



## **CITY OF ANAMOSA**

### **CITY COUNCIL AGENDA – REGULAR SESSION**

**TUESDAY, January 26, 2021 – 6:00 P.M.**  
**ANAMOSA LIBRARY & LEARNING CENTER (VIA ZOOM)**  
**600 EAST 1ST STREET, ANAMOSA, IA 52205**

Zoom Meeting Link

<https://us02web.zoom.us/j/81507369006>

Meeting ID: 815 0736 9006

Passcode: Anamosa

Join by Telephone

+1 312 626 6799

Meeting ID: 815 0736 9006

Passcode 1725007

*If you wish to address the City Council, please use the “raise your hand” feature or comment indicating such. Once the Mayor has opened the issue for public comment, you will be called on and your microphone will be turned on. Before speaking, please state your name and address. Each speaker is limited to five (5) minutes per agenda item and is expected to refrain from the use of profane, obscene, or slanderous language.*

**1.0) ROLL CALL**

**2.0) PLEDGE OF ALLEGIANCE**

**3.0) APPROVAL OF AGENDA**

**4.0) MOTION TO APPROVE THE MINUTES FROM THE FOLLOWING MEETINGS:**

4.1) January 11, 2021 – Regular Council Meeting

4.2) January 20, 2021 – Budget Work Session

**5.0) PUBLIC HEARINGS: NONE**

**6.0) PROCLAMATIONS: NONE**

**7.0) OLD BUSINESS:**

7.1) **REVIEW AND APPROVAL OF DOWNTOWN FAÇADE PROJECT SPECIFICATIONS AND BID DOCUMENTS.** (Derek Lumsden, JCED)

7.2) **DISCUSSION AND POSSIBLE ACTION HIGHWAY 151 GRADE SEPARATION PROJECT. ENGINEER’S UPDATE.** (Lindsay Beaman, Snyder and Associates)

7.3) **REVIEW AND APPROVAL OF EXTENSION OF CLOSING WITH INTERSTATE POWER AND LIGHT COMPANY FOR PURCHASE OF REAL PROPERTY TO “ON OR BEFORE APRIL 1, 2021”**

**8.0) NEW BUSINESS**

8.1) **REQUEST FOR FUNDING FOR ANAMOSA AREA AMBULANCE SERVICE.** (Eric Briesemeister, Jones Regional Medical Center)

8.2) **REVIEW AND APPROVAL OF AGREEMENT WITH SHIVE-HATTERY FOR THE FIRE DEPARTMENT ADDITION.**

- 8.3) **REVIEW AND APPROVAL OF TEMPORARY WASTEWATER OPERATOR III AGREEMENT WITH ION ENVIRONMENTAL (Operations only, no testing change at this time)**
- 8.4) **REVIEW AND APPROVAL OF AMENDED AGREEMENT WITH HR GREEN FOR ANAMOSA JORDAN WELL #6 FINAL DESIGN & BIDDING**
- 8.5) **REQUEST FOR WAIVER OF PLATTING REQUIREMENTS FOR BUFFALO COMMERCIAL PARK PLAT**
- 8.6) **RESOLUTION AUTHORIZING THE USE OF A PRELIMINARY OFFICIAL STATEMENT IN CONNECTION WITH THE ISSUANCE OF GENERAL OBLIGATION CORPORATE PURPOSE BONDS, SERIES 2021 AND SETTING THE DATE FOR THE SALE OF THE BONDS**
- 8.7) **RESOLUTION SETTING A PUBLIC HEARING DATE OF MARCH 8, 2021 AT 6:00 PM TO REVIEW AN APPLICATION FOR A STATE REVOLVING FUND (SRF) LOAN AND TO MAKE AVAILABLE TO THE PUBLIC THE CONTENTS OF AN ENVIRONMENTAL INFORMATION DOCUMENT AND THE CITY'S PROJECT PLAN FOR A NEW JORDAN WELL (WELL #6)**
- 8.8) **REVIEW AND APPROVAL OF LIQUOR LICENSE RENEWAL FOR TAPKEN'S CONVENIENCE**
- 8.9) **REVIEW AND APPROVAL OF CURRENT BILLS**
- 9.0) **CITY ADMINISTRATOR'S REPORT:**
- 10.0) **MAYOR AND COUNCIL REPORTS:**
  - 10.1) MAYOR'S REPORT
  - 10.2) COUNCIL REPORTS
- 11.0) **PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA**
- 12.0) **BUDGET WORK SESSION**
  - 12.1) WATER DEPARTMENT BUDGET
  - 12.2) WASTEWATER BUDGET
- 13.0) **ADJOURNMENT**

## STATEMENT OF COUNCIL PROCEEDINGS

January 11, 2021

The City Council of the City of Anamosa met in Regular Session January 11, 2021 at the Anamosa Library and Learning Center and via Zoom at 6:00 p.m. with Mayor Rod Smith presiding. The following Council Members were present: John Machart, Rich Crump (via Zoom), Jeff Stout (via Zoom), Kay Smith, Alan Zumbach, and Galen Capron. Absent: none. Also present were Beth Brincks, City Administrator/Clerk; Rebecca Vernon, Library Director and Jeremiah Hoyt, Police Chief. Due to the restrictions on public gatherings, the public utilized Zoom to participate in the meeting from their homes. Iowa Code Chapter 21, as interpreted, permits public meetings to be held electronically.

Mayor Rod Smith called the meeting to order at 6:00 p.m. Roll call was taken with a quorum present. All votes will be called as roll votes.

Pledge of Allegiance.

Director Vernon gave some brief instructions on use of Zoom and how to participate in the meeting.

Motion by Stout, second by Capron to approve the agenda. Ayes: all. Nays: none. Motion carried.

Motion by Zumbach, second by Machart to approve the minutes of the December 28, 2020 Regular City Council meeting. Ayes: all. Nays: none. Motion carried.

Mayor Rod Smith proclaimed January 24-30, 2021 to be School Choice Week in the City of Anamosa, Iowa.

Motion by Smith, second by Zumbach to approve the repayment agreement for the sewer service line at 402 N Williams Street. Ayes: all. Nays: none. Motion carried.

Shane Brown, Street Dept. Superintendent presented a proposal for the Sycamore Street Project from HR Green Engineering. This proposal was discussed and will come back to the next meeting with a conceptual draft of the project.

Motion by Crump, second by Smith to approve the Final Budget Timeline. Ayes: all. Nays: none. Motion carried.

Motion by Zumbach, second by Machart to approve the following Committee Appointments for 2021 as recommended by Mayor Rod Smith. Parks & Recreation Board Liaison – Jeff Stout, Library Board Liaison – Kay Smith, Mayor Pro-tem – John Machart, Jones County Solid Waste – Galen Capron & Dale Barnes, E911/Emergency Management – John Machart, Senior Dining Advisory Board – Alan Zumbach, JETS Board – Alan Zumbach, Jones County Economic Development – Rod Smith, Jones County Tourism – Rich Crump, ECICOG – Rod Smith, Fire Service Board – Kay Smith, Rich Crump, Jeff Stout, & Beth Brincks (ex-officio), Downtown Taskforce – Jeff Stout, JCED, Chamber Director, City Administrator. Ayes: all. Nays: none. Motion carried.

Motion by Smith, second by Zumbach to approve Resolution 2021-01 setting the dates for the Regular Anamosa City Council Meetings for calendar year 2021. Roll vote. Ayes: Crump, Smith, Machart, Capron, Stout, and Zumbach. Nays: none. Motion carried.

Motion by Crump, second by Zumbach to approve current job description and salary range for the Wastewater Superintendent position. This position opening will be posted and advertised through various outlets. Ayes: all. Nays: none. Motion carried.

Motion by Smith, second by Zumbach to approve a 12 year borrowing schedule for the 2021 1.75M GO Bond issue. The 12 year issue does come with interest savings. Ayes: all. Nays: none. Motion carried.

Motion by Zumbach, second by Machart to approve the December Treasurer's Report. Ayes: all. Nays: none. Motion carried.

Motion by Smith, to approve the current bills, second by Stout. Ayes: all. Nays: none. Motion carried.

City Administrators Report: Brincks reported that preparations are being made for the annual audit.

Mayor and Council Reports: The Mayor reported that he had received a lot of positive feedback for the Street Department on their work done during the heavy snowfall.

Machart attended the Emergency Management Meeting. It has been reported that the vials with the COVID vaccine have had more doses then reported. They have been calling people on the waiting list to get them in right away when this happens.

There were no Public comments for items not on the agenda.

The FY22 Mayor, City Council, Administration, City Hall, and Library Budgets were presented and discussed.

Motion by Machart, second by Crump to adjourn. Ayes: all. Nays: none. Motion Carried.  
Meeting adjourned at 7:44 pm.

---

Rod Smith, Mayor

ATTEST:

---

Beth Brincks, City Clerk

## STATEMENT OF COUNCIL PROCEEDINGS

January 20, 2021

The City Council of the City of Anamosa met in Special Session January 20, 2021 at the Anamosa Library and Learning Center at 6:00 p.m. with Mayor Rod Smith presiding. The following Council Members were present: Rich Crump (via Zoom), Alan Zumbach, Jeff Stout (via Zoom), Kay Smith, Galen Capron, and John Machart. Absent: None. Also present were; Beth Brincks, City Administrator/Clerk; Jeremiah Hoyt, Police Chief, Rebecca Vernon, Library Director. The public utilized Zoom to participate in the meeting from their homes. Iowa Code Chapter 21, as interpreted, permits public meetings to be held electronically.

Mayor Rod Smith called the meeting to order at 6:00 p.m. Roll call was taken with a quorum present.

The Budget Work Session was lead off with Jeramiah Hoyt, Police Chief. Chief Hoyt gave an overview of the Police Department and explanations for the various line items on the budget. Highlighted were the increased costs for the communications contract, RAGBRAI costs, community service officer position, and squad car replacement.

Shelly Carr, Park and Recreation Director presented the Park and Recreation Budget. Carr highlighted the tennis court resurfacing and pool projects.

Shane Brown, Street Department Superintendent presented the Street Department Budget. Brown highlighted requests for a replacement dump truck and alley and street resurfacing. The HWY 151 Grade Separation Project was also discussed at length.

Meeting adjourned at 9:24 P.M.

---

Rod Smith, Mayor

ATTEST:

---

Beth Brincks, City Clerk



# **ARCHITECTURAL**

# **DOWNTOWN**

# **REVITALIZATION FAÇADE**

# **IMPROVEMENT PROJECT**

**CITY OF ANAMOSA**

**107 SOUTH FORD STREET  
ANAMOSA, IA 52205**

## **PROJECT MANUAL**

**ARCHITECT PROJECT NUMBER: I1919.01**

**ARCHITECT:**

**Martin Gardner Architecture, P.C.**

**JANUARY 2021**

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

TABLE OF CONTENTS	NO. OF PAGES	PAGE NOS.
<u>DIVISION 00 – PROCUREMENT AND CONTRACT REQUIREMENTS</u>		
SECTION 000101 – PROJECT INFORMATION AND SEAL PAGE	1	5
SECTION 001113 – NOTICE OF PUBLIC HEARING AND BID LETTING	4	6-9
SECTION 002113 – INSTRUCTIONS TO BIDDERS	12	10-21
-AIA A201 GENERAL CONDITIONS		
SECTION 002213 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS	4	22-25
-AIA A101 STANDARD FORM OF AGREEMENT		
SECTION 002600 – PROCUREMENT SUBSTITUTION PROCEDURES	2	26-27
SECTION 003300 – EXISTING CONDITION INFORMATION	1	28
SECTION 003350 – EXISTING HAZARDOUS MATERIAL INFORMATION	1	29
SECTION 004113 – FORM OF PROPOSAL GENERAL CONSTRUCTION	2	30-31
SECTION 004114 – FORM OF PROPOSAL GENERAL CONSTRUCTION UNIT PRICES	2	32-33
SECTION 004115 – FORM OF PROPOSAL UNIT PRICES INDIVIDUAL BUILDINGS	1	34
SECTION 004116 – INTENT TO COMPLY WITH SECTION 3 REQUIREMENTS	2	35-36
SECTION 004117 – VERIFICATION OF ELIGIBILITY TO PARTICIPATE IN A FEDERALLY ASSISTED PROJECT	2	37-38
SECTION 009910 – DAVIS BACON WAGES	7	39-45
SECTION 009930 – CDBG MBE/WBE PLAN ROOMS	2	46-47
SECTION 009940 – CDBG FEDERAL LABOR STANDARDS	5	48-52
SECTION 009950 – HUD SECTION 3 CONTRACT CLAUSE	1	53
<u>DIVISION 01 – GENERAL REQUIREMENTS</u>		
SECTION 011000 – SUMMARY	3	54-56
SECTION 012000 – PROJECT MEETINGS	1	57
SECTION 012100 – ALLOWANCES	3	58-60
SECTION 012200 – UNIT PRICES	2	61-62
SECTION 012500 – SUBSTITUTION PROCEDURES	3	63-65
SECTION 012600 – CONTRACT MODIFICATION PROCEDURES	3	66-68
SECTION 012900 – PAYMENT PROCEDURES	3	69-71
SECTION 012910 – INITIAL CONTRACT REQUIREMENTS	2	72-73
SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION	4	74-77
SECTION 013200 – CONSTRUCTION PROGRESS DOCUMENTATION	5	78-82
SECTION 013220 – PHOTOGRAPHIC DOCUMENTATION	2	83-84
SECTION 013300 – SUBMITTAL PROCEDURES	5	85-89
SECTION 014000 – QUALITY REQUIREMENTS	5	90-94
SECTION 014200 – REFERENCES	7	95-101
SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS	8	102-109
SECTION 016350 – PRODUCT REQUIREMENTS	3	110-112
SECTION 017000 – EXECUTION REQUIREMENTS	5	113-117
SECTION 017410 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	5	118-122
SECTION 017700 – CLOSEOUT PROCEDURES	3	123-125
SECTION 017810 – PROJECT RECORD DOCUMENTS	2	126-127
SECTION 017820 – OPERATION AND MAINTENANCE DATA	3	128-130
SECTION 018200 – DEMONSTRATION AND TRAINING	2	131-132
<u>DIVISION 02 – EXISTING CONDITIONS</u>		
SECTION 022260 – HISTORIC REMOVAL AND DISMANTLING	3	133-135
SECTION 027640 – PAVEMENT JOINT SEALANTS	3	136-138

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

<u>TABLE OF CONTENTS</u>	<u>CONTD.</u>	<u>NO. OF PAGES</u>	<u>PAGE NOS.</u>
<u>DIVISION 03 – CONCRETE</u>			
SECTION 033000 – CAST-IN-PLACE CONCRETE		5	139-143
<u>DIVISION 04 – MASONRY</u>			
SECTION 047200 – CAST STONE MASONRY		5	144-148
SECTION 049620 – HISTORIC BRICK UNIT MASONRY REPAIR		4	149-152
SECTION 049630 – HISTORIC BRICK UNIT MASONRY REPOINTING		4	153-156
SECTION 049700 – HISTORIC STONE MASONRY REPAIR		5	157-161
SECTION 049720 – HISTORIC STONE MASONRY REPOINTING		4	162-165
<u>DIVISION 05 – METALS</u>			
SECTION 051200 – STRUCTURAL STEEL FRAMING		6	166-171
SECTION 057300 – DECORATIVE METAL RAILINGS		5	172-176
<u>DIVISION 06 – WOOD, PLASTICS AND COMPOSITES</u>			
SECTION 061000 – ROUGH CARPENTRY		5	177-181
SECTION 061533 – WOOD PATIO DECKING		2	182-183
SECTION 061600 – SHEATHING		3	184-186
SECTION 062020 – EXTERIOR AND INTERIOR FINISH CARPENTRY		4	187-190
<u>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</u>			
SECTION 072100 – THERMAL INSULATION		2	191-192
SECTION 072500 – WEATHER BARRIERS		5	193-197
SECTION 074600 – SIDING		3	198-200
SECTION 75423.02 – FLEECE-BACK THERMOPLASTIC-POLYOLEFIN ROOFING		8	201-208
SECTION 076200 – SHEET METAL FLASHING AND TRIM		6	209-214
SECTION 079200 – JOINT SEALANTS		5	215-219
<u>DIVISION 08 – OPENINGS</u>			
SECTION 081433 – STILE AND RAIL WOOD DOORS		4	220-223
SECTION 084110 – ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS		6	224-229
SECTION 085113 – ALUMINUM STORM WINDOWS		6	230-235
SECTION 085213 – ALUMINUM-CLAD WOOD WINDOWS		5	236-240
SECTION 085920 – HISTORIC TREATMENT OF WOOD WINDOWS		7	241-247
SECTION 087100 – DOOR HARDWARE		11	248-258
SECTION 088000 – GLAZING		5	259-263
<u>DIVISION 09 – FINISHES</u>			
SECTION 092900 – GYPSUM BOARD		4	264-267
SECTION 092900 – HISTORIC TREATMENT OF PLASTER		6	268-273
SECTION 093013 – CERAMIC TILING		5	274-278
SECTION 099113 – EXTERIOR PAINTING		4	279-282
SECTION 099123 – INTERIOR PAINTING		5	283-287
SECTION 099300 – STAINING AND TRANSPARENT FINISHING		4	288-291
SECTION 099910 – HISTORIC TREATMENT OF PLAIN PAINTING		4	292-295

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

TABLE OF CONTENTS	CONTD.	NO. OF PAGES	PAGE NOS.
<hr/>			
DIVISION 34 – APPENDIX			
SECTION 341000 – MORTAR ANALYSIS		17	296-312
SECTION 341100 – ASBESTOS REPORT		149	313-461
SECTION 341200 – APPENDIX A GREEN DEVELOPMENT PLAN AND CHECKLIST		7	462-468
SECTION 342000 – CSI SUBSTITUTION REQUEST FORM		1	469

END TABLE OF CONTENTS

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

**PROJECT MANUAL**

**Owner:**

CITY OF ANAMOSA IOWA  
107 SOUTH FORD STREET  
ANAMOSA, IOWA 52205

**Architect:**

**Martin Gardner Architecture, P.C.**  
Website: [www.MartinGardnerArch.com](http://www.MartinGardnerArch.com)

**Marion Office**

700 11<sup>th</sup> Street, Suite 200  
Marion, Iowa 52302  
Telephone: 319-377-7604  
Fax: 319-377-1175

**Strawberry Point Office**

11502 390<sup>th</sup> Street  
Strawberry Point, Iowa 52076  
Telephone: 563-9333-4712  
Fax: 319-377-1175

S E A L	I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly registered architect under the laws of the state of Iowa.	
	<u>KYLE D. MARTIN, AIA, PRESIDENT</u> Printed or typed name	
	_____ Signature	_____ Date
	_____ Registration expires	_____ Date issued
	Pages or sheets covered by this seal: _____ _____ _____	

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****NOTICE OF PUBLIC HEARING AND LETTING OF BIDS FOR THE DOWNTOWN REVITALIZATION FAÇADE  
IMPROVEMENT PROJECT, ANAMOSA, IOWA**

Project Description: The proposed project consists of renovation to 10 existing Downtown Anamosa storefront buildings as listed below, described in the construction documents, and generally includes selective demolition, door, window, and wall repair and replacement, painting, masonry renovation such as brick replacement, repointing, repair, and replacement, and work associated with these items.

Bid Type: One lump sum contract will be awarded at the appointed time and place.

Pre-Bid Conference: A mandatory pre-bid meeting for all General Contractors will be held at the Anamosa City Hall, 107 South Ford Street, Council Chambers on February 2, 2021 at 10:00 AM local time. Following the meeting, the meeting will be continued at the project site, weather permitting. Any General Contractor wishing to submit a bid on this project will need to have a designated representative registered at the pre-bid meeting. The pre-bid meeting is open to all suppliers and subcontractors but attendance is not mandatory for those contractors.

Project Access: The exterior of the project site is open to inspection at any time. Interior inspection of the buildings can be made at the Pre-Bid Conference and is otherwise limited. Retail stores may be accessible when retail stores are open for business. Contractors should avoid interfering with store operations.

Documents: Plans and specifications governing construction of the proposed project have been prepared by Martin Gardner Architecture PC., as Architect. All materials and procedures shall be in strict accordance with said plans and specifications referred to and defining said proposed improvements and are hereby made a part of this Advertisement and of the proposed contract by reference, and that the contract shall be executed in compliance therewith.

Document Availability: Plans and specifications and proposed contract documents may be examined at the offices of the Architect, and other locations as outlined in the Construction Documents. Copies of the plans and specifications, form of contract and bid form may be obtained from Martin Gardner Architecture, P.C., 700 11<sup>th</sup> Street, Suite 200, Marion, IA 52302 or 11502 390<sup>th</sup> Street, Strawberry Point, IA 52076, 319-377-7604. The Architect's office will issue plans to all Contractors. A maximum of two sets of Construction Documents will be provided to each General Contractor upon delivery of a \$250 per set refundable deposit to the office of the Architect. All other Subcontractors and Suppliers may obtain one set of Construction Documents upon delivery of a \$250 per set refundable deposit to the office of the Architect. The drawings and specifications are available at the architect's website [www.MartinGardnerArch.com](http://www.MartinGardnerArch.com). Plans and specifications to be viewed are in Adobe .pdf format and may be downloaded and printed. Be aware that no warranty as to the compatibility of your computer software or hardware with the files provided is made. Variations between the printed files provided above by the Architect and these electronic files may exist. In the event that a conflict does exist, the printed documents issued by the Architect will take precedence over the downloaded files.

Bid Forms: All bids shall be on the forms provided in the specifications for project. The provided forms of proposal shall be submitted at the time required for bids. The following forms shall be submitted electronically from the apparent lowest qualified bidder to the Architect's office within 3 days of the bid opening:

- "Form of Proposal for General Construction Unit Prices"
- "Form of Proposal Unit Prices Individual Buildings"
- "Intent to Comply with Section 3 Requirements"
- "Verification of Eligibility to Participate in a Federally Assisted Project"

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Bid Security: Each bid shall be accompanied by a bid bond, certified check, cashier's check or credit union certified share draft, in a separate sealed envelope in an amount equal to five percent (5%) of the total amount of the bid. If bid bond is submitted, it must be on an approved AIA bid bond form. The certified check or cashier's check shall be drawn on a bank in Iowa or a bank chartered under the laws of the United States of America; certified share draft shall be drawn on a credit union chartered under the laws of the United States. Bid security should be made payable to the City of Anamosa as security that if awarded a contract the bidder will enter into a contract at the prices bid and furnish the required Contractor's Bonds, Certificate of Insurance, and other materials as may be required in the contract documents. The certified check, cashier's check, or certified share draft may be cashed, or the Bid Bond forfeited, and the proceeds retained as liquidated damages if the Bidder fails to execute a contract and file acceptable Certificate of Insurance within ten (10) days after the acceptance of the proposal by the Anamosa City Council. No bidder may withdraw a proposal within thirty (30) days after the date set for opening bids.

Project Bonding: The successful bidder shall be required to furnish a Contractor's Performance and Labor and Material Payment Bond on an approved AIA form in an amount equal to one hundred percent (100%) of the contract price. The bonds are to be issued by responsible surety, approved by the Anamosa City Council, and shall guarantee the faithful performance of the contract and the terms and conditions therein contained and shall guarantee the prompt payment for and of all materials and protect and save harmless the City from all claims and damages of any kind caused by the operation of the Contractor, and shall guarantee the work contracted for a period of one (1) year from the date of final acceptance of the improvements by the City.

Sales Tax: The said project is a tax exempt project. The City of Anamosa will issue exemption certificates from the Iowa Department of Revenue, as specified in the 701 Iowa Administrative Code, Chapter 19, Rule 19.12. These certificates shall be used by the successful bidder when purchasing materials or the completion of the project.

Bid Filing: All bids must be filed at the Office of the City Clerk, Anamosa City Hall, located at 107 South Ford Street, Anamosa, Iowa, on or before 2:00PM local time, February 19<sup>th</sup>, 2021. Bids received after this time will not be accepted.

Bid Opening: Bids will be opened and publicly read aloud immediately after specified closing time.

Public Hearing and Award of Contract: Notice is hereby given that the Anamosa Council will meet in the designated Council Chambers, on March 8, 2021 at 6:00 PM local time, at which time and place a hearing will be held on the proposed drawings, specifications, form of contract, and estimate of cost for the Downtown Revitalization Project. Any interested party may appear to be heard. At the said time and place, the City Council shall also receive and consider bids for said construction. Award of contract is subject to the requirements of the Iowa Economic Development Authority.

Progress Payments: Payment to the Contractor will be made in monthly estimates and one final payment. Monthly estimates will be equivalent to ninety-five percent (95%) of the contract value of the work completed during the preceding calendar month. Such payments will in no way be construed as an act of acceptance for any of the work partially or totally completed.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Final Payment: Final payment to Contractor will be made no earlier than forty-five (45) days from and after final acceptance of work by the City of Anamosa, subject to the contract conditions and in accordance with the provisions of Iowa Code chapters 26 and 573.

Source of Funding: Payment of the cost of said project will be made in cash used for said purposes. The City of Anamosa has received a Community Development Block Grant that will be used for partial funding of the project.

Prevailing Wages: Pursuant to the requirements of that grant, Davis-Bacon wage rates are to be used on this project. Current wage rates were inserted in this specification and it is the Contractor's responsibility to make sure that they are using the most current rates at the time of bid opening. Wage rates should be reviewed prior to submitting a proposal the day of the bid opening.

Other Project Requirements: Also pursuant to that grant, this project is subject to the requirements of the National Park Service, Secretary of the Interior's Standards for the Treatment of Historic Properties and is subject to review by the Iowa State Historic Preservation Office (SHPO) and the Iowa Economic Development Authority.

Project Construction Schedule: The work under the contract shall commence on or before the date specified in the written 'Notice of Proceed' or if lieu of the notice to proceed, the execution of the contract for construction and shall be Substantially Completed on or before April 1, 2022 and fully completed and ready for acceptance no later than May 1, 2022.

HUD Section 3 Language for Procurement Documents:

- A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

Section 3 Businesses are encourage to respond to this proposal. A Section 3 business is a business that is:

- 51% owned by Section 3 residents\*
- Whose permanent, full-time staff is comprised of at least 30% Section 3 residents\*
- Has committed 25% of the dollar amount of its subcontracts to Section 3 businesses

\*A Section 3 resident is defined as a public housing resident or someone with a household income that is less than 80% of the area median income.

Businesses that believe they meet the Section 3 criteria are encouraged to register as a Section 3 Business through HUD's website: <https://portalapps.hud.gov/Sec3BusReg/BRegistry/RegisterBusiness>

The City of Anamosa hereby reserves the right to reject any or all bids and to waive informalities and irregularities and to accept the lowest responsive and responsible bid.

Published upon order of the Anamosa City Council

Beth Brinks  
City Clerk

By\_\_\_\_\_

Attest:\_\_\_\_\_

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

DIVISION 00 – BIDDING AND CONTRACT REQUIREMENTS

SECTION – 002113 INSTRUCTIONS TO BIDDERS

**ARTICLE 1- PROJECT INFORMATION SUMMARY**

## 1.1 DESCRIPTION OF WORK

- A. The work of the project is defined by the Construction Documents and consists of renovation to 10 existing Downtown Anamosa storefront buildings as listed below, described in the construction documents, and generally includes selective demolition, door, window, and wall repair and replacement, painting, masonry renovation such as brick removal, cleaning, tuckpointing, repair, and replacement, and work associated with these items.
- B. Location: The following table identifies all buildings in Downtown Anamosa, Iowa to be included in the bidding. The final participants will be identified following review of construction proposals.

ADDRESS	BUILDING NAME
103 East Main Street	Vacant
201 East Main Street	Tucker's Tavern
203 East Main Street	Vendor Village
205 East Main Street	Vendor Village
205 West Main Street	Vacant
207 East Main Street	Vacant
209 East Main Street	Vacant
209 West Main Street	Life Connections
211 West Main Street	Barner Realty & Auction
213 East Main Street	Jones County Tourism & Anamosa Chamber of Commerce

- C. Owner: The City of Anamosa and the building Owners have entered into a leasing agreement allowing the City of Anamosa to carry out the outlined improvements to their buildings.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1.2 MANDATORY PRE BID CONFERENCE: **Mandatory for General Contractors. Optional but recommended for Subcontractors and Suppliers.**

1. Place: Anamosa City Hall  
107 South Ford Street  
Anamosa, Iowa 52205
2. Date: February 2, 2021
3. Time: 10:00 AM local time
4. After the initial meeting at City Hall, the meeting will continue at the project site weather permitting.

1.3 RECEIPT OF BIDS:

1. Place: City Clerk's Office  
Anamosa City Hall  
107 South Ford Street  
Anamosa, Iowa 52205
2. Date: February 19, 2021
3. Time: 2:00 PM local time

1.4 BID OPENING:

1. Place: City Hall Council Chambers  
107 South Ford Street  
Anamosa, Iowa 52205
2. Date: February 19, 2021
3. Time: 2:05 pm local time

1.5 DOCUMENTS ON FILE: Documents shall be available for inspection at the following locations and on our website at [www.MartinGardnerArch.com](http://www.MartinGardnerArch.com): Printed documents are available by contacting the Marion office of the Architect.

*\*COVID-19 RESTRICTIONS: Call in advance to make an appointment for in-person viewing of construction documents. Anamosa City Hall may have public restrictions in place. Face masks are required.*

MARTIN GARDNER ARCHITECTURE, P.C.- Contact this office to obtain copies of bid documents.  
700 11<sup>th</sup> Street – Suite 200  
Marion, IA 52302  
319-377-7604

MARTIN GARDNER ARCHITECTURE, P.C.  
11502 390<sup>TH</sup> Street  
Strawberry Point, IA 52076

CITY OF ANAMOSA, CITY HALL, CITY CLERK'S OFFICE  
107 South Ford Street  
Anamosa, Iowa 50651  
319-462-6055

1.6 PLAN DEPOSIT: \$250 Refundable. See Section 4.1.4 AND 4.1.5

1.7 SITE ACCESS: The exterior of the project site is open to inspection at any time. Interior inspection of the buildings can be made at the Pre-Bid Conference and is otherwise limited. Access to the interior lower level of buildings with retail stores or offices are available during normal business hours for the given building. Inform building occupants of your purpose and minimize disruption to normal business. Access to the upper levels of the buildings, which are

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

typically apartments, will be accessible following the pre-bid conference only. No inquiries about the project or bid documents are to be made to store owners, apartment residents, or City personnel and no statements made by any of these individuals will be binding upon this project.

1.8 BIDS: Additional information regarding bidding information is contained throughout this Instructions to Bidders. All Bids shall be made as lump sum bid for the general construction of the entire work of the project. Prices quoted shall be guaranteed for a minimum of forty-five (45) days after the date of the bid.

1.9 UNIT PRICE BIDS: Form to be completed and submitted within 72 hours of the opening of the general bids by the apparent low bidder and any additional bidders requested by the Architect. See Section 9.1.

1.10 BID SECURITY: (Required): See Section 8.2

1.11 BONDS: (Required). See Article 10.

1.12 PRICE GUARANTEE: Prices quoted shall be guaranteed for a period of forty-five (45) days after the date of the Bid.

1.13 IOWA SALES TAX: Per State of Iowa legislation, public systems have tax exempt status. Reference Iowa Code sections 421.17(19) and 422.68. Amendment to Chapter 19, "Sales and Use Tax on Construction Activities", Iowa Administrative Code. No sales tax on all applicable materials shall be charged to this project and all bid forms submitted shall contain no said sales tax. Sales Tax Exemption Certificate will be issued by the Owner upon completion of the contract for construction.

1.14 PROPOSED COMPLETION DATE: Substantial Completion - April 1, 2022. Final Completion - May 1, 2022.

1.15 LIQUIDATED DAMAGES: None.

**ARTICLE 2 – DEFINITIONS**

2.1 GENERAL: Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

2.2 ADDITIONAL DEFINITIONS: Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.

2.3 ADDENDA: Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

2.4 BID OR PROPOSAL: A Bid or Proposal is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

2.5 BASE BID: The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

2.6 ALTERNATE BID: An Alternate Bid or Alternate is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2.7 UNIT PRICE: A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.

2.8 BIDDER: A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

2.9 SUB-BIDDER: A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work. The Sub-Bidder in submitting a proposal represents that to the extent applicable to his portion of the Work that he is making the same representations outlined in Article 3 as the Bidder.

2.10 ADDENDA DOCUMENTS: Addenda are documents which modify the Construction Documents and Bidding Requirements. All addenda issued during the bidding period shall be included in the bids and will become a part of the Contract Documents

**ARTICLE 3 – BIDDER'S REPRESENTATIONS**

3.1 The Bidder and to extent applicable, the Sub-Bidder by making a Bid represents that:

3.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.

3.1.2 The Bid is made in compliance with the Bidding Documents.

3.1.3 The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents. Submission of a bid will be considered evidence that the Bidder is familiar with local facilities and difficulties, requirements of the bidding documents and of pertinent State and local Codes, the state of labor and material markets and has made due allowance in his bid for all contingencies. Submission of a bid will also be considered evidence that the Bidder will supply a complete and full usable installation at the completion of the work without additional cost to the Owner.

3.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception. See Substitutions.

**ARTICLE 4 – AVAILABILITY OF BIDDING DOCUMENTS**

4.1 EXAMINATION AND PROCUREMENT OF DOCUMENTS:

4.1.1 EXAMINATION AND DOWNLOAD OF ELECTRONIC DOCUMENTS: Plans and specifications may be viewed on the Architect's website, [www.MartinGardnerArch.com](http://www.MartinGardnerArch.com). Plans and specifications to be viewed are in Adobe .pdf format and may be downloaded and printed. Be aware that no warranty as to the compatibility of your computer software or hardware with the files provided is made. Variations between the printed files provided above by the Architect and these electronic files may exist. In the event that a conflict does exist, the printed documents supplied by the Architect will take precedence over the downloaded files. Persons accessing our documents on our website are requested to provide contact information so that project Addenda may be directly transmitted to them. The Architect will not be responsible to provide Addenda or other information to parties who fail to properly register their contact information on the website.

4.2. EXAMINATION OF PRINTED DOCUMENTS: Documents may be viewed at the locations shown in Section 1.5.

4.2.1 PROCUREMENT OF PRINTED DOCUMENTS: Bidders and Sub-bidders may obtain complete sets of the Bidding Documents from the Marion office of the Architect. Two sets of plans and specifications will be issued to Prime Bidders and one set of plans and specifications will be issued to other Sub-bidders including Subcontractors and Suppliers

4.2.2 DEPOSIT: Refundable \$250 per set.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

4.2.3 DEPOSIT REFUND: Deposits will be refunded upon return of the Plans and Specifications to the office of the Architect in good condition within 14 days of the bid opening. Deposits for Documents not returned by that date will be used to replace the missing documents which are to be used during construction. Prime Bidders who are awarded the project may retain their Documents and the deposit will be returned to them. All Sub-bidders are to return their plans for deposit refund unless the Bidder issues a confirmation that the Sub-bidder will be awarded work on the project.

4.4 PROCUREMENT OF DOCUMENTS FROM OTHER SOURCES: Neither the Owner, Architect's Consultants, nor the Architect will be responsible for the content nor completeness of Bidding Documents obtained from sources other than the office of the Architect. Contractors using printed or electronic plan rooms including those listed above should verify with their sources that all documents, including addenda are included in the materials.

4.5 PARTIAL DOCUMENT SETS: Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner, Architect's Consultants, nor Architect assumes responsibility for omissions, errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. No partial sets of documents will be issued.

**ARTICLE 5 – USE OF THE DOCUMENTS**

5.1 TERMS OF USE: The Owner, Prime Consultant, and Architect make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

5.2 DOCUMENT QUESTIONS: The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect items which the Bidder or Sub-bidder believe to be errors, inconsistencies or ambiguities discovered.

5.2.1 BUILDING CODE ISSUES: Bidders and Sub-bidders are not required to perform building code reviews, but items which are believed to be in conflict with local codes or interpretations of the Authorities Having Jurisdiction over the project, shall be brought to the Architect's attention for clarification.

5.3 DOCUMENT CLARIFICATIONS: Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make an inquiry to the Project Manager for the Architect soon as items are encountered. Inquiries will be accepted verbally, in person, via telephone or written request via email, fax, or mail. Written inquiries will typically be addressed with the highest priority. Inquiries must be made at least three (3) business days before the receipt of bids to allow time for Addenda to be generated and transmitted via mail to all bidders. Inquiries received after this time of a procedural nature will be answered but no changes in the Bidding Documents will be allowed.

5.4 DOCUMENT CHANGES: Interpretations, corrections and changes to the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them. Contractors are encouraged to speak with the Architect, but must be aware that answers to questions cannot be considered final until thoroughly researched and properly documented in an Addendum.

**ARTICLE 6 – ADDENDA**

6.1 DISTRIBUTION: Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents or who have registered at the Architect's web site when the electronic plans were accessed.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

6.2 AVAILABILITY: Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose. Copies of Addenda may be obtained from the Architect's office without additional charge to plan holders and suppliers.

6.3 DATE OF ISSUE: Addenda will be issued no later than two business days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids, which may be issued up to the time of Bidding.

6.4 VERIFICATION OF ADDENDA: Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid. Verification of such information may be made at the Architect's website, [www.MartinGardnerArch.com](http://www.MartinGardnerArch.com).

**ARTICLE 7 – SUBSTITUTIONS**

7.1 SPECIFIED MATERIALS: The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. Unless otherwise approved by Addendum, the Bidders and Sub-bidders shall submit a Base Bid and Alternates that include the materials and/or equipment items of manufacturers as listed in Construction Documents, plans and specifications.

7.2 REQUEST FOR SUBSTITUTION: No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least five (5) days prior to the date for receipt of Bids.

7.2.1 FORM OF SUBSTITUTION REQUEST: Preferred Form of Request CSI 1.5C. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

- A. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
- B. No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

**ARTICLE 8 - BIDDING PROCEDURES****8.1 PREPARATION OF BIDS**

8.1.1 BID FORMS: Bids shall be submitted on the forms included with the Bidding Documents or as revised by Addendum.

8.1.2 COMPLETION OF BIDS: All blanks on the bid form shall be legibly executed in a non-erasable medium.

8.1.3 ASSEMBLY OF BIDS: All bids are to be sealed in two envelopes.

8.1.3.1 SEPARATION OF BID FROM BID SECURITY: The Bid Proposal must be enclosed in an envelope separate from the Bid Security and DBE Form. Label both envelopes with the name of the General Contractor, name of the project, "Downtown Revitalization Façade Improvement Project, Anamosa, Iowa", and "Bid Security" or "Bid Proposal" as appropriate to the contents of the envelope.

8.1.3.2 ATTACHMENT OF BID AND BID SECURITY ENVELOPES: The two envelopes containing the Bid Proposal and the Bid Security may be sealed into a third envelope or stapled together. Do not submit loose envelopes. If the Bid is

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

mailed the two envelopes must be enclosed in a mailing envelope and should be stapled together or sealed in another envelope.

8.1.3.3 ADDITIONAL BID MATERIALS: If additional information is required in the Contract Documents, this information may be sealed in the envelope with the Bid or in a separate envelope. Such envelope shall be clearly marked as to its contents.

8.1.4 STATEMENT OF BID AMOUNT: Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.

8.1.5 CHANGES ON BID FORM: Interlineations, alterations and erasures must be initialed by the signer of the Bid.

8.1.6 ALTERNATES: All requested Alternates shall be bid. Where a choice to select whether an Alternate is an addition or deduction the proper choice must be selected. If no change in the Base Bid is required, enter "No Change."

8.1.7 BID STIPULATIONS: The Bidder shall make no stipulations on the bid form nor qualify the Bid in any manner.

8.1.8 MULTIPLE BIDS: Where the bid for the project is to be stated as multiple parts of the Work of the project where no one Bidder will automatically perform all parts of the Work, the Bidder is not required to submit a bid for all of the parts of the Work and may state on his bid form that his bid is only valid for certain combinations of bid packages. Items for which bids are not submitted shall be marked as "No Bid".

8.1.9 BIDDER INFORMATION: Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract.

8.1.10 BIDDER IDENTIFICATION: Upon request of the Owner or Architect, the Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work, provide information as to the state of incorporation of a business operating as a corporation, provide information as to other companies related to this company by ownership, authorization to operate in the state where the project is located, and where the bid is signed by an agent, that is any person not regularly employed by the Bidder, a current power of attorney attached certifying the agent's authority to bind the Bidder.

**8.2 BID SECURITY**

8.2.1 BID SECURITY REQUIRED: Each Bid shall be accompanied by a bid security.

8.2.2 FORM OF BID SECURITY: Bid bond, certified or cashier's check or a credit union certified share draft are acceptable. If bid bond, the bond shall be provided in the form of AIA A310-2010 Bid Bond. The attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.

8.2.3 BID SECURITY AMOUNT: Bid Security in the amount of five percent (5%) of the total amount of the bid.

8.2.4 BID SECURITY PLEDGE: By submitting a Bid and providing Bid Security, the Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

8.2.5 CONDITIONS FOR RETAINING BID SECURITY: The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

**8.3 SUBMISSION OF BIDS**

8.3.1 All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in opaque envelopes and assembled as noted in 8.1.3 above.

8.2.2 VERIFICATION OF TIME OF SUBMITTAL: Iowa Public bidding laws require timely submission of bids. Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened. Where a time stamp is available it shall be used to show proof of timely submission, the time shown by the stamp will be final. Where times are affixed manually, the time shall be determined by mobile phone and the time of submission noted by the recipient on the bid.

8.2.3 RESPONSIBILITY FOR DELIVERY OF BIDS: The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids. Failure of the US Mail or other service to make delivery on time is not acceptable.

8.2.4 BID MEDIUM: All bids must be submitted in written form. Oral, telephonic, telegraphic, and facsimile or other electronically transmitted bids will not be considered.

**8.3 MODIFICATION OR WITHDRAWAL OF BID****8.3.1 BID MODIFICATION:**

- .1 MODIFICATION PRIOR TO TIME DUE: A bidder may request the return of a bid that has been submitted and may revise and resubmit a bid prior to the time bids are due. Revised bids must be in full compliance with these Instructions to Bidders. If the bid is to be resubmitted, the original bid form may be modified and the changes initialed by the person signing the form or a new bid form prepared and submitted to replace the original. The amount of the Bid Security must match any revisions in the bid amount.
- .2 MODIFICATION AFTER TIME DUE: A Bid may not be modified by the Bidder after the time that bids are due or after they are opened.

8.3.2 BID WITHDRAWAL: The Bidder may withdraw his bid from consideration after the deadline for submittal and after the opening of the bids provided that the Owner has not formally accepted the bids. Once the bid has been formally accepted by the Owner, withdrawal of the bid requires forfeiture of the Bid Security.

8.4 OPENING OF BIDS: Bids for this project will be opened at the date and time noted in Article 1 above. All properly prepared bids will be read aloud as they are opened. Bids not accompanied by a Bid Security and other required forms will be returned unopened. Bids to public agencies will be tabulated and the results of all bids will be made available to all Bidders.

**8.5 REJECTION OF BIDS**

The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

**8.6 ACCEPTANCE OF BID (AWARD)**

8.6.1 INTENT TO AWARD: It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

8.6.2 REFERRAL OF BIDS FOR ACCEPTANCE: Provided the Owner finds the bids to be in his best interests, the contracts will be referred to the Anamosa City Council for award to the lowest responsible bidder considering base bid,

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

any selected alternates, unit prices, and that personnel meet the minimum qualifications. For this project once the Owner has determined the lowest responsible bidder and tentatively made contract award, the Iowa Economic Development Authority (IEDA) may elect to review the proposal information. Further, each building Owner is making a financial contribution to this project and therefore will have the right to review cost information provided by the Contractor for each building. Bids are submitted with the understanding that any of the Building Owners may elect to withdraw from the project prior to execution of a Contract for Construction. An executed "Notice to Proceed" or fully executed Contract will indicate final award of the project to the contractor. The Owner reserves the right to include any combination of alternates indicated on the Form of Proposal in the determination of the lowest responsible bidder.

8.6.3 WAIVER OF IRREGULARITIES: The Owner reserves the right to reject any or all bids, to waive minor informalities and to enter into such contract as it shall deem for the best interest of the Owner.

- A. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

**ARTICLE 9 – POST-BID INFORMATION**

9.1 CONTRACTOR'S QUALIFICATION STATEMENT: Bidders to whom award of a Contract is under consideration may be requested to submit a properly executed AIA Document A305, Contractor's Qualification Statement.

9.2 OWNER'S FINANCIAL CAPABILITY: The Owner shall, at the request of the Bidder to whom award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

9.3 SUBMITTALS REQUIRED BEFORE EXECUTION OF CONSTRUCTION CONTRACT:

9.3.1 UNIT PRICE BID FORM FOR BUILDING CONSTRUCTION CONTRACT

- .1 SUBMITTAL: This form must be completed and electronically transmitted to the Architect within 72 hours of the Bid Opening. The apparent low Bidder and any additional Bidders requested by the Architect shall submit this form.
- .2 USE OF INFORMATION DURING BIDDING: These unit prices may be used for comparison purposes to determine if the Bid of the apparent low Bidder is in the best interests of the Owner. Bidders who fail to submit this form by the deadline may be disqualified from the project.
- .3 USE OF THE INFORMATION DURING CONSTRUCTION: The prices provided on this form are to be used for addition or deletion of Work for the items indicated on the form. Unless otherwise directed, these costs are to be used to compute the additional cost or savings when the project scope of work is modified. The Owner reserves the right to request recomputation of proposed costs where significant quantities of material are involved in the change.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****9.3.2 BUILDING COST BREAKDOWN**

- .1 SUBMITTAL: To be submitted within three (3) days of the opening of bids by the apparent lowest responsible bidder.
- .2 CONTENT: On a form provided by the Architect the Bidder will provide a breakdown of the cost of each building project and a breakdown of the cost of labor and materials to be paid for by the CBDG Grant as distinct from the cost of labor and materials to be paid for separate from the CBDG Grant. Based upon this information each Building Owner will choose to remain or decline to continue with the project. The withdrawal of a Building Owner from the project will decrease the project contract amount by the amount allocated to that building.

**9.3.3 INTENT TO COMPLY WITH SECTION 3 REQUIREMENTS**

- .1 SUBMITTAL: To be submitted within three (3) days of the opening of bids by the apparent lowest responsible bidder.
- .2 FORMAT: On a form provided by the Architect in the specifications, as part of the CBDG Grant requirements.

**9.3.4 VERIFICATION OF ELIGIBILITY TO PARTICIPATE IN A FEDERALLY ASSISTED PROJECT**

- .1 SUBMITTAL: To be submitted to the Grant Administrator within three (3) days of the opening of bids by the apparent lowest responsible bidder.
- .2 FORMAT: On a form provided by the Grant Administrator in the specifications, as part of the CBDG Grant requirements.

**9.3.5 PROJECT MANAGER AND PROJECT SUPERINTENDENT RESUMES FOR BUILDING CONSTRUCTION CONTRACT:**

- .1 To be submitted within (3) days of the opening of bids by the apparent lowest responsible Bidder. In the case of close bids the Architect may request additional contractors to submit this form for further evaluation.
- .2 Resumes shall demonstrate education and experience requirements shown in Section 00800.1.3.
- .3 Contractors who fail to submit this proposal by the time requested or whose personnel qualifications fail to meet the required standards may be disqualified.

**9.3.6 SUBMITTAL OF ADDITIONAL ITEMS FOR ALL CONTRACTS: Prior to execution of the final contract for construction the following items will be required to be submitted.**

- .1 PERFORMANCE AND PAYMENT BOND
- .2 PROOF OF INSURANCE
- .3 SCHEDULE OF PROJECT VALUES FOR EACH BUILDING
- .4 LIST OF SUBCONTRACTORS AND SUPPLIERS
- .5 OTHER INFORMATION NOTED HEREIN

**9.3.7 LIST OF SUBCONTRACTORS AND SUPPLIERS FOR BUILDING CONSTRUCTION CONTRACT: The Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:**

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

**9.3.8 QUALIFICATIONS OF THE CONSTRUCTION TEAM: The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed in the list of subcontractors and suppliers to furnish and perform the Work described in the Bidding Documents.**

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

9.3.9 REJECTION OF SUBCONTRACTORS OR SUPPLIERS: Prior to the execution of the Contract, the Architect will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

9.3.10 USE OF SPECIFIED ENTITIES: Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

**ARTICLE 10 – PERFORMANCE BOND AND PAYMENT BOND**

10.1 BOND REQUIREMENTS: The successful bidder will be required to furnish Performance and Labor and Material Payment Bond for each project on AIA -312-2010 equal to One Hundred Percent (100%) of the contract price. Contractor is to include cost of such bonds in the Base Bid.

10.2 COST OF BOND: If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid.

10.3 DELIVERY OF BOND: The Bidder shall deliver the required bonds to the Owner not later than the date of delivery of the executed Contract. If the Work is to be commenced prior thereto in response to a Letter of Intent, the Bidder shall, upon request and prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section.

10.4 The attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

**ARTICLE 11 – FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR**

11.1 CONTRACT: Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A101, Standard Form of Agreement between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.

11.2 GENERAL CONDITIONS: AIA GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AIA201-1997 as modified by these documents is included as a part of the contract document.

**ARTICLE 12- WAGE RATES**

12.1 WAGE RATES: The City of Anamosa has received a federal grant that will be used for partial funding of the project. Pursuant to the requirements of that grant Davis-Bacon wage rates are to be used on this project. Wage rates that were current at the time of preparation have been inserted in this specification and it is the contractor's responsibility to make sure that they are using the most current rates at the time of bid opening. Wage rates should be checked the day of bidding.

All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- ( 1 ) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- ( 2 ) The classification is utilized in the area by the construction industry; and
- ( 3 ) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 00 – PROCUREMENT AND CONTRACT REQUIREMENTS

## SECTION 002213 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

## PART 1 - GENERAL

## 1.1 GENERAL

- A. The "General Conditions of the Contract for Construction, "AIA Document A201-2017, Articles 1 through 15 inclusive, is a part of ALL CONTRACTS FOR THIS PROJECT and is bound herein.
- B. The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction, "AIA Document A201-2017". Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

## 1.2 ARTICLE 1: CONTRACT DOCUMENTS

- A. Add new subparagraph, "1.1.9 PRODUCTS: The term product as used in these Supplementary Conditions includes materials, systems and equipment."

## 1.3 ARTICLE 3: CONTRACTOR

- A. Add the following to paragraph 3.3.1 "Management of the project by an Owner or Officer of the Company or another designated employee shall be fulfilled by meeting the requirements of section 3.9."
- B. Rename and insert the following in lieu of the existing paragraph 3.9:  
"3.9 PROJECT MANAGEMENT AND SUPERVISORY PERSONNEL  
3.9.1 The Contractor shall employ competent personnel to fulfill the proper management and supervision of the project. As a minimum a project superintendent and project manager and required assistants shall be employed to manage the project. These persons shall represent the Contractor and communications given to either the Project Manager or the Superintendent shall be as binding as given to the Contractor. Superintendent and Project Manager may be one individual. Superintendent shall be on site construction personnel are working at the site.

3.9.2 Project Manager: The Contractor shall employ a competent Project Manager who shall attend all project meetings, shall be responsible for review and processing of all shop drawings, shall have authority to direct the Superintendent, Subcontractors, and Suppliers, and shall be the primary point of contact for all contract matters on the project. The Project Manager may have assistants as required for the project. The Project Manager shall be in fiscal and time schedule control of the Project. The Project Manager may manage more than one project at a time provided that service to this project is provided in a timely manner. Project managers must be experienced in construction with experience in contracts, scheduling, and related on site experience. Project managers shall have a minimum of five years as a project superintendent or five years as a project manager or be able to demonstrate broad construction experience and knowledge over a long period of time that has prepared the individual for management of the project.

3.9.3 Superintendent: The superintendent shall be considered to be a project foreman who is at the site and involved in the project as note below. Superintendents are considered a part of the project work force and shall in addition to supervisory functions provide skilled construction work. Inquiries and questions at the jobsite shall be first directed to the superintendent. Only upon his direction shall questions from the jobsite be directed to the Architect. The superintendent shall coordinate onsite construction activities with the Owner when needed to facilitate construction or resolve onsite construction conflicts including when the Owner is occupying the building, providing part of the building labor or materials, or has separate Contractors working on the project. Questions regarding construction documents, which are not clearly apparent to the superintendent shall be directed to the

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Architect for interpretation. As a minimum Superintendents shall have five years of successful experience as a lead framing carpenter and three years or five projects as a project superintendent or be able to demonstrate broad construction experience and knowledge over a long period of time that has prepared the individual for management of the project.

3.9.4 Submittal of Qualifications (Applies only to Building Construction Contract): The Contractor, as soon as practical after the award of the Contract, but prior to formal acceptance of the Contractor's proposal by the Owner, shall furnish in writing to the Owner through the Architect the name and qualifications of the proposed Project Manager and Superintendent. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or Architect has reasonable objection to the proposed Project Manager or Superintendent or (2) that the Architect requires additional information or time to review. Upon notice that a candidate is not acceptable the Contractor shall submit the name and qualifications of alternate personnel or withdraw their proposal for the project. If no written objection is filed within 14 days the Contractor's selection shall be considered acceptable. The Contractor shall not employ on this project any Project Manager or Superintendent to whom the Owner or Architect has made reasonable and timely objection.

3.9.5 Change in Personnel: The Superintendent and Project Manager shall be assigned to the project for the duration of the project, and shall be replaced on the project only if dismissed from employment with the construction company, has an illness that would require long absences from the work site, is requested to be removed by the Owner and Architect \, or upon request by the General Contractor for approval of the Owner and Architect. Any change in the Superintendent or Project Manager on the project shall be requested by the Contractor in writing at least two weeks prior to the change and shall be approved by the Architect and Owner in writing prior to any change. Any of the following will be deemed to be a failure to pursue the project in a timely manner and will be pursued according to Article 1.07 below or other provisions of the General Conditions as may be appropriate.

1. Absence from the project by the Superintendent at critical times in the project or when the construction trades are working at the site.
2. Reassignment of the Superintendent to other projects where the Superintendent is required to be full-time,
3. Repeated failure of the Superintendent or Project Manager to respond in a timely manner to inquiries from the Owner, Subcontractors, Suppliers, or the Architect
4. Repeated failure of the Superintendent or Project Manager to attend project meetings"

1.4 ARTICLE 4: ARCHITECT

- A. Add the following sentence to subparagraph, "4.1.1: The term Architect as used in the Contract Documents shall refer to Martin Gardner Architecture, P.C., Kyle D. Martin, A.I.A., President, 700 11th St., Suite 200, Marion, IA 52302, or his authorized representative. "

1.5 ARTICLE 9: PAYMENTS AND COMPLETION

- A. Add new subparagraph, "9.3.4 Owner will make payment on Contract on or about the 15th day of each month of 95% of value based on contract price of labor and materials incorporated in the work, and of materials suitably stored on the site as of the 1st day of the month, less the aggregate of previous payments. Request for Payment (3 copies) shall be filed with the Architect by the 5th day of the month.
- B. Add new subparagraph, "9.10.6 Final payment will be made after 45 days from date of final acceptance and receipt of the following in 3 copies each:
1. Contractor's Affidavit of Payment of Debts and Claims, AIA Form G706.
  2. All guarantees, letters of certification, instruction manuals, and other documents required by these Specifications.
  3. Consent of Surety Company to Final Payment, AIA Form G707.
  4. Itemized statement in duplicate showing the amount of Iowa Sales Tax, or use tax, if any, and to who paid, on all materials, which have become a part of this contract.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## 1.6 ARTICLE 11: INSURANCE

- A. In subparagraph 11.1.1, in the first line following the word "maintain", insert the words "in a company or companies licensed to do business in Iowa."
- B. Add new clause 11.1.1.1 "Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:
1. The Contractor shall purchase and maintain such insurance as will protect the contractor from claims set forth below which may arise out of or result from the Contractor's operations under the contract, whether such operations be by the Contractor or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
    - a. Claims under Workers' Compensation, disability benefit, and other similar employee benefit acts;
    - b. Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employee;
    - c. Claims for damages because of bodily injury, sickness, or disease, or death of any person other than the Contractor's employee.
  2. The insurance to be maintained by Contractor shall be written as follows:
    - a. Workers' Compensation and Employers Liability Insurance as prescribed by Iowa law minimum limits shown below covering Employers Liability:

Bodily Injury by accident	\$500,000 each accident
Bodily Injury by disease	\$500,000 each accident
Bodily Injury by disease	\$500,000 policy limit
    - b. Commercial General Liability Insurance Combined Single Limits shown below covering Bodily Injury, Property Damage and Personal Injury:

General Aggregate Limit	\$2,000,000
Products-Completed	
Operations Aggregate Limit	\$2,000,000
Personal and Advertising	
Injury Limit	\$1,000,000
Each Occurrence Limit	\$1,000,000
Fire Damage Limit	
(for any one fire)	\$50,000
Medical Damage Limit	
(any one person)	\$5,000
    - c. This insurance must include the following features:
      1. Coverage for all premises and operations. The policy shall be endorsed to provide the Aggregate Per Project Endorsement.
      2. Personal and Advertising Injury.
      3. Operations by independent contractors.
      4. Contractual Liability coverage.
      5. Coverage for property damage underground or damaged by explosion or collapse (XCU).
    - d. Automobile Liability insurance, covering all owned, non-owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of \$1,000,000 per accident. Insurance must include Contractual Liability.
    - e. Umbrella/Excess Insurance: At Contractor's option, the limits specified in may be satisfied with combination of primary and Umbrella/Excess Insurance.
    - f. Additional Insured- The Contractor will include the owner as additional insured all policies except Workers' Compensation as respects all work performed for the jurisdiction.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- g. Insurance Certificates- Each policy noted above shall be issued by an insurance company authorized to write such insurance in the State of Iowa and shall be reasonably acceptable to owner. These insurance policies shall not be canceled without at least 10 days prior written notice to owner. A properly executed Certificate of Insurance showing evidence of these insurance Requirements shall be delivered to owner prior to the Commencement of Operations.
      - h. The company and the insured expressly agree and state that the purchase of this policy of insurance by the insured does not waive any of the defenses of governmental immunity available to the insured under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time. The company and the insured further agree and state that this policy of Insurance shall cover only those claims not subject to the defense of governmental immunity under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
    - 3. Subrogation: To the extent that such insurance is in force and collectible and to the extent permitted by law, owner and Contractor each hereby releases and waives all right of recovery against the other or anyone claiming through or under each of them by way of subrogation or otherwise. The foregoing release and waiver shall apply to damage to contractor's equipment, tools, and other personal property as well as automobiles.
  - C. Builders Risk insurance shall be purchased by the Contractor.
- 1.7 ARTICLE 14: TERMINATION OF CONTRACT
- A. Add new subparagraph 14.1.1.5 to read as follows, "Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials or employs subcontractors or suppliers who persistently or repeatedly refuse or fail to supply enough properly skilled workers or proper materials in a timely manner so as to keep the construction project on schedule."
  - B. Add new subparagraph 14.1.5, "If work or construction is stopped directly or indirectly by or as the result of the order or action of any federal or state authority or of any Court because of the occurrence or existence of a national emergency, and the circumstances or conditions are such that it is and will be impracticable to proceed with such work or construction, the contract may be terminated. When this contract is so terminated the Contractor shall be paid for all work or construction executed and completed at that time, and also for any materials or equipment on hand specially procured for that project. If the parties cannot agree as to the termination of this contract, or as to the amount of payment to be made, either party may have said question or questions determined by bringing an appropriate action therefore in the District Court of the state of the county in which the project is located."

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 00 – PROCUREMENT AND CONTRACT REQUIREMENTS

## SECTION 002600 - PROCUREMENT SUBSTITUTION PROCEDURES

## 1.1 DEFINITIONS

- A. Procurement Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Procurement and Contracting Documents, submitted prior to receipt of bids.
- B. Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Contract Documents, submitted following Contract award. See Section 012500 "Substitution Procedures" for conditions under which Substitution requests will be considered following Contract award.

## 1.2 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Where appropriate engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

## 1.3 PROCUREMENT SUBSTITUTIONS

- A. Procurement Substitutions, General: By submitting a bid, the Bidder represents that its bid is based on materials and equipment described in the Procurement and Contracting Documents, including Addenda. Bidders are encouraged to request approval of qualifying substitute materials and equipment when the Specifications Sections list materials and equipment by product or manufacturer name.
- B. Procurement Substitution Requests will be received and considered by Owner when the following conditions are satisfied, as determined by Architect; otherwise requests will be returned without action:
  - 1. The request is fully documented and properly submitted.
  - 2. Extensive revisions to the Contract Documents are not required.
  - 3. Proposed changes are in keeping with the general intent of the Contract Documents, including the level of quality of the Work represented by the requirements therein.

## 1.4 SUBMITTALS

- A. Procurement Substitution Request: Submit to Architect Procurement Substitution Request must be made in writing ] in compliance with the following requirements:
  - 1. Requests for substitution of materials and equipment will be considered if received no later than 5 days prior to date of bid opening.  
Submittal Format: Submit three (3) copies of each written Procurement Substitution Request, or one (1) electronic copy using CSI Substitution Request Form 1.5C or similar form.
  - 2. Submittal Format: Submit Procurement Substitution Request, using format provided on Project Web site.
    - a. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specifications Sections and drawing numbers.
    - b. Provide complete documentation on both the product specified and the proposed substitute, including the following information as appropriate:
      - 1) Point-by-point comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.
      - 2) Copies of current, independent third-party test data of salient product or system characteristics.
      - 3) Samples where applicable or when requested by Architect.
      - 4) Detailed comparison of significant qualities of the proposed substitute with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- 5) Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - 6) Research reports, where applicable, evidencing compliance with building code in effect for Project, from ICC-ES (International Code Council Evaluation Service) or other code compliance agency.
  - 7) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will become necessary to accommodate the proposed substitute.
  - 8) List of similar installations for completed projects with project names, addresses and names of addresses for architects and owners who will act a reference as to the performance of the product.
  - c. Provide certification by manufacturer that the substitute proposed is equal to or superior to that required by the Procurement and Contracting Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated.
  - d. Bidder, in submitting the Procurement Substitution Request, waives the right to additional payment or an extension of Contract Time because of the failure of the substitute to perform as represented in the Procurement Substitution Request.
- B. Architect's Action:
- 1. Architect may request additional information or documentation necessary for evaluation of the Procurement Substitution Request. Architect will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the Procurement and Contracting Documents.
- C. Architect's approval of a substitute during bidding does not relieve Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents.

END OF SECTION

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

SECTION 003300 – EXISTING CONDITION INFORMATION

1.1 MORTAR ANALYSIS REPORT

- A. A mortar analysis report entitled “Mortar Analysis Anamosa Façade Rehabilitation Project” has been prepared by David Arbogast, dated December 14, 2020.

AMA Arbogast Mortar Analysis

David Arbogast

Ph: 563-355-1553

1803 Pineacre Avenue

Davenport, IA. 52803

- B. A summary of this report is bound into this Project Manual as shown in the Appendix for reference. The full report is available for download from the Architect's website and for review in both offices of the Architect and at the Owner's noted locations.
- C. The information described shall be construed as a requirement of this Contract.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

## DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

## SECTION 003350 – EXISTING HAZARDOUS MATERIAL INFORMATION

## 1.1 Asbestos Report

- A. An Asbestos Inspection report entitled “Anamosa Façade Project” has been prepared by Hawkeye Environmental, LLC,

Hawkeye Environmental, LLC.  
Steve Hennebury  
Ph: (319) 551-4441  
814 Wood Lily Road  
Solon, Iowa 52333

- B. The “Material Samples” Schedules part of the full report is bound into this Project Manual as show in the Appendix for reference. A copy of the full asbestos report is available for download on the Architect's project website, both offices of the Architect, and the offices of the Owner.
- C. The information provided is for contractor information only. An Asbestos Abatement contractor will be retained by the owner under a separate contract. The selected general construction contractor shall coordinate construction efforts with the abatement contractor.

## 1.2 Lead Based Paint

- A. Upper story residential units are present in 203 East Main, 205 East Main, 209 West Main, and 211 West Main. Lead safe work practices are required for work conducted on the facade and interior of these units. Work must be performed by an IDPH Lead Professional.
- B. Clearance testing is required following any lead hazard reduction or abatement activity accomplished on federally assisted target housing (paint stabilization, interim controls, standard treatments, on-going maintenance, rehabilitation activity that disturbs known or presumed lead based paint, or lead hazard or lead paint abatement). Clearance testing must be performed in accordance with the Iowa Department of Public Health's State Environmental Protection Agency program requirements and can only be performed by certain certified lead professionals. Clearance testing results must conform to the EPA clearance standards found in the Iowa Department of Public Health's Chapter 70 of the Iowa Administrative Code.
- C. Lead safe practices are defined in the following regulations:
- Lead Based Paint Poisoning Prevention Act (42 U.S.C. 4821 - 4846) and implementing regulations.
  - Lead Base Paint & Lead-Safe Housing Regulations, 24 CFR Part 35 et. al.
  - Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Properties and Housing Receiving Federal Assistance, Final Rule
- D. The Contractor must provide information as necessary and as requested by the Iowa Economic Development Authority for the purpose of fulfilling all reporting requirements related to the CDBG Program.
- E. The use of lead-based paint materials on any surface, interior or exterior, is prohibited.

END OF SECTION

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01**

FORM OF PROPOSAL FOR  
DOWNTOWN FAÇADE REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA

DATE: \_\_\_\_\_

PROJECT NO: 11919.01

**PROPOSAL FOR GENERAL CONSTRUCTION**

Hereby described as follows:  
All construction for the project as shown in the construction documents.

Name of Bidder: \_\_\_\_\_ a corporation/a partnership/an  
individual (strike out Inapplicable terms) doing business as \_\_\_\_\_.

To: City of Anamosa  
107 South Ford Street  
Anamosa, Iowa 52205

The undersigned, having examined the contract documents and having familiarized themselves with the nature of the work to be done and the conditions under which the work will be performed, in accordance with the drawings and specifications proposes to provide the required labor, services, materials and equipment, and to perform the work required for completion of the project at the price set forth hereafter.

Bidder acknowledges receipt of the following Addenda, which are a part of the Bidding Documents:

Numbers \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

**Base Bid:** \_\_\_\_\_ (\$ \_\_\_\_\_)

**Alternate Bid A-1:** New inset paneling above storefront for 201 E Main, as shown on sheet A110.  
ADD for the sum of:

\_\_\_\_\_ (\$ \_\_\_\_\_)

**Alternate Bid A-2:** Removal of existing windows and new replacement windows for 201 E Main, as shown on sheet A111.  
ADD for the sum of:

\_\_\_\_\_ (\$ \_\_\_\_\_)

**Commencement Date:** Commencement of construction will be contingent upon Written Notice to Proceed.

**Substantial Completion Date:** to be achieved no later than April 1, 2022.

**Final Completion:** to be achieved no later than May 1, 2022.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

The undersigned bidder states that this proposal is made in conformity with contract documents and agrees that, in the event of any discrepancies or differences between any condition of his proposal and the contract documents prepared by Martin Gardner Architecture, P.C., Kyle D. Martin, A.I.A., the provisions of the latter shall prevail.

The contractor in submitting this proposal agrees that the above schedule is acceptable and that he has made all provisions in his proposal to deliver the project by the above date provided the Owner accepts the above proposal or combination of proposals and submits to the contractor a Notice to Proceed or a contract for construction within forty-five (45) working days of the receipt of bids. If Notice to Proceed or the contract is received after forty-five (45) days than that number of days shall be added to the above completion date.

All of the above to commence after receipt of either a written Notice to Proceed or the executed Agreement furnished by the Owner, subject to factors which may delay, extend, suspend or terminate the work as set forth in the contract documents.

The contractor hereby submits this proposal in duplicate in an envelope marked with the project name and "Proposal". In a separate envelope accompanying the proposal shall be a Bid Bond as noted in the Instructions to Bidders. Mark this envelope with the project name and "Bid Bond"

BIDDER: \_\_\_\_\_ Corporate Seal (if any)

BY: \_\_\_\_\_  
(Authorized Signature)

TITLE: \_\_\_\_\_

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01****UNIT PRICE PROPOSAL FORM  
DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA**

**This form is to be completed and returned by the apparent low bidder within three days of the date the bids for the project are due. This form is for use during construction as a means to calculate additional project costs that might be incurred. These costs may be used as a consideration in determining the lowest responsible bidder.**

Name of Bidder: \_\_\_\_\_ a corporation/a partnership/an  
individual (strike out Inapplicable terms) doing business as \_\_\_\_\_.

To: City of Anamosa  
107 South Ford Street  
Anamosa, Iowa 52205

The undersigned, having examined the contract documents and having familiarized himself with the nature of the work to be done and the conditions under which the work will be performed, in accordance with the drawings and specifications proposes to provide the following items at the prices indicated.

	<u>Description</u>	<u>Unit</u>	<u>Unit Price</u>
A-1	Additional brick, limestone or clay tile mortar joint repair on building already noted to have work. Includes cutting mortar joints and repointing with lime mortar as specified.	LF Joint	_____
A-2	Cost per brick unit to remove existing brick from the wall and install new (standard) brick on building where other masonry work is already noted for completion. Brick is to be an approved color match for the building.	Per Brick	_____
A-3	Cost per brick unit to remove existing brick from the wall and install custom-made brick to match on the building where other masonry work is already noted for completion. Custom brick color to be as approved for the building.	Per Brick	_____
A-4	Cost per structural clay tile unit to remove existing clay tile from the wall and install new clay tile on building where other masonry work is already noted for completion. Clay tile is to be an approved match for the building.	Per Clay Tile	_____
A-5	Patch/repair/paint interior plaster wall finish to match existing adjacent wall in areas not already noted for work.	Per SF	_____

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

A-6 Additional joint sealant on building Per LF  
already noted to have work. Includes  
removing old sealant and installing new  
sealant, no backer rod.

BIDDER: \_\_\_\_\_ Corporate Seal (if any)

BY: \_\_\_\_\_  
(Authorized Signature)

TITLE: \_\_\_\_\_

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****UNIT PRICE PROPOSAL FORM  
INDIVIDUAL BUILDING RENOVATION COST BREAK DOWN FORM  
ANAMOSA, IOWA**

This form is to be completed and returned by the apparent low bidder within three days of the date the bids for the project are due (by the end of the working day) identifying the costs for each individual building in the project (buildings listed in Section 002113, 1.1,B). The apparent low bidder shall be required to submit this proposal.

Name of Bidder: \_\_\_\_\_ a corporation/a partnership/an  
individual (strike out inapplicable terms) doing business as \_\_\_\_\_.

To: City of Anamosa  
107 South Ford Street  
Anamosa, Iowa 552205

The undersigned understands that the City of Anamosa, as the project Owner, will obtain leases from the property owners of all of the participating businesses that allow work to be pursued under this construction contract.

The undersigned, having examined the contract documents and having familiarized themselves with the nature of the work to be done and the conditions under which the work will be performed, in accordance with the drawings and specifications identifies the following costs to be the actual cost of work on each of the buildings.

The undersigned further understands in submitting this information that that the individual building owners may not elect to participate in the construction project after reviewing the final costs for the work on their buildings and their required contribution to the project cost. This reduction in the contract amount may be reflected after the initial contract for construction has been awarded and all building owners have determined their level of participation.

Building Name: \_\_\_\_\_  
Building Address: \_\_\_\_\_

Total Building Construction Cost. \$ \_\_\_\_\_

BIDDER: \_\_\_\_\_ Corporate Seal (if any)

BY: \_\_\_\_\_  
(Authorized Signature)

TITLE: \_\_\_\_\_

**INTENT TO COMPLY WITH SECTION 3 REQUIREMENTS**  
***(To be provided with procurement documents and returned with all submitted bids)***

Section 3 of the Housing and Urban Development Act of 1968 [12 U.S.C. 1701u and 24 CFR Part 135] is HUD's legislative directive for providing preference to low-income residents of the local community (regardless of race or gender), and the businesses that substantially employ these persons, for new employment, training and contracting opportunities resulting from HUD-funded projects. The regulations seek to ensure that low- and very low- income persons, and the businesses that employ these individuals, are notified about the expenditure of HUD funds in their community and encouraged to seek opportunities, if created.

A Section 3 resident is defined as a public housing resident or someone with a household income that is less than 80% of the area median income.

A Section 3 business is defined as a business that is:

51% owned by Section 3 residents

Whose permanent, full-time staff is comprised of at least 30% Section 3 residents\*\*

Has committed 25% of the dollar amount of its subcontracts to Section 3 businesses

**Note:** If your business meets the definition of a Section 3 business, you may register as a Section 3 Business through HUD's website here: <https://portalapps.hud.gov/Sec3BusReg/BRegistry/RegisterBusiness>

Businesses who self-certify that they meet one of the regulatory definitions of a Section 3 business will be included in a searchable online database. The database can be used by agencies that receive HUD funds, developers, contractors, and others to facilitate the award of covered construction and non-construction contracts to Section 3 businesses.

**Please complete the following:**

1. If awarded a contract for this CDBG funded project, do you anticipate hiring new employees to complete the project? (Hiring would be specific to this project)

☐ Yes ☐ No If yes, please estimate the number of employees to be hired: \_\_\_\_\_

2. Is your business a Section 3 Business? ☐ Yes ☐ No

3. Is the bidder willing to consider hiring Section 3 residents for future employment opportunities that are a direct result of this CDBG funded project?

☐ Yes ☐ No

4. Is the bidder willing to consider subcontracting with Section 3 Businesses for this project?

☐ Yes ☐ No

I understand that this contracting opportunity is subject to HUD Section 3 requirements (24 CFR Part 135). I have read and understand the Section 3 requirements as generally described above and presented in the Section 3 contract language included in the procurement documents for this project. If awarded a contract, the business commits to following Section 3 requirements, as they apply to this project. If awarded a contract for this project, the business agrees to provide reports to (insert City/County) on Section 3 efforts and accomplishments.

<hr/>	
Name of Contractor/Subcontractor	Address
<hr/>	
Print Name	Title
<hr/>	
Signature	Date



## MEMORANDUM

TO: Contractors, Consultants, and/or Vendors  
FROM: Tom Gruis – ECICOG Planner

Subject: **Verification of Eligibility to Participate in a Federally Assisted Project**

**Project Name: Anamosa DTR Project / 20-DTR-001**

Due to federal funding that is assisting the herein named project, it is required that contractors, consultants, and/or vendors (as applicable) be verified as eligible through the Iowa Economic Development Authority (IEDA) to perform work or provide product. More specifically, that they have not been placed on the “debarred” list maintained by the U.S. Department of Labor.

As such, contractors, consultants, and/or vendors must be verified as eligible prior to award of a funding agreement. In the case of contractors to perform construction or architect/engineer to perform professional service prior to entering into contract with city or county. In the case of construction sub-contractor, prior to performing work with the general contractor. In the case of vendor, prior to the provision of product with purchaser.

**General contractors are to submit the attached form with their construction bid.**  
**Others are otherwise to submit when appropriate to person named below.**

*Note: All construction contractors (general & subs) must be registered with the State of Iowa.  
This requirement does not pertain to professional service consultants or product vendors.*

**If not submitted with construction bid, the attached form must be returned directly to:**

Tom Gruis, Planner  
East Central Iowa Council of Governments  
700 16<sup>th</sup> Street NE – Ste. 301  
Cedar Rapids, IA 52402  
319-365-9941 ext. 130  
[tom.gruis@ecicog.org](mailto:tom.gruis@ecicog.org)

**Project Name: Anamosa DTR Project**

**Please Write with Clarity**

Check, as Applicable: \_\_\_ General Contractor \_\_\_ Sub-contractor \_\_\_ Consultant \_\_\_ Vendor

If Sub-contractor or Consultant ,Type of Work: \_\_\_\_\_

Contract or Product Value: \$ \_\_\_\_\_

Business Name: \_\_\_\_\_

Business Officer's Name: \_\_\_\_\_

BusinessAddress: \_\_\_\_\_

Business Tax ID Number: \_\_\_\_\_

DUNS Number: \_\_\_\_\_

Information regarding the DUNS number is available here: <http://fedgov.dnb.com/webform/>

State of Iowa Registration Number: \_\_\_\_\_

*Note: Insert Not Applicable if Consultant or Vendor*

“Section 3” Business (i.e., for low income business qualified business): \_\_\_\_\_ yes *or* \_\_\_\_\_ no

Minority Business Enterprise: \_\_\_\_\_ yes *or* \_\_\_\_\_ no

If yes, (i.e., not White), check appropriate line:

- \_\_\_\_\_ Black / African American
- \_\_\_\_\_ Asian
- \_\_\_\_\_ American Indian / Alaskan Native
- \_\_\_\_\_ Native Hawaiian / Other Pacific Islander
- \_\_\_\_\_ White & American Indian / Alaskan Native
- \_\_\_\_\_ White & Asian
- \_\_\_\_\_ White & Black
- \_\_\_\_\_ American Indian / Alaskan Native & Black
- \_\_\_\_\_ Other Multi-Racial

Women's Business Enterprise: \_\_\_\_\_ yes *or* \_\_\_\_\_ no

Hispanic Business: \_\_\_\_\_ yes *or* \_\_\_\_\_ no

Number of Current Employees to Work on Project: \_\_\_\_\_

Number of New Employees to be Hired to Work on the Project: \_\_\_\_\_

**If not Submitted with Bid, Complete and Return To:**

Tom Gruis, Planner  
East Central Iowa Council of Governments  
700 16<sup>th</sup> Street NE – Ste. 301  
Cedar Rapids, IA 52402  
319-365-9941 ext. 130  
[tom.gruis@ecicog.org](mailto:tom.gruis@ecicog.org)

**Return conveyance of scanned copy to person above via e-mail is preferred.**

"General Decision Number: IA20210078 01/01/2021

Superseded General Decision Number: IA20200078

State: Iowa

Construction Type: Building

Counties: Benton and Jones Counties in Iowa.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/01/2021

ASBE0081-001 06/01/2018

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 29.91	21.15

BOIL0083-009 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 36.56	29.05

BRIA0003-002 05/01/2019

BENTON, IOWA, JOHNSON, JONES, LINN AND POWESHIEK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 31.04	13.02

01/20/2021

39

-----  
 \* BRIA0003-006 05/01/2020

	Rates	Fringes
TILE SETTER.....	\$ 24.69	13.42

-----

CARP0308-003 05/01/2020

	Rates	Fringes
CARPENTER (Includes Acoustical Ceiling Installation, Drywall Hanging, Form Work, and Metal Stud Installation).....	\$ 27.58	20.54

-----

CARP2158-004 06/01/2020

	Rates	Fringes
MILLWRIGHT.....	\$ 30.10	24.75

-----

ELEV0033-002 01/01/2020

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 46.30	34.77+a+b

FOOTNOTES:

A. Employer contributes 8% of regular basic hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for employees with less than 5 years of service.

B. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veteran's Day; Thanksgiving Day; Day after Thanksgiving; & Christmas Day.

-----  
 ENGI0150-044 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Loader).....	\$ 35.50	34.75

Class 1(B)

-----

ENGI0150-045 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Paver-All Types).....	\$ 35.50	34.75

Class 1(B)

-----

ENGI0150-046 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR (Roller).....	\$ 35.50	34.75

01/20/2021 40

## Class 1(B)

-----  
ENGI0234-006 05/01/2018

Rates Fringes

POWER EQUIPMENT OPERATOR  
(Backhoe/Excavator/Trackhoe).....\$ 28.90 15.25  
-----

IRON0089-002 05/01/2019

Rates Fringes

IRONWORKER (Ornamental and  
Structural).....\$ 28.50 19.72  
-----

IRON0111-002 07/01/2019

Rates Fringes

IRONWORKER (Reinforcing).....\$ 32.50 26.42  
-----

LAB00043-004 05/01/2017

Rates Fringes

LABORER (Common or General).....\$ 24.62 11.90  
-----

LAB00309-010 05/01/2019

Rates Fringes

LABORER (Pipelayer).....\$ 25.75 20.82  
-----

PAIN0447-001 05/01/2019

Rates Fringes

PAINTER (Brush and Roller).....\$ 24.95 9.90  
-----

PAIN0447-002 05/01/2019

Rates Fringes

PAINTER (Spray).....\$ 24.95 9.90  
-----

PLUM0125-003 05/01/2020

Rates Fringes

PIPEFITTER (Includes HVAC  
Pipe Installation).....\$ 38.79 18.64  
-----

PLUM0125-004 05/01/2020

Rates Fringes

PLUMBER.....\$ 38.79 18.64  
-----

SFIA0669-002 04/01/2020

Rates Fringes

SPRINKLER FITTER (Fire  
01/20/2021

Sprinklers).....	\$ 36.31	23.63
------------------	----------	-------

-----  
SHEE0263-007 05/01/2020

	Rates	Fringes
--	-------	---------

SHEET METAL WORKER (Includes HVAC Duct and Unit Installation).....	\$ 35.78	19.72
--	----------	-------

-----  
SUIA2016-053 07/19/2016

	Rates	Fringes
--	-------	---------

CEMENT MASON/CONCRETE FINISHER...	\$ 21.66	2.47
ELECTRICAL INSTALLER (Low Voltage Wiring).....	\$ 24.04	8.68
ELECTRICIAN.....	\$ 28.70	10.85
FLOOR LAYER: Floor Coating/Epoxy.....	\$ 22.43	0.00
LABORER: Mason Tender - Brick...	\$ 19.39	8.17
OPERATOR: Bulldozer.....	\$ 26.13	13.56
OPERATOR: Crane.....	\$ 24.15	8.10
OPERATOR: Forklift.....	\$ 22.96	7.49
ROOFER.....	\$ 21.92	5.07

-----  
WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current

negotiated/CBA rate of the union locals from which the rate is based.

-----

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====



# **CLEARINGHOUSES FOR SOLICITATION OF MINORITY OWNED AND FEMALE OWNED BUSINESSES**

## **Small Business Administration District Office**

210 Walnut Street, Room 749

Federal Building

Des Moines, IA 50309

Contact Person: Jayne Armstrong

515/284-4913

<http://www.sba.gov/offices/district/ia/des-moines>

## **Sioux City Construction League**

3900 Stadium Drive

P.O. Box 3346

Sioux City, IA 51102 -3346

712/255-9730

<http://www.siouxlandconstructionalliance.com>

## **Illinois MBDA Business Center**

216 W Jackson Blvd.

Suite 600

Chicago, IL 60606

312/755-2565

## **National Association of Women in Construction (NAWIC)**

327 S. Adams Street

Fort Worth, TX 76104

Toll Free: 800-552-3506

Fax: 817-877-0324

Web: [www.nawic.org](http://www.nawic.org)

### Iowa Chapters

#80 - Greater Des Moines

Amber Darby

515-778-6116

#160 - Cedar Rapids/Iowa City

Carol Hustad

319-848-3133

<http://www.nawicdesmoines.org>

# **CLEARINGHOUSES FOR SOLICITATION OF MINORITY OWNED AND FEMALE OWNED BUSINESSES**

## **CONSTRUCTION UPDATE PLAN ROOMS**

*For more information, visit <http://www.mbionline.com>*

### **Master Builders of Iowa/Construction Update Plan Room**

221 Park Street  
PO Box 695  
Des Moines, IA 50306  
Phone: 515-288-8904 or 1-800-362-2578  
Fax: 515-288-8718

### **Construction Update Plan Room, Fort Dodge**

24 N. 9<sup>th</sup> Street, Suite A  
Fort Dodge, IA 50501-4251  
Phone: 515-955-5500  
Fax: 515-955-3245

### **North Iowa Builders Exchange**

9 N. Federal  
Mason City, IA 50401-3228  
Phone: 641-423-5334  
Fax: 641-423-5725

### **Master Builders of Iowa - Omaha Builders Exchange Office**

4255 S. 94<sup>th</sup> St.  
Omaha, NE 68127-1223  
Phone: (402) 593-6908  
Fax: (402) 593-6912

## Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

**A. 1. (i) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

**(ii) (a)** Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

**(1)** The work to be performed by the classification requested is not performed by a classification in the wage determination; and

**(2)** The classification is utilized in the area by the construction industry; and

**(3)** The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

**(b)** If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

**(c)** In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**(d)** The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

**(iii)** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

**(iv)** If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

**3. (i) Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

**(ii) (a)** The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

**(b)** Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

**(1)** That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and Trainees.**

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

**(iii) Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

**6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

**7. Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

**10. (i) Certification of Eligibility.** By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(ii)** No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(iii)** The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

**11. Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

**B. Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

**(1) Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

**(2) Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

---

**(3) Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

**(4) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

**C. Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

**(1)** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

**(2)** The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

**(3)** The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

## Section 3 Clause

***All section 3 covered contracts shall include the following clause (referred to as the section 3 clause):***

A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 011000 – SUMMARY

PART 1-GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section Includes:
    - 1) Project information.
    - 2) Work covered by Contract Documents.
    - 3) Access to site.
    - 4) Coordination with occupants.
    - 5) Work restrictions.
    - 6) Contractor Contributions
  - B. Related Requirements:
    - 1) Division 1 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
3. PROJECT INFORMATION
  - A. Project Identification: Downtown Revitalization Facade Improvement Project.
    - 1) Project Location: Selected Buildings, Downtown Anamosa, Iowa
  - B. Owner: City of Anamosa
    - 1) 107 South Ford Street, Anamosa, Iowa 52205
  - C. Architect: Martin Gardner Architecture, P.C.
    - 1) Project Architect: Bethany Jordan, AIA, Marion office, 319-200-8499, [bethanyj@martingardnerarch.com](mailto:bethanyj@martingardnerarch.com)
    - 2) Principal Architect: Kyle D. Martin, AIA, Marion office, 319-377-7604.
    - 3) Address:
      - a) Marion Office: 700 11<sup>th</sup> Street, Suite 200, Marion, Iowa 52302, 319-377-7604.
      - b) Strawberry Point Office: 11502, 390<sup>th</sup> Street, Strawberry Point, Iowa 52076, 563-933-4712.
4. WORK COVERED BY CONTRACT DOCUMENTS
  - A. The Work of Project is defined by the Contract Documents and consists of the following:  
Rehabilitation of existing building fronts and supplementary building elements.
  - B. Type of Contract:  
Project will be constructed under a single prime contract.
5. ACCESS TO SITE
  - A. General: Contractor shall have limited use of Project site for construction operations as indicated in the requirements of this Section. The City of Anamosa will be finalizing leases for the storefronts of the subject buildings to allow for a concerted construction project. All areas of most buildings in the project will be occupied and in use during the construction period and coordination with the building owners and tenants will be necessary to the completion of this project. Special care must also be given to protecting business patrons during the construction process.
  - B. Use of Site: Limit use of Project site to areas within the Contract limits indicated by the plans or coordinated with the Owner and Architect. Such areas include the public sidewalk and parking space or spaces directly in front of the building to be renovated. See project phasing notes on the plans. Do not

disturb portions of Project site beyond areas in which the Work is indicated. The construction schedule for the project prepared by the Contractor must be structured to indicate the phases of construction that will be undertaken. Work on one phase of the project shall be completed before beginning work on the next phase of the project.

C. Limits: Confine construction operations to the areas in and around the area of construction as noted above. Work and storage of materials and equipment in front of adjacent storefronts not in the project or not currently under construction should be avoided at all times.

D. Storage areas- Coordinate the need for on-site storage of construction materials needed for a specific storefront with the building owners and the City of Anamosa. Closure of on street parking areas and of sidewalks during the construction is allowed but only after coordinating at least 72 hours in advance. Offsite storage of materials is to be arranged for by the contractors as needed. Sidewalk access in front of buildings during construction may be restricted during construction with barricades to limit public access to the area. Protective access tunnels to store entrances may be employed when needed.

E. Driveways, Walkways and Entrances; Unless approved in advance, driveways, alleys, and store entrances not in the project cannot be blocked. Emergency access for vehicles and personnel must be maintained at all times.

- 1) Construction Barricades: A continuous barrier must be maintained around all construction areas at all time that construction work is underway. As a minimum a continuous 36" high fence, similar to snow fence is to be erected around the construction site at times while open excavations, uneven terrain, or long term construction material storage are present.
- 2) Temporary Work Areas: Areas where construction is of a short duration and construction personnel are present at all times, construction barricades are to be placed around areas sufficient to prevent entry by the general public to the work area
- 3) Temporary Enclosures: Temporary security enclosures of all openings are to be made every night. During times that occupied areas are heated or cooled the contractors shall erect weather barriers to minimize utility costs. Where storefronts or windows are removed and the building is heated or cooled, or where construction will create dust, the contractor shall construct an internal dust or weather enclosure.
- 4) Deliveries: Schedule deliveries to minimize use of streets, driveways, and entrances by construction operations. Provide flagmen to direct traffic and pedestrians when needed. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- 5) Signage and Barricades-Contractor shall provide all signage and barricades required to redirect building occupants and automobiles.
- 6) Parking: Parking by construction personnel in the construction areas shall be limited to only vehicles needed for the immediate work. Construction personnel shall park in areas agreed upon with the Architect and Owner.

F. Full Occupancy: Building Owners and the general public will occupy site and existing buildings during entire construction period. Cooperate with building owners during construction operations to minimize conflicts and facilitate the building owner's and the general public's continued usage. Perform the Work so as not to interfere with building owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

- 1) Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from building owners and approval of authorities having jurisdiction.
- 2) Notify building owner(s) not less than 72 hours in advance of activities that will affect building owner's operations.

G. Limit use of Project site to areas within the Contract limits indicated by the plans or coordinated with the Owner and Architect. Do not disturb portions of Project site beyond areas in which the Work is indicated. The construction schedule for the project must be structured to indicate the phases of construction that will be undertaken. Work on one phase of the project shall be completed before beginning work on the next phase of the project.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01**

6. WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1) Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-site work hours: Limit work to between the hours of 7:00 a.m. to 8:00 p.m. daily, unless otherwise approved in advance by owner.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
  - 1) Notify Owner not less than two days in advance of proposed utility interruptions.
  - 2) Obtain Owner's written permission before proceeding with utility interruptions.Noise, Vibration, and Odors: It is not anticipated that any restrictions will be required to limit construction activities due to noise, vibration, or odors. Review construction activities with the Owners at the Preconstruction Conference and discuss current client needs in regard to this item. Before beginning any construction operations ascertain whether any noise, vibration, or odors pose problems for any of the building program participants in the existing building.
- D. Controlled Substances: Use of tobacco products, including smoking, and other controlled substances on Project site is not permitted in areas prohibited by Iowa Law.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

## DIVISION 1 - GENERAL REQUIREMENTS

## SECTION 012000 – PROJECT MEETINGS

PART 1 – GENERAL

- 1.1 RELATED DOCUMENTS: The general provisions of the Contract including General and Supplementary Conditions and General Requirements, apply to the work specified in this section.
- A. Project meetings will be held as requested by the Owner or Architect.
- 1.2 ATTENDANCE: Construction site meetings will be held as requested by the Architect or Owner at a date and time to be established by the Architect. All Contractors active on the project as of the date of the meeting or within a week of the date of the meeting shall send a representative to the meeting. If a principal of the firm does not attend meetings, they shall send a representative that has full responsibility to bind Contractor to any decisions reached. The General Contractor shall require attendance of their Project Manager and Site Superintendent at all project meetings. Repeated failure to attend project meetings will be grounds for the Owner to request removal of subcontractors, superintendents, or project managers from the project. Additional costs to the project caused by the failure of attendance may be recovered from the Contractor at fault.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 01 – GENERAL REQUIREMENTS

## SECTION 012100 – ALLOWANCES

**PART 1 – GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
  - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order. Not all allowances noted have been used on this project. See the proposal form and other sections of this specification to determine the type or types to be used.
- B. Types of allowances may include the following:
  - 1. Lump-sum allowances.
  - 2. Unit-cost allowances.
  - 3. Quantity allowances.
  - 4. Contingency allowances.
  - 5. Testing and inspecting allowances.
- C. Related Requirements:
  - 1. Division 1 Section "Unit Prices" for procedures for using unit prices.
  - 2. Division 1 Section "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.
  - 3. Divisions 2 through 16 Sections for items of Work covered by allowances.

## 1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

## 1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

## 1.6 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 1.7 LUMP-SUM UNIT-COST AND QUANTITY ALLOWANCES
- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include freight and delivery to Project site.
  - B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- 1.8 CONTINGENCY ALLOWANCES
- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
  - B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
  - C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit margins.
  - D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.
- 1.9 TESTING AND INSPECTING ALLOWANCES
- A. Costs of services not required by the Contract Documents are not included in the allowance.
  - B. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to Owner by Change Order.
- 1.10 ADJUSTMENT OF ALLOWANCES
- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
    - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
    - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
    - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
    - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
  - B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
    - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
    - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

**PART 3 – EXECUTION**

- 3.1 EXAMINATION
- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.
- 3.2 PREPARATION
- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Lump Sum Allowance: Include a \$350 per light fixture allowance for new light fixtures where shown on construction documents but not specified. The above allowance includes material cost, freight and delivery to project site, but does not include labor, see section 1.7 above.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 01 – GENERAL REQUIREMENTS

## SECTION 012200 - UNIT PRICES

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
  - 1. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
  - 2. Section 014000 "Quality Requirements" for general testing and inspecting requirements.

## 1.3 DEFINITIONS

- A. Unit price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.
- B. Unit Prices are provided to expedite the computation of materials used where quantities cannot be anticipated prior to the start of construction or to expeditiously resolve unforeseen conditions that might arise so that construction is not delayed while pricing issues are resolved.
- C. Unit Prices are to be provided based upon the units of measure designated and shall be computed such that as little as one unit of material might be provided under this pricing. In situations where large quantities of material are required, the Contractor may be requested to re-examine the costs of providing and placing the materials to reflect the actual conditions encountered.

## 1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit unless specifically noted otherwise in the specification section for the material or on the Unit Price Proposal Form.
- B. Approval to Use Unit Prices:
  - 1. Unit Prices for Remedial Work: Contractors shall notify the Architect when remedial work is required and conditions are present where unit prices may be the basis for computing costs for the remediation. Upon notice, the Architect may review the specific project conditions or request additional testing. Upon verification of the conditions, the Architect shall either notify the Contractor of alternate methods of resolution of the condition or authorize the Contractor to proceed with the remedial operation. For situations involving large quantities of material, the Architect may request that the Contractor re-examine the unit prices to reflect the actual conditions of encountered.
  - 2. Unit Prices to Resolve Allowance Costs in the Project: Where an allowance has been noted in the contract documents which are subject to provisions of Section 012100, the Unit Prices noted on the Unit Price Proposal form shall be used to calculate the actual cost of the work under the Allowance. Work under this provision requires no additional authorization.
- C. Measurement and Payment: Contractors are to provide delivery receipts for most unit price measurements. See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections or on the Unit Price Proposal Form.
- D. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- E. List of Unit Prices: A schedule of unit prices is included in the Unit Price Proposal Form. Specification Sections for the materials contain material requirements and may contain additional information for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES: See Unit Price Proposal Form

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 01 - GENERAL REQUIREMENTS

## SECTION 012500 - SUBSTITUTION PROCEDURES

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
  - 1. Section 012100 "Allowances" for products selected under an allowance.
  - 2. Section 012300 "Alternates" for products selected under an alternate.
  - 3. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

## 1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Contractor Substitutions for Convenience: Changes proposed by the Contractor that are not required in order to meet other Project requirements but may offer time, ease the ordering process or offer other advantages to Contractor
  - 3. Contractor Substitutions for Cost: Changes proposed by the Contractor that are not required by the project but will result in a cost reduction for the project.
  - 4. Owner Substitutions for Convenience: Changes proposed by the Owner that are not required in order to meet Project requirements, but provide the Owner with a perceived better project condition or other advantage.
  - 5. Owner Substitutions for Cost: Changes proposed by the Owner strictly to reduce the project cost.

## 1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form:
    - Use CSI Form 13.1A or similar form as shown in the Appendix of this Project Manual.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
    - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Certificates and qualification data, where applicable or requested.
  - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
  - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
  - k. Cost information, including a proposal of change, if any, in the Contract Sum.
  - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
  - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.
- 1.5 QUALITY ASSURANCE
- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.
- 1.6 PROCEDURES
- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

**PART 2 - PRODUCTS**

- 2.1 SUBSTITUTIONS
- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
    - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
      - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
      - b. Substitution request is fully documented and properly submitted.
      - c. Requested substitution will not adversely affect Contractor's construction schedule.
      - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
      - e. Requested substitution is compatible with other portions of the Work.
      - f. Requested substitution has been coordinated with other portions of the Work.
      - g. Requested substitution provides specified warranty.

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01**

- h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not allowed.
- C. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Architect.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
    - b. Requested substitution does not require extensive revisions to the Contract Documents.
    - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - d. Substitution request is fully documented and properly submitted.
    - e. Requested substitution will not adversely affect Contractor's construction schedule.
    - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - g. Requested substitution is compatible with other portions of the Work.
    - h. Requested substitution has been coordinated with other portions of the Work.
    - i. Requested substitution provides specified warranty.
    - j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1-GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
  - B. Related Requirements:
    - 1) Division 1 Section "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.
3. PROPOSAL REQUESTS
  - A. Owner-Initiated Proposal Requests: Should the Owner, City of Anamosa, decide that a change in the Contract Documents or the built construction is desired or should the Owner choose to change the scope of the project, the following procedures shall be followed:
    - 1) The Owner will issue a detailed description of proposed changes in the Work in writing.
    - 2) The Owner will submit such proposed changes to the Architect for review.
    - 3) The Architect will make an initial determination as to if the proposed change will require a change in the Contract Sum or Contract Time. The Architect may request additional information to further clarify the requested change. The Architect will include Consultants in this process whenever appropriate. Where appropriate, the Architect will provide to the Owner, the cost of additional fees for the Architect and Consultants.
    - 4) The Architect may add additional information to clarify the request and will determine the method by which the proposed changes will be communicated to the General Contractor, or other Contractors. Methods for communication include but are not necessarily limited to Architect's Information to Clarify, Change Directive, or Field Directive.
    - 5) Upon receipt of the request the Contractors shall promptly inform the Architect of any additional information needed to properly address the proposed change.
    - 6) Work Change Proposal Requests issued by the Architect are not instructions either to stop work in progress or to execute the proposed change. The Contractor should notify the Architect at once if the ongoing work activities will adversely affect the proposed change. If such conditions are present, the Architect will so notify the Owner, who may issue a Stop Work notice.
    - 7) After the receipt of the Proposal Request, the General Contractor shall submit to the Architect within the time specified, a quotation detailing cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
      - a. Include a list of quantities of products and labor required or eliminated and the unit and extended costs of same, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
      - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
      - c. Include costs of labor and supervision directly attributable to the change.
      - d. Include a statement outlining the affect the proposed change would have upon the construction schedule or submit a revised schedule.
      - e. Lump sum proposals will not be acceptable unless specifically requested by the Architect or approved by the Architect in advance.
      - f. Quotation Form: Use forms acceptable to Architect.
    - 8) The Architect will review the quotation and either request clarification from the Contractor or forward the quotation to the Owner.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01**

- 9) The Owner will make a determination as to whether the quotation will be accepted.
  - 10) If accepted, the Architect will prepare the necessary notices or change order.
  - 11) Submittal of a proposed change to the Contractor does not restrict the Owner's right to conduct the change in the work with their own forces or a separate Contractor.
  - 12) Unless specifically approved in advance all changes resulting in an increase in the project cost are to be performed on a time and material basis using the estimate of costs as the maximum cost. All savings shall be maintained by the Owner. The final cost shall be documented with labor records, material breakdowns, and profit and overhead documented as separate costs.
- B. Architect-Initiated Proposals: Should the Architect decide that a change in the Contract Documents or the built construction is required; the following procedures shall be followed:
- 1) The Architect will issue a detailed description of proposed changes.
  - 2) The Architect will make an initial determination as to if the proposed change will require a change in the Contract Sum or Contract Time. The Architect may request initial information from the Owner or Contractor to determine the scope and potential costs of the proposed change. The Architect will include Consultants in this process whenever appropriate. Where appropriate, the Architect will provide to the Owner, the cost of additional fees for the Architect and Consultants.
  - 3) Methods for communication include but are not necessarily limited to Architect's Information to Clarify, Change Directive, or Field Directive.
  - 4) Upon receipt of the request the Contractors shall promptly inform the Architect of any additional information needed to properly address the proposed change.
  - 5) Work Change Proposal Requests issued by the Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 6) After the receipt of the Proposal Request, the Contractor shall submit to the Architect within the time specified, a quotation detailing cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products and labor required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
    - e. Quotation Form: Use forms acceptable to Architect.
  - 7) The Architect will review the quotation and either request clarification from the Contractor or forward the quotation to the Owner.
  - 8) The Owner will make a determination as to whether the quotation will be accepted.
  - 9) If accepted, the Architect will prepare the necessary notices or change order.
  - 10) Submittal of a proposed change to the Contractor does not restrict the Owner's right to conduct the change in the work with their own forces or a separate Contractor.
  - 11) Unless specifically approved in advance all changes resulting in an increase in the project cost are to be performed on a time and material basis using the estimate of costs as the maximum cost. All savings shall be maintained by the Owner. In work are to be performed on a time and material basis using the estimate of cost as a maximum expense. The final cost shall be documented with labor records, material breakdowns, and profit and overhead documented as separate costs.
- C. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, the Contractor may initiate a claim by submitting a request to the Architect for a change to any part of the project. Not all of the following must be submitted with the initial inquiries, but all applicable information will be required before a change order will be issued.
- 1) Seek clarification of the construction documents to be certain that the proposed change is not already included in the construction documents.
  - 2) Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- on the Contract Sum and the Contract Time.
- 3) Include a list of quantities of products and labor required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 4) Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 5) Include costs of labor and supervision directly attributable to the change.
  - 6) Include an updated Contractor's construction schedule or written statement that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time. The current schedule for completion of the project will be considered to remain in effect unless it is addressed with this submission.
  - 7) Comply with requirements in Division 1 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
  - 8) Submit the request to the Architect. The Architect will review and request additional information if needed to clarify the request.
  - 9) The Architect may determine that the request is unwarranted or propose an alternate method of resolving the issue.
  - 10) The Architect will present the request to the Owner for review.
  - 11) If accepted by the Owner, a change order will be issued by the Architect.
  - 12) Unless specifically approved in advance all changes resulting in an increase in the project cost are to be performed on a time and material basis using the estimate of costs as the maximum cost. All savings shall be maintained by the Owner. in work are to be performed on a time and material basis using the estimate of cost as a maximum expense. The final cost shall be documented with labor records, material breakdowns, and profit and overhead documented as separate costs.
4. ADMINISTRATIVE CHANGE ORDERS
- A. Unit-Price Adjustment: See Division 1 Section "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.
5. CHANGE ORDER PROCEDURES
- A. On Owner's approval of a Work Changes Proposal Request, the Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.
6. CHANGE ORDER DIRECTIVES: See Section 7.3 of the General Conditions of the Contract for Construction. Change Order Directives will be used when full agreement as to the cost of a change cannot be determined or is in dispute.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 012900 - PAYMENT PROCEDURES

PART 1-GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
  - B. Related Requirements:
    - 1) Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
    - 2) Division 1 Section "Unit Prices" for administrative requirements governing the use of unit prices.
    - 3) Division 1 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of Contractor's construction schedule.
3. DEFINITIONS
  - A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
4. SCHEDULE OF VALUES
  - A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
    - 1) Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
      - a. Application for Payment forms with continuation sheets.
      - b. Submittal schedule.
      - c. Items required to be indicated as separate activities in Contractor's construction schedule.
    - 2) Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
    - 3) Sub-schedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the work, provide sub-schedules showing values coordinated with each element.
  - B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
    - 1) Identification: Include the following Project identification on the schedule of values:
      - a. Project name and location.
      - b. Name of Architect.
      - c. Architect's project number.
      - d. Contractor's name and address.
      - e. Date of submittal.
    - 2) Arrange schedule of values consistent with format of AIA Document G703.
    - 3) Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 4) Round amounts to nearest whole dollar; total shall equal the Contract Sum.
- 5) Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
  - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
- 6) Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7) Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
  - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
- 8) Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

**5. APPLICATIONS FOR PAYMENT**

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
  - 1) Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  - 2) Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  - 3) Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
  - 4) Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
  - 1) Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
  - 2) Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  - 3) Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
- 1) Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
- 1) List of subcontractors.
  - 2) Schedule of values.
  - 3) Contractor's construction schedule (preliminary if not final).
  - 4) List of Contractor's staff assignments.
  - 5) Copies of building permits.
  - 6) Certificates of insurance and insurance policies.
  - 7) Performance and payment bonds.
- H. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
- 1) Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  - 2) This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
- 1) Evidence of completion of Project closeout requirements.
  - 2) Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  - 3) AIA Document G706A, "Contractor's Affidavit of Release of Liens."

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 012910 - INITIAL CONTRACT REQUIREMENTS

PART 1-GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
  - B. Related Requirements:
    - 1) Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
    - 2) Division 1 Section "Unit Prices" for administrative requirements governing the use of unit prices.
    - 3) Division 1 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of Contractor's construction schedule.
3. MATERIALS REQUIRED PRIOR TO EXECUTION OF THE CONTRACT FOR CONSTRUCTION
  - A. The following materials will be required to be submitted prior to execution of the Contract for Construction. Contractor shall submit the following in printed or electronically in Word .doc or .docx, Excel .xls or Adobe .pdf form unless noted otherwise:
    1. Initial list of subcontractors and major suppliers with contact information.
    2. Schedule of values as noted below.
    3. Construction Schedule. See Article 3.10 of the AIA 201 General Conditions of the Contract for Construction.
    3. Contractor's construction schedule showing projected dates for major project milestones.
    4. List of Contractor's staff assignments with resumes and qualifications of Project Manager and Superintendent
    5. Certificates of insurance.
    6. Performance and payment bonds. Provide two original paper copies.
    7. Data needed to acquire Owner's insurance. To be outlined as required by the Owner.
    8. Other forms or information needed by the Owner for lenders or funding agencies.
4. PREPARATION OF THE INITIAL SCHEDULE OF VALUES
  - A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment. See Article 9.2 of the AIA 201 General Conditions of the Contract for Construction.
  - B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section. Additional breakdown is allowed and separation of labor and material values is acceptable. Submit on AIA Document G703.
    - 1) Identification: Include the following Project identification on the schedule of values:
      - a. Project name and location.
      - b. Name of Architect.
      - c. Architect's project number.
      - d. Contractor's name and address.
      - e. Date of submittal.
    - 2) Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.

- 3) Round amounts to nearest whole dollar; total shall equal the Contract Sum.
  - 4) Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
  - 5) Each item in the schedule of values and Application for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
    - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
  - 6) Schedule Updating: Update and resubmit the Schedule of Values before the next Application for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.
- C. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
- 1) Coordinate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
    - a. Application for Payment forms with continuation sheets.
    - b. Submittal schedule.
    - c. Items required to be indicated as separate activities in Contractor's construction schedule.
  - 2) Submit the initial schedule of values to Architect at earliest possible date, but no later than seven days after notification of the award of the contract.
  - 3) Sub-schedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the work, provide sub-schedules showing values coordinated with each element.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
    - 1) General coordination procedures.
    - 2) Requests for Information (RFIs).
    - 3) Project meetings.
  - B. Related Requirements:
    - 1) Division 1 Section "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
    - 2) Division 1 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
    - 3) Division 1 Section "Closeout Procedures" for coordinating closeout of the Contract.
3. DEFINITIONS
  - A. RFI: Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.
4. INFORMATIONAL SUBMITTALS
  - A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
    - 1) Name, address, and telephone number of entity performing subcontract or supplying products.
    - 2) Number and title of related Specification Section(s) covered by subcontract.
    - 3) Drawing number and detail references, as appropriate, covered by subcontract.
  - B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
    - 1) Post copies of list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.
5. GENERAL COORDINATION PROCEDURES
  - A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
    - 1) Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
    - 2) Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
    - 3) Make adequate provisions to accommodate items scheduled for later installation.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Asbestos Abatement Coordination: The Contractor shall coordinate construction operations with the asbestos abatement contractor. The asbestos abatement contractor will be working with the owner under a separate contract.
  - C. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
    - 1) Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
  - D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
    - 1) Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.
6. REQUESTS FOR INFORMATION (RFIs)
- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
    - 1) Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
    - 2) Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
  - B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
    - 1) Project name.
    - 2) Project number.
    - 3) Date and revision dates.
    - 4) Name of Contractor.
    - 5) Name of Architect.
    - 6) RFI number, numbered sequentially with revision numbers and
    - 7) RFI subject.
    - 8) Specification Section number and title and related paragraphs, as appropriate.
    - 9) Drawing number and detail references, as appropriate.
    - 10) Field dimensions and conditions, as appropriate.
    - 11) Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
    - 12) Contractor's signature.
    - 13) Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
      - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
  - C. RFI Forms: AIA Document G716.
    - 1) Attachments shall be electronic files in Adobe Acrobat PDF format.
  - D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
    - 1) The following Contractor-generated RFIs will be returned without action:
      - a. Requests for approval of submittals.
      - b. Requests for approval of substitutions.
      - c. Requests for approval of Contractor's means and methods.
      - d. Requests for coordination information already indicated in the Contract Documents.
      - e. Requests for adjustments in the Contract Time or the Contract Sum.
      - f. Requests for interpretation of Architect's actions on submittals.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- g. Incomplete RFIs or inaccurately prepared RFIs.
    - 2) Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
    - 3) Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."
      - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
  - E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
    - 1) Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
    - 2) Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
7. PROJECT MEETINGS
- A. General: meetings and conferences at Project site unless otherwise indicated.
    - 1) Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
    - 2) Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
    - 3) Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
  - B. Preconstruction Conference: a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
    - 1) Conduct the conference to review responsibilities and personnel assignments.
    - 2) Attendees: Authorized representatives of Owner Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
    - 3) Agenda: Discuss items of significance that could affect progress, including the following:
      - a. Tentative construction schedule.
      - b. Designation of key personnel and their duties.
      - c. Lines of communications.
      - d. Procedures for processing field decisions and Change Orders.
      - e. Procedures for RFIs.
      - f. Procedures for processing Applications for Payment.
      - g. Distribution of the Contract Documents.
      - h. Submittal procedures.
      - i. Preparation of record documents.
      - j. Use of the premises and existing building.
      - k. Work restrictions.
      - l. Working hours.
      - m. Owner's occupancy requirements.
      - n. Responsibility for temporary facilities and controls.
      - o. Procedures for disruptions and shutdowns.
      - p. Parking availability.
      - q. Office, work, and storage areas.
      - r. Security.
      - s. Progress cleaning.
    - 4) Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
  - C. Progress Meetings: progress meetings at weekly intervals or other regular intervals as agreed to by the Owner and Architect.
    - 1) Coordinate dates of meetings with preparation of payment requests.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 2) Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
- 3) Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
  - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - i. Review schedule for next period.
  - b. Review present and future needs of each entity present, including the following:
    - i. Status of submittals.
    - ii. Off-site fabrication.
    - iii. Access.
    - iv. Site utilization.
    - v. Temporary facilities and controls.
    - vi. Progress cleaning.
    - vii. Quality and work standards.
    - viii. Status of correction of deficient items.
    - ix. Field observations.
    - x. Status of RFIs.
    - xi. Pending changes.
    - xii. Status of Change Orders.
    - xiii. Documentation of information for payment requests.
- 4) Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 01 – GENERAL REQUIREMENTS

## SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Startup construction schedule.
  - 2. Contractor's construction schedule.
  - 3. Construction schedule updating reports.
  - 4. Daily construction reports.
  - 5. Material location reports.
  - 6. Site condition reports.
  - 7. Special reports.
- B. Related Requirements:
  - 1. Section 011200 "Multiple Contract Summary" for preparing a combined Contractor's construction schedule.
  - 2. Section 013300 "Submittal Procedures" for submitting schedules and reports.
  - 3. Section 014000 "Quality Requirements" for submitting a schedule of tests and inspections.

## 1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
  - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the schedule of values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum unless otherwise approved by Architect.
- C. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
  - 1. Working electronic copy of schedule file, where indicated.
  - 2. PDF electronic file.
  - 3. Two paper copies.
- B. Startup construction schedule.
  - 1. Approval of cost-loaded, startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
- D. Construction Schedule Updating Reports: Submit with Applications for Payment.
- E. Daily Construction Reports: Submit at weekly intervals.
- F. Site Condition Reports: Submit at time of discovery of differing conditions.

**1.5 QUALITY ASSURANCE**

- A. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Section 013100 "Project Management and Coordination." Review methods and procedures related to the preliminary construction schedule and Contractor's construction schedule, including, but not limited to, the following:
  - 1. Verify availability of qualified personnel needed to develop and update schedule.
  - 2. Discuss constraints, including phasing, work stages, area separations, interim milestones, and partial Owner occupancy.
  - 3. Review delivery dates for Owner-furnished products.
  - 4. Review schedule for work of Owner's separate contracts.
  - 5. Review submittal requirements and procedures.
  - 6. Review time required for review of submittals and resubmittals.
  - 7. Review requirements for tests and inspections by independent testing and inspecting agencies.
  - 8. Review time required for Project closeout and Owner startup procedures, including commissioning activities.
  - 9. Review and finalize list of construction activities to be included in schedule.
  - 10. Review procedures for updating schedule.

**1.6 COORDINATION**

- A. Coordinate Contractor's construction schedule with the schedule of values, list of multiple contracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
  - 1. Secure time commitments for performing critical elements of the Work from entities involved.
  - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

**PART 2 - PRODUCTS****2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL**

- A. Time Frame: Extend schedule from date established for commencement of the Work date of Substantial Completion.
  - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
  - 1. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
  - 2. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
  - 3. Startup and Testing Time: Include no fewer than 15 days for startup and testing.
  - 4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
  - 5. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
  2. Work under More Than One Contract: Include a separate activity for each contract.
  3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
  4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
  5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
  6. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use of premises restrictions.
    - f. Provisions for future construction.
    - g. Seasonal variations.
    - h. Environmental control.
  7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
    - a. Subcontract awards.
    - b. Submittals.
    - c. Purchases.
    - d. Mockups.
    - e. Fabrication.
    - f. Sample testing.
    - g. Deliveries.
    - h. Installation.
    - i. Tests and inspections.
    - j. Adjusting.
    - k. Curing.
    - l. Building flush-out.
    - m. Startup and placement into final use and operation.
  8. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
    - a. Structural completion.
    - b. Temporary enclosure and space conditioning.
    - c. Permanent space enclosure.
    - d. Completion of mechanical installation.
    - e. Completion of electrical installation.
    - f. Substantial Completion.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion, and the following interim milestones:
1. Temporary enclosure and space conditioning.
- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
1. Unresolved issues.
  2. Unanswered Requests for Information.
  3. Rejected or unreturned submittals.
  4. Notations on returned submittals.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

5. Pending modifications affecting the Work and Contract Time.
  - F. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.
  - G. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
- 2.2 STARTUP CONSTRUCTION SCHEDULE
- A. Bar-Chart Schedule: Submit startup, horizontal, bar-chart-type construction schedule within seven days of date established for the Notice of Award.
  - B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 90 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.
- 2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)
- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 30 days of date established for commencement of the Work. Base schedule on the startup construction schedule and additional information received since the start of Project.
  - B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
    1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.
- 2.4 REPORTS
- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
    1. List of subcontractors at Project site.
    2. List of separate contractors at Project site.
    3. Approximate count of personnel at Project site.
    4. Equipment at Project site.
    5. Material deliveries.
    6. High and low temperatures and general weather conditions, including presence of rain or snow.
    7. Accidents.
    8. Meetings and significant decisions.
    9. Unusual events (see special reports).
    10. Stoppages, delays, shortages, and losses.
    11. Meter readings and similar recordings.
    12. Emergency procedures.
    13. Orders and requests of authorities having jurisdiction.
    14. Change Orders received and implemented.
    15. Construction Change Directives received and implemented.
    16. Services connected and disconnected.
    17. Equipment or system tests and startups.
    18. Partial completions and occupancies.
    19. Substantial Completions authorized.
  - B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01****PART 3 - EXECUTION****3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE**

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
  - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  - 3. As the Work progresses, indicate final completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
  - 1. Post copies in Project meeting rooms and temporary field offices.
  - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 013220 - PHOTOGRAPHIC DOCUMENTATION

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Related Requirements:
    - 1) Division 1 Section "Unit Prices" for procedures for unit prices for extra photographs.
    - 2) Division 1 Section "Submittal Procedures" for submitting photographic documentation.
    - 3) Division 1 Section "Closeout Procedures" for submitting photographic documentation as project record documents at Project closeout.
    - 4) Division 1 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.
3. NUMBER REQUIRED

Basis for Bids: A minimum 20 photographs shall be prepared of the project each week. Additional photographs shall be provided as required to properly document the project status and conditions. Take photographs as work progresses to show major milestones.
4. INFORMATIONAL SUBMITTALS
  - A. Qualification Data: For photographer.
  - B. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
5. QUALITY ASSURANCE
  - A. Photographer Qualifications: Project Superintendent, Project Manager, or other employee of the construction company designated for this purpose.
6. USAGE RIGHTS
  - A. Obtain and transfer copyright usage rights from photographer to Owner for unlimited reproduction of photographic documentation. Transfer of photographs shall indicate compliance with this provision.

PART 2 - PRODUCTS

1. PHOTOGRAPHIC MEDIA
  - A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of 8 megapixels, and at an image resolution of not less than 3200 by 2400 pixels. Digital files of this size are to be transmitted with the close out documents. Weekly image transfers may be reduced in size to allow transfer over the internet.

PART 3 - EXECUTION

1. CONSTRUCTION PHOTOGRAPHS
  - A. Photographer: Project Superintendent, Project Manager, or other employee of the construction company designated for this purpose.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
  - 1) Maintain key plan with each set of construction photographs that identifies each photographic location.
- C. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software at end of project. Weekly submittals may be reduced in size to accommodate internet transfer.
  - 1) Date and Time: Include date and time in file name for each image.
- D. Field Office Images: Field Superintendent shall have access to images.
- E. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points to show condition of the surrounding features that may be affected by construction.
- F. Directed Construction Photographs: From time to time, Architect may instruct photographer about number and frequency of photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.
- G. Time-Lapse Sequence Construction Photographs: Take 5 photographs each week on the same day of the week in addition to the above noted required photos, to show status of construction and progress since last photographs were taken.
  - 1) Frequency: Take photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment.
  - 2) Vantage Points: Following suggestions by Architect, the photographer is to select vantage points. Unless otherwise directed the five required vantage point photographs shall be taken from the four corners of the site directed into the site to include the whole site and the fifth shall be from one location inside the building as selected by the Architect.
  - 3) Additional Photographs: Architect may request photographs in addition to periodic photographs specified. Where needed in order to respond to an Request for Information, the Contractor shall respond within 24 hours. Where requested for other purposes response within three days is required. In emergency situations, take additional photographs within the same working day. Photographs for these purposes need not be taken by the designated photographer and may be of reduced quality if information needed is clear in the photograph.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
  - B. Related Requirements:
    - 1) Division 1 Section "Payment Procedures" for submitting Applications for Payment and the schedule of values.
    - 2) Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
    - 3) Division 1 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
    - 4) Division 1 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
    - 5) Division 1 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.
3. DEFINITIONS
  - A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
  - B. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
  - C. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.
4. ACTION SUBMITTALS
  - A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
    - 1) Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
    - 2) Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
    - 3) Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
      - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
    - 4) Format: Arrange the following information in a tabular format:
      - a. Scheduled date for first submittal.
      - b. Specification Section number and title.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- c. Submittal category: Action; informational.
  - d. Name of subcontractor.
  - e. Description of the Work covered.
  - f. Scheduled date for Architect's final release or approval.
  - g. Scheduled date of fabrication.
  - h. Scheduled dates for purchasing.
  - i. Scheduled dates for installation.
  - j. Activity or event number.
5. SUBMITTAL ADMINISTRATIVE REQUIREMENTS
- A. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
  - B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
    - 1) Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
    - 2) Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
    - 3) Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
    - 4) Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
      - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
  - C. Processing Time: Allow time for submittal review, including time for re-submittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including re-submittals.
    - 1) Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
    - 2) Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
    - 3) Re-submittal Review: Allow 15 days for review of each re-submittal.
    - 4) Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
  - D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.
    - 1) Indicate name of firm or entity that prepared each submittal on label or title block.
    - 2) Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
    - 3) Include the following information for processing and recording action taken:
      - a. Project name.
      - b. Date.
      - c. Name of Architect.
      - d. Name of Contractor.
      - e. Name of subcontractor.
      - f. Submittal number or other unique identifier, including revision identifier.
        - i. Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06100.01). Re-submittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).
      - g. Number and title of appropriate Specification Section.
      - h. Drawing number and detail references, as appropriate.
    - 4) Additional Paper Copies: Unless additional copies are required for final submittal, and unless

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

- a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
- E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
  - 1) Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
  - 2) Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-06100.01). Re-submittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-06100.01.A).
  - 3) Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
- F. Options: Identify options requiring selection by Architect.
- G. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- H. Re-submittals: Make re-submittals in same form and number of copies as initial submittal.
  - 1) Note date and content of previous submittal.
  - 2) Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3) Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

**PART 2 – PRODUCTS**

1. SUBMITTAL PROCEDURES
  - A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
    - 1) Post electronic submittals as PDF electronic files directly to specifically established for Project.
      - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
    - 2) Submit electronic submittals via email as PDF electronic files.
      - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
    - 3) Action Submittals: Submit three paper copies of each submittal unless otherwise indicated. Architect will return two copies.
    - 4) Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
      - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
      - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
  - B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
    - 1) If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
    - 2) Mark each copy of each submittal to show which products and options are applicable.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 3) Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Standard color charts.
    - c. Statement of compliance with specified referenced standards.
  - 4) Submit Product Data before or concurrent with Samples.
  - 5) Submit Product Data in the following format:
    - a. PDF electronic file.
    - b. Five paper copies of Product Data unless otherwise indicated. Architect will return Four copies.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1) Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Compliance with specified standards.
    - c. Notation of coordination requirements.
    - d. Notation of dimensions established by field measurement.
    - e. Relationship and attachment to adjoining construction clearly indicated.
  - 2) Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches.
  - 3) Submit Shop Drawings in the following format:
    - a. PDF electronic file.
    - b. Five opaque copies of each submittal. Architect will retain One copies; remainder will be returned.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
- 1) Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  - 2) Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of applicable Specification Section.
    - e. Specification paragraph number and generic name of each item.
  - 3) For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
  - 4) Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
  - 5) Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
    - a. Number of Samples: Submit sets of Samples. Architect and Construction Manager will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record sample.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- I. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
- II. If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Contractor's Construction Schedule: Comply with requirements specified in Division 1 Section "Construction Progress Documentation."
- F. Application for Payment and Schedule of Values: Comply with requirements specified in Division 1 Section "Payment Procedures."
- G. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

**PART 3 – EXECUTION**

- 1. CONTRACTOR'S REVIEW
  - A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
  - B. Project Closeout and Maintenance Material Submittals: See requirements in Division 1 Section "Closeout Procedures."
  - C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
- 2. ARCHITECT'S ACTION
  - A. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
  - B. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
  - C. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for re-submittal without review.
  - D. Submittals not required by the Contract Documents may be returned by the Architect without action.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 014000 - QUALITY REQUIREMENTS

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for quality assurance and quality control.
  - B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
    - 1) Specific quality assurance and control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
    - 2) Specified tests, inspections, and related actions do not limit Contractor's other quality assurance and control procedures that facilitate compliance with the Contract Document requirements.
    - 3) Requirements for Contractor to provide quality assurance and control services required by Architect, Owner or authorities having jurisdiction are not limited by provisions of this Section.
3. DEFINITIONS
  - A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
  - B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
  - C. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
  - D. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
  - E. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
  - F. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
  - G. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
    - 1) Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
  - H. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
4. CONFLICTING REQUIREMENTS
  - A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.
5. ACTION SUBMITTALS
- A. Shop Drawings: provide plans, sections, and elevations, indicating materials.
- 1) Indicate manufacturer and model number of individual components.
  - 2) Provide axonometric drawings for conditions difficult to illustrate in two dimensions.
6. INFORMATIONAL SUBMITTALS
- A. Qualification Data: For Contractor's quality-control personnel.
7. REPORTS AND DOCUMENTS
- A. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
- 1) Name, address, and telephone number of technical representative making report.
  - 2) Statement on condition of substrates and their acceptability for installation of product.
  - 3) Statement that products at Project site comply with requirements.
  - 4) Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5) Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6) Statement whether conditions, products, and installation will affect warranty.
  - 7) Other required items indicated in individual Specification Sections.
- B. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
- 1) Name, address, and telephone number of factory-authorized service representative making report.
  - 2) Statement that equipment complies with requirements.
  - 3) Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 4) Statement whether conditions, products, and installation will affect warranty.
  - 5) Other required items indicated in individual Specification Sections.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.
8. QUALITY ASSURANCE
- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that is similar in material, design, and extent to those indicated for this Project.
  - F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
    - 1) NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
    - 2) NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
  - G. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
  - H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
  - I. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
    - 1) Contractor responsibilities include the following:
      - a. Provide test specimens representative of proposed products and construction.
      - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
      - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
      - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
      - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
      - f. When testing is complete, remove test specimens, assemblies, and mockups; do not reuse products on Project.
    - 2) Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
9. QUALITY CONTROL
- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
    - 1) Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
    - 2) Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
      - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
    - 3) Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
    - 4) Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
    - 5) Testing and inspecting requested by Contractor and not required by the Contract Documents are

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- Contractor's responsibility.
- 6) Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 1 Section "Submittal Procedures."
- C. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in pre-installation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- D. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
- 1) Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2) Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  - 3) Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 4) Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 5) Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6) Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
- 1) Access to the Work.
  - 2) Incidental labor and facilities necessary to facilitate tests and inspections.
  - 3) Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 4) Facilities for storage and field curing of test samples.
  - 5) Delivery of samples to testing agencies.
  - 6) Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 7) Security and protection for samples and for testing and inspecting equipment at Project site.
- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
- 1) Schedule times for tests, inspections, obtaining samples, and similar activities.
10. SPECIAL TESTS AND INSPECTIONS
- A. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction, as indicated in individual Specification Sections and in Statement of Special Inspections attached to this Section, and as follows:
- 1) Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
  - 2) Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
  - 3) Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
  - 4) Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 5) Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- 6) Retesting and re-inspecting corrected work.

**PART 2 – PRODUCTS (NOT USED)****PART 3 – EXECUTION**

1. TEST AND INSPECTION LOG
  - A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
    - 1) Date test or inspection was conducted.
    - 2) Description of the Work tested or inspected.
    - 3) Date test or inspection results were transmitted to Architect.
    - 4) Identification of testing agency or special inspector conducting test or inspection.
  - B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.
2. REPAIR AND PROTECTION
  - A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
    - 1) Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Division 1 Section "Execution Requirements."
  - B. Protect construction exposed by or for quality-control service activities.
  - C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

## DIVISION 01 – GENERAL REQUIREMENTS

## SECTION 014200 – REFERENCES

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

## 1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
  - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

## 1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
  - 1. AABC - Associated Air Balance Council; [www.aabc.com](http://www.aabc.com).
  - 2. AAMA - American Architectural Manufacturers Association; [www.aamanet.org](http://www.aamanet.org).
  - 3. AAPFCO - Association of American Plant Food Control Officials; [www.aapfco.org](http://www.aapfco.org).

4. AASHTO - American Association of State Highway and Transportation Officials; [www.transportation.org](http://www.transportation.org).
5. AATCC - American Association of Textile Chemists and Colorists; [www.aatcc.org](http://www.aatcc.org).
6. ABMA - American Bearing Manufacturers Association; [www.americanbearings.org](http://www.americanbearings.org).
7. ABMA - American Boiler Manufacturers Association; [www.abma.com](http://www.abma.com).
8. ACI - American Concrete Institute; (Formerly: ACI International); [www.abma.com](http://www.abma.com).
9. ACPA - American Concrete Pipe Association; [www.concrete-pipe.org](http://www.concrete-pipe.org).
10. AEIC - Association of Edison Illuminating Companies, Inc. (The); [www.aeic.org](http://www.aeic.org).
11. AF&PA - American Forest & Paper Association; [www.afandpa.org](http://www.afandpa.org).
12. AGA - American Gas Association; [www.aga.org](http://www.aga.org).
13. AHAM - Association of Home Appliance Manufacturers; [www.aham.org](http://www.aham.org).
14. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); [www.ahrinet.org](http://www.ahrinet.org).
15. AI - Asphalt Institute; [www.asphaltinstitute.org](http://www.asphaltinstitute.org).
16. AIA - American Institute of Architects (The); [www.aia.org](http://www.aia.org).
17. AISC - American Institute of Steel Construction; [www.aisc.org](http://www.aisc.org).
18. AISI - American Iron and Steel Institute; [www.steel.org](http://www.steel.org).
19. AITC - American Institute of Timber Construction; [www.aitc-qlulam.org](http://www.aitc-qlulam.org).
20. AMCA - Air Movement and Control Association International, Inc.; [www.amca.org](http://www.amca.org).
21. ANSI - American National Standards Institute; [www.ansi.org](http://www.ansi.org).
22. AOSA - Association of Official Seed Analysts, Inc.; [www.aosaseed.com](http://www.aosaseed.com).
23. APA - APA - The Engineered Wood Association; [www.apawood.org](http://www.apawood.org).
24. APA - Architectural Precast Association; [www.archprecast.org](http://www.archprecast.org).
25. API - American Petroleum Institute; [www.api.org](http://www.api.org).
26. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
27. ARI - American Refrigeration Institute; (See AHRI).
28. ARMA - Asphalt Roofing Manufacturers Association; [www.asphaltroofing.org](http://www.asphaltroofing.org).
29. ASCE - American Society of Civil Engineers; [www.asce.org](http://www.asce.org).
30. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
31. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; [www.ashrae.org](http://www.ashrae.org).
32. ASME - ASME International; (American Society of Mechanical Engineers); [www.asme.org](http://www.asme.org).
33. ASSE - American Society of Safety Engineers (The); [www.asse.org](http://www.asse.org).
34. ASSE - American Society of Sanitary Engineering; [www.asse-plumbing.org](http://www.asse-plumbing.org).
35. ASTM - ASTM International; [www.astm.org](http://www.astm.org).
36. ATIS - Alliance for Telecommunications Industry Solutions; [www.atis.org](http://www.atis.org).
37. AWEA - American Wind Energy Association; [www.awea.org](http://www.awea.org).
38. AWI - Architectural Woodwork Institute; [www.awinet.org](http://www.awinet.org).
39. AWMAC - Architectural Woodwork Manufacturers Association of Canada; [www.awmac.com](http://www.awmac.com).
40. AWPA - American Wood Protection Association; [www.awpa.com](http://www.awpa.com).
41. AWS - American Welding Society; [www.aws.org](http://www.aws.org).
42. AWWA - American Water Works Association; [www.awwa.org](http://www.awwa.org).
43. BHMA - Builders Hardware Manufacturers Association; [www.buildershardware.com](http://www.buildershardware.com).
44. BIA - Brick Industry Association (The); [www.gobrick.com](http://www.gobrick.com).
45. BICSI - BICSI, Inc.; [www.bicsi.org](http://www.bicsi.org).
46. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); [www.bifma.org](http://www.bifma.org).
47. BISSC - Baking Industry Sanitation Standards Committee; [www.bissc.org](http://www.bissc.org).
48. BWF - Badminton World Federation; (Formerly: International Badminton Federation); [www.bissc.org](http://www.bissc.org).
49. CDA - Copper Development Association; [www.copper.org](http://www.copper.org).
50. CEA - Canadian Electricity Association; [www.electricity.ca](http://www.electricity.ca).
51. CEA - Consumer Electronics Association; [www.ce.org](http://www.ce.org).
52. CFFA - Chemical Fabrics and Film Association, Inc.; [www.chemicalfabricsandfilm.com](http://www.chemicalfabricsandfilm.com).
53. CFSEI - Cold-Formed Steel Engineers Institute; [www.cfsei.org](http://www.cfsei.org).

54. CGA - Compressed Gas Association; [www.cganet.com](http://www.cganet.com).
55. CIMA - Cellulose Insulation Manufacturers Association; [www.cellulose.org](http://www.cellulose.org).
56. CISCA - Ceilings & Interior Systems Construction Association; [www.cisca.org](http://www.cisca.org).
57. CISPI - Cast Iron Soil Pipe Institute; [www.cispi.org](http://www.cispi.org).
58. CLFMI - Chain Link Fence Manufacturers Institute; [www.chainlinkinfo.org](http://www.chainlinkinfo.org).
59. CPA - Composite Panel Association; [www.pbmdf.com](http://www.pbmdf.com).
60. CRI - Carpet and Rug Institute (The); [www.carpet-rug.org](http://www.carpet-rug.org).
61. CRRC - Cool Roof Rating Council; [www.coolroofs.org](http://www.coolroofs.org).
62. CRSI - Concrete Reinforcing Steel Institute; [www.crsi.org](http://www.crsi.org).
63. CSA - Canadian Standards Association; [www.csa.ca](http://www.csa.ca).
64. CSA - CSA International; (Formerly: IAS - International Approval Services); [www.csa-international.org](http://www.csa-international.org).
65. CSI - Construction Specifications Institute (The); [www.csinet.org](http://www.csinet.org).
66. CSSB - Cedar Shake & Shingle Bureau; [www.cedarbureau.org](http://www.cedarbureau.org).
67. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); [www.cti.org](http://www.cti.org).
68. CWC - Composite Wood Council; (See CPA).
69. DASMA - Door and Access Systems Manufacturers Association; [www.dasma.com](http://www.dasma.com).
70. DHI - Door and Hardware Institute; [www.dhi.org](http://www.dhi.org).
71. ECA - Electronic Components Association; (See ECIA).
72. ECAMA - Electronic Components Assemblies & Materials Association; (See ECIA).
73. ECIA - Electronic Components Industry Association; [www.eciaonline.org](http://www.eciaonline.org).
74. EIA - Electronic Industries Alliance; (See TIA).
75. EIMA - EIFS Industry Members Association; [www.eima.com](http://www.eima.com).
76. EJMA - Expansion Joint Manufacturers Association, Inc.; [www.ejma.org](http://www.ejma.org).
77. ESD - ESD Association; (Electrostatic Discharge Association); [www.esda.org](http://www.esda.org).
78. ESTA - Entertainment Services and Technology Association; (See PLASA).
79. EVO - Efficiency Valuation Organization; [www.evo-world.org](http://www.evo-world.org).
80. FCI - Fluid Controls Institute; [www.fluidcontrolsintstitute.org](http://www.fluidcontrolsintstitute.org).
81. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); [www.fiba.com](http://www.fiba.com).
82. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); [www.fivb.org](http://www.fivb.org).
83. FM Approvals - FM Approvals LLC; [www.fmglobal.com](http://www.fmglobal.com).
84. FM Global - FM Global; (Formerly: FMG - FM Global); [www.fmglobal.com](http://www.fmglobal.com).
85. FRSA - Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.; [www.floridarooft.com](http://www.floridarooft.com).
86. FSA - Fluid Sealing Association; [www.fluidsealing.com](http://www.fluidsealing.com).
87. FSC - Forest Stewardship Council U.S.; [www.fscus.org](http://www.fscus.org).
88. GA - Gypsum Association; [www.gypsum.org](http://www.gypsum.org).
89. GANA - Glass Association of North America; [www.glasswebsite.com](http://www.glasswebsite.com).
90. GS - Green Seal; [www.greenseal.org](http://www.greenseal.org).
91. HI - Hydraulic Institute; [www.pumps.org](http://www.pumps.org).
92. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
93. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
94. HPVA - Hardwood Plywood & Veneer Association; [www.hpva.org](http://www.hpva.org).
95. HPW - H. P. White Laboratory, Inc.; [www.hpwhite.com](http://www.hpwhite.com).
96. IAPSC - International Association of Professional Security Consultants; [www.iapsc.org](http://www.iapsc.org).
97. IAS - International Accreditation Service; [www.iasonline.org](http://www.iasonline.org).
98. IAS - International Approval Services; (See CSA).
99. ICBO - International Conference of Building Officials; (See ICC).
100. ICC - International Code Council; [www.iccsafe.org](http://www.iccsafe.org).
101. ICEA - Insulated Cable Engineers Association, Inc.; [www.icea.net](http://www.icea.net).
102. ICPA - International Cast Polymer Alliance; [www.icpa-hq.org](http://www.icpa-hq.org).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

103. ICRI - International Concrete Repair Institute, Inc.; [www.icri.org](http://www.icri.org).
104. IEC - International Electrotechnical Commission; [www.iec.ch](http://www.iec.ch).
105. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); [www.ieee.org](http://www.ieee.org).
106. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); [www.ies.org](http://www.ies.org).
107. IESNA - Illuminating Engineering Society of North America; (See IES).
108. IEST - Institute of Environmental Sciences and Technology; [www.iest.org](http://www.iest.org).
109. IGMA - Insulating Glass Manufacturers Alliance; [www.igmaonline.org](http://www.igmaonline.org).
110. IGSHPA - International Ground Source Heat Pump Association; [www.igshpa.okstate.edu](http://www.igshpa.okstate.edu).
111. ILI - Indiana Limestone Institute of America, Inc.; [www.iliai.com](http://www.iliai.com).
112. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); [www.intertek.com](http://www.intertek.com).
113. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); [www.isa.org](http://www.isa.org).
114. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).
115. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); [www.isfanow.org](http://www.isfanow.org).
116. ISO - International Organization for Standardization; [www.iso.org](http://www.iso.org).
117. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
118. ITU - International Telecommunication Union; [www.itu.int/home](http://www.itu.int/home).
119. KCMA - Kitchen Cabinet Manufacturers Association; [www.kcma.org](http://www.kcma.org).
120. LMA - Laminating Materials Association; (See CPA).
121. LPI - Lightning Protection Institute; [www.lightning.org](http://www.lightning.org).
122. MBMA - Metal Building Manufacturers Association; [www.mbma.com](http://www.mbma.com).
123. MCA - Metal Construction Association; [www.metalconstruction.org](http://www.metalconstruction.org).
124. MFMA - Maple Flooring Manufacturers Association, Inc.; [www.maplefloor.org](http://www.maplefloor.org).
125. MFMA - Metal Framing Manufacturers Association, Inc.; [www.metalframingmfg.org](http://www.metalframingmfg.org).
126. MHIA - Material Handling Industry of America; [www.mhia.org](http://www.mhia.org).
127. MIA - Marble Institute of America; [www.marble-institute.com](http://www.marble-institute.com).
128. MMPA - Moulding & Millwork Producers Association; [www.wmmpa.com](http://www.wmmpa.com).
129. MPI - Master Painters Institute; [www.paintinfo.com](http://www.paintinfo.com).
130. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; [www.mss-hq.org](http://www.mss-hq.org).
131. NAAMM - National Association of Architectural Metal Manufacturers; [www.naamm.org](http://www.naamm.org).
132. NACE - NACE International; (National Association of Corrosion Engineers International); [www.nace.org](http://www.nace.org).
133. NADCA - National Air Duct Cleaners Association; [www.nadca.com](http://www.nadca.com).
134. NAIMA - North American Insulation Manufacturers Association; [www.naima.org](http://www.naima.org).
135. NBGQA - National Building Granite Quarries Association, Inc.; [www.nbgqa.com](http://www.nbgqa.com).
136. NBI - New Buildings Institute; [www.newbuildings.org](http://www.newbuildings.org).
137. NCAA - National Collegiate Athletic Association (The); [www.ncaa.org](http://www.ncaa.org).
138. NCMA - National Concrete Masonry Association; [www.ncma.org](http://www.ncma.org).
139. NEBB - National Environmental Balancing Bureau; [www.nebb.org](http://www.nebb.org).
140. NECA - National Electrical Contractors Association; [www.necanet.org](http://www.necanet.org).
141. NelMA - Northeastern Lumber Manufacturers Association; [www.nelma.org](http://www.nelma.org).
142. NEMA - National Electrical Manufacturers Association; [www.nema.org](http://www.nema.org).
143. NETA - InterNational Electrical Testing Association; [www.netaworld.org](http://www.netaworld.org).
144. NFHS - National Federation of State High School Associations; [www.nfhs.org](http://www.nfhs.org).
145. NFPA - National Fire Protection Association; [www.nfpa.org](http://www.nfpa.org).
146. NFPA - NFPA International; (See NFPA).
147. NFRC - National Fenestration Rating Council; [www.nfrc.org](http://www.nfrc.org).
148. NHLA - National Hardwood Lumber Association; [www.nhla.com](http://www.nhla.com).
149. NLGA - National Lumber Grades Authority; [www.nlga.org](http://www.nlga.org).
150. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

151. NOMMA - National Ornamental & Miscellaneous Metals Association; [www.nomma.org](http://www.nomma.org).
152. NRCA - National Roofing Contractors Association; [www.nrca.net](http://www.nrca.net).
153. NRMCA - National Ready Mixed Concrete Association; [www.nrmca.org](http://www.nrmca.org).
154. NSF - NSF International; [www.nsf.org](http://www.nsf.org).
155. NSPE - National Society of Professional Engineers; [www.nspe.org](http://www.nspe.org).
156. NSSGA - National Stone, Sand & Gravel Association; [www.nssga.org](http://www.nssga.org).
157. NTMA - National Terrazzo & Mosaic Association, Inc. (The); [www.ntma.com](http://www.ntma.com).
158. NWFA - National Wood Flooring Association; [www.nwfa.org](http://www.nwfa.org).
159. PCI - Precast/Prestressed Concrete Institute; [www.pci.org](http://www.pci.org).
160. PDI - Plumbing & Drainage Institute; [www.pdionline.org](http://www.pdionline.org).
161. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); [www.plasa.org](http://www.plasa.org).
162. RCSC - Research Council on Structural Connections; [www.boltcouncil.org](http://www.boltcouncil.org).
163. RFCI - Resilient Floor Covering Institute; [www.rfci.com](http://www.rfci.com).
164. RIS - Redwood Inspection Service; [www.redwoodinspection.com](http://www.redwoodinspection.com).
165. SAE - SAE International; [www.sae.org](http://www.sae.org).
166. SCTE - Society of Cable Telecommunications Engineers; [www.scte.org](http://www.scte.org).
167. SDI - Steel Deck Institute; [www.sdi.org](http://www.sdi.org).
168. SDI - Steel Door Institute; [www.steeldoor.org](http://www.steeldoor.org).
169. SEFA - Scientific Equipment and Furniture Association (The); [www.sefalabs.com](http://www.sefalabs.com).
170. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
171. SIA - Security Industry Association; [www.siaonline.org](http://www.siaonline.org).
172. SJI - Steel Joist Institute; [www.steeljoist.org](http://www.steeljoist.org).
173. SMA - Screen Manufacturers Association; [www.smainfo.org](http://www.smainfo.org).
174. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; [www.smacna.org](http://www.smacna.org).
175. SMPTE - Society of Motion Picture and Television Engineers; [www.smpte.org](http://www.smpte.org).
176. SPFA - Spray Polyurethane Foam Alliance; [www.sprayfoam.org](http://www.sprayfoam.org).
177. SPIB - Southern Pine Inspection Bureau; [www.spib.org](http://www.spib.org).
178. SPRI - Single Ply Roofing Industry; [www.spri.org](http://www.spri.org).
179. SRCC - Solar Rating & Certification Corporation; [www.solar-rating.org](http://www.solar-rating.org).
180. SSINA - Specialty Steel Industry of North America; [www.ssina.com](http://www.ssina.com).
181. SSPC - SSPC: The Society for Protective Coatings; [www.sspc.org](http://www.sspc.org).
182. STI - Steel Tank Institute; [www.steeltank.com](http://www.steeltank.com).
183. SWI - Steel Window Institute; [www.steelwindows.com](http://www.steelwindows.com).
184. SWPA - Submersible Wastewater Pump Association; [www.swpa.org](http://www.swpa.org).
185. TCA - Tilt-Up Concrete Association; [www.tilt-up.org](http://www.tilt-up.org).
186. TCNA - Tile Council of North America, Inc.; [www.tileusa.com](http://www.tileusa.com).
187. TEMA - Tubular Exchanger Manufacturers Association, Inc.; [www.tema.org](http://www.tema.org).
188. TIA - Telecommunications Industry Association (The); (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); [www.tiaonline.org](http://www.tiaonline.org).
189. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
190. TMS - The Masonry Society; [www.masonrysociety.org](http://www.masonrysociety.org).
191. TPI - Truss Plate Institute; [www.tpinst.org](http://www.tpinst.org).
192. TPI - Turfgrass Producers International; [www.turfgrasssod.org](http://www.turfgrasssod.org).
193. TRI - Tile Roofing Institute; [www.tilerroofing.org](http://www.tilerroofing.org).
194. UL - Underwriters Laboratories Inc.; [www.ul.com](http://www.ul.com).
195. UNI - Uni-Bell PVC Pipe Association; [www.uni-bell.org](http://www.uni-bell.org).
196. USAV - USA Volleyball; [www.usavolleyball.org](http://www.usavolleyball.org).
197. USGBC - U.S. Green Building Council; [www.usgbc.org](http://www.usgbc.org).
198. USITT - United States Institute for Theatre Technology, Inc.; [www.usitt.org](http://www.usitt.org).
199. WASTEC - Waste Equipment Technology Association; [www.wastec.org](http://www.wastec.org).
200. WCLIB - West Coast Lumber Inspection Bureau; [www.wclib.org](http://www.wclib.org).
201. WCMA - Window Covering Manufacturers Association; [www.wcmanet.org](http://www.wcmanet.org).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

202. WDMA - Window & Door Manufacturers Association; [www.wdma.com](http://www.wdma.com).
  203. WI - Woodwork Institute; [www.wicnet.org](http://www.wicnet.org).
  204. WSRCA - Western States Roofing Contractors Association; [www.wsrca.com](http://www.wsrca.com).
  205. WWPA - Western Wood Products Association; [www.wwpa.org](http://www.wwpa.org).
- C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
1. DIN - Deutsches Institut für Normung e.V.; [www.din.de](http://www.din.de).
  2. IAPMO - International Association of Plumbing and Mechanical Officials; [www.iapmo.org](http://www.iapmo.org).
  3. ICC - International Code Council; [www.iccsafe.org](http://www.iccsafe.org).
  4. ICC-ES - ICC Evaluation Service, LLC; [www.icc-es.org](http://www.icc-es.org).
- D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.
1. COE - Army Corps of Engineers; [www.usace.army.mil](http://www.usace.army.mil).
  2. CPSC - Consumer Product Safety Commission; [www.cpsc.gov](http://www.cpsc.gov).
  3. DOC - Department of Commerce; National Institute of Standards and Technology; [www.nist.gov](http://www.nist.gov).
  4. DOD - Department of Defense; [www.quicksearch.dla.mil](http://www.quicksearch.dla.mil).
  5. DOE - Department of Energy; [www.energy.gov](http://www.energy.gov).
  6. EPA - Environmental Protection Agency; [www.epa.gov](http://www.epa.gov).
  7. FAA - Federal Aviation Administration; [www.faa.gov](http://www.faa.gov).
  8. FG - Federal Government Publications; [www.gpo.gov](http://www.gpo.gov).
  9. GSA - General Services Administration; [www.gsa.gov](http://www.gsa.gov).
  10. HUD - Department of Housing and Urban Development; [www.hud.gov](http://www.hud.gov).
  11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; [www.eetd.lbl.gov](http://www.eetd.lbl.gov).
  12. OSHA - Occupational Safety & Health Administration; [www.osha.gov](http://www.osha.gov).
  13. SD - Department of State; [www.state.gov](http://www.state.gov).
  14. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; [www.trb.org](http://www.trb.org).
  15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; [www.ars.usda.gov](http://www.ars.usda.gov).
  16. USDA - Department of Agriculture; Rural Utilities Service; [www.usda.gov](http://www.usda.gov).
  17. USDJ - Department of Justice; Office of Justice Programs; National Institute of Justice; [www.ojp.usdoj.gov](http://www.ojp.usdoj.gov).
  18. USP - U.S. Pharmacopeial Convention; [www.usp.org](http://www.usp.org).
  19. USPS - United States Postal Service; [www.usps.com](http://www.usps.com).
- E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. CFR - Code of Federal Regulations; Available from Government Printing Office; [www.gpo.gov/fdsys](http://www.gpo.gov/fdsys).
  2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; [www.quicksearch.dla.mil](http://www.quicksearch.dla.mil).
  3. DSCC - Defense Supply Center Columbus; (See FS).
  4. FED-STD - Federal Standard; (See FS).
  5. FS - Federal Specification; Available from DLA Document Services; [www.quicksearch.dla.mil](http://www.quicksearch.dla.mil).
    - a. Available from Defense Standardization Program; [www.dsp.dla.mil](http://www.dsp.dla.mil).
    - b. Available from General Services Administration; [www.gsa.gov](http://www.gsa.gov).
    - c. Available from National Institute of Building Sciences/Whole Building Design Guide; [www.wbdg.org/ccb](http://www.wbdg.org/ccb).
  6. MILSPEC - Military Specification and Standards; (See DOD).
  7. USAB - United States Access Board; [www.access-board.gov](http://www.access-board.gov).
  8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. CBHF; State of California; Department of Consumer Affairs; Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; [www.bearhfti.ca.gov](http://www.bearhfti.ca.gov).
  2. CCR; California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; [www.calregs.com](http://www.calregs.com).
  3. CDHS; California Department of Health Services; (See CDPH).
  4. CDPH; California Department of Public Health; Indoor Air Quality Program; [www.cal-iaq.org](http://www.cal-iaq.org).
  5. CPUC; California Public Utilities Commission; [www.cpuc.ca.gov](http://www.cpuc.ca.gov).
  6. SCAQMD; South Coast Air Quality Management District; [www.aqmd.gov](http://www.aqmd.gov).
  7. TFS; Texas A&M Forest Service; Sustainable Forestry and Economic Development; [www.txforestservation.tamu.edu](http://www.txforestservation.tamu.edu).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 01 – GENERAL REQUIREMENTS

## SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS

**PART 1 – GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
  - 1. Division 1 Section "Summary" for limitations on work restrictions and utility interruptions.
  - 2. Division 2 Section "Dewatering" for disposal of ground water at Project site.

## 1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service: Pay all charges for construction service and water used by all entities for construction operations.
- C. Electric Power Service: Pay electric-power-service use charges for electricity used by all entities for construction operations including temporary electric service as required. Grounded 110 volt power from existing receptacles in the existing buildings may be used by the contractors without charge. Contractors using the power are responsible for tripped breakers and blown fuses. Where GFI circuits are needed for worker operations, these are to be supplied as a part of the temporary electrical service. Where 220 volt or similar higher voltage or three-phase circuits are required power is to be obtained from a central temporary service.
- D. Natural Gas or Propane: Pay all charges for construction service and natural gas charges or for propane facilities and propane use during construction.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit, Iowa DNR, or local authorities having jurisdiction, whichever is more stringent.

## 1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions ICC/ANSI A117.1.

## 1.6 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

**PART 2 – PRODUCTS**

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.1 MATERIALS**

- A. FENCING: Secure construction material storage areas, areas around construction work areas, excavations, ground and suspended scaffolds, and under personnel lifts. Select fencing to match the level of safety and security required.
1. Minimum Excavation and Storage Area Fencing: Minimum four foot high Polybarrier polymer mesh fencing or similar product, supported not less than ten feet on center or as required to keep fencing at full height between fence posts. Tie fencing to posts.
  2. Security Fencing: Minimum 6 foot high chain link in rolls or panels, supported every 10 feet on center or at each panel point should contractor decide secured storage areas are required for the project.
  3. Short Term Minimum Work Fencing; Barricades, portable fencing, and other devices appropriate to prevent entry of the public into construction areas.
- B. Security Barriers- Where the building interior is not heated or cooled and doors or windows are removed, the contractor needs to only provide a security barrier that will protect the interior against rain overnight or when work is not being actively pursued on the openings. Such barrier shall as a minimum consist of wood framing a minimum of four feet on center with OSB or plywood finish. Temporary doors shall be secured from the inside of the building or with a hasp and padlock on the exterior of the door.
- C. Weather Barriers- Where the building is heated or cooled, the security barriers shall be upgraded to include batt insulation between wood framing and a 6 mil reinforced polyethylene plastic film across the inside of the framing.
- D. Dust Barriers- During demolition and reconstruction of exterior walls and associated work, the contractors shall install a dust barrier between the work area and the interior of the building. The dust barrier shall consist of as a minimum, wood framing full height of the room on 4 centers minimum with 6 mil reinforced polyethylene plastic sheathing. The dust barrier shall be located to allow the needed clearance to the inside of the exterior wall to allow the work to be accomplished but shall intrude on the interior of the building as little as possible. Dust barriers are to be supplemented during non-construction work hours with a security barrier at the exterior wall line. Where sound isolation is essential to the use of the building, such as at offices, the dust barrier shall have batt insulation added between the wall framing and another layer of polyethylene or OSB or plywood sheathing added.
- E. Safety Barriers, walkways, and enclosures- The contractors shall provide fences or walls around work zones to prevent the entry of the general public into work areas. Horizontal barriers may be security fencing as noted above or visual barriers consisting of wood framed walls with solid sheathing. Where work is to be performed above public sidewalks or building accesses to remain open during construction. contractors shall provide overhead barriers to prevent construction debris, tools, or materials from falling into the public areas.

**2.2 TEMPORARY FACILITIES**

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading. These offices are to be moved from area to area as the work is accomplished to minimize travel to the construction office and maximize the use of the space by construction personnel. All other items noted below are to be in the field office. Office location to be coordinated with Architect and Owner.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of construction personnel office activities and project meetings. Furnish and equip offices as follows:
1. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
  2. Provide an area where construction drawings, shop drawings, and other construction information is available to the field personnel.
  3. Provide an office or meeting area as part of the construction office where small meetings can be held. Provide desk or table for the meeting area. (Project meetings can be held at the Anamosa City Council Chambers)

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. A minimum number of construction storage trailers can be parked adjacent to work areas. A parking area for storage trailers near the work area will be provided by the Owner.
  - 1. Store combustible materials apart from building.
- 2.3 EQUIPMENT
- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures or if directed by the local fire jurisdiction, in the locations and numbers outlined by them or by contractor safety personnel. In lieu of their specific direction keep one in field office one in each storage area, and one in each work area.
  - B. HVAC Equipment: If weather conditions require the use of heating equipment to perform the work the following items apply. At this time, it is anticipated that the construction schedule will require no supplemental heating.
    - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
    - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
      - 3. Under no circumstances should the main heating or cooling system for the building be used to heat or cool the construction area/ At the beginning of work on a storefront, the contractor shall install filters at the existing building return air intakes with a MERV of 8. This filter is to be changed as needed during construction and shall be removed at the end of construction. Supply air ducts into the work area should be sealed unless sealing the duct reduces the air flow through the system enough to cause problems with the heating or cooling system.

**PART 3 – EXECUTION**

- 3.1 INSTALLATION, GENERAL
- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
    - 1. Locate facilities to limit site disturbance as specified in Division 1 Section "Summary."
  - B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.
- 3.2 TEMPORARY UTILITY INSTALLATION
- A. General: Install temporary service or connect to existing service.
    - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
  - B. Water Service: Provide temporary water source for the use of the trades in or near the construction area. Contractor is to arrange for the installation of a metered access from an existing fire hydrant or make arrangements to obtain water from one of the buildings under construction. Contractor is to pay for metered water from hydrants and reimburse building owner or tenant for use of water. Contractor to monitor use and waste. Trades are to provide hoses as required.
  - C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
    - 1. Toilets: Use of existing restrooms in the buildings under construction is prohibited.
  - D. Heating: At this time the use of temporary heating or cooling equipment is not anticipated due to the construction schedule.
  - E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

1. Provide dehumidification systems when required to reduce substrate moisture levels to level required to allow installation or application of finishes.
- F. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
  1. Minimum electrical service to the site shall be 100 amp single phase service with 220 volt and 110 volt outlets. Final service size and arrangements on the site shall be coordinated with the General Contractor.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
  1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system. Coordinate lighting to not infringe on camping areas.
  2. Remove all temporary lighting and wiring from the project at the end of the project.
- H. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office. In lieu of land line a mobile telephone may be placed in the field office for use of field personnel. Phone is to remain in the office and accessible to construction personnel at all times.
  1. Provide additional telephone lines for the following:
    - a. Provide a dedicated telephone line or fax switch for each facsimile machine in each field office.
    - b. Field superintendent is to have mobile phone for his or her continuous use during construction.
  2. At each telephone and on exterior of job trailer, post a list of important telephone numbers.
    - a. Police and fire departments.
    - b. Ambulance service.
    - c. Contractor's home office.
    - d. Contractor's emergency after-hours telephone number.
    - e. Architect's office.
    - f. Engineers' offices.
    - g. Owner's office.
    - h. Principal subcontractors' field and home offices.
    - i. 24 hour General Contractor's Emergency Contact Information and Telephone Number.
- I. Internet Access: Project office is to internet service, computer, and printer for use of the project superintendent. Internet access may be via land connection, wireless internet phone card, or other access method. Project superintendent must be able to send and receive emails and print project communications.

**3.3 SUPPORT FACILITIES INSTALLATION**

- A. General: Comply with the following:
  1. Provide construction for temporary offices, shops, and sheds located within construction area or within 100 feet of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241. Coordinate location with the Owner and Architect.
  2. Maintain support facilities until Architect schedules Substantial Completion inspection unless otherwise approved by the Architect. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  2. Maintain access for fire-fighting equipment and access to fire hydrants.
- C. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- Project site, excavations, and construction free of water.
1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  2. Remove snow and ice as required to minimize accumulations.
- D. Project Signs: Provide Project sign as part of the contract. Sign is to be 4foot by 8 foot sign with names of project, owner, architect, engineers, general contractor, mechanical contractors, and electrical contractors. Utilize Community Development Block Grant signage layout provided in the specifications. Unauthorized signs are not permitted.
- 1) Identification Signs: Provide Project identification signs as noted above.
  2. Temporary Signs: Provide other signs as required to direct the public around the construction site.
  3. Maintain and touchup signs so they are legible at all times.
- E. Waste Disposal Facilities: Comply with requirements specified in Division 1 Section "Construction Waste Management."
- 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION
- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Existing sidewalk and street paving is constructed of permeable concrete pavers. Protect sidewalks and streetscapes from damage. Provide proper coverage to sidewalks and streetscapes as to prevent dirt, debris, and any other miscellaneous waste materials from entering the paver joints. Repair damage to existing facilities and properly clean out the permeable paving system.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
1. Comply with work restrictions specified in Division 1 Section "Summary."
  2. This property is located on a backwater of the Mississippi River.
  3. This property is leased from the Army Corps of Engineers and is subject to their oversight and control.
  4. This project is subject to Iowa Department of Natural Resources review.
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of 2003 EPA Construction General Permit, Iowa DNR, or local authorities having jurisdiction, whichever is more stringent and requirements specified in Division 2 Section "Site Clearing."
- D. Storm water Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of storm water from heavy rains.
- E. Tree and Plant Protection: No plantings to be protected are located in the project area.
- G. Temporary Exits: At all times building occupants must have access to adequate means of egress in case of fire or other emergency
- H. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations. If not otherwise shown on the drawings, surround the immediate building construction area to prevent entry of the general public to the work site.
  2. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.
  3. Maintain security by limiting number of keys and restricting distribution to authorized personnel.
  4. Fence and barricade utility and other ditch excavation areas outside of the primary fenced areas.
  5. Parking areas, driveways, and site graded areas that have no additional excavation shall be fenced at the discretion of the General Contractor to protect the public as needed.
  6. Maintain fence until building is secure, backfilling is complete, scaffolds are removed from the site, and construction operations requires removal.
- H. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- I. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.
    - 1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
  - J. Temporary Locks: In addition to gates and locks on temporary enclosures, provide temporary locks or construction key cylinders once permanent doors and windows are installed. Temporary cylinders and locks shall not be changed to permanent units until Substantial Completion. At that time permanent keys are to be transferred to the Owner along with an accounting of all keys delivered and any keys retained by the Contractors. All keys shall be transferred to the Owner before final payment is made.
- 3.5 MOISTURE AND MOLD CONTROL
- A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction and employ professional contractor experienced in mold mitigation provide removal, clean up, and testing.
- 3.6 OPERATION, TERMINATION, AND REMOVAL
- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
  - B. Maintenance: Maintain facilities in good operating condition until removal.
    - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
  - C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
  - D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
    - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
    - 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 1 Section "Closeout Procedures."

**Project Construction Sign**

White Background

**Project Title**

Sponsor/Developer

Official(s) or Sponsor Address

Black  
Lettering

Architect or Engineer

(second line)

Contractor

(second line)

Project Financed by:

Community Development Block Grant  
Iowa Economic Development Authority

Kim Reynolds, Governor

Sign Dimensions: 1200mm x 2400mm (approx. 4'x8'x3/4")  
Plywood Panel (APA Rated A-B Grade-Exterior)

Black

**CDBG**  
Community Development Block Grant

**IOWA**  
economic development

Pantone 7540  
(CMYK: 0/0/0/72)  
Pantone 390  
(CMYK: 22/0/100/8)

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
  - B. Related Requirements:
    - 1) Division 1 Section "Substitution Procedures" for requests for substitutions.
3. DEFINITIONS
  - A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
    - 1) Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
    - 2) New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
    - 3) Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
  - B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.
4. ACTION SUBMITTALS
  - A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
    - 1) Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
    - 2) Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
      - a. Form of Approval: As specified in Division 1 Section "Submittal Procedures."
      - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
5. QUALITY ASSURANCE
  - A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

were also options.

6. PRODUCT DELIVERY, STORAGE, AND HANDLING
  - A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
  - B. Storage:
    - 1) Store materials in a manner that will not endanger Project structure.
    - 2) Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
    - 3) Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
    - 4) Protect stored products from damage and liquids from freezing.
7. PRODUCT WARRANTIES
  - A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
    - 1) Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
    - 2) Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
  - B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
    - 1) Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
    - 2) See Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
  - C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

**PART 2 – PRODUCTS**

1. PRODUCT SELECTION PROCEDURES
  - A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
    - 1) Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
    - 2) Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
    - 3) Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
    - 4) Where products are accompanied by the term "as selected," Architect will make selection.
    - 5) Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
  - B. Product Selection Procedures:
    - 1) Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2. COMPARABLE PRODUCTS**

A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:

- 1) Evidence that the proposed product does not require revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
- 2) Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
- 3) Evidence that proposed product provides specified warranty.
- 4) List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
- 5) Samples, if requested.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 017000 - EXECUTION REQUIREMENTS

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
    - 1) Construction layout.
    - 2) Field engineering and surveying.
    - 3) Cutting and patching.
    - 4) Starting and adjusting.
    - 5) Protection of installed construction.
    - 6) Correction of the Work.
  - B. Related Requirements:
    - 1) Division 1 Section "Summary" for limits on use of Project site.
    - 2) Division 1 Section "Submittal Procedures" for submitting surveys.
    - 3) Division 1 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
3. DEFINITIONS
  - A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
  - B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.
4. QUALITY ASSURANCE
  - A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
    - 1) Structural Elements: No structural or operational elements should be cut for installation of this project. If cutting becomes required notify the Architect prior to beginning operations.
    - 2) When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
    - 3) Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that result in increased maintenance or decreased operational life or safety. Operational elements include the following:
      - a. Primary operational systems and equipment.
      - b. Mechanical systems piping and ducts.
      - c. Control systems.
      - d. Communication systems.
      - e. Fire-detection and -alarm systems.
      - f. Electrical wiring systems.
      - g. Operating systems of special construction.
    - 4) Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity that result in reducing their capacity to perform as intended, or that result in increased maintenance or decreased operational life or safety.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Other construction elements include but are not limited to the following:

- a. Sprayed fire-resistive material.
  - b. Equipment supports.
  - c. Piping, ductwork, vessels, and equipment.
- 5) Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

**PART 2 – PRODUCTS****1. MATERIALS**

- A. General: Comply with requirements specified in other Sections.
- 1) For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with requirements in Division 1 sustainable design requirements Section.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
- 1) If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

**PART 3 - EXECUTION****1. EXAMINATION**

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
- 1) Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  - 2) Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- B. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
- 1) Description of the Work.
  - 2) List of detrimental conditions, including substrates.
  - 3) List of unacceptable installation tolerances.
  - 4) Recommended corrections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

**2. PREPARATION**

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Division 1 Section "Project Management and Coordination."
  - D. Surface and Substrate Preparation: Comply with manufacturer's written recommendations for preparation of substrates to receive subsequent work.
3. CONSTRUCTION LAYOUT
- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
4. INSTALLATION
- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
    - 1) Make vertical work plumb and make horizontal work level.
    - 2) Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
    - 3) Conceal pipes and wiring in finished areas unless otherwise indicated.
    - 4) Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.
  - B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
  - C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
  - D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
  - E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
  - F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels. Provide ear protection whenever using noise producing tools or equipment.
  - G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
  - H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
    - 1) Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
    - 2) Allow for building movement, including thermal expansion and contraction.
    - 3) Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
    - 4) Do not cut, drill, weld, use explosive fasteners, or otherwise modify structural columns, beams, or other structural elements without documenting same in shop drawings or by special notice to the Architect.
  - I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous. At this time the Owner has no knowledge of any asbestos or other hazardous material in the areas affected by this construction project. If any such materials are discovered or suspected, the contractor shall immediately vacate the affected area and notify the Owner immediately in writing of the location and

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

nature of the suspected materials. The Owner will then have the suspected materials tested and, if required, removed or remediated.

**5. CUTTING AND PATCHING**

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
  - 1) Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- D. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Division 1 Section "Summary."
- E. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. Do not use any spark or flame producing equipment on the site without the explicit knowledge and approval of the Owner. Do not use such equipment when students or the public is present.
  - 1) In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2) Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3) Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4) Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - 5) Proceed with patching after construction operations requiring cutting are complete.
- F. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Fill and patch any holes from anchors, piping, supports or other items that are from the previous bleacher installation. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
  - 1) Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
  - 2) Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
    - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    - b. Restore damaged pipe covering to its original condition.
- G. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

**6. PROGRESS CLEANING**

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  - 1) Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2) Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
  - 3) Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
    - a. Use containers intended for holding waste materials of type to be stored.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 4) Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
  - B. Site: Maintain Project site free of waste materials and debris.
  - C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
    - 1) Cover floors in the work areas to prevent damage to the existing and refinished floors. Provide walk surface over finished floors as required.
    - 2) Remove liquid spills promptly.
    - 3) Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
  - D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
  - E. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
  - F. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Division 1 Section "Temporary Facilities and Controls."
  - G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
  - H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
  - I. Limiting Exposures: Supervise construction operations to assure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.
7. STARTING AND ADJUSTING
- A. Coordinate startup and adjusting of equipment and operating components with requirements in Division 1 Section "General Commissioning Requirements."
  - B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
  - C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
  - D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
  - E. Manufacturer's Field Service: Comply with qualification requirements in Division 1 Section "Quality Requirements."
8. PROTECTION OF INSTALLED CONSTRUCTION
- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
  - B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 01 – GENERAL REQUIREMENTS

## SECTION 017410 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
  - 1. Salvaging nonhazardous demolition and construction waste.
  - 2. Recycling nonhazardous demolition and construction waste.
  - 3. Disposing of nonhazardous demolition and construction waste.
- B. Related Requirements:
  - 1. Section 024119 "Selective Demolition" for disposition of waste resulting from partial demolition of buildings, structures, and site improvements, and for disposition of hazardous waste.
  - 2. Section 042000 "Unit Masonry" for disposal requirements for masonry waste.
  - 3. Section 044313.13 "Anchored Stone Masonry Veneer" for disposal requirements for excess stone and stone waste.

## 1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

## 1.4 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 25 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials as defined in the construction waste management objectives described in the IEDA Green Streets Criteria, Section 6-1a.

## 1.5 ACTION SUBMITTALS

- A. Waste Management Plan: Submit plan within 30 days of date established for commencement of the Work.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include the following information:
  - 1. Material category.
  - 2. Generation point of waste.
  - 3. Total quantity of waste in tons (tonnes).
  - 4. Quantity of waste salvaged, both estimated and actual in tons (tonnes).
  - 5. Quantity of waste recycled, both estimated and actual in tons (tonnes).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

6. Total quantity of waste recovered (salvaged plus recycled) in tons (tonnes).
  7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
  - B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
  - C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
  - D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
  - E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
  - F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- 1.7 QUALITY ASSURANCE
- A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of projects with similar requirements.
  - B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- 1.8 WASTE MANAGEMENT PLAN
- A. General: Develop a waste management plan according to ASTM E 1609 and requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
  - B. Waste Identification: Indicate anticipated types and quantities of demolition and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
  - C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
    1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
    2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
    3. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
    4. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
    5. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

**PART 2 - PRODUCTS (Not Used)****PART 3 - EXECUTION**

- 3.1 PLAN IMPLEMENTATION
- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
    1. Comply with operation, termination, and removal requirements in Section 015000 "Temporary Facilities and Controls."
  - B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
  - C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
    1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
    2. Comply with Section 015000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.
  - D. Waste Management in Historic Zones or Areas: Hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, by 12 inches (300 mm) or more.
- 3.2 SALVAGING DEMOLITION WASTE
- A. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
    1. Clean salvaged items.
    2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
    3. Store items in a secure area until installation.
    4. Protect items from damage during transport and storage.
    5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
  - B. Salvaged Items for Sale and Donation: Not permitted on Project site.
  - C. Salvaged Items for Owner's Use: Salvage items for Owner's use and handle as follows:
    1. Clean salvaged items.
    2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
    3. Store items in a secure area until delivery to Owner.
    4. Transport items to Owner's storage area designated by Owner.
    5. Protect items from damage during transport and storage.
  - D. Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors.
  - E. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
  - F. Plumbing Fixtures: Separate by type and size.
  - G. Lighting Fixtures: Separate lamps by type and protect from breakage.
  - H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.
- 3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL
- A. General: Recycle paper and beverage containers used by on-site workers.
  - B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Owner.
  - C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
  - D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
    1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
      - a. Inspect containers and bins for contamination and remove contaminated materials if found.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
4. Store components off the ground and protect from the weather.
5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

**3.4 RECYCLING DEMOLITION WASTE**

- A. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.
  1. Clean and stack undamaged, whole masonry units on wood pallets.
- B. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.
- C. Metals: Separate metals by type.
  1. Structural Steel: Stack members according to size, type of member, and length.
  2. Remove and dispose of bolts, nuts, washers, and other rough hardware.
- D. Asphalt Shingle Roofing: Separate organic and glass-fiber asphalt shingles and felts. Remove and dispose of nails, staples, and accessories.
- E. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
- F. Acoustical Ceiling Panels and Tile: Stack large clean pieces on wood pallets and store in a dry location.
- G. Metal Suspension System: Separate metal members including trim, and other metals from acoustical panels and tile and sort with other metals.
- H. Carpet and Pad: Roll large pieces tightly after removing debris, trash, adhesive, and tack strips.
  1. Store clean, dry carpet and pad in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.
- I. Carpet Tile: Remove debris, trash, and adhesive.
  1. Stack tile on pallet and store clean, dry carpet in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.
- J. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
- K. Conduit: Reduce conduit to straight lengths and store by type and size.

**3.5 RECYCLING CONSTRUCTION WASTE**

- A. Packaging:
  1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
  2. Polystyrene Packaging: Separate and bag materials.
  3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
  4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
  1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
  2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.

**3.6 DISPOSAL OF WASTE**

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
  2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
    - 1) Substantial Completion procedures.
    - 2) Final completion procedures.
    - 3) Final cleaning.
    - 4) Repair of the Work.
  - B. Related Requirements:
    - 1) Division 1 Section "Photographic Documentation" for submitting final completion construction photographic documentation.
    - 2) Division 1 Section "Execution Requirements" for progress cleaning of Project site.
    - 3) Division 1 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
    - 4) Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
    - 5) Division 1 Section "Demonstration and Training" for requirements for instructing Owner's personnel.
    - 6) Divisions 2 through 16 Sections for specific closeout and special cleaning requirements for the Work in those Sections.
3. SUBSTANTIAL COMPLETION PROCEDURES
  - A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
  - B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
    - 1) Submit closeout submittals specified in other Division 1 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
    - 2) Submit closeout submittals specified in individual Divisions 2 through 16 Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
    - 3) Submit test/adjust/balance records.
  - C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
    - 1) Complete startup and testing of systems and equipment.
    - 2) Perform preventive maintenance on equipment used prior to Substantial Completion.
    - 3) Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Division 1 Section "Demonstration and Training."
    - 4) Terminate and remove temporary facilities from Project site along with construction tools, and similar elements.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 5) Complete final cleaning requirements, including touchup painting.
  - 6) Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
4. FINAL COMPLETION PROCEDURES
- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
    - 1) Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
    - 2) Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  - B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
    - 1) Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
5. LIST OF INCOMPLETE ITEMS (PUNCH LIST)
- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
    - 1) Organize list of spaces in sequential order, starting with exterior areas first.
    - 2) Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
    - 3) Include the following information at the top of each page:
      - a. Project name.
      - b. Date.
      - c. Name of Architect.
      - d. Name of Contractor.
      - e. Page number.
    - 4) Submit list of incomplete items in the following format:
      - a. PDF electronic file. Architect will return annotated file.
      - b. Three paper copies. Architect will return two copies.

**PART 2 – PRODUCTS**

1. MATERIALS
  - A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
    - 1) Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

**PART 3 – EXECUTION**

1. FINAL CLEANING
  - A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
  - B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 1) Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site, and areas disturbed by construction activities, including rubbish, waste material, litter, and other foreign substances.
    - b. Clean exposed surface finishes to a dirt-free condition, free of stains, films, and similar foreign substances.
    - c. Sweep concrete floors broom clean in unoccupied spaces.
    - d. Remove labels that are not permanent.
    - e. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - C. Construction Waste Disposal: Comply with waste disposal requirements in Division 1 Section "Temporary Facilities and Controls."
2. REPAIR OF THE WORK
- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
  - B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
    - 1) Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
      - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 017810 - PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for project record documents, including the following:
    - 1) Record Drawings.
  - B. Related Requirements:
    - 1) Division 1 Section "Execution Requirements" for final property survey.
    - 2) Division 1 Section "Closeout Procedures" for general closeout procedures.
    - 3) Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
    - 4) Divisions 2 through 16 Sections for specific requirements for project record documents of the Work in those Sections.

PART 2 – PRODUCTS

1. RECORD DRAWINGS
  - A. Record Prints: Maintain one set of marked-up paper copies of the Shop Drawings, incorporating new and revised drawings as modifications are issued.
    - 1) Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
      - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
      - b. Accurately record information in an acceptable drawing technique.
      - c. Record data as soon as possible after obtaining it.
      - d. Record and check the markup before enclosing concealed installations.
      - e. Cross-reference record prints to corresponding archive photographic documentation.
    - 2) Content: Types of items requiring marking include, but are not limited to, the following:
      - a. Dimensional changes to Drawings.
      - b. Revisions to routing of piping and conduits. By electrician hired by Owner.
      - c. Revisions to electrical circuitry. By electrician hired by Owner.
      - d. Changes made by Change Order or Change Directive.
      - e. Record information on the Work that is shown only schematically.
    - 3) Mark the Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
    - 4) Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
    - 5) Mark important additional information that was either shown schematically or omitted from original Drawings.
    - 6) Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
  - B. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****PART 3 – EXECUTION****3.1 RECORDING AND MAINTENANCE**

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 017820 - OPERATION AND MAINTENANCE DATA

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
    - 1) Operation and maintenance documentation directory.
    - 2) Operation manuals for systems, subsystems, and equipment.
    - 3) Product maintenance manuals.
  - B. Related Requirements:
    - 1) Division 1 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
    - 2) Divisions 2 through 16 Sections for specific operation and maintenance manual requirements for the Work in those Sections.
3. DEFINITIONS
  - A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
  - B. Subsystem: A portion of a system with characteristics similar to a system.
4. CLOSEOUT SUBMITTALS
  - A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
    - 1) Architect will comment on whether content of operations and maintenance submittals are acceptable.
    - 2) Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
  - B. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.
    - 1) Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.

PART 2 – PRODUCTS

1. OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY
  - A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
    - 1) List of documents.
    - 2) List of systems.
    - 3) List of equipment.
    - 4) Table of contents.
  - B. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
  - C. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. OPERATION MANUALS
  - A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
    - 1) System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
    - 2) Operating standards.
    - 3) Operating procedures.
    - 4) Precautions against improper use.
  - B. Operating Procedures: Include the following, as applicable:
    - 1) Startup procedures.
    - 2) Routine and normal operating instructions.
    - 3) Normal shutdown instructions.
    - 4) Seasonal and weekend operating instructions.
3. PRODUCT MAINTENANCE MANUALS
  - A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
  - B. Source Information: List each product included in manual identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
  - C. Product Information: Include the following, as applicable:
    - 1) Product name and model number.
    - 2) Manufacturer's name.
    - 3) Color, pattern, and texture.
  - D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
    - 1) Inspection procedures.
    - 2) Types of cleaning agents to be used and methods of cleaning.
    - 3) Schedule for routine cleaning and maintenance.
  - E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
  - F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
    - 1) Include procedures to follow and required notifications for warranty claims.

**PART 3 – EXECUTION**

1. MANUAL PREPARATION
  - A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
  - B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
  - C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
    - 1) Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
    - 2) Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
  - D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

references to information not applicable.

- 1) Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
- 1) Do not use original project record documents as part of operation and maintenance manuals.
  - 2) Comply with requirements of newly prepared record Drawings in Division 1 Section "Project Record Documents."
- F. Comply with Division 1 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 1 – GENERAL REQUIREMENTS

## SECTION 018200 - DEMONSTRATION AND TRAINING

PART 1 – GENERAL

1. RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
2. SUMMARY
  - A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
    - 1) Demonstration of operation of systems, subsystems, and equipment.
    - 2) Training in operation and maintenance of systems, subsystems, and equipment.
3. QUALITY ASSURANCE
  - A. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Division 1 Section "Quality Requirements," experienced in operation and maintenance procedures and training.
4. COORDINATION
  - A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
  - B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
  - C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 – PRODUCTS

1. INSTRUCTION PROGRAM
  - A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.

PART 3 – EXECUTION

1. PREPARATION
  - A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Division 1 Section "Operations and Maintenance Data."
  - B. Set up instructional equipment at instruction location.
2. INSTRUCTION
  - A. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
    - 1) Contractor will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
    - 2) Owner will furnish an instructor to describe Owner's operational philosophy.
    - 3) Owner will furnish Contractor with names and positions of participants.
  - A. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 1) Schedule training with Owner with at least seven days' advance notice.
- B. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- C. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 2 – EXISTING CONDITIONS

## SECTION 022260 - HISTORIC REMOVAL AND DISMANTLING

PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes historic treatment procedures in the form of special types of selective demolition work for designated historic spaces, areas, rooms, and surfaces.
- B. Related Requirements:
  - 1. Section 01351 "Special Procedures for Historic Treatment" for general historic treatment requirements.

## 1.2 DEFINITIONS

- A. Dismantle: To disassemble or detach a historic item from a surface, or a nonhistoric item from a historic surface, using gentle methods and equipment to prevent damage to historic items and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- B. Existing to Remain: Existing items that are not to be removed or dismantled, except to the degree indicated for performing required Work.
- C. Remove: To take down or detach a nonhistoric item located within a historic space, area, or room, using methods and equipment to prevent damage to historic items and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- D. Retain: To keep existing items that are not to be removed or dismantled.
- E. Salvage for Reuse on this Project: Items noted in the drawings to be reused that have to be removed should be carefully removed, marked for identification, stored in a safe area, refurbished as needed, and reinstalled. Contractors may suggest reuse of salvaged materials on the project if removed items are in good condition.
- F. Salvage for Delivery to the Owner: If an item is noted in the drawings to be given to a building Owner, the Contractor shall salvage the item as gently as possible and deliver it to the Owner of the building. Contractor shall place the items within the building the item was removed from as directed by the Owner. Contractors who find concealed trim, scrollwork, or decorative panels shall so notify the Architect immediately upon discovery.

## 1.3 PRECONSTRUCTION MEETINGS

- A. Preconstruction Conference(s): Conduct conference(s) at Project site.
  - 1. Review minutes of Preliminary Historic Treatment Conference that pertain to removal and dismantling procedures and protection of historic areas and surfaces.
  - 2. Review list of items indicated to be salvaged.
  - 3. Review methods and procedures related to removal and dismantling work.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For historic removal and dismantling specialist.
- B. Preconstruction Documentation: Contractors are encouraged to photograph storefronts just prior to start of work on that storefront to document the condition of the adjacent surfaces. Emphasize in photographs or through other documentation preexisting conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by Contractor's removal, dismantling, or renovation efforts operations.
- C. Removal and Dismantling Historic Treatment Program: Submit before work begins on each storefront the items to be protected or salvaged.
- D. List of Items Indicated to Be Salvaged: Prepare a list of items indicated on Drawings to be salvaged for reuse on the project or delivery to an Owner. Submit 7 days before preconstruction conference.

## **SPECIFICATIONS-**

### **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT ANAMOSA, IOWA ARCHITECT PROJECT #1919.01**

- E. Inventory of Salvaged Items: After removal or dismantling work is complete, submit a list of items that have been salvaged and confirm that they have been refurbished and reinstalled or delivered to the building Owner.

#### **1.5 QUALITY ASSURANCE**

- A. Historic Removal and Dismantling Specialist Qualifications: A qualified historic treatment specialist. General selective demolition experience is insufficient experience for historic removal and dismantling work.
- B. Removal and Dismantling Historic Treatment Program: Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of removal and dismantling work, including protection of surrounding and substrate materials and Project site.
- C. Regulatory Requirements: Comply with notification regulations of authorities having jurisdiction before beginning removal and dismantling work. Comply with hauling and disposal regulations of authorities having jurisdiction.
  - 1. Do not begin demolition operations until asbestos removal is completed on any buildings requiring mitigation.
  - 2. Comply with worker and public safety requirements for items having lead paint or other hazardous materials.

#### **1.6 FIELD CONDITIONS**

- A. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before removal and dismantling, the Building Owner will remove from the designated construction area, merchandize, loose furnishings, draperies, blinds, and any other items they wish to salvage. Any built in items to be salvaged by the Contractor is noted on the drawings.
- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with removal and dismantling work.
- C. Hazardous Materials: See the asbestos survey of the project included in this project manual for a list of areas requiring asbestos mitigation.
  - 1. Hazardous materials will be removed by Owner before start of the Work under a separate contract. General Contractor is to provide schedule of work on the project so that asbestos mitigation can be carried out just before start of work on a storefront.
  - 2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify the General Contractor verbally and follow up with written notification. The General Contractor is to verbally notify the Owner and Architect and confirm that notification in writing. Notifications are to identify specifically which building, material within the building, and location in the building of the suspicious material. The Owner will have material identified and remove hazardous materials under a separate contract.
    - a. In the case of asbestos, stop work in the area of potential hazard, shut off fans and other air handlers ventilating the area, and barricade the area until the questionable material is identified and if necessary removed. Reassign workers to continue work in unaffected areas. Resume work in the area of concern after safe working conditions are verified.
    - b. It is assumed on this project that all historic wood trim and painted surfaces in these buildings contain lead paint. Workers on this project who will be removing, handling, modifying, painting, or otherwise working with these materials should be trained in safety procedures.

## **PART 2 - PRODUCTS - (Not Used)**

## **PART 3 - EXECUTION**

#### **3.1 EXAMINATION**

- A. Preparation for Removal and Dismantling: Examine construction to be removed or dismantled to determine best methods to safely and effectively perform removal and dismantling work.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Verify that affected utilities are disconnected and capped.
  2. Inventory and record the condition of items to be removed and dismantled for reinstallation or salvage. Enter this information on the submittal of inventory of salvaged items.
  3. Structural Survey: If any structural elements of the building are shown for removal, the Contractors shall provide necessary shoring, blocking, bracing, or other means to temporarily support the structure until new structure is inserted. If the Contractor has questions as to the loads that are bearing upon the elements in question or is uncertain of the temporary methods required, he shall retain a structural engineer to design the temporary supports.
  4. Mortar tests: Masonry mortar shall replicate mortar test results included herein.
- B. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video recordings. Comply with requirements specified in Section 01322 "Photographic Documentation."
- C. Perform surveys as the Work progresses to detect hazards resulting from historic removal and dismantling procedures.
- 3.2 HISTORIC REMOVAL AND DISMANTLING
- A. General: Have removal and dismantling work performed by a qualified historic removal and dismantling specialist.
- B. Perform work according to the historic treatment program.
- C. Water-Mist Sprinkling: Use water-mist sprinkling and other wet methods to control dust only with adequate, approved procedures and equipment according to the historic treatment program to ensure that such water does not create a hazard or adversely affect other building areas or materials.
- D. Anchorages: (See masonry restoration sections for further information.)
1. Remove anchorages associated with removed items.
  2. Dismantle anchorages associated with dismantled items.
  3. In nonhistoric surfaces, patch holes created by anchorage removal or dismantling according to the requirements for new work.
  4. In historic surfaces, patch or repair holes created by anchorage removal or dismantling according to Section that is specific to the historic surface being patched.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 02 – EXISTING CONDITIONS

## SECTION 027640 - PAVEMENT JOINT SEALANTS

**PART 1 – GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Cold-applied joint sealants for sidewalks and concrete drives and curbs.

## 1.3 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Qualification Data: For qualified Installer.

## 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each type of joint sealant from single source from single manufacturer.
- C. Preinstallation Conference: Conduct conference at Project site.

## 1.5 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
  - 2. When joint substrates are wet.
  - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

**PART 2 – PRODUCTS**

## 2.1 MATERIALS

- A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer based on testing and field experience.

## 2.2 COLD-APPLIED JOINT SEALANTS

- A. Single-Component, Self-Leveling, Silicone Joint Sealant for Concrete: ASTM D 5893, Type SL.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. BASF Corp., Sonneborn SL-1.
    - b. Crafco Inc., an ERGON company; RoadSaver Silicone SL.
    - c. Dow Corning Corporation; 890-SL.
    - d. Pecora Corporation; 300 SL.

## 2.3 JOINT-SEALANT BACKER MATERIALS

- A. General: Provide joint-sealant backer materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by joint-sealant

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- manufacturer based on field experience and laboratory testing.
- B. Backer Strips for Cold- and Hot-Applied Joint Sealants: ASTM D 5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

**2.4 PRIMERS**

- A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 PREPARATION**

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.
- B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

**3.3 INSTALLATION OF JOINT SEALANTS**

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install joint-sealant backings of kind indicated to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of joint-sealant backings.
  - 2. Do not stretch, twist, puncture, or tear joint-sealant backings.
  - 3. Remove absorbent joint-sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install joint sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place joint sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.

**3.4 CLEANING**

- A. Clean off excess joint sealant or sealant smears adjacent to joints as the Work progresses, by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

**3.5 SCHEDULE OF JOINTS TO BE FILLED**

- A. Existing Concrete Slabs- Horizontal Joints between existing concrete slabs and new walls, foundations, or new

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

slabs.

- B. Patched Concrete Slabs- Where field patches or toppings cannot be formed tight to existing vertical surfaces, where a removable screed is needed to properly level a topping, where saw cuts are installed, or where movement between adjacent surfaces is anticipated.
- C. New Concrete Slabs- All perimeter joints of slabs where they abut existing concrete or vertical surfaces.

**3.5 PROTECTION**

- A. Protect joint sealants, during and after curing period, from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately and replace with joint sealant so installations in repaired areas are indistinguishable from the original work.

**3.6 PAVEMENT-JOINT-SEALANT SCHEDULE**

- A. Joint-Sealant Application: Joints within cement concrete pavement.
  - 1. Joint Location:
    - a. Expansion and isolation joints in cast-in-place concrete pavement.
    - b. Contraction joints in cast-in-place concrete slabs.
    - c. Other joints as indicated.
  - 2. Silicone Joint Sealant for Concrete: Single component, self-leveling.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 03 – CONCRETE

## SECTION 033000 - CAST-IN-PLACE CONCRETE

**PART 1 – GENERAL**

- 1.1 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- 1.2 SUMMARY
  - A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
    - 1. Concrete Toppings
- 1.3 DEFINITIONS
  - A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.
- 1.4 ACTION SUBMITTALS
  - A. Product Data: For each type of product indicated.
  - B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
    - 1. Indicate amounts of mixing water to be withheld for later addition at Project site.
  - C. Samples: For vapor retarder.
- 1.5 INFORMATIONAL SUBMITTALS
  - A. Material Certificates: For each of the following, signed by manufacturers:
    - 1. Form materials and form-release agents.
- 1.6 QUALITY ASSURANCE
  - A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
  - B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
    - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
  - C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- 1.7 DELIVERY, STORAGE, AND HANDLING
  - A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

**PART 2 - PRODUCTS**

- 2.1 STEEL REINFORCEMENT
  - A. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, plain, fabricated from as-drawn steel wire into flat sheets.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.2 CONCRETE MATERIALS**

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
  - 1. Portland Cement: ASTM C 150, Type I, white.
- B. Normal-Weight Aggregates: ASTM C 33, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source.
  - 1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
  - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M and potable.

**2.3 ADMIXTURES**

- A. Air-Entraining Admixture: ASTM C 260.

**2.4 CURING MATERIALS**

- A. Water: Potable.

**2.5 RELATED MATERIALS**

- A. Semirigid Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Type A shore durometer hardness of 80 per ASTM D 2240.

**2.6 CONCRETE MIXTURES, GENERAL**

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
  - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.

**2.7 CONCRETE MIXTURES FOR BUILDING ELEMENTS**

- A. Concrete Toppings: Proportion normal-weight concrete mixture as follows:
  - 1. Minimum Compressive Strength: 5000 psi at 28 days.
  - 2. Slump Limit: 4 inches plus or minus 1 inch.
  - 3. Air Content: 5.5 percent, plus or minus 1.5 percent at point of delivery for 1-1/2-inch nominal maximum aggregate size.
  - 4. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 3/4-inch nominal maximum aggregate size.
  - 5. Air Content: Do not allow air content of trowel-finished toppings to exceed 3 percent.
  - 6. Synthetic Micro-Fiber: Uniformly disperse in concrete mixture at manufacturer's recommended rate, but not less than 1.5 lb/cu. yd.

**2.8 FABRICATING REINFORCEMENT**

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

**2.9 CONCRETE MIXING**

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M, and furnish batch ticket information.
  - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

**PART 3 – EXECUTION**

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.1 FORMWORK**

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
  - 1. Class A, 1/8 inch for smooth-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
  - 1. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Tool exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

**3.2 EMBEDDED ITEMS**

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

**3.3 REMOVING AND REUSING FORMS**

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations and curing and protection operations need to be maintained.
  - 1. Leave formwork for beam soffits, joists, slabs, and other structural elements that supports weight of concrete in place until concrete has achieved at least 70 percent of its 28-day design compressive strength.
  - 2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.4 JOINTS**

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:
  - 1. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.

**3.5 CONCRETE PLACEMENT**

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
- E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
- F. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
- G. Hot-Weather Placement: Comply with ACI 301

**3.6 FINISHING FLOORS AND SLABS**

- A. General: Comply with ACI 302.1R recommendations for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraighening until surface is left with a uniform, smooth, granular texture.
  - 1. Apply float finish to surfaces to receive trowel finish.

**3.7 MISCELLANEOUS CONCRETE ITEMS**

- A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.

**3.8 CONCRETE PROTECTING AND CURING**

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period.
- C. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.

**3.9 JOINT FILLING**

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.
- 3.10 CONCRETE SURFACE REPAIRS
- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
  - B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
  - C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
    - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
    - 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
    - 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
  - D. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
  - E. Repair materials and installation not specified above may be used, subject to Architect's approval.
- 3.11 Paving Joint Sealants- Provide sealants at exposed expansion joints within the building as noted in Section 02764.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 04 – MASONRY

SECTION 047200 - CAST STONE MASONRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
  - 1. Cast-stone trim including the following:
    - a. Parapet caps.
    - b. Belt courses.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. For cast-stone units, include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Show fabrication and installation details for cast-stone units. Include dimensions, details of reinforcement and anchorages if any, and indication of finished faces.
  - 1. Include building elevations showing layout of units and locations of joints and anchors.
- C. Samples for Verification:
  - 1. For each color and texture of cast stone required, 10 inches (250 mm) square in size.
  - 2. For each trim shape required, 10 inches (250 mm) in length.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
  - 1. Include copies of material test reports for completed projects, indicating compliance of cast stone with ASTM C 1364.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer of cast-stone units similar to those indicated for this Project, that has sufficient production capacity to manufacture required units, and is a plant certified by the Cast Stone Institute, the Architectural Precast Association, or the Precast/Prestressed Concrete Institute for Group A, Category AT.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Coordinate delivery of cast stone with unit masonry work to avoid delaying the Work and to minimize the need for on-site storage.
- B. Pack, handle, and ship cast-stone units in suitable packs or pallets.
  - 1. Lift with wide-belt slings; do not use wire rope or ropes that might cause staining. Move cast-stone units if required, using dollies with wood supports.
  - 2. Store cast-stone units on wood skids or pallets with nonstaining, waterproof covers, securely tied. Arrange to distribute weight evenly and to prevent damage to units. Ventilate under covers to prevent condensation.
- C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- D. Store mortar aggregates where grading and other required characteristics can be maintained and contamination can be avoided.

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

1.7 PROJECT CONDITIONS

- A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Comply with cold-weather construction requirements in TMS 602/ACI 530.1/ASCE 6.
  - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and above and will remain so until cast stone has dried, but no fewer than seven days after completing cleaning.
- B. Hot-Weather Requirements: Comply with hot-weather construction requirements in TMS 602/ACI 530.1/ASCE 6.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations for Cast Stone: Obtain cast-stone units from single source from single manufacturer.
- B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color, from one manufacturer for each cementitious component and from one source or producer for each aggregate.
- C. Acceptable Manufacturers:
  - 1. River City Cast Stone
  - 2. Edwards Cast Stone
  - 3. DeVinci Precast
- D. Requests for substitutions per Division 01 requirements.

2.2 CAST-STONE MATERIALS

- A. General: Comply with ASTM C 1364.
- B. Portland Cement: ASTM C 150/C 150M, Type I or Type III, containing not more than 0.60 percent total alkali when tested according to ASTM C 114. Provide natural color or white cement as required to produce cast-stone color indicated.
- C. Coarse Aggregates: Granite, quartz, or limestone complying with ASTM C 33/C 33M; gradation and colors as needed to produce required cast-stone textures and colors.
- D. Fine Aggregates: Natural sand or crushed stone complying with ASTM C 33/C 33M, gradation and colors as needed to produce required cast-stone textures and colors.
- E. Color Pigment: ASTM C 979/C 979M, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, free of carbon black, nonfading, and resistant to lime and other alkalis.
- F. Admixtures: Use only admixtures specified or approved in writing by Architect.
  - 1. Do not use admixtures that contain more than 0.1 percent water-soluble chloride ions by mass of cementitious materials. Do not use admixtures containing calcium chloride.
  - 2. Use only admixtures that are certified by manufacturer to be compatible with cement and other admixtures used.
  - 3. Air-Entraining Admixture: ASTM C 260/C 260M.
  - 4. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
  - 5. Water-Reducing, Retarding Admixture: ASTM C 494/C 494M, Type D.
  - 6. Water-Reducing, Accelerating Admixture: ASTM C 494/C 494M, Type E.
- G. Reinforcement: Deformed steel bars complying with ASTM A 615/A 615M, Grade 60 (Grade 420). Use galvanized or epoxy-coated reinforcement when covered with less than 1-1/2 inches (38 mm) of cast-stone material.
  - 1. Epoxy Coating: ASTM A 775/A 775M.
  - 2. Galvanized Coating: ASTM A 767/A 767M.
- H. Embedded Anchors and Other Inserts: Fabricated from stainless steel complying with ASTM A 240/A 240M, ASTM A 276, or ASTM A 666, Type 304.

2.3 CAST-STONE UNITS

- A. Cast-Stone Units: Comply with ASTM C 1364.
  - 1. Units shall be manufactured using the vibrant dry tamp methods.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. Units shall be resistant to freezing and thawing as determined by laboratory testing according to ASTM C 666/C 666M, Procedure A, as modified by ASTM C 1364.
- B. Fabricate units with sharp arris and accurately reproduced details, with indicated texture on all exposed surfaces unless otherwise indicated.
  1. Slope exposed horizontal surfaces 1:12 to drain unless otherwise indicated.
  2. Provide raised fillets at backs of sills and at ends indicated to be built into jambs.
  3. Provide drips on projecting elements unless otherwise indicated.
- C. Fabrication Tolerances:
  1. Variation in Cross Section: Do not vary from indicated dimensions by more than 1/8 inch (3 mm).
  2. Variation in Length: Do not vary from indicated dimensions by more than 1/360 of the length of unit or 1/8 inch (3 mm), whichever is greater, but in no case by more than 1/4 inch (6 mm).
  3. Warp, Bow, and Twist: Not to exceed 1/360 of the length of unit or 1/8 inch (3 mm), whichever is greater.
  4. Location of Grooves, False Joints, Holes, Anchorages, and Similar Features: Do not vary from indicated position by more than 1/8 inch (3 mm) on formed surfaces of units and 3/8 inch (10 mm) on unformed surfaces.
- D. Cure Units as Follows:
  1. Cure units in enclosed, moist curing room at 95 to 100 percent relative humidity and temperature of 100 deg F (38 deg C) for 12 hours or 70 deg F (21 deg C) for 16 hours.
  2. Keep units damp and continue curing to comply with one of the following:
    - a. No fewer than five days at mean daily temperature of 70 deg F (21 deg C) or above.
    - b. No fewer than seven days at mean daily temperature of 50 deg F (10 deg C) or above.
- E. Acid etch units after curing to remove cement film from surfaces to be exposed to view.
- F. Colors and Textures: Provide units with fine-grained texture and buff color resembling smooth-finished Anamosa limestone.

**2.4 MORTAR MATERIALS**

- A. Provide mortar materials that comply with Section 042000 "Unit Masonry."
- B. Portland Cement: ASTM C 150/C 150M, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- C. Hydrated Lime: ASTM C 207, Type S.
- D. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.
- E. Aggregate for Mortar: ASTM C 144.
  1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
  2. For joints less than 1/4 inch (6 mm) thick, use aggregate graded with 100 percent passing the No. 16 (1.18-mm) sieve.
  3. White-Mortar Aggregates: Natural white sand or crushed white stone.
- F. Water: Potable.

**2.5 ACCESSORIES**

- A. Anchors: Type and size indicated, fabricated from Type 304 stainless steel complying with ASTM A 240/A 240M, ASTM A 276, or ASTM A 666.
- B. Dowels: 1/2-inch- (12-mm-) diameter round bars, fabricated from Type 304 stainless steel complying with ASTM A 240/A 240M, ASTM A 276, or ASTM A 666.
- C. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cast-stone manufacturer and expressly approved by cleaner manufacturer for use on cast stone and adjacent masonry materials.
  1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Diedrich Technologies, Inc.; a division of Sandell Construction Solutions.
    - b. EaCo Chem, Inc.
    - c. PROSOCO, Inc.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.6 MORTAR MIXES**

- A. Comply with requirements in Section 042000 "Unit Masonry" for mortar mixes.
- B. Do not use admixtures including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
  - 1. Do not use calcium chloride in mortar or grout.

**PART 3 - EXECUTION****3.1 EXAMINATION**

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 SETTING CAST STONE IN MORTAR**

- A. Install cast-stone units to comply with requirements in Section 042000 "Unit Masonry."
- B. Set cast stone as indicated on Drawings. Set units accurately in locations indicated, with edges and faces aligned according to established relationships and indicated tolerances.
  - 1. Install anchors, supports, fasteners, and other attachments indicated or necessary to secure units in place.
  - 2. Coordinate installation of cast stone with installation of flashing specified in other Sections.
- C. Wet joint surfaces thoroughly before applying mortar or setting in mortar.
- D. Set units in full bed of mortar with full head joints unless otherwise indicated.
  - 1. Set units with joints 1/4 to 3/8 inch (6 to 10 mm wide unless otherwise indicated).
  - 2. Build anchors and ties into mortar joints as units are set.
  - 3. Fill dowel holes and anchor slots with mortar.
  - 4. Build concealed flashing into mortar joints as units are set.
  - 5. Keep head joints in copings and between other units with exposed horizontal surfaces open to receive sealant.
  - 6. Keep joints at shelf angles open to receive sealant.
- E. Rake out joints for pointing with mortar to depths of not less than 3/4 inch (19 mm). Rake joints to uniform depths with square bottoms and clean sides. Scrub faces of units to remove excess mortar as joints are raked.
- F. Point mortar joints by placing and compacting mortar in layers not greater than 3/8 inch (10 mm). Compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
- G. Tool exposed joints slightly concave when thumbprint hard. Use a smooth plastic jointer larger than joint thickness.
- H. Provide sealant joints at head joints of copings and other horizontal surfaces; at expansion, control, and pressure-relieving joints; and at locations indicated.
  - 1. Keep joints free of mortar and other rigid materials.
  - 2. Build in compressible foam-plastic joint fillers where indicated.
  - 3. Form joint of width indicated, but not less than 3/8 inch (10 mm).
  - 4. Prime cast-stone surfaces to receive sealant and install compressible backer rod in joints before applying sealant unless otherwise indicated.
  - 5. Prepare and apply sealant of type and at locations indicated to comply with applicable requirements in Section 079200 "Joint Sealants."

**3.3 SETTING ANCHORED CAST STONE WITH SEALANT-FILLED JOINTS**

- A. Set cast stone as indicated on Drawings. Set units accurately in locations indicated, with edges and faces aligned according to established relationships and indicated tolerances.
  - 1. Install anchors, supports, fasteners, and other attachments indicated or necessary to secure units in place.
  - 2. Shim and adjust anchors, supports, and accessories to set cast stone in locations indicated with uniform joints.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Keep cavities open where unfilled space is indicated between back of cast-stone units and backup wall; do not fill cavities with mortar or grout.
  - C. Fill anchor holes with sealant.
    - 1. Where dowel holes occur at pressure-relieving joints, provide compressible material at ends of dowels.
  - D. Set cast stone supported on clip or continuous angles on resilient setting shims. Use material of thickness required to maintain uniform joint widths. Hold shims back from face of cast stone a distance at least equal to width of joint.
  - E. Keep joints free of mortar and other rigid materials. Remove temporary shims and spacers from joints after anchors and supports are secured in place and cast-stone units are anchored. Do not begin sealant installation until temporary shims and spacers are removed.
    - 1. Form open joint of width indicated, but not less than 3/8 inch (10 mm).
  - F. Prime cast-stone surfaces to receive sealant and install compressible backer rod in joints before applying sealant unless otherwise indicated.
  - G. Prepare and apply sealant of type and at locations indicated to comply with applicable requirements in Section 079200 "Joint Sealants."
- 3.4 ADJUSTING AND CLEANING
- A. Remove and replace stained and otherwise damaged units and units not matching approved Samples. Cast stone may be repaired if methods and results are approved by Architect.
  - B. Replace units in a manner that results in cast stone matching approved Samples, complying with other requirements, and showing no evidence of replacement.
  - C. In-Progress Cleaning: Clean cast stone as work progresses.
    - 1. Remove mortar fins and smears before tooling joints.
    - 2. Remove excess sealant immediately, including spills, smears, and spatter.
  - D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed cast stone as follows:
    - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
    - 2. Test cleaning methods on sample; leave one sample uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of cast stone.
    - 3. Protect adjacent surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
    - 4. Wet surfaces with water before applying cleaners; remove cleaners promptly by rinsing thoroughly with clear water.
    - 5. Clean cast stone with proprietary acidic cleaner applied according to manufacturer's written instructions.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 4 – MASONRY

## SECTION 049620 - HISTORIC BRICK UNIT MASONRY REPAIR

PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes historic treatment work consisting of repairing historic clay brick masonry.
- B. Related Requirements:
  - 1. Section 022260 "Historic Removal and Dismantling" for historic removal and dismantling work.
  - 2. Section 049630 "Historic Brick Unit Masonry Repointing"
  - 3. See other sections on masonry repair.

## 1.3 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 01270 "Unit Prices."

## 1.4 DEFINITIONS

- A. Low-Pressure Spray: 100 to 300 psi
- B. Rebuilding (Setting) Mortar: Mortar used to set and anchor masonry in a structure, distinct from pointing mortar installed after masonry is set in place.
- C. Pointing Mortar

## 1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference on historic masonry repair and repointing at Project site.
  - 1. Review minutes of Preliminary Historic Treatment Conference that pertain to masonry historic treatment, masonry repair, and fire protection.
  - 2. Review methods and procedures related to repairing historic brick masonry.

## 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product, including brick, stone, backup materials, mortar dye, setting mortar, and pointing mortar. Submittals shall note use of the material, proposed location for use of the material, and buildings on which material is to be used.
- B. Shop Drawings: Provide where existing brick or single replacement brick units are not appropriate to make the repair.
  - 1. Include plans, elevations, sections, and locations of masonry repair work on the structure.
  - 2. Show full-size patterns with complete dimensions for new custom molded brick shapes, special brick patterns, including pulled courses, and brick arches and their jointing, showing relationship of existing units to new units.
  - 3. Show provisions for expansion joints or other sealant joints.
  - 4. Show replacement and repair anchors. Include details of anchors.
- C. Samples: For each brick, colored mortar or standard mortar to match existing color, exposed product and for each color and texture or required for the project.

## 1.7 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic brick masonry repair specialist. Experience installing standard unit masonry is insufficient experience for masonry historic treatment work.
  - 1. Historic Treatment Worker Qualifications: When masonry units are being patched, assign at least one worker per crew who is trained and certified by manufacturer of patching compound to apply its products.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Mockups: Prepare mockups of historic treatment adjacent to the existing surfaces to demonstrate aesthetic effects and to set quality standards for materials and execution, and for fabrication and installation. Mockups are required only where any elevation of a building are to receive more than 100 new brick.
  - 1. Masonry Repair: Prepare sample areas for each type of masonry material indicated to have repair work performed. If not otherwise indicated, size each mockup not smaller than two adjacent whole units or approximately 24 inches in least dimension. Construct sample areas in locations adjacent to existing walls. Demonstrate quality of materials, workmanship, and blending with existing work.

**PART 2 - PRODUCTS****2.1 OWNER-FURNISHED MATERIAL**

- A. Salvaged brick. Brick removed may be reused in the same wall. Brick matching the damaged areas to be repaired may be obtained from concealed locations or from areas not immediately visible from the street may be removed and used for repair in visible areas at the option of the contractor. Brick areas where salvaged brick are obtained must be repaired with new units.

**2.2 MASONRY MATERIALS**

- A. Face Brick: Provide face brick, including molded, ground, cut, or sawed shapes where required to complete masonry repair work.
  - a. provide new units matched to look like the existing building brick with physical properties, colors, color variation within units, surface texture, size, and shape to match existing brickwork. New brick to be submitted for approval of final appearance.
  - b. For existing brickwork that exhibits a range of colors or color variation within units, provide brick that proportionally matches that range and variation rather than brick that matches an individual color within that range.
- 2. Special Shapes:
  - a. Provide 100 percent solid shapes for applications where core holes or "frogs" could be exposed to view or weather when in final position, and where shapes produced by sawing would result in sawed surfaces being exposed to view.
  - b. Provide specially ground units, shaped to match patterns, for arches and where indicated.
  - c. Mechanically chopping or breaking brick, or bonding pieces of brick together by adhesive, are unacceptable procedures for fabricating special shapes.
  - d. Field or job specific brick molded and dyed to match specific project needs are not to be used unless specifically approved by the Architect after search for color match for existing brick produces no acceptable matches.
- B. Building Brick: Provide building brick according to ASTM C 62, Grade SW where in contact with earth, Grade SW, MW, or NW for concealed backup; of same vertical dimension as face brick, for masonry work concealed from view.

**2.3 MORTAR MATERIALS AND MIXES – See section 049630 Historic Brick Unit Masonry Repointing.****2.4 ACCESSORY MATERIALS**

- A. Setting Buttons and Shims: Resilient plastic, nonstaining to masonry, sized to suit joint thicknesses and bed depths of masonry units, less the required depth of pointing materials unless removed before pointing.

**PART 3 - EXECUTION****3.1 PROTECTION**

- A. Prevent mortar from staining face of surrounding masonry and other surfaces.
- B. Remove or protect gutters and downspouts, signs, windows, doors, and wood trim to remain and associated hardware adjacent to immediate work area, and store during masonry repair work. Reinstall when repairs are complete.
  - 1. Provide temporary rain drainage during work to direct water away from building.

**3.2 BRICK REMOVAL AND REPLACEMENT**

- A. At locations indicated, remove bricks that are damaged, spalled, or deteriorated or are to be reused. Carefully remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
- B. Support and protect remaining masonry that surrounds removal area.
- C. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition. Through wall flashing is to be repaired or replaced within the wall where present. Note any significant deterioration of existing wall reinforcing or lintels to the Architect immediately upon discovery.
- D. Notify Architect of unforeseen detrimental conditions, including voids, cracks, bulges, loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.
- E. Remove in an undamaged condition as many whole bricks as possible. Remove mortar and sealant from surfaces of removed units.
- F. Clean masonry surrounding removal areas by removing mortar, dust, and loose particles in preparation for brick replacement.
- G. Replace removed damaged brick with other removed brick in good condition, where possible, matching existing brick. Do not use broken units unless they can be cut to usable size.
- H. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
  - 1. Maintain joint width for replacement units to match existing joints.
  - 2. Use setting buttons or shims to set units accurately spaced with uniform joints.
- I. Lay replacement brick with rebuilding (setting) mortar and with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. (30 g/194 sq. cm per min.). Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.
  - 1. Where entire walls are to be replaced, tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
  - 2. Where brick replacement or limited areas of the wall are replaced, rake out mortar used for laying brick before mortar sets according to Section 04963 "Historic Brick Unit Masonry Repointing." Point at same time as repointing of surrounding area.
  - 3. When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of joints.
- J. Curing: Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
  - Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

**3.3 BACKUP MASONRY REMOVAL AND REPLACEMENT**

- A. Where backup masonry is fractured or unstable and at locations indicated, remove mortar and masonry units that are broken or deteriorated and rebuild with whole, new brick or whole salvaged units. Carefully remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
- B. Perform backup masonry removal and replacement according to requirements in "Brick Removal and Replacement" Paragraph.
- C. Use of concrete block for back up masonry is allowed only where the existing back up is concrete masonry unless allowed by the Architect.
- D. Where structural clay tile is backup for brick masonry, either concrete block or brick may be used as backup.

**3.4 FINAL CLEANING**

- A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, applied by low-pressure spray.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Do not use metal scrapers or brushes.
2. Do not use acidic or alkaline cleaners.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 4 – MASONRY

## SECTION 049630 - HISTORIC BRICK UNIT MASONRY REPOINTING

PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes historic treatment work consisting of repointing brick masonry joints.
- B. Related Requirements:
  - 1. See other masonry repair sections.

## 1.3 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 01270 "Unit Prices."

## 1.4 DEFINITIONS

- A. Low-Pressure Spray: 100 to 300 psi.

## 1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference historic masonry repair and repointing at Project site.
  - 1. Review minutes of Preliminary Historic Treatment Conference that pertain to masonry historic treatment, repointing, and fire protection.
  - 2. Review methods and procedures related to repointing historic brick masonry.

## 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified.

## 1.7 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic masonry repointing specialist. Experience in pointing or repointing only new or nonhistoric masonry is insufficient experience for masonry historic treatment work.
- B. Mockups: Prepare mockups of historic treatment on existing surface to demonstrate aesthetic effects and to set quality standards for materials and execution.
  - 1. Repointing: Rake out joints in two separate areas each approximately 36 inches (900 mm) high by 48 inches (1200 mm) wide in location agreed to by the Architect for each type of repointing required.

PART 2 - PRODUCTS

## 2.1 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150/C 150, Type I or Type II; white, gray or both where required for color matching of exposed mortar.
  - 1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Sand: ASTM C 144 unless otherwise indicated.
  - 1. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.
  - 2. Color: Provide natural sand of color necessary to produce required mortar color.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3. Provide sand with rounded edges if needed to create match.
  - D. Mortar Pigments: ASTM C 979/C 979M, compounded for use in mortar mixes, and having a record of satisfactory performance in masonry mortars.
    1. **Products:** Subject to compliance with requirements, provide one of the following:
      - a. Davis Colors; True Tone Mortar Colors.
      - b. Lanxess Corporation; Bayferrox Iron Oxide Pigments.
      - c. Solomon Colors, Inc.; SGS Mortar Colors.
      - d. King's Colors
  - E. Water: Potable.
- 2.2 MORTAR MIXES
- A. Measurement and Mixing: Mortar mix as specified shall be equal or softer as mortar test results indicated herein. Mortar mix shall be of same color, texture and re-pointing detail as historic (original) mortar.
  - B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
    1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
  - C. Colored Mortar: Produce mortar of color required by using specified ingredients. Custom mix assorted pigments if required to achieve required match. Once color mix is established do not alter specified proportions without Architect's approval. Mortar matches are to be made and reviewed before existing mortar is removed from wall.
    1. Mortar Pigments: Where mortar pigments are indicated, do not add pigment exceeding 10 percent by weight of the cementitious or binder materials, except for carbon black, which is limited to 2 percent, unless otherwise demonstrated by a satisfactory history of performance.
  - D. Do not use admixtures in mortar unless otherwise indicated.
  - E. Mixes: Mortar mixes for each individual building shall match the formulas indicated in the Mortar Analysis Report.

**PART 3 - EXECUTION**

- 3.1 PROTECTION
- A. Prevent mortar from staining face of surrounding masonry and other surfaces.
  - B. Remove or protect gutters and downspouts, signage, windows, doors, wood trim and associated hardware adjacent to immediate work area. Store during masonry repointing work in secure areas. Reinstall when repointing is complete. Remove protection materials when repointing is complete.
    1. Provide temporary rain drainage during work to direct water away from building.
- 3.2 REPOINTING MASONRY
- A. Rake out and repoint joints to the following extent:
    1. All joints in areas indicated.
    2. Joints indicated as sealant-filled joints. Seal joints according to Section 07920 "Joint Sealants."
    3. Joints at locations of the following defects:
      - a. Holes and missing mortar.
      - b. Cracks that can be penetrated 1/4 inch (6 mm) or more by a knife blade 0.027 inch (0.7 mm) thick.
      - c. Cracks 1/16 inch (1.6 mm) or more in width and of any depth.
      - d. Hollow-sounding joints when tapped by metal object.
      - e. Eroded surfaces 1/4 inch (6 mm) or more deep.
      - f. Deterioration to point that mortar can be easily removed by hand, without tools.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- g. Joints filled with substances other than mortar.
- B. Do not rake out and repoint joints where not required. The extent of the repointing work is generally indicated on the drawings for each of the buildings. Initial evaluation of the wall condition was made without the benefit of lifts, ladders, or scaffolding. Mason shall make their own evaluation of the condition of the wall and make recommendations for a revision in the amount of work as early in the process as possible. If at any time during the process, any areas of the walls are found to require more or less work, the mason should bring this to the attention of the Architect immediately. See unit price sections for further information.
- C. Rake out joints as follows, according to procedures demonstrated in approved mockup:
  - 1. Remove mortar from joints to depth of 2 times joint width, but not less than that required to expose sound, unweathered mortar. Do not remove unsound mortar more than 2 inches (50 mm) for nominal 4 inch deep unit unless unit is removed, rebedded, and pointed. Where additional compensation for removal and reinstallation of units is expected by the Contractor, the location of each unit must be identified by photograph or drawing. See photographic documentation. Multiple units may be documented in one photograph. Consult Architect for direction where conditions within the wall vary beyond normal ranges.
  - 2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
  - 3. Do not spall edges of masonry units or widen joints. Replace or patch damaged masonry units as directed by Architect. The work of this project is subject to the Secretary of the Interior of the National Park Service Guidelines and the recommendations of that document must be followed in order for this project to receive funding. Contractors should apply to following methods in accordance with that document.
    - a. Cut out mortar head joints by hand with chisel and resilient mallet. Do not use power-operated grinders or mechanical removal methods.
    - b. Cut out center of mortar bed joints and larger areas using angle grinders with diamond-impregnated metal blades at damaged masonry units to be removed, large mortar patches or mortar joints one inch in size or larger. Remove remaining mortar in bed joints and mortar in head joints by hand with chisel and resilient mallet. Metal blades are never to contact masonry units to remain.
- D. Notify Architect of unforeseen detrimental conditions, including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.
- E. Pointing with Mortar:
  - 1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
  - 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch (9 mm) until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
  - 3. After deep areas have been filled to same depth as remaining joints, point joints by placing mortar in layers not greater than 3/8 inch (9 mm). Fully compact each layer and allow it to become thumbprint hard before applying next layer. Where existing masonry units have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed masonry surfaces or to featheredge the mortar.
  - 4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
  - 5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
    - a. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- b. Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface mortar.
- 6. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Remove mortar and repoint.
- F. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.
- G. Clean masonry following completion of mortar repointing.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 4 – MASONRY

## SECTION 049700 - HISTORIC STONE MASONRY REPAIR

PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes historic treatment work consisting of repairing historic stone assemblies.
- B. Related Requirements:
  - 1. See other masonry repair and repointing sections.

## 1.3 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 01270 "Unit Prices."

## 1.4 DEFINITIONS

- A. Low-Pressure Spray: 100 to 300 psi.
- B. Rebuilding (Setting) Mortar: Mortar used to set and anchor masonry in a structure, distinct from pointing mortar installed after masonry is set in place.

## 1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review minutes of Preliminary Historic Treatment Conference that pertain to stone historic treatment, stone repair, and fire protection.
  - 2. Review methods and procedures related to repairing historic stone masonry.

## 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product showing product to be used, building on which it is proposed for use, and location on the building if for a specific function.
- B. Shop Drawings: For areas not shown in the construction documents and proposed for additional work.
  - 1. Include plans, elevations, sections, and locations of stone repair work on the structure.
  - 2. Indicate complete dimensions for new stone units and their jointing, showing relation of existing to new units.
  - 3. Indicate setting number of each new stone unit and its location on the structure in annotated plans and elevations.
  - 4. Show provisions for expansion joints or other sealant joints.
  - 5. Show replacement and repair anchors, including drilled-in pins.

## 1.7 INFORMATIONAL SUBMITTALS

- A. Preconstruction Test Reports: For replacement stone.

## 1.8 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic stone repair specialist. Experience installing standard unit masonry or new stone masonry is insufficient experience for stone historic treatment work.
  - 1. Historic Treatment Worker Qualifications: When stone units are being patched, assign at least one worker per crew who is trained and certified by manufacturer of patching compound to apply its products and who has at least three years of successful experience in working on patching of stonework.
- B. Mockups: Prepare mockups of historic treatment on existing surfaces to demonstrate aesthetic effects and to set quality standards for materials and execution and for fabrication and installation.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Stone Repair: Prepare sample areas for each type of stone indicated to have repair work performed. If not otherwise indicated, size each mockup not smaller than two adjacent whole units or a maximum of approximately 48 inches (1200 mm) in maximum dimension. Construct sample areas in locations in existing walls where directed by Architect unless otherwise indicated. Mockups are not needed for each building but a representative sample may be prepared for multiple buildings where the type of stone, mortar type, mortar color, and joint are similar. Demonstrate quality of materials, workmanship, and blending with existing work. Include the following as a minimum if the size of wall allows:
    - a. Replacement: Four stone units replaced if size of wall all.
    - b. Partial Stone Replacement: Two partial stone replacements (dutchman repairs).
    - c. Stone Plug Repair: Two stone plug repairs for each type of stone indicated to be plugged.
    - d. Patching: Three small holes at least 1 inch (25 mm) in diameter.
- 1.9 PRECONSTRUCTION TESTING
- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on stone units as follows:
1. Replacement Stone: Test each proposed type of replacement stone, according to ASTM C 170/C 170M for compressive strength, wet and dry, perpendicular and parallel to rift; ASTM C 99/C 99M for modulus of rupture, wet and dry, perpendicular and parallel to rift; and ASTM C 97/C 97M for absorption and bulk specific gravity.

**PART 2 - PRODUCTS****2.1 MASONRY MATERIALS**

- A. Stone Matching Existing: Provide natural building stone of variety, color, texture, grain, veining, finish, size, and shape to match existing stone.
1. Physical Properties for Limestone:
    - a. Limestone from local quarries which commonly produce building stone will be allowed without formal testing provided the quarry has had its products previously tested and supply materials from the same stratum of stone that have met the following criteria.
    - b. Compressive Strength: according to ASTM C 170/C 170M.
    - c. Modulus of Rupture: according to ASTM C 99/C 99M.
    - d. Absorption: according to ASTM C 97/C 97M.
    - e. Bulk Specific Gravity: according to ASTM C 97/C 97M.
  2. For existing stone that exhibits a range of colors, textures, grains, veining, finishes, sizes, or shapes, provide stone that proportionally matches that range rather than stone that matches an individual color, texture, grain, veining, finish, size, or shape within that range.
  3. Quarry: Subject to compliance with requirements, provide stone from quarries in the region that generally supply stone of the color, texture, grain, veining, and finish to match the original.
    - a. Original Quarry: Local quarries that supplied the buildings are unknown.
  4. See brick sections for backup materials.

**2.2 MORTAR MATERIALS**

- A. Portland Cement: ASTM C 150/C 150M, Type I or Type II; white or gray, or both, where required for color matching of mortar.
1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Sand: ASTM C 144 unless otherwise indicated.
1. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.
  2. Colored Mortar: Provide natural sand of color necessary to produce required mortar color.
  3. For exposed mortar, provide sand with rounded edges.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- D. Mortar Pigments: ASTM C 979/C 979M, compounded for use in mortar mixes, and having a record of satisfactory performance in masonry mortars.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Davis Colors; True Tone Mortar Colors.
    - b. Lanxess Corporation; Bayferrox Iron Oxide Pigments.
    - c. Solomon Colors, Inc.; SGS Mortar Colors.
    - d. King's Colors
- E. Water: Potable. Verify chemical content, hardness and other factors that may affect the overall long term satisfactory performance of the mortar.

**2.3 ACCESSORY MATERIALS**

- A. Stone Anchors and Pins: Type and size indicated or, if not indicated, to match existing anchors in size and type. Fabricate anchors and pins from Type 304 or Type 316 stainless steel.
- B. Setting Buttons and Shims: Resilient plastic, nonstaining to stone, sized to suit joint thicknesses and bed depths of stone units, less the required depth of pointing materials unless removed before pointing.

**2.4 MORTAR MIXES**

- A. Measurement and Mixing: Mortar mix as specified shall be equal or softer as mortar test results indicated herein. Mortar mix shall be of same color, texture and re-pointing detail as historic (original) mortar.
- B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
- C. Colored Mortar: Produce mortar of color required by using specified ingredients. Do not alter specified proportions without Architect's approval.
  - 1. Mortar Pigments: Where mortar pigments are indicated, do not add pigment exceeding 10 percent by weight of the cementitious or binder materials, except for carbon black which is limited to 2 percent, unless otherwise demonstrated by a satisfactory history of performance.
- D. Do not use admixtures in mortar unless otherwise indicated.
- E. Mixes: Mix mortar materials in the following proportions:
  - 1. Rebuilding (Setting) Mortar by Type: ASTM C 270, Proportion Specification, Type O unless otherwise indicated; with cementitious material limited to portland cement and lime.
  - 2. Colored Mortar: Add mortar pigments to produce exposed, setting (rebuilding) mortar of colors required.

**PART 3 - EXECUTION****3.1 PROTECTION**

- A. Prevent mortar from staining face of surrounding stone and other surfaces.
- B. Remove or protect gutters and downspouts, signs, windows, doors, and wood trim and associated hardware adjacent to immediate work area and store during stone repair work. Mark items to identify for reinstallation and store in secure area. Reinstall when repairs are complete. Remove protection materials when repairs are complete.
  - 1. Provide temporary rain drainage during work to direct water away from building.

**3.2 STONE REMOVAL AND REPLACEMENT**

- A. At locations indicated, remove stone that has deteriorated or is damaged beyond repair or is to be reused. Carefully remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
- B. Support and protect remaining masonry that was supported by removed stone.
- C. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition. Replace any through wall flashing encountered in place. Notify the Architect immediately of damaged or deteriorated reinforcing or lintels.
- D. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, loose units in existing stone or unit masonry backup, rotted wood, rusted metal, and other deteriorated items.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- E. Remove in an undamaged condition as many whole stone units as possible. Remove mortar and sealant from surfaces of removed stones.
  - F. Clean masonry surrounding removal areas by removing mortar, dust, and loose particles in preparation for stone replacement.
  - G. Replace removed damaged stone with other removed stone in good condition, where possible, matching existing stone. Do not use broken units unless they can be cut to usable size.
  - H. Rift: Do not allow face bedding of stone. Before setting, inspect to verify that each stone has been cut so that, when it is set in final position, the rift or natural bedding planes are predominantly horizontal except for arches, where bedding planes are predominantly radial or vertical, but perpendicular to the wall. Reject stone with vertical bedding planes except as required for arches, lintels, and copings.
  - I. Install replacement stone into bonding and coursing pattern of existing stone. If cutting is required, use a motor-driven saw designed to cut stone with clean, sharp, unchipped edges except where existing stone was intentionally hand edged by chipping. Finish edges to blend with appearance of edges of existing stone.
    - 1. Maintain joint width for replacement stone to match existing joints.
    - 2. Use setting buttons or shims to set stone accurately spaced with uniform joints.
  - J. Set replacement stone with rebuilding (setting) mortar and with completely filled bed, head, and collar joints. Butter vertical joints for full width before setting and set units in full bed of mortar unless otherwise indicated. Replace existing anchors with new anchors of size and type indicated].
    - 1. Finishing of mortar joints where surrounding areas are not to be repointed may be pointed as stone is laid for small repairs or as a separate operation. Tool exposed mortar joints in repaired areas to match joints of surrounding existing stonework. If more expeditious and for larger areas of repair rake out mortar used for laying stone before mortar sets according to Section 04972 "Historic Stone Masonry Repointing." If adjoining areas of wall are repointed, point at same time as repointing balance of wall.
    - 2. When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of joints.
  - K. Curing: Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
    - 1. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.
- 3.3 PARTIAL STONE REPLACEMENT
- A. Remove defective portion of existing stone unit (backing stone). Carefully remove defective portion of stone by making vertical and horizontal saw cuts at face of backing stone and removing defective material to depth required for fitting partial replacement (dutchman).
    - 1. Make edges of backing stone at cuts smooth and square to each other and to finished surface; essentially rectangular. Make back of removal area flat and parallel to stone face.
    - 2. Do not overcut at corners and intersections. Hand trim to produce clean sharp corners with no rounding and no damage to existing work to remain.
    - 3. If backing stone becomes further damaged, remove damaged area and enlarge partial replacement as required.
  - B. Cut and trim partial replacement to accurately fit area where material was removed from backing stone. Fabricate to size required to produce joints between partial replacement and backing stone of no more than 1/16 inch (1.6 mm) in width, and to produce joints between partial replacement and other stones that match existing joints between stones.
  - C. Pinning: Before applying adhesive, prepare for mechanical anchorage consisting of 1/4-inch- (6-mm-) diameter, plain or threaded stainless-steel pins set into 1/4-inch- (6-mm-) diameter holes drilled at a 45-degree downward angle through face of partial replacement and into backing stone. Center and space pins between 3 and 5 inches (75 and 125 mm) apart and at least 2 inches (50 mm) from any edge. Insert pins at least 2 inches (50 mm) in backing stone and 2 inches (50 mm) in partial replacement with end countersunk at least 3/4 inch (19 mm) from exposed face of partial replacement.
  - D. Concealed Pinning: Before applying adhesive, prepare for concealed mechanical anchorage consisting of 1/4-inch- (6-mm-) diameter, plain or threaded stainless-steel pins set into 1/4-inch- (6-mm-) diameter holes

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

drilled into backing stone and into, but not through, the partial replacement. Center and space pins between 3 and 5 inches (75 and 125 mm) apart and at least 2 inches (50 mm) from any edge. Insert pins at least 2 inches (50 mm) in backing stone and 2 inches (50 mm) in partial replacement, but no closer than 3/4 inch (19 mm) from exposed face of partial replacement.

- E. Apply stone-to-stone adhesive according to adhesive manufacturer's written instructions. Coat bonding surfaces of backing stone and partial replacement, completely filling all crevices and voids.
- F. Apply partial replacement while adhesive is still tacky and hold securely in place until adhesive has cured. Use shims, clamps, wedges, or other devices as necessary to align face of partial replacement with face of backing stone.
- G. Clean adhesive residue from exposed surfaces.

**3.4 STONE-FRAGMENT REPAIR**

- A. Carefully remove cracked or fallen stone fragment indicated to be repaired. Reuse only stone fragment that is in sound condition.
- B. Remove soil, loose particles, mortar, and other debris or foreign material, from fragment surfaces to be bonded and from parent stone where fragment had broken off, by cleaning with stiff-fiber brush.
- C. Pinning: Before applying adhesive, prepare for mechanical anchorage consisting of 1/4-inch- (6-mm-) diameter, plain or threaded stainless-steel pins set into 1/4-inch- (6-mm-) diameter holes drilled at a 45-degree downward angle through face of fragment and into parent stone. Center and space pins 3 to 5 inches (75 to 125 mm) apart and at least 2 inches (50 mm) from any edge. Insert pins at least 2 inches (50 mm) in parent stone and 2 inches (50 mm) in fragment with end countersunk at least 3/4 inch (19 mm) from exposed face of fragment.
- D. Concealed Pinning: Before applying adhesive, prepare for concealed mechanical anchorage consisting of 1/4-inch- (6-mm-) diameter, plain or threaded stainless-steel pins set into 1/4-inch- (6-mm-) diameter holes drilled into parent stone and into, but not through, the fragment. Center and space pins 3 to 5 inches (75 to 125 mm) apart and at least 2 inches (50 mm) from any edge. Insert pins at least 2 inches (50 mm) in parent stone and 2 inches (50 mm) in fragment, but no closer than 3/4 inch (19 mm) from exposed face of fragment.
- E. Apply stone-to-stone adhesive according to adhesive manufacturer's written instructions. Coat bonding surfaces of fragment and parent stone, completely filling all crevices and voids.
- F. Fit stone fragment onto parent stone while adhesive is still tacky and hold fragment securely in place until adhesive has cured. Use shims, clamps, wedges, or other devices as necessary to align face of fragment with face of parent stone.
- G. Clean adhesive residue from exposed surfaces and patch chipped areas and exposed drill holes as specified in "Stone Patching" Article.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 4 – MASONRY

## SECTION 049720 - HISTORIC STONE MASONRY REPOINTING

PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes historic treatment work consisting of repointing stone masonry joints.
- B. Related Requirements:
  - 1. See other masonry repair and repointing sections.

## 1.3 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 01270 "Unit Prices."

## 1.4 DEFINITIONS

- A. Low-Pressure Spray: 100 to 300 psi.

## 1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review minutes of Preliminary Historic Treatment Conference that pertain to masonry historic treatment, repointing, and fire protection.
  - 2. Review methods and procedures related to repointing historic stone masonry.

## 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product including product data sheets, building(s) products are to be used on and location of use on each building.
- B. Samples: For each exposed product and for each color and texture specified.

## 1.7 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic masonry repointing specialist. Experience in pointing or repointing only new or nonhistoric masonry is insufficient experience for masonry historic treatment work.
- B. Mockups: Prepare mockups of historic treatment on existing surfaces to demonstrate aesthetic effects and to set quality standards for materials and execution.
  - 1. Repointing: Rake out joints in two separate areas, each approximately 36 inches (900 mm) high by 48 inches (1200 mm) wide where wall area allows for each type of repointing required and repoint one of the areas.

PART 2 - PRODUCTS

## 2.1 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150/C 150M, Type I or Type II; white, or gray or both where required for color matching of exposed mortar.
  - 1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Sand: ASTM C 144 unless otherwise indicated.
  - 1. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. Color: Provide natural sand of color necessary to produce required mortar color.
  3. Provide sand with rounded edges.
  - D. Mortar Pigments: ASTM C 979/C 979M, compounded for use in mortar mixes, and having a record of satisfactory performance in masonry mortars.
    1. Products: Subject to compliance with requirements, provide one of the following:
      - a. Davis Colors; True Tone Mortar Colors.
      - b. Lanxess Corporation; Bayferrox Iron Oxide Pigments.
      - c. Solomon Colors, Inc.; SGS Mortar Colors.
      - d. King's Colors.
  - E. Water: Potable.
- 2.2 MORTAR MIXES
- A. Measurement and Mixing: Mortar mix as specified shall be equal or softer as mortar test results indicated herein. Mortar mix shall be of same color, texture and re-pointing detail as historic (original) mortar.
  - B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
    1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
  - C. Colored Mortar: Produce mortar of color required by using specified ingredients. Custom mix assorted pigments if required to achieve required match. Once color mix is established do not alter specified proportions without Architect's approval. Mortar matches are to be made and reviewed before existing mortar is removed from wall.
    1. Mortar Pigments: Where mortar pigments are indicated, do not add pigment exceeding 10 percent by weight of the cementitious or binder materials, except for carbon black which is limited to 2 percent, unless otherwise demonstrated by a satisfactory history of performance.
  - D. Do not use admixtures in mortar unless otherwise indicated.
  - E. Mixes: Mix mortar materials in the following proportions:
    1. Pointing Mortar by Type: ASTM C 270, Proportion Specification, Type O for sound, un-spalled stone; with cementitious material limited to portland cement and lime. Notify architect if spalled stone is uncovered.
    2. Colored Mortar: Add mortar pigments to produce exposed, setting (rebuilding) mortar of colors required.

**PART 3 - EXECUTION**

- 3.1 PROTECTION
- A. Prevent mortar from staining face of surrounding stone and other surfaces.
  - B. Remove or protect gutters and downspouts, signs, windows, doors, and wood trim and associated hardware adjacent to immediate work area and store during stone repointing work. Reinstall when repointing is complete.
    1. Provide temporary rain drainage during work to direct water away from building.
- 3.2 REPOINTING STONEMASONRY
- A. Rake out and repoint joints to the following extent:
    1. All joints in areas indicated.
    2. Joints indicated as sealant-filled joints. Seal joints according to Section 07920 "Joint Sealants."
    3. In addition to the above joints at locations of the following defects (Areas which the Contractor expects additional compensation for must document the existing condition of the joints through photographic documentation):

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- a. Holes and missing mortar.
  - b. Cracks that can be penetrated 1/4 inch (6 mm) or more by a knife blade 0.027 inch (0.7 mm) thick.
  - c. Cracks 1/16 inch (1.6 mm) or more in width and of any depth.
  - d. Hollow-sounding joints when tapped by metal object.
  - e. Eroded surfaces 1/4 inch (6 mm) or more deep.
  - f. Deterioration to point that mortar can be easily removed by hand, without tools.
  - g. Joints filled with substances other than mortar.
- B. Do not rake out and repoint joints where not required.
- C. Rake out joints as follows, according to procedures demonstrated in approved mockup:
- 1. Remove mortar from joints to depth of joint width plus 1/8 inch (3 mm) or 2 times the joint width, but not less than 1/2 inch (13 mm) in 4 inch deep stone units or not less than that required to expose sound, unweathered mortar. Do not remove unsound mortar more than 2 inches (50 mm) deep in 4 inch stone units. For conditions out of these ranges consult Architect for direction.
  - 2. Remove mortar from stone surfaces within raked-out joints to provide reveals with square backs and to expose stone for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
  - 3. Do not spall edges of stone units or widen joints unless existing unit face style has manually chipped edges. Replace or patch damaged stone units as directed by Architect.
  - 4. Do not spall edges of masonry units or widen joints. Replace or patch damaged masonry units as directed by Architect. The work of this project is subject to the Secretary of the Interior of the National Park Service Guidelines and the recommendations of that document must be followed in order for this project to receive funding. Contractors should apply to following methods in accordance with that document.
    - a. Cut out mortar by hand with chisel and resilient mallet. Do not use power-operated grinders without Architect's written approval based on approved quality-control program.
    - b. Cut out center of mortar bed joints and larger areas using angle grinders with diamond-impregnated metal blades at damaged masonry units to be removed, large mortar patches or mortar joints one inch in size or larger. Remove remaining mortar in bed joints and mortar in head joints by hand with chisel and resilient mallet. Metal blades are never to contact masonry units to remain.
- D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose stone, rotted wood, rusted metal, and other deteriorated items.
- E. Pointing with Mortar:
- 1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
  - 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch (9 mm) until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
  - 3. After deep areas have been filled to same depth as remaining joints, point joints by placing mortar in layers not greater than 3/8 inch (9 mm). Fully compact each layer and allow it to become thumbprint hard before applying next layer. Where existing stone has worn or rounded edges, slightly recess finished mortar surface below face of stone to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed stone surfaces or to featheredge the mortar.
  - 4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
  - 5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
    - a. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- b. Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface mortar.
- 6. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Remove mortar and repoint.
- F. Where repointing work precedes cleaning of existing stone, allow mortar to harden at least 30 days before beginning cleaning work.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 05 – METALS

SECTION 051200 - STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
  - B. See Structural Drawings for project specific requirements.
- 1.2 SUMMARY
  - A. Section Includes:
    - 1. Structural steel.
    - 2. Grout.
- 1.3 DEFINITIONS
  - A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."
  - B. Heavy Sections: Rolled and built-up sections as follows:
    - 1. Shapes included in ASTM A 6/A 6M with flanges thicker than 1-1/2 inches (38 mm).
    - 2. Welded built-up members with plates thicker than 2 inches (50 mm).
- 1.4 COORDINATION
  - A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
  - B. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.
- 1.5 ACTION SUBMITTALS
  - A. Product Data: For each type of product.
  - B. Shop Drawings: Show fabrication of structural-steel components.
    - 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
    - 2. Include embedment Drawings.
    - 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain.
    - 4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical, high-strength bolted connections.
- 1.6 INFORMATIONAL SUBMITTALS
  - A. Qualification Data: For Installer and fabricator.
  - B. Welding certificates.
  - C. Mill test reports for structural steel, including chemical and physical properties.
  - D. Product Test Reports: For the following:
    - 1. Bolts, nuts, and washers including mechanical properties and chemical analysis.
    - 2. Direct-tension indicators.
    - 3. Tension-control, high-strength, bolt-nut-washer assemblies.
    - 4. Shop primers.
    - 5. Nonshrink grout.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****1.7 QUALITY ASSURANCE**

- A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD, or is accredited by the IAS Fabricator Inspection Program for Structural Steel (AC 172).
- B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- C. Comply with applicable provisions of the following specifications and documents:
  - 1. AISC 303.
  - 2. AISC 360.
  - 3. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

**1.8 DELIVERY, STORAGE, AND HANDLING**

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.
  - 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.
- B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.
  - 1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
  - 2. Clean and relubricate bolts and nuts that become dry or rusty before use.
  - 3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1852 fasteners and for retesting fasteners after lubrication.

**PART 2 - PRODUCTS****2.1 STRUCTURAL-STEEL MATERIALS**

- A. W-Shapes: ASTM A 572/A 572M, Grade 50 (345).
- B. Channels, Angles, S-Shapes: ASTM A 572/A 572M, Grade 50 (345).
- C. Plate and Bar: ASTM A 572/A 572M, Grade 50 (345).
- D. Corrosion-Resisting Structural-Steel Shapes, Plates, and Bars: ASTM A 588/A 588M, Grade 50 (345).
- E. Corrosion-Resisting, Cold-Formed Hollow Structural Sections: ASTM A 847/A 847M, structural tubing.
- F. Welding Electrodes: Comply with AWS requirements.

**2.2 BOLTS, CONNECTORS, AND ANCHORS**

- A. High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade C, (ASTM A 563M, Class 8S) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M), Type 1, hardened carbon-steel washers; all with plain finish.
  - 1. Direct-Tension Indicators: ASTM F 959, Type 325 (ASTM F 959M, Type 8.8), compressible-washer type with plain finish.
- B. High-Strength Bolts, Nuts, and Washers: ASTM A 490 (ASTM A 490M), Type 1, heavy-hex steel structural bolts or tension-control, bolt-nut-washer assemblies with splined ends; ASTM A 563, Grade DH, (ASTM A 563M, Class 10S) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M), Type 1, hardened carbon-steel washers with plain finish.
  - 1. Direct-Tension Indicators: ASTM F 959, Type 490 (ASTM F 959M, Type 10.9), compressible-washer type with plain finish.
- C. Zinc-Coated High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade DH (ASTM A 563M, Class 10S) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M), Type 1, hardened carbon-steel washers.
  - 1. Finish: Hot-dip or mechanically deposited zinc coating.
  - 2. Direct-Tension Indicators: ASTM F 959, Type 325 (ASTM F 959M, Type 8.8), compressible-washer type with mechanically deposited zinc coating or mechanically deposited zinc coating, baked epoxy-coated finish.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- D. Unheaded Anchor Rods: ASTM F 1554, Grade 36.
    - 1. Configuration: Straight or Hooked as detailed on structural drawings.
    - 2. Nuts: ASTM A 563 (ASTM A 563M) hex carbon steel.
    - 3. Plate Washers: ASTM A 36/A 36M carbon steel.
    - 4. Washers: ASTM F 436 (ASTM F 436M), Type 1, hardened carbon steel.
    - 5. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C or Mechanically deposited zinc coating, ASTM B 695, Class 50.
  - E. Headed Anchor Rods: ASTM F 1554, Grade , straight.
    - 1. Nuts: ASTM A 563 (ASTM A 563M) hex carbon steel.
    - 2. Plate Washers: ASTM A 36/A 36M carbon steel.
    - 3. Washers: ASTM F 436 (ASTM F 436M), Type 1, hardened carbon steel.
    - 4. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C or Mechanically deposited zinc coating, ASTM B 695, Class 50.
  - F. Threaded Rods ASTM A 572/A 572M, Grade 50 (345).
    - 1. Nuts: ASTM A 563 (ASTM A 563M) hex carbon steel.
    - 2. Washers: ASTM A 36/A 36M]carbon steel.
    - 3. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C or Mechanically deposited zinc coating, ASTM B 695, Class 50.
  - G. Clevises and Turnbuckles: Made from cold-finished carbon steel bars, ASTM A 108, Grade 1035.
  - H. Eye Bolts and Nuts: Made from cold-finished carbon steel bars, ASTM A 108, Grade 1030.
  - I. Sleeve Nuts: Made from cold-finished carbon steel bars, ASTM A 108, Grade 1018.
- 2.3 PRIMER
- A. Primer: Comply with Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."
  - B. Galvanizing Repair Paint: MPI#18, MPI#19, or SSPC-Paint 20.
- 2.4 GROUT
- A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107/C 1107M, factory-packaged, nonmetallic aggregate grout, noncorrosive and nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.
- 2.5 FABRICATION
- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.
    - 1. Camber structural-steel members where indicated.
    - 2. Fabricate beams with rolling camber up.
    - 3. Identify high-strength structural steel according to ASTM A 6/A 6M and maintain markings until structural steel has been erected.
    - 4. Mark and match-mark materials for field assembly.
    - 5. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
  - B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
    - 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.
  - C. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
  - D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
  - E. Welded Door Frames: Build up welded door frames attached to structural-steel frame. Weld exposed joints continuously and grind smooth. Plug-weld fixed steel bar stops to frames. Secure removable stops to frames with countersunk machine screws, uniformly spaced not more than 10 inches (250 mm) o.c. unless otherwise indicated.
  - F. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel members.
    - 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
3. Weld threaded nuts to framing and other specialty items indicated to receive other work.

**2.6 SHOP CONNECTIONS**

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
  1. Joint Type: Snug tightened.
  2. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303 for mill material.

**2.7 SHOP PRIMING**

- A. Shop prime steel surfaces except the following:
  1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
  2. Surfaces to be field welded.
  3. Surfaces of high-strength bolted, slip-critical connections.
  4. Surfaces to receive sprayed fire-resistive materials (applied fireproofing).
  5. Galvanized surfaces.
  6. Surfaces enclosed in interior construction.
- B. Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
  1. SSPC-SP 2, "Hand Tool Cleaning."
  2. SSPC-SP 3, "Power Tool Cleaning."
- C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils (0.038 mm). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.
  1. Stripe paint corners, crevices, bolts, welds, and sharp edges.
  2. Apply two coats of shop paint to surfaces that are inaccessible after assembly or erection. Change color of second coat to distinguish it from first.
- D. Painting: Prepare steel and apply a one-coat, nonasphaltic primer complying with SSPC-PS Guide 7.00, "Painting System Guide 7.00: Guide for Selecting One-Coat Shop Painting Systems," to provide a dry film thickness of not less than 1.5 mils (0.038 mm).

**2.8 GALVANIZING**

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A 123/A 123M.
  1. Fill vent and drain holes that are exposed in the finished Work unless they function as weep holes, by plugging with zinc solder and filing off smooth.
  2. Galvanize lintels, shelf angles and welded door frames attached to structural-steel frame and located in exterior walls.

**2.9 SOURCE QUALITY CONTROL**

- A. Welded Connections: Visually inspect shop-welded connections according to AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:

**PART 3 - EXECUTION****3.1 EXAMINATION**

- A. Verify, with certified steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
  1. Prepare a certified survey of existing conditions. Include bearing surfaces, anchor rods, bearing plates, and other embedments showing dimensions, locations, angles, and elevations.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.2 PREPARATION**

- A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place unless otherwise indicated.
  - 1. Do not remove temporary shoring supporting composite deck construction until cast-in-place concrete has attained its design compressive strength.

**3.3 ERECTION**

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Baseplates, Bearing Plates and Leveling Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
  - 1. Set plates for structural members on wedges, shims, or setting nuts as required.
  - 2. Weld plate washers to top of baseplate.
  - 3. Pretension anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
  - 4. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- C. Maintain erection tolerances of structural steel within AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."
- D. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that are in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
  - 1. Level and plumb individual members of structure.
  - 2. Make allowances for difference between temperature at time of erection and mean temperature when structure is completed and in service.
- E. Splice members only where indicated.
- F. Do not use thermal cutting during erection.
- G. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.
- H. Shear Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Use automatic end welding of headed-stud shear connectors according to AWS D1.1/D1.1M and manufacturer's written instructions.

**3.4 FIELD CONNECTIONS**

- A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
- B. Weld Connections: Comply with AWS D1.1/D1.1M and AWS D1.8/D1.8M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
  - 1. Comply with AISC 303 and AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
  - 2. Remove backing bars or runoff tabs where indicated, back gouge, and grind steel smooth.
  - 3. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," for mill material.

**3.5 PREFABRICATED BUILDING COLUMNS**

- A. Install prefabricated building columns to comply with AISC 360, manufacturer's written recommendations, and requirements of testing and inspecting agency that apply to the fire-resistance rating indicated.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.6 REPAIRS AND PROTECTION**

- A. Galvanized Surfaces: Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A 780/A 780M.
- B. Touchup Painting: Immediately after erection, clean exposed areas where primer is damaged or missing and paint with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
  - 1. Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning.
- C. Touchup Painting: Cleaning and touchup painting are specified in Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."
- D. Touchup Priming: Cleaning and touchup priming are specified in Section 099600 "High-Performance Coatings."

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 05 – METALS

SECTION 057300 - DECORATIVE METAL RAILINGS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
  - A. Section Includes:
    - 1. Steel and iron decorative railings.
- 1.3 DEFINITIONS
  - A. Railings: Guards, handrails, and similar devices used for protection of occupants at open-sided floor areas and for pedestrian guidance and support, visual separation, or wall protection.
- 1.4 COORDINATION AND SCHEDULING
  - A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written instructions to ensure that shop primers and topcoats are compatible.
  - B. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver items to Project site in time for installation.
  - C. Schedule installation so wall attachments are made only to completed walls. Do not support railings temporarily by any means that do not meet structural performance requirements.
- 1.5 ACTION SUBMITTALS
  - A. Product Data: For the following:
    - 1. Manufacturer's product lines of railings assembled from standard components.
    - 2. Grout, anchoring cement, and paint products.
  - B. Shop Drawings: Include plans, elevations, sections, and attachment details.
  - C. Samples for Verification: For each type of exposed finish required.
    - 1. Sections of each distinctly different linear railing member, including handrails, top rails, posts, and balusters.
    - 2. Fittings and brackets.
- 1.6 INFORMATIONAL SUBMITTALS
  - A. Mill Certificates: Signed by manufacturers of stainless-steel products certifying that products furnished comply with requirements.
  - B. Welding certificates.
  - C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.
- 1.7 QUALITY ASSURANCE
  - A. Welding Qualifications: Qualify procedures and personnel according to the following:
    - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- 1.8 FIELD CONDITIONS
  - A. Field Measurements: Verify actual locations of walls and other construction contiguous with railings by field measurements before fabrication and indicate measurements on Shop Drawings.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****PART 2 - PRODUCTS****2.1 MANUFACTURERS**

- A. Steel and Iron Decorative Railings:
  - 1. Architectural Iron Design, Inc.
  - 2. Greco, CSW Industrials Company
  - 3. Indital USA
  - 4. Lawler Foundry Corp
  - 5. Regency Railings
  - 6. Wiemann Metalcraft
- B. Source Limitations: Obtain each type of railing from single source from single manufacturer.
- C. Product Options: Information on Drawings and in Specifications establishes requirements for system's aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods, including structural analysis, preconstruction testing, field testing, and in-service performance.
  - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.

**2.2 PERFORMANCE REQUIREMENTS**

- A. General: In engineering railings to withstand structural loads indicated, determine allowable design working stresses of railing materials based on the following:
  - 1. Steel: 72 percent of minimum yield strength.
- B. Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 1. Handrails and Top Rails of Guards:
    - a. Uniform load of 50 lbf/ft. (0.73 kN/m) applied in any direction.
    - b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
    - c. Uniform and concentrated loads need not be assumed to act concurrently.
  - 2. Infill of Guards:
    - a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
    - b. Infill load and other loads need not be assumed to act concurrently.
- C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior railings by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
  - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

**2.3 METALS, GENERAL**

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
- B. Brackets, Flanges, and Anchors: Same metal and finish as supported rails unless otherwise indicated.
  - 1. Provide formed-steel brackets with predrilled hole for bolted anchorage and with snap-on cover that matches rail finish and conceals bracket base and bolt head.

**2.4 STEEL AND IRON**

- A. Tubing: ASTM A 500/A 500M (cold formed) or ASTM A 513.
- B. Bars: Hot-rolled, carbon steel complying with ASTM A 29/A 29M, Grade 1010.
- C. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- D. Cast Iron: Either gray iron, ASTM A 48/A 48M, or malleable iron, ASTM A 47/A 47M, unless otherwise indicated.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.5 FASTENERS**

- A. Fastener Materials: Unless otherwise indicated, provide the following:
  - 1. Galvanized-Steel Components: Plated-steel fasteners complying with ASTM B 633, Class Fe/Zn 25 for electrodeposited zinc coating.
- B. Fasteners for Anchoring to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated and capable of withstanding design loads.
- C. Provide concealed fasteners for interconnecting railing components and for attaching railings to other work unless otherwise indicated.

**2.6 MISCELLANEOUS MATERIALS**

- A. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- B. Shop Primer for Galvanized Steel: Water-based galvanized metal primer complying with MPI#134.
- C. Intermediate Coats and Topcoats: Provide products that comply with Section 099110 "Exterior Painting."

**2.7 FABRICATION**

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Assemble railings in the shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch (1 mm) unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form work true to line and level with accurate angles and surfaces.
- E. Fabricate connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate. Locate weep holes in inconspicuous locations.
- F. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.
- G. Connections: Fabricate railings with welded connections unless otherwise indicated.
- H. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove flux immediately.
  - 4. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Type 1 welds; no evidence of a welded joint.
- I. Mechanical Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
  - 1. Fabricate splice joints for field connection using an epoxy structural adhesive if this is manufacturer's standard splicing method.
- J. Form changes in direction as follows:
  - 1. By bending to smallest radius that will not result in distortion of railing member.
- K. Bend members in jigs to produce uniform curvature for each configuration required; maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- L. Close exposed ends of hollow railing members with prefabricated end fittings.
- M. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns, unless clearance between end of rail and wall is 1/4 inch (6 mm) or less.
- N. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- O. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure.

**2.8 GENERAL FINISH REQUIREMENTS**

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipment.
- C. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.

**2.9 STEEL AND IRON FINISHES**

- A. Galvanized Railings:
  - 1. Hot-dip galvanize steel and iron railings, including hardware, after fabrication.
  - 2. Comply with ASTM A 123/A 123M for hot-dip galvanized railings.
  - 3. Comply with ASTM A 153/A 153M for hot-dip galvanized hardware.
  - 4. Do not quench or apply post-galvanizing treatments that might interfere with paint adhesion.
  - 5. Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.
- B. For galvanized railings, provide hot-dip galvanized fittings, brackets, fasteners, sleeves, and other ferrous components.
- C. Preparing Galvanized Railings for Shop Priming: After galvanizing, thoroughly clean railings of grease, dirt, oil, flux, and other foreign matter, and treat with etching cleaner.
- D. Powder-Coat Finish: Prepare, treat, and coat galvanized metal to comply with resin manufacturer's written instructions and as follows:
  - 1. Prepare galvanized metal by thoroughly removing grease, dirt, oil, flux, and other foreign matter.
  - 2. Treat prepared metal with zinc-phosphate pretreatment, rinse, and seal surfaces.
  - 3. Apply thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils (0.04 mm).
  - 4. Color: As selected by Architect from manufacturer's full range.

**PART 3 - EXECUTION****3.1 INSTALLATION, GENERAL**

- A. Fit exposed connections together to form tight, hairline joints.
- B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
  - 1. Do not weld, cut, or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
  - 2. Set posts plumb within a tolerance of 1/16 inch in 3 feet (2 mm in 1 m).
  - 3. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet (5 mm in 3 m).
- C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.
- D. Adjust railings before anchoring to ensure matching alignment at abutting joints.
- E. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

**3.2 RAILING CONNECTIONS**

- A. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in "Fabrication" Article whether welding is performed in the shop or in the field.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Expansion Joints: Install expansion joints not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2 inches (50 mm) beyond joint on either side, fasten internal sleeve securely to one side, and locate joint within 6 inches (150 mm) of post.
- 3.3 ANCHORING POSTS
  - A. Anchor posts to metal surfaces with flanges, angle type, or floor type as required by conditions, connected to posts and to metal supporting members as follows:
    - 1. For steel railings, weld flanges to posts and bolt to metal-supporting surfaces.
- 3.4 ATTACHING RAILINGS
  - A. Anchor railing ends to concrete and masonry with sleeves concealed within railing ends and anchored to wall construction with anchors and bolts.
  - B. Attach handrails to walls with wall brackets. Provide brackets with 1-1/2-inch (38-mm) clearance from inside face of handrail and finished wall surface. Locate brackets at spacing required to support structural loads.
    - 1. Use type of bracket with flange tapped for concealed anchorage to threaded hanger bolt.
  - C. Secure wall brackets and railing end flanges to building construction as follows:
    - 1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
    - 2. For hollow masonry anchorage, use toggle bolts.
    - 3. For wood stud partitions, use hanger or lag bolts set into wood backing between studs. Coordinate with carpentry work to locate backing members.
- 3.5 CLEANING
  - A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
    - 1. Apply by brush or spray to provide a minimum 2.0-mil (0.05-mm) dry film thickness.
  - B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780/A 780M.
- 3.6 PROTECTION
  - A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.
  - B. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 06 – WOOD, PLASTICS AND COMPOSITES

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. See Structural Drawings for further information regarding specific project requirements.

1.2 SUMMARY

- A. Section Includes:
  - 1. Framing with dimension lumber.
  - 2. Framing with engineered wood products.
  - 3. Wood blocking and nailers.
  - 4. Wood furring.
  - 5. Wood sleepers.
  - 6. Plywood backing panels.
- B. Related Requirements:
  - 1. Section 061600 "Sheathing" for sheathing, subflooring, and underlayment.

1.3 DEFINITIONS

- A. Boards or Strips: Lumber of less than 2 inches nominal (38 mm actual) size in least dimension.
- B. Dimension Lumber: Lumber of 2 inches nominal (38 mm actual) size or greater but less than 5 inches nominal (114 mm actual) size in least dimension.
- C. Exposed Framing: Framing not concealed by other construction.
- D. OSB: Oriented strand board.
- E. Timber: Lumber of 5 inches nominal (114 mm actual) size or greater in least dimension.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Stack wood products flat with spacers beneath and between each bundle to provide air circulation. Protect wood products from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
  - 1. Factory mark each piece of lumber with grade stamp of grading agency.
  - 2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece.
  - 3. Dress lumber, S4S, unless otherwise indicated.
- B. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal (38-mm actual) thickness or less; 19 percent for more than 2-inch nominal (38-mm actual) thickness unless otherwise indicated.
- C. Engineered Wood Products: Acceptable to authorities having jurisdiction and for which current model code research or evaluation reports exist that show compliance with building code in effect for Project.
  - 1. Allowable design stresses, as published by manufacturer, shall meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

**2.2 WOOD-PRESERVATIVE-TREATED LUMBER**

- A. Preservative Treatment by Pressure Process: AWP A U1; Use Category UC2.
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
  - 2. For exposed items indicated to receive a stained or natural finish, chemical formulations shall not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
  - 1. For exposed lumber indicated to receive a stained or natural finish, mark end or back of each piece.
  - 2. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
  - 3. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
  - 4. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
  - 5. Wood framing members that are less than 18 inches (460 mm) above the ground in crawlspaces or unexcavated areas.
  - 6. Wood floor plates that are installed over concrete slabs-on-grade.

**2.3 DIMENSION LUMBER FRAMING**

- A. Non-Load-Bearing Interior Partitions: No. 2 grade.
  - 1. Application: All interior partitions.
  - 2. Species:
    - a. Spruce-pine-fir; NLGA.
- B. Load-Bearing Partitions: No. 2 grade.
  - 1. Application: Exterior walls and interior load-bearing partitions.
  - 2. Species:
    - a. Spruce-pine-fir; NLGA.
- C. Ceiling Joists: No. 2 grade.
  - 1. Species:
    - a. Spruce-pine-fir; NLGA.

**2.4 ENGINEERED WOOD PRODUCTS**

- A. Source Limitations: Obtain each type of engineered wood product from single source from a single manufacturer.
- B. Laminated-Veneer Lumber: Structural composite lumber made from wood veneers with grain primarily parallel to member lengths, evaluated and monitored according to ASTM D 5456 and manufactured with an exterior-type adhesive complying with ASTM D 2559.
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Boise Cascade Corporation.
    - b. Georgia-Pacific Building Products.
    - c. Louisiana-Pacific Corporation.
    - d. Weyerhaeuser Company.
- C. Parallel-Strand Lumber: Structural composite lumber made from wood strand elements with grain primarily parallel to member lengths, evaluated and monitored according to ASTM D 5456 and manufactured with an exterior-type adhesive complying with ASTM D 2559.
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01**

- a. Louisiana-Pacific Corporation.
- b. Weyerhaeuser Company.

**2.5 MISCELLANEOUS LUMBER**

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
  - 1. Blocking.
  - 2. Nailers.
  - 3. Rooftop equipment bases and support curbs.
  - 4. Cants.
  - 5. Furring.
  - 6. Grounds.
- B. Dimension Lumber Items: Construction or No. 2 grade lumber of any species.
- C. Concealed Boards: 15 percent maximum moisture content and any of the following species and grades:
- D. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
- E. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.
- F. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

**2.6 PLYWOOD BACKING PANELS**

- A. Equipment Backing Panels: Plywood, DOC PS 1, Exterior, A-C in thickness indicated or, if not indicated, not less than 3/4-inch (19-mm) nominal thickness.

**2.7 FASTENERS**

- A. General: Fasteners shall be of size and type indicated and shall comply with requirements specified in this article for material and manufacture.
  - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

**2.8 METAL FRAMING ANCHORS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. KC Metals Products, Inc.
  - 2. Simpson Strong-Tie Co., Inc.
  - 3. USP Structural Connectors.
- B. Allowable design loads, as published by manufacturer, shall meet or exceed those of basis-of-design products. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.
- C. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.
  - 1. Use for interior locations unless otherwise indicated.
- D. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A 653/A 653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 (Z550) coating designation; and not less than 0.036 inch (0.9 mm) thick.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Use for wood-preservative-treated lumber and where indicated.

**2.9 MISCELLANEOUS MATERIALS**

- A. Sill-Sealer Gaskets: Closed-cell neoprene foam, 1/4 inch (6.4 mm) thick, selected from manufacturer's standard widths to suit width of sill members indicated.
- B. Adhesives for Gluing Furring and Sleepers to Concrete or Masonry: Formulation complying with ASTM D 3498 that is approved for use indicated by adhesive manufacturer.

**PART 3 - EXECUTION****3.1 INSTALLATION, GENERAL**

- A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- B. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.
- C. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate furring, nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- D. Install plywood backing panels by fastening to studs; coordinate locations with utilities requiring backing panels.
- E. Install shear wall panels to comply with manufacturer's written instructions.
- F. Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- G. Install sill sealer gasket to form continuous seal between sill plates and foundation walls.
- H. Do not splice structural members between supports unless otherwise indicated.
- I. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
  1. Provide metal clips for fastening gypsum board or lath at corners and intersections where framing or blocking does not provide a surface for fastening edges of panels. Space clips not more than 16 inches (406 mm) o.c.
- J. Provide fire blocking in furred spaces, stud spaces, and other concealed cavities as indicated and as follows:
  1. Fire block furred spaces of walls, at each floor level, at ceiling, and at not more than 96 inches (2438 mm) o.c. with solid wood blocking or noncombustible materials accurately fitted to close furred spaces.
  2. Fire block concealed spaces of wood-framed walls and partitions at each floor level, at ceiling line of top story, and at not more than 96 inches (2438 mm) o.c. Where fire blocking is not inherent in framing system used, provide closely fitted solid wood blocks of same width as framing members and 2-inch nominal (38-mm actual) thickness.
  3. Fire block concealed spaces between floor sleepers with same material as sleepers to limit concealed spaces to not more than 100 sq. ft. (9.3 sq. m) and to solidly fill space below partitions.
  4. Fire block concealed spaces behind combustible cornices and exterior trim at not more than 20 feet (6 m) o.c.
- K. Sort and select lumber so that natural characteristics do not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- L. Comply with AWPAC M4 for applying field treatment to cut surfaces of preservative-treated lumber.
  1. Use inorganic boron for items that are continuously protected from liquid water.
  2. Use copper naphthenate for items not continuously protected from liquid water.
- M. Where wood-preservative-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
- N. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- O. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.
  - P. For exposed work, arrange fasteners in straight rows parallel with edges of members, with fasteners evenly spaced, and with adjacent rows staggered.
    - 1. Use common nails unless otherwise indicated. Drive nails snug but do not countersink nail heads.
- 3.2 WOOD BLOCKING, AND NAILER INSTALLATION
- A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
  - B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.
  - C. Provide permanent grounds of dressed, pressure-preservative-treated, key-beveled lumber not less than 1-1/2 inches (38 mm) wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.
- 3.3 WOOD FURRING INSTALLATION
- A. Install level and plumb with closure strips at edges and openings. Shim with wood as required for tolerance of finish work.
  - B. Furring to Receive Plywood or Hardboard Paneling: Install 1-by-3-inch nominal- (19-by-63-mm actual-) size furring horizontally and vertically at 24 inches (610 mm) o.c.
- 3.4 WALL AND PARTITION FRAMING INSTALLATION
- A. General: Provide single bottom plate and double top plates using members of 2-inch nominal (38-mm actual) thickness whose widths equal that of studs, except single top plate may be used for non-load-bearing partitions and for load-bearing partitions where framing members bearing on partition are located directly over studs. Fasten plates to supporting construction unless otherwise indicated.
  - B. Construct corners and intersections with three or more studs, except that two studs may be used for interior non-load-bearing partitions.
  - C. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Support headers on jamb studs.
    - 1. For non-load-bearing partitions, provide double-jamb studs and headers not less than 4-inch nominal (89-mm actual) depth for openings 48 inches (1200 mm) and less in width, 6-inch nominal (140-mm actual) depth for openings 48 to 72 inches (1200 to 1800 mm) in width, 8-inch nominal (184-mm actual) depth for openings 72 to 120 inches (1800 to 3000 mm) in width, and not less than 10-inch nominal (235-mm actual) depth for openings 10 to 12 feet (3 to 3.6 m) in width.
    - 2. For load-bearing walls, provide double-jamb studs for openings 60 inches (1500 mm) and less in width, and triple-jamb studs for wider openings. Provide headers of depth indicated.
- 3.5 PROTECTION
- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
  - B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet enough that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 06 – WOOD, PLASTICS AND COMPOSITES

SECTION 061533 – WOOD PATIO DECKING

PART 1 GENERAL

1.1 SECTION INCLUDES

1. Plastic decking.

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 06 20 00 - Finish Carpentry.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
- C. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with requirements of authorities having jurisdiction and applicable codes at the location of the project.
- B. Installer Qualifications: Minimum 2 years experience installing similar products.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Comply with manufacturer's recommendations. Handle materials to avoid damage.

1.6 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits

1.7 WARRANTY

- A. Provide manufacturer's standard limited warranty for products, stating that components will be free from defects in material that occur as a direct result of the manufacturing process, occur under normal use and service, occur during the warranty period and result in blistering, peeling, flaking, cracking, splitting, cupping, rotting or structural defects from termites or fungal decay.

PART 2 PRODUCTS

2.1 PLASTIC DECKING

- a. Composite Plastic Lumber: Solid profile shapes made from a mixture of cellulose fiber and polyethylene or polypropylene.
  - 1) Manufacturers:
    - a) Trex Company, Inc.
    - b) TimberTech, AZEK Building Products
    - c) CertainTeed Corporation

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

- d) Greenbay Decking
- 2) Decking Standard: ICC-ES AC109.
- 3) Decking Size: 7/8 by 5-1/2 inches (22 by 140 mm).
- 4) Configuration: Provide product with grooved edges designed for fastening with concealed decking fasteners.
- 5) Surface Texture: Manufacturer's standard.
- 6) Color: As selected by Architect from manufacturer's full range.

**2.2 ACCESSORIES**

- A. Fasteners: Manufacturers standard for concealed decking installation.
- B. Trim: Provide matching fascia profiles.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions that may be detrimental to proper or timely completion.
- B. Do not proceed until unsatisfactory conditions have been corrected.

**3.2 INSTALLATION**

- A. General: Install products in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
  - 1. Use manufacturer's recommended fasteners, not more than 2 inches from ends.
  - 2. Glue joints to eliminate joint separation.
  - 3. Allow for expansion and contraction at ends of the runs.

**3.3 CLEANING AND PROTECTION**

- A. Protect from damage during construction operations. Promptly repair any damaged surfaces. Remove and replace work which cannot be satisfactorily repaired.
- B. Clean products, prior to Substantial Completion, using materials recommended by the manufacturer to remove stains, dirt and debris prior to final acceptance.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 06 – WOOD, PLASTICS AND COMPOSITES

SECTION 061600 – SHEATHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. See Structural Drawings for project specific requirements.

1.2 SUMMARY

- A. Section Includes:
  - 1. Wall sheathing.
  - 2. Roof sheathing.
- B. Related Requirements:
  - 1. Section 061000 "Rough Carpentry"
  - 2. Section 072500 "Weather Barriers" for water-resistive barrier applied over wall sheathing.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
  - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Indicate type of preservative used and net amount of preservative retained.
  - 2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Include physical properties of treated materials.
  - 3. For fire-retardant treatments, include physical properties of treated plywood both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D 5516.
  - 4. For products receiving waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

1.4 DELIVERY, STORAGE, AND HANDLING

Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of sheathing system that fail due to manufacturing defects within specified warranty period.
  - 1. Construction Period Warranty: Manufacturer shall warrant the panels and tape for weather exposure for a period of 180 days from installation.
  - 2. System Warranty Period: 30 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance Ratings: As tested according to ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

**2.2      WOOD PANEL PRODUCTS**

- A. Thickness: As needed to comply with requirements specified, but not less than thickness indicated.
- B. Factory mark panels to indicate compliance with applicable standard.

**2.3      PRESERVATIVE-TREATED PLYWOOD**

- A. Preservative Treatment by Pressure Process: AWWPA U1; Use Category UC2 for interior construction not in contact with ground, Use Category UC3b for exterior construction not in contact with ground, and Use Category UC4a for items in contact with ground.
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Mark plywood with appropriate classification marking of an inspection agency acceptable to authorities having jurisdiction.
- C. Application: Treat items indicated on Drawings and plywood in contact with masonry or concrete or used with roofing, flashing, vapor barriers, and waterproofing.

**2.4      WALL SHEATHING**

- A. Plywood Sheathing: Exposure 1, Structural I sheathing.
  - 1. Span Rating: Not less than 32/16.
  - 2. Nominal Thickness: Not less than as indicated on the drawings.
- B. Oriented-Strand-Board Sheathing: DOC PS 2, Exposure 1, Structural I sheathing.
  - 1. Span Rating: Not less than 32/16.
  - 2. Nominal Thickness: Not less than as indicated on the drawings.

**2.5      ROOF SHEATHING**

- A. Plywood Sheathing: Exterior, Structural I sheathing.
  - 1. Span Rating: Not less than 48/24.
  - 2. Nominal Thickness: Not less than as indicated on the drawings.
- B. Oriented-Strand-Board Sheathing: DOC PS 2, Exposure 1, Structural I sheathing.
  - 1. Span Rating: Not less than 48/24.
  - 2. Nominal Thickness: Not less than as indicated on the drawings.

**2.6      SUBFLOORING AND UNDERLAYMENT**

- A. Plywood Subflooring: Exposure 1, Structural I single-floor panels or sheathing.
  - 1. Span Rating: Not less than 48/24.
  - 2. Nominal Thickness: Not less than as indicated on the drawings.
- B. Underlayment: Provide underlayment in nominal thicknesses indicated or, if not indicated, not less than 1/4 inch (6.4 mm) over smooth subfloors and not less than 3/8 inch (9.5 mm) over board or uneven subfloors.
  - 1. Plywood Underlayment for Resilient Flooring: DOC PS 1, Exposure 1 Underlayment with fully sanded face.
  - 2. Plywood Underlayment for Carpet: DOC PS 1, Exposure 1, Underlayment.

**2.7      FASTENERS**

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  - 1. For roof and wall sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- D. Screws for Fastening Sheathing to Wood Framing: ASTM C 1002.
- E. Screws for Fastening Wood Structural Panels to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

2.8 MISCELLANEOUS MATERIALS

- A. Adhesives for Field Gluing Panels to Wood Framing: Formulation complying with APA AFG-01 that is approved for use with type of construction panel indicated by manufacturers of both adhesives and panels.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Securely attach to substrate by fastening as indicated, complying with the following:
  - 1. Table 2304.9.1, "Fastening Schedule," in the ICC's International Building Code and as indicated under special fastening provisions of the structural drawings.
- D. Use common wire nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections. Install fasteners without splitting wood.
- E. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- F. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

## SECTION 062020 – EXTERIOR AND INTERIOR FINISH CARPENTRY

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Exterior beadboard tongue and groove paneling.
  - 2. Interior trim.
  - 3. Interior board paneling.
- B. Related Requirements:
  - 1. Division 6 Section "Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.
  - 2. Section 099110 "Exterior Painting" for priming and backpriming of exterior finish carpentry.
  - 3. Section 099120 "Interior Painting" for priming and backpriming of interior finish carpentry.

## 1.3 DEFINITIONS

- A. MDF: Medium-density fiberboard.
- B. MDO: Plywood with a medium-density overlay on the face.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials, dimensions, profiles, textures, and colors and include construction and application details.
- B. Samples for Verification:
  - 1. For each species and cut of lumber and panel products with non-factory-applied finish, with 1/2 of exposed surface finished, 50 sq. in. for lumber and 8 by 10 inches for panels.
  - 2. For foam plastic moldings, with 1/2 of exposed surface finished; 50 sq. in..
  - 3. For each finish system and color of lumber and panel products with factory-applied finish, 50 sq. in. for lumber and 8 by 10 inches for panels.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber, plywood, and other panels flat with spacers between each bundle to provide air circulation. Protect materials from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.
- B. Deliver interior finish carpentry materials only when environmental conditions meet requirements specified for installation areas. If interior finish carpentry materials must be stored in other than installation areas, store only where environmental conditions meet requirements specified for installation areas.

## 1.6 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install interior finish carpentry materials until building is enclosed and weatherproof, wet work in space is completed and nominally dry, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Do not install finish carpentry materials that are wet, moisture damaged, or mold damaged.
  - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****PART 2 – PRODUCTS****2.1 MATERIALS, GENERAL**

- A. Lumber: DOC PS 20 and the following grading rules:
  - 1. NeLMA: Northeastern Lumber Manufacturers' Association, "Standard Grading Rules for Northeastern Lumber."
  - 2. NHLA: National Hardwood Lumber Association, "Rules for the Measurement and Inspection of Hardwood & Cypress."
  - 3. NLGA: National Lumber Grades Authority, "Standard Grading Rules for Canadian Lumber."
  - 4. SPIB: The Southern Pine Inspection Bureau, "Standard Grading Rules for Southern Pine Lumber."
  - 5. WCLIB: West Coast Lumber Inspection Bureau, Standard No. 17, "Grading Rules for West Coast Lumber."
  - 6. WWPA: Western Wood Products Association, "Western Lumber Grading Rules."
- B. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
  - 1. For exposed lumber, mark grade stamp on end or back of each piece.

**2.2 EXTERIOR TRIM**

- A. Hardwood Lumber Beadboard, provide kiln-dried lumber siding complying with DOC PS 20.
  - 1. Species and Grade: C & Btr southern pine.
  - 2. Finger Jointing: Not allowed.
  - 3. Gluing for Width: Not allowed.
  - 4. Veneered Material: Not allowed.
  - 5. Pattern: Edge and center bead, tongue and groove, actual face width (coverage) and thickness of 5-1/8 by 23/32 inch.

**2.3 INTERIOR TRIM**

- A. Hardwood Lumber Trim for Finish- Confirm species prior to ordering
  - 1. Species and Grade:
    - b. Window, Door and Miscellaneous Trim- Poplar to be painted
  - 2. Maximum Moisture Content: 10 percent.
  - 3. Finger Jointing: Not allowed.
  - 4. Gluing for Width: Not allowed.
  - 5. Veneered Material: Not allowed.
  - 6. Face Surface: Surfaced (smooth).
  - 7. Matching: Selected for compatible grain and color.
- B. Board Paneling- Confirm species/product prior to ordering, match existing paneling for 205 E Main.
  - 1. Species and Grade: Match existing, Custom stain to match existing; NHLA.
  - 2. Pattern: Match existing.

**2.4 MISCELLANEOUS MATERIALS**

- A. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.
- B. Multipurpose Construction Adhesive: Formulation complying with ASTM D 3498 that is recommended for indicated use by adhesive manufacturer.

**2.5 FABRICATION**

- A. Back out or kerf backs of the following members except those with ends exposed in finished work:
  - 1. Interior standing and running trim except shoe and crown molds.
  - 2. Wood-board paneling.

**PART 3 – EXECUTION**

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.1 EXAMINATION**

- A. Examine existing wood trim in the building and match the profiles, joinery, and appearance of the existing conditions.
- B. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- C. Examine finish carpentry materials before installation. Reject materials that are wet, moisture damaged, and mold damaged.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 PREPARATION**

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours unless longer conditioning is recommended by manufacturer.

**3.3 INSTALLATION, GENERAL**

- A. Do not use materials that are unsound, warped, improperly treated or finished, inadequately seasoned, too small to fabricate with proper jointing arrangements, or with defective surfaces, sizes, or patterns.
- B. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
  - 1. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
  - 2. Where face fastening is unavoidable, countersink fasteners, fill surface flush, and sand unless otherwise indicated.
  - 3. Install to tolerance of 1/8 inch in 96 inches for level and plumb. Install adjoining interior finish carpentry with 1/32-inch maximum offset for flush installation and 1/16-inch maximum offset for reveal installation.
  - 4. Coordinate interior finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate interior finish carpentry.

**3.4 STANDING AND RUNNING TRIM INSTALLATION**

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches long, except where necessary. Stagger joints in adjacent and related standing and running trim. Cope at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints. Plane backs of casings to provide uniform thickness across joints where necessary for alignment.
  - 1. Match color and grain pattern of trim for transparent finish (stain or clear finish) across joints.
  - 2. Install trim after gypsum-board joint finishing operations are completed.
  - 3. Install without splitting; drill pilot holes before fastening where necessary to prevent splitting. Fasten to prevent movement or warping. Countersink fastener heads on exposed carpentry work and fill holes.

**3.5 ADJUSTING**

- A. Replace interior finish carpentry that is damaged or does not comply with requirements. Interior finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery for uniform appearance.

**3.6 CLEANING**

- A. Clean interior finish carpentry on exposed and semiexposed surfaces. Restore damaged or soiled areas and touch up factory-applied finishes, if any.

**3.7 PROTECTION**

- A. Protect installed products from damage from weather and other causes during construction.
- B. Remove and replace finish carpentry materials that are wet, moisture damaged, and mold damaged.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

SECTION 072100 - THERMAL INSULATION

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
  - A. Section Includes:
    - 1. Glass-fiber blanket.
- 1.3 ACTION SUBMITTALS
  - A. Product Data: For each type of product.
- 1.4 DELIVERY, STORAGE, AND HANDLING
  - A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.
  - B. Protect foam-plastic board insulation as follows:
    - 1. Do not expose to sunlight except to necessary extent for period of installation and concealment.
    - 2. Protect against ignition at all times. Do not deliver foam-plastic board materials to Project site until just before installation time.
    - 3. Quickly complete installation and concealment of foam-plastic board insulation in each area of construction.

PART 2 - PRODUCTS

- 2.1 GLASS-FIBER BLANKET
  - A. Glass-Fiber Blanket, Unfaced: ASTM C 665, Type I; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively, per ASTM E 84; passing ASTM E 136 for combustion characteristics.
    - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
      - a. CertainTeed Corporation.
      - b. Guardian Building Products, Inc.
      - c. Johns Manville; a Berkshire Hathaway company.
      - d. Owens Corning.
- 2.2 ACCESSORIES
  - A. Insulation for Miscellaneous Voids:
    - 1. Glass-Fiber Insulation: ASTM C 764, Type II, loose fill; with maximum flame-spread and smoke-developed indexes of 5, per ASTM E 84.

PART 3 - EXECUTION

- 3.1 PREPARATION
  - A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or that interfere with insulation attachment.
- 3.2 INSTALLATION, GENERAL
  - A. Comply with insulation manufacturer's written instructions applicable to products and applications.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.
- C. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.
- D. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

**3.3 INSTALLATION OF INSULATION IN FRAMED CONSTRUCTION**

- A. Blanket Insulation: Install in cavities formed by framing members according to the following requirements:
  - 1. Use insulation widths and lengths that fill the cavities formed by framing members. If more than one length is required to fill the cavities, provide lengths that will produce a snug fit between ends.
  - 2. Place insulation in cavities formed by framing members to produce a friction fit between edges of insulation and adjoining framing members.
  - 3. Maintain 3-inch (76-mm) clearance of insulation around recessed lighting fixtures not rated for or protected from contact with insulation.
  - 4. Attics: Install eave ventilation troughs between roof framing members in insulated attic spaces at vented eaves.
  - 5. For wood-framed construction, install blankets according to ASTM C 1320 and as follows:
    - a. With faced blankets having stapling flanges, lap blanket flange over flange of adjacent blanket to maintain continuity of vapor retarder once finish material is installed over it.
- B. Miscellaneous Voids: Install insulation in miscellaneous voids and cavity spaces where required to prevent gaps in insulation using the following materials:
  - 1. Glass-Fiber Insulation: Compact to approximately 40 percent of normal maximum volume equaling a density of approximately 2.5 lb/cu. ft. (40 kg/cu. m).
  - 2. Spray Polyurethane Insulation: Apply according to manufacturer's written instructions.

**3.4 PROTECTION**

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

## SECTION 072500 - WEATHER BARRIERS

## PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SECTION INCLUDES

- A. Weather barrier membrane
- B. Seam Tape
- C. Flashing
- D. Fasteners

## 1.3 REFERENCES

- A. ASTM International
  - 1. ASTM C920; Standard Specification for Elastomeric Joint Sealants
  - 2. ASTM C1193; Standard Guide for Use of Joint Sealants
  - 3. ASTM D882; Test Method for Tensile Properties of Thin Plastic Sheeting
  - 4. ASTM D1117; Standard Guide for Evaluating Non-woven Fabrics
  - 5. ASTM E84; Test Method for Surface Burning Characteristics of Building Materials
  - 6. ASTM E96; Test Method for Water Vapor Transmission of Materials
  - 7. ASTM E1677; Specification for Air Retarder Material or System for Framed Building Walls
  - 8. ASTM E2178; Test Method for Air Permeance of Building Materials
- B. AATCC – American Association of Textile Chemists and Colorists
  - 1. Test Method 127 Water Resistance: Hydrostatic Pressure Test
- C. TAPPI
  - 1. Test Method T-410; Grams of Paper and Paperboard (Weight per Unit Area)
  - 2. Test Method T-460; Air Resistance (Gurley Hill Method)

## 1.4 SUBMITTALS

- A. Refer to Section 01 33 00 Submittal Procedures.
- B. Product Data: Submit manufacturer current technical literature for each component.
- C. Samples: Weather Barrier Membrane, minimum 8-1/2 inches by 11 inch.
- D. Quality Assurance Submittals
  - 1. Design Data, Test Reports: Provide manufacturer test reports indicating product compliance with indicated requirements.
  - 2. Manufacturer Instructions: Provide manufacturer's written installation instructions.
  - 3. Manufacturer's Field Service Reports: Provide site reports from authorized field service representative, indicating observation of weather barrier assembly installation.
- E. Closeout Submittals
  - 1. Refer to Section [01 78 00 Closeout Submittals] [insert section number and title].
  - 2. Weather Barrier Warranty: Manufacturer's executed warranty form with authorized signatures and endorsements indicating date of Substantial Completion.

## 1.5 QUALITY ASSURANCE

- A. Qualifications
  - 1. Installer shall have experience with installation of commercial weather barrier assemblies under similar conditions.
  - 2. Installation shall be in accordance with weather barrier manufacturer's installation guidelines and recommendations.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3. Source Limitations: Provide commercial weather barrier and accessory materials produced by single manufacturer.
  - B. Pre-installation Meeting
    1. Refer to Section 01 31 19 Project Meetings.
    2. Hold a pre-installation conference, two weeks prior to start of weather barrier installation. Attendees shall include Contractor and Weather Barrier Manufacturer's Designated Representative.
    3. Review all related project requirements and submittals, status of substrate work and preparation, areas of potential conflict and interface, availability of weather barrier assembly materials and components, installer's training requirements, equipment, facilities and scaffolding, and coordinate methods, procedures and sequencing requirements for full and proper installation, integration and protection.
  - 1.6 DELIVERY, STORAGE AND HANDLING
    - A. Refer to Section 01 60 00 Product Requirements.
    - B. Deliver weather barrier materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.
    - C. Store weather barrier materials as recommended by weather barrier manufacturer.
  - 1.7 SCHEDULING
    - A. Review requirements for sequencing of installation of weather barrier assembly with installation of windows, doors, and flashings to provide a weather-tight barrier assembly.
    - B. Schedule installation of weather barrier materials and exterior cladding within nine months of weather barrier assembly installation.
  - 1.8 WARRANTY
    - A. Special Warranty
      1. Special weather-barrier manufacturer's warranty for weather barrier assembly for a period of ten (10) years from date of final weather barrier installation.
      2. Approval by weather barrier manufacturer for warranty is required prior to assembly installation.
- PART 2 – PRODUCTS
- 2.1 MANUFACTURER
    - A. DuPont Building Innovations; 4417 Lancaster Pike, Chestnut Run Plaza 721, Wilmington, DE 19805; 1.800.44TYVEK (8-9835); <http://construction.tyvek.com>
  - 2.2 MATERIALS
    - A. Basis of Design: High-performance, spunbonded polyolefin, non-woven, non-perforated, weather barrier is based upon DuPont™ Tyvek® CommercialWrap® and related assembly components.
    - B. Performance Characteristics:
      1. Air Penetration: 0.001 cfm/ft² at 75 Pa, when tested in accordance with ASTM E2178. Type I per ASTM E1677.
      2. Water Vapor Transmission: 28 perms, when tested in accordance with ASTM E96, Method B.
      3. Water Penetration Resistance: 280 cm when tested in accordance with AATCC Test Method 127.
      4. Basis Weight: 2.7 oz/yd², when tested in accordance with TAPPI Test Method T-410.
      5. Air Resistance: Air infiltration at >1500 seconds, when tested in accordance with TAPPI Test Method T-460.
      6. Tensile Strength: 38/35 lbs/in., when tested in accordance with ASTM D882, Method A.
      7. Tear Resistance: 12/10 lbs., when tested in accordance with ASTM D1117.
      8. Surface Burning Characteristics: Class A, when tested in accordance with ASTM E 84. Flame Spread: 10, Smoke Developed: 10.
  - 2.3 ACCESSORIES
    - A. Seam Tape: 3 inch wide, DuPont™ Tyvek® Tape for commercial applications.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Fasteners:
  - 1. Tyvek® Wrap Caps, as manufactured by DuPont Building Innovations: #4 nails with large 1-inch plastic cap fasteners.
- C. Sealants
  - 1. Provide sealants that comply with ASTM C920, elastomeric polymer sealant to maintain watertight conditions.
  - 3. Products:
    - a. Tremco 830
    - b. Tremco Butyl
    - c. Sealants recommended by the weather barrier manufacturer.
- D. Adhesives:
  - 1. Provide adhesive recommended by weather barrier manufacturer.
  - 2. Products:
    - a. Liquid Nails® LN-109
    - b. Polyglaze® SM 5700
    - c. Denso Butyl Liquid
    - d. 3M High Strength 90
    - e. SIA 655
    - f. Adhesives recommend by the weather barrier manufacturer.
- E. Primers:
  - 1. Provide flashing manufacturer recommended primer to assist in adhesion between substrate and flashing.
  - 2. Products:
    - a. 3M High Strength 90
    - b. Denso Butyl Spray
    - c. SIA 655
    - d. Permagrip 105
    - e. ITW TACC Sta' Put SPH
    - f. Primers recommended by the flashing manufacturer
- F. Flashing
  - 1. DuPont™ FlexWrap™, as manufactured by DuPont Building Innovations: flexible membrane flashing materials for window openings and penetrations.
  - 2. DuPont™ StraightFlash™, as manufactured by DuPont Building Innovations: straight flashing membrane materials for flashing windows and doors and sealing penetrations such as masonry ties, etc.
  - 3. DuPont™ StraightFlash™ VF, as manufactured by DuPont Building Innovations: dual-sided straight flashing membrane materials for brick mold and non-flanged windows and doors.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Verify substrate and surface conditions are in accordance with weather barrier manufacturer recommended tolerances prior to installation of weather barrier and accessories.

**3.2 INSTALLATION – WEATHER BARRIER**

- A. Install weather barrier over exterior face of exterior wall substrate in accordance with manufacturer recommendations.
- B. Install weather barrier prior to installation of windows and doors.
- C. Start weather barrier installation at a building corner, leaving 6-12 inches of weather barrier extended beyond corner to overlap.
- D. Install weather barrier in a horizontal manner starting at the lower portion of the wall surface with subsequent layers installed in a shingling manner to overlap lower layers. Maintain weather barrier plumb and level.
- E. Sill Plate Interface: Extend lower edge of weather barrier over sill plate interface 3-6 inches. Secure to foundation with elastomeric sealant as recommended by weather barrier manufacturer.
- F. Window and Door Openings: Extend weather barrier completely over openings.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- G. Overlap weather barrier
    - 1. Exterior corners: minimum 12 inches.
    - 2. Seams: minimum 6 inches.
  - H. Weather Barrier Attachment:
    - 1. Attach weather barrier to studs through exterior sheathing. Secure using weather barrier manufacturer recommended fasteners, space 12 -18 inches vertically on center along stud line, and 24 inch on center, maximum horizontally.
    - 2. Attach weather barrier to masonry. Secure using weather barrier manufacturer recommended fasteners, spaced 12-18 inches vertically on center and 24 inches maximum horizontally. Weather barrier may be temporarily attached to masonry using recommended adhesive, placed in vertical strips spaced 24 inches on center, when coordinated on the project site.
  - I. Apply 4 inch by 7 inch piece of DuPont™ StraightFlash™ to weather barrier membrane prior to the installation cladding anchors.
- 3.3 SEAMING
- A. Seal seams of weather barrier with seam tape at all vertical and horizontal overlapping seams.
  - B. Seal any tears or cuts as recommended by weather barrier manufacturer.
- 3.4 OPENING PREPARATION (for use with non-flanged windows – all cladding types)
- A. Flush cut weather barrier at edge of sheathing around full perimeter of opening.
  - B. Cut a head flap at 45-degree angle in the weather barrier at window head to expose 8 inches of sheathing. Temporarily secure weather barrier flap away from sheathing with tape.
- 3.5 FLASHING (for use with non-flanged windows – all cladding types)
- A. Cut 9-inch wide DuPont™ FlexWrap™ a minimum of 12 inches longer than width of sill rough opening. Apply primer as required by manufacturer.
  - B. Cover horizontal sill by aligning DuPont™ FlexWrap™ edge with inside edge of sill. Adhere to rough opening across sill and up jambs a minimum of 6 inches. Secure flashing tightly into corners by working in along the sill before adhering up the jambs.
  - C. Fan DuPont™ FlexWrap™ at bottom corners onto face of wall. Firmly press in place. Mechanically fasten fanned edges.
  - D. Apply 9-inch wide strips of DuPont™ StraightFlash™ at jambs. Align flashing with interior edge of jamb framing. Start DuPont™ StraightFlash™ at head of opening and lap sill flashing down to the sill.
  - E. Spray-apply primer to top 6 inches of jambs and exposed sheathing.
  - F. Install DuPont™ FlexWrap™ at opening head using same installation procedures used at sill. Overlap jamb flashing a minimum of 2 inches.
  - G. Coordinate flashing with window installation.
  - H. On exterior, install backer-rod in joint between window frame and flashed rough framing. Apply sealant at jambs and head, leaving sill unsealed. Apply sealants in accordance with sealant manufacturer's instructions and ASTM C 1193.
  - I. Position weather barrier head flap across head flashing. Adhere using 4-inch wide DuPont™ StraightFlash™ over the 45-degree seams.
  - J. Tape top of window in accordance with manufacturer recommendations.
  - K. On interior, install backer rod in joint between frame of window and flashed rough framing. Apply sealant around entire window to create air seal. Apply sealant in accordance with sealant manufacturer's instructions and ASTM C 1193.
- 3.6 OPENING PREPARATION (for use with flanged windows)
- A. Cut weather barrier in a modified "I-cut" pattern.
    - 1. Cut weather barrier horizontally along the bottom of the header.
    - 2. Cut weather barrier vertically 2/3 of the way down from top center of window opening.
    - 3. Cut weather barrier diagonally from bottom of center vertical cut to the left and right corners of the opening.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 4. Fold side and bottom weather barrier flaps into window opening and fasten.
  - B. Cut a head flap at 45-degree angle in the weather barrier at window head to expose 8 inches of sheathing. Temporarily secure weather barrier flap away from sheathing with tape.
- 3.7 FLASHING (for use with flanged windows)
- A. Cut 9-inch wide DuPont™ FlexWrap™ a minimum of 12 inches longer than width of sill rough opening.
  - B. Cover horizontal sill by aligning DuPont™ FlexWrap™ edge with inside edge of sill. Adhere to rough opening across sill and up jambs a minimum of 6 inches. Secure flashing tightly into corners by working in along the sill before adhering up the jambs.
  - C. Fan DuPont™ FlexWrap™ at bottom corners onto face of wall. Firmly press in place. Mechanically fasten fanned edges.
  - D. On exterior, apply continuous bead of sealant to wall or backside of window mounting flange across jambs and head. Do not apply sealant across sill.
  - E. Install window according to manufacturer's instructions.
  - F. Apply 4-inch wide strips of DuPont™ StraightFlash™ at jambs overlapping entire mounting flange. Extend jamb flashing 1-inch above top of rough opening and below bottom edge of sill flashing.
  - G. Apply 4-inch wide strip of DuPont™ StraightFlash™ as head flashing overlapping the mounting flange. Head flashing should extend beyond outside edges of both jamb flashings.
  - H. Position weather barrier head flap across head flashing. Adhere using 4-inch wide DuPont™ StraightFlash™ over the 45-degree seams.
  - I. Tape head flap in accordance with manufacturer recommendations.
  - J. On interior, install backer rod in joint between frame of window and flashed rough framing. Apply sealant around entire window to create air seal. Apply sealant in accordance with sealant manufacturer's instructions and ASTM C 1193.
- 3.8 FIELD QUALITY CONTROL
- A. Notify manufacturer's designated representative to obtain [required] periodic observations of weather barrier assembly installation.
- 3.9 PROTECTION
- A. Protect installed weather barrier from damage.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

## SECTION 074600 – SIDING

PART 1 – GENERAL

- 1.1 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- 1.2 SUMMARY
  - A. Section Includes:
    - 1. Fiber-cement siding and trim.
  - B. Related Sections:
    - 1. Division 6 Section "Rough Carpentry" for wood furring, grounds, nailers, and blocking.
    - 2. Division 6 Section "Sheathing" for wall sheathing and weather-resistive barriers.
- 1.3 ACTION SUBMITTALS
  - A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
  - B. Samples for Initial Selection: For siding soffit including related accessories.
  - C. Samples for Verification: For each type, color, texture, and pattern required.
    - 1. 12-inch-long-by-actual-width Sample of siding.
    - 2. 24-inch-wide-by-36-inch-high Sample panel of siding assembled on plywood backing.
    - 3. 12-inch-long-by-actual-width Sample of soffit.
- 1.4 INFORMATIONAL SUBMITTALS
  - A. Product Certificates: For each type of siding soffit, from manufacturer.
- 1.5 CLOSEOUT SUBMITTALS
  - A. Maintenance Data: For each type of siding soffit and related accessories to include in maintenance manuals.
- 1.6 QUALITY ASSURANCE
  - A. Labeling: Provide fiber-cement siding that is tested and labeled according to ASTM C 1186 by a qualified testing agency acceptable to authorities having jurisdiction.
  - B. Source Limitations: Obtain siding soffit, including related accessories, from single source from single manufacturer.
- 1.7 DELIVERY, STORAGE, AND HANDLING
  - A. Store materials in a dry, well-ventilated, weathertight place.
- 1.8 COORDINATION
  - A. Coordinate installation with flashings and other adjoining construction to ensure proper sequencing.
- 1.9 WARRANTY
  - A. Special Warranty: Standard form in which manufacturer agrees to repair or replace siding that fail(s) in materials or workmanship within specified warranty period.
    - 1. Failures include, but are not limited to, the following:
      - a. Structural failures including cracking, deforming.
      - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
    - 2. Warranty Period: 50 years from date of Substantial Completion.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****PART 2 – PRODUCTS****2.1 FIBER-CEMENT SIDING**

- A. General: ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible when tested according to ASTM E 136; with a flame-spread index of 25 or less when tested according to ASTM E 84.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Hardie Panel by James Hardie or comparable product by one of the following:
    - a. James Hardie.
  - 2. Vertical Siding:
    - a. HardiePanel Vertical Siding HZ5 siding as manufactured by James Hardie Building Products, Inc.
      - 1) Type: Smooth panel 4 feet by 8 feet OR 4 feet by 10 as needed.
      - 2) Finish: Primed for paint.

**2.2 ACCESSORIES**

- A. Aluminum Accessories: Where aluminum accessories are indicated, provide accessories complying with AAMA 1402.
  - 1. Texture: Smooth.
  - 2. Nominal Thickness: 0.024 inch.
  - 3. Finish: Manufacturer's standard primer and baked-on polyester.
  - 4. Corners: Mitered.
- B. Flashing: Provide aluminum flashing complying with Division 7 Section "Sheet Metal Flashing and Trim" at window and door heads, horizontal panel joints, and where indicated.
  - 1. Finish for Aluminum Flashing: match finish color.
- C. Fasteners:
  - 1. For fastening to wood, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1 inch into substrate.
  - 2. For fastening fiber cement, use stainless-steel fasteners.
- D. Trim:
  - 1. Hardipanel Harditrim Plan for trim applications. Smooth finish. 5/4" thick by 11 1/4" and 7 1/4".

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of siding soffit and related accessories.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 PREPARATION**

- A. Clean substrates of projections and substances detrimental to application.
- B. Any cut edges to be primed prior to installation.

**3.3 INSTALLATION**

- A. General: Comply with siding manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.
  - 1. Do not install damaged components.
- B. Install fiber-cement siding and related accessories.
  - 1. Install fasteners no more than 24 inches o.c.
  - 2. Place fasteners no closer than 3/8 inch (9.5 mm) from panel edges and 2 inches (51 mm) from panel corners.
- C. Install joint sealants as specified in Division 7 Section "Joint Sealants" and to produce a weathertight installation.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- D. Where aluminum siding will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape or installing nonconductive spacers as recommended by manufacturer for this purpose.
- 3.4 ADJUSTING AND CLEANING
- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
  - B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

## SECTION 075423.02 – FLEECE-BACK THERMOPLASTIC-POLYOLEFIN ROOFING

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Fleece-back Thermoplastic Polyolefin Membrane Roofing (TPO).
- B. Membrane Flashings.
- C. Metal Flashings.

## 1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Roof blocking installation and requirements.
- B. Section 07620 - Sheet Metal Flashing and Trim: Metal flashing and counter flashing installation and requirements.
- C. Section 15430 - Plumbing Specialties: roof drains, scuppers, gutters and downspout installation and requirements.

## 1.3 REFERENCES

- A. American Society of Civil Engineers (ASCE) - ASCE 7 - Minimum Design Loads for Buildings and Other Structures, Current Revision.
- B. ANSI/SPRI WD-1 "Wind Design Standard for Roofing Assemblies".
- C. ASTM International (ASTM):
  - 1. ASTM C 578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
  - 2. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
  - 3. ASTM D 1079 - Standard Terminology Relating to Roofing, Waterproofing, and Bituminous Materials.
  - 4. ASTM D 6878 - Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing.
  - 5. ASTM D 3909 - Standard Specification for Asphalt Roll Roofing (Glass Felt) Surfaced With Mineral Granules.
  - 6. ASTM D 6163 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements.
  - 7. ASTM D 6164 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements.
- D. International Code Council (ICC):
  - 1. International Building Code (IBC).
- E. National Roofing Contractors Association (NRCA) - Low Slope Roofing and Waterproofing Manual, Current Edition.
- F. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - Architectural Sheet Metal Manual.
- G. Underwriters Laboratories (UL):
  - 1. TGFU R1306 - "Roofing Systems and Materials Guide".
  - 2. UL-790 - Standard Test Method for Fire Tests of Roof Coverings.
- H. ANSI/ASHRAE/IESNA Standard 9.1 (2009): Energy Standard for Buildings Except Low-Rise Residential Buildings.

## 1.4 DESIGN CRITERIA

- A. Wind Uplift Performance:
  - 1. Roof system is designed to withstand wind uplift forces as calculated using the current revision of ASCE-7.
  - 2. Roof system is designed in accordance to an FM I-90 wind uplift rating. Building Owner is not Factory Mutual Insured.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Fire Resistance Performance:
  - 1. Roof system will achieve a UL Class A rating when tested in accordance with UL-790.
- C. Drainage: Provide a roof system with positive drainage where all standing water dissipates within 48 hours after inclement weather and precipitation.
- D. Building Codes:
  - 1. Roof system will meet the current requirements of all federal, state and local code bodies having jurisdiction.

**1.5 SUBMITTALS**

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Sample of Specified Warranty.
- B. Detail Drawings:
  - 1. Submit approved plan, section, elevation or isometric drawings which detail the appropriate methods for all flashing conditions found on the project.
  - 2. Coordinate approved drawings with locations found on the Contract Drawings.
- C. Verification Samples: For each finish product specified, three samples, minimum size 4 inches square representing actual product, color, and patterns.
- D. Maintenance Data: For roofing system to include in maintenance manuals.

**1.6 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: All primary products specified in this section will be supplied by a single manufacturer with a minimum of Twenty (20) years experience.
- B. Weekly Quality and Progress Inspections may be provided by an independent non-interested third party consultant. Inspections will be conducted for the sole purpose of communicating quality and installation progress information to the owner or owner's representative.
- C. Manufacturer's Representative to provide an inspection at the start of membrane installation, an additional in progress inspection of the roof assembly at approximately 30% completion, and 60% completion, and a final inspection of the roof assembly upon the completion of the roof system installation.
- D. Qualified Manufacturer's Representative will be an RCI accredited Registered Roof Observer (RRO) In Good Standing.
- E. Installer Qualifications:
  - 1. All products listed in this section are to be installed by a single installer with a minimum of five (5) years demonstrated experience in installing products of the same type and scope as specified.
  - 2. Installer to be a licensed GAF Master or Master Select Contractor
  - 3. Installer must be an MRCA (Midwest Roofing Contractors Association) or IRCA (Iowa Roofing Contractors Association) Member in Good Standing.
  - 4. Installer must be capable of extending the Manufacturer's No Dollar Limit guarantee.
- F. Pre-installation Conference: Conduct conference at Project site to review methods and procedures related to roofing system, but not limited to the following:
  - 1. Safety.
  - 2. Meet with Owner, Architect, Owner's Representative, Consultant if applicable, roofing installer, roofing system manufacturer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof mounted equipment.
  - 3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review base flashing details, any special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect the roofing system.

**1.7 DELIVERY, STORAGE, AND HANDLING**

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- A. All delivered materials are to be clearly labeled with the material manufacturer's factory label visible. Store products in unopened packaging until ready for installation.
- B. When loading materials onto the roof, the Roofing Applicator must comply with the requirements of the building owner to prevent overloading and possible disturbance to the building structure.

**1.8 PROJECT CONDITIONS**

- A. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- B. Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.
- C. Provide protection, such as ¾ inch thick plywood or 1" isocyanurate, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters.
- D. New roofing shall be complete and weather tight at the end of the work day.
- E. Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.

**1.9 WARRANTY**

- A. At project closeout, provide to Owner or Owners Representative an executed copy of the manufacturer's Diamond Pledge NDL type Warranty, non-prorated with no dollar limit to coverage; Warranty shall include coverage of adhesives, supplied insulation, flashings, and contain no exclusions for standing or ponded water.
  - 1. Duration: 20 Years.
  - 2. Installing Contractor to provide Total System Warranty for the first 2 years of roof service.

**PART 2 PRODUCTS****2.1 MANUFACTURERS**

- A. All products are to be furnished from U.S. Manufacturing plants and be provided by primary material manufacturers wholly Owned, Operating, and Headquartered in the United States of America. Products supplied by non-primary material manufacturers (privately labeled products) will not be accepted.
  - 1. GAF Materials Corporation, Parsippany, NJ 07054 1-800-766-3411
  - 2. Subject to compliance with specifications and drawings, other acceptable manufacturers are: Carlisle SynTec Systems, Versico Roofing Systems, and Firestone Building Products.
  - 3. PVC and White EPDM Membranes will not be accepted.

**2.2 SCOPE / APPLICATION**

- A. Roof System: Provide a waterproof roof system, capable of withstanding uplift forces as specified in the Design Criteria article of this section.
  - 1. Fleece-Back Membrane Attachment: Full Spread Polyurethane Adhesive.
  - 2. Provide a Zero or Low-VOC and low odor adhered membrane system.

**2.3 THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE**

- A. Basis of Design: GAF EVERGUARD TPO MEMBRANE.  
A flexible Fleece-Backed TPO membrane reinforced with a non-woven polyester based scrim matting. Exceeding the requirements of ASTM D 6878 for Fleece and Felt backed thermoplastic membranes.
  - 1. Field of Roof Color: Gray.
  - 2. Membrane Thickness: 60 mil nominal thickness.
  - 3. Field Sheet Dimensions:
    - a. Width: 10 feet minimum.
    - b. Length: 100 feet minimum.

**2.4 FLASHING ACCESSORIES**

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- A. Inside Corners: Pre-molded corner flashing for inside corners. 60 mil thickness.
- B. Outside Corners: Injection molded corner used for flashing outside corners. 60 mil thickness.
- C. TPO T-Joint Covers: TPO formed into a circle used to seal step-offs at splice intersections. 55 mil thickness.
- D. Molded Vent Boots: A pre-molded flashing and clamping ring used for pipe penetrations. 75 mil thickness. Available for 0.75 inch to 8 inch diameter pipes.
- E. UN-55 Detailing Membrane: Non-reinforced TPO flashing is a 55-mil thick non-reinforced TPO based membrane used for detail work where the use of pre-molded or pre-fabricated accessories are not feasible.

**2.5 CLEANERS, PRIMERS, ADHESIVES AND SEALANTS**

- A. TPO Cut Edge Sealant: A medium solids content, free flowing polymeric material designed for sealing cut edges (exposed fabric reinforcement) of reinforced field membrane, clear in color.
- B. Water Block: A one-component, high viscosity, Butyl based mastic used as a compression sealing agent between membrane and applicable substrates.
- C. TPO Primer: Solvent-based product designed to prepare TPO membrane for improved adhesion to surfaces prior to the application of pressure-sensitive products and sealant pockets.
- D. TPO Seam Cleaner: Clear, solvent-based cleaner used to loosen and remove contaminants from the surface of exposed membrane prior to heat welding aged or dirty material.
- E. Commercial grade roofing sealant suitable for sealing the upper lip of exposed termination bars and penetrations and around clamping rings and comes with a 20 yr. ltd warranty against leaks caused by manufacturing defects. Meets the performance criteria of ASTM D412, ASTM D2196, ASTM D1475 and ASTM D1644, FlexSeal™ Roof Sealant, by GAF®.
- F. FlexSeal Caulk Grade: A high viscosity elastomeric sealant specifically designed to adhere to TPO membranes, used to seal the exposed lip of compression fittings such as termination bars, pipe clamping rings, and exposed fasteners.
- G. Solvent based liquid, required to protect field cut edges of EverGuard® TPO membranes. Applied directly from a squeeze bottle, EverGuard® TPO Cut Edge Sealant, by GAF®.

**2.6 MEMBRANE FASTENING COMPONENTS**

- A. Mechanically fastened fleece-Back TPO system.
  - 1. Drill-Tec fasteners and plates as recommended by manufacturer, specific to this project.

**PART 3 EXECUTION****3.1 SUBSTRATE PREPARATION**

- A. Using a broom or high capacity leaf blower gently remove any loose roofing granules, dirt, or debris from the existing modified SBS membrane.
- B. Inspect the cleaned membrane surface for blisters, damage, or areas where the membrane may have disbanded from the underlying substrate. Cut loose and remove any blistered areas, and perform necessary repairs to any wet or damaged roofing.
- C. Do not commence work until all other trades have completed jobs that require them to traverse the deck on foot or with equipment.

**3.2 MECHANICALLY ATTACHED MEMBRANE**

- 1. Full-width rolls must be installed in the field of the roof. Half-width rolls must be installed in the perimeter region of the roof. Width of the roof perimeter region must be determined in accordance with the Perimeter half sheet calculation.

**SPECIFICATIONS:**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Building Width	Building Height	Number of EverGuard® TPO 60" (1.5 m) Half Sheets	Number of EverGuard® PVC 60" (1.5 m) Half Sheets	Number of EverGuard® TPO 72" (1.83 m) Half Sheets
<200' (61 m)	0-34' (0-10 m)	1	1	1
	35-100' (10-30 m)	2	2	2
	>100' (30 m)	<b>Formula Calculations:</b> Install half sheet throughout the perimeter and corner region. The width of this region is defined as the least of the following two measurements: 0.1 x building width or 0.4 x building height. <b>Note:</b> The minimum perimeter width is 4' (1.2 m). The width is defined as the narrowest dimension.		
≥200' (61 m)	any height			

2. Overlap roof membrane a minimum of 3" (76 mm) for end laps.
3. The membrane shall be mechanically fastened in the side lap area to the roof deck with appropriate DRILL-TEC™ fasteners and plates as required by roof system specification and/or Factory Mutual classification requirements.
4. Best practice is to install membrane so that the side laps run across the roof slope lapped toward drainage points.
5. All exposed sheet corners must be rounded a minimum of 1" (25 mm).
6. Use full-width rolls throughout the field and perimeter of the roof. Half sheets are not necessary.
7. Membrane laps shall be heat-welded together. All welds shall be continuous, without voids or partial welds. Welds shall be free of burns and scorch marks.
8. Weld shall be a minimum of 1" (25.4 mm) in width for automatic machine welding and a minimum 2" in width for hand welding,
9. Roof membrane must be mechanically attached along the base of walls with screws and plates 12" (305 mm) on center
10. Alternatively, membrane may be extended vertically 3" (75 mm) up walls and curbs and secured to the wall/ curb substrate within 2" (51 mm) of the plane of the roof. Use DRILL-TEC™ Fasteners and inverted termination bar of type and spacing in accordance with in-lap attachment requirements, with a 6" (152 mm) o.c. maximum spacing. Vertical attachment with seam plates and fasteners may also be used. This alternative detail is required to be used for pressurized buildings.
11. The metal plates must be placed within ¼" to ½" of the membrane edge. Plates shall not be placed less than ¼" from the membrane edge.
12. In the corner regions, additional fasteners shall be installed through the perimeter membrane to form a grid pattern, with an 8" (305 mm) wide EverGuard® TPO reinforced membrane flashing-strip welded over the additional fasteners. Corners include both outside and inside corners that measure 75 - 105 degrees.
13. Membrane attachment to the roof deck is required at locations of deck angle changes in excess of 1:12.
14. In the corner areas, additional fasteners will also be installed through the perimeter half-width membrane rolls to form a grid pattern, with an 8" (203 mm) wide reinforced membrane flashing strip heat-welded over the additional fasteners. "Corners" include both outside and inside corners that measure 75°-105°. Perimeter cap sheets may overlap one another in the corner areas. Alternatively, the half sheet may be laid out in a "picture frame" manner, burying the fasteners under the half sheets.
15. Roof membrane must be mechanically secured at the perimeter, at the base of internal walls and curbs, and at all penetrations with DRILL-TEC™ Membrane Fasteners and Plates at a 12" (305 mm) o.c. maximum spacing.
16. Membrane may be heat welded to coated metal flanges

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.3 SEAM WELDING**

- A. Hot-air weld membrane using an Automatic Hot Air Welding Machine or Hot Air Hand Welder in accordance with the manufacturer's current guidelines. At all splice intersections, roll the seam with a silicone roller to ensure a continuous hot air welded seam.
- B. Overlay all splice intersections with a T-Joint Cover.
- C. Probe all seams once the hot air welds have thoroughly cooled (approximately 30 minutes). Seams should be checked the same day the material is welded. Take care not to damage the membrane while probing.
- D. Repair all seam deficiencies the same day they are discovered.
- E. Apply a clear colored Cut Edge Sealant on all cut edges of reinforced membrane (where the scrim reinforcement is exposed) after seam probing is complete. Cut Edge Sealant is required on vertical splices.

**3.4 FLASHINGS****A. GENERAL**

- 1. All penetrations must be at least 24" (610 mm) from curbs, walls, and edges to provide adequate space for proper flashing.
- 2. Flash all perimeter, curb, and penetration conditions with coated metal, membrane flashing, and flashing accessories as appropriate to the site condition.
- 3. All coated metal and membrane flashing corners shall be reinforced with preformed corners or non-reinforced membrane.
- 4. Heat-weld all flashing membranes, accessories, and coated metal. A minimum 2" (52 mm) wide hand weld or minimum 1" (25 mm) to 1-1/2" (39 mm) automatic machine weld is required.
- 5. Consult the EverGuard® *Application and Specifications Manual* or GAF® Technical Support Services for more information on specific construction details, or those not addressed in this section.

**B. COATED METAL FLASHINGS**

- 1. Coated metal flashings shall be formed in accordance with current EverGuard® construction details and SMACNA guidelines.
- 2. Coated metal sections used for roof edging, base flashing and coping shall be butted together with a 1/4" (7 mm) gap to allow for expansion and contraction. Heat-weld a 6" (152 mm) wide reinforced membrane flashing strip to both sides of the joint, with approximately 1" (25.4 mm) on either side of the joint left un-welded to allow for expansion and contraction. 2" (52 mm) wide aluminum tape can be installed over the joint as a bond-breaker, to prevent welding in this area.
- 3. Coated metal used for sealant pans, scupper inserts, corners of roof edging, base flashing and coping shall be overlapped or provided with separate metal pieces to create a continuous flange condition, and pop-riveted securely. Heat-weld a 6" (152 mm) wide reinforced membrane flashing strip over all seams that will not be sealed during subsequent flashing installation.
- 4. Provide a 1/2" (13 mm) hem for all exposed metal edges to provide corrosion protection and edge reinforcement for improved durability.
- 5. Provide a 1/2" (13 mm) hem for all metal flange edges whenever possible to prevent wearing of the roofing and flashing membranes at the flange edge.
- 6. Coated metal flashings shall be nailed to treated wood nailers or otherwise mechanically attached to the roof deck, wall or curb substrates, in accordance with construction detail requirements.

**C. REINFORCED MEMBRANE FLASHINGS**

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. The thickness of the flashing membrane shall be the same as the thickness of the roofing membrane.
2. Membrane flashing may either be installed loose or fully adhered to the substrate surface in accordance with "Construction Detail Requirements".
3. Apply the adhesive only when outside temperature is above 40°F. Recommended minimum application temperature is 50°F to allow for easier adhesive application. Water-based adhesives are approved for use with smooth TPO membranes for flashings only
4. The membrane flashing shall be carefully positioned prior to application to avoid wrinkles and buckles.
5. Please note that solvent-based adhesives must be allowed to dry until tacky to the touch before mating flashing membrane. Water-based adhesive must be allowed to flash off completely.
6. Heat-weld all laps in EverGuard® smooth-reinforced flashing membrane in accordance with heat-welding guidelines. All seams in fleece-back membrane and smooth field sheet must be stripped in with 8" (203 mm) flashing strip.
7. For extended length guarantees, separate counter flashing is required; exposed termination bars are not acceptable.

**D. ROOF EDGES**

1. Roof edge flashings are applicable for gravel stop and drip edge conditions as well as for exterior edges of parapet walls.
2. Flash roof edges with coated metal flanged edging with a minimum 3" (76 mm) wide flange nailed 4" (102 mm) on center to wood nailers, and heat weld 8" (203 mm) membrane strip to metal flanges.
3. When the fascia width exceeds 4" (102 mm), coated metal roof edging must be attached with a continuous cleat to secure the lower fascia edge. The cleat must be secured to the building no less than 12" (305 mm) o.c.
4. Flash roof edge scuppers with a coated metal insert that is mechanically attached to the roof edge and integrated as a part of the metal edging.
5. Alternatively, roof edges may be flashed with a 2-piece snap on fascia system, adhering the roof membrane to a metal cant and face nailing the membrane 8" (152 mm) on center prior to installing a snap-on fascia.
  - a) Submit design drawings for review and approval to Architect or Specifier before fabrication.
  - b) Installing contractor shall check as-built conditions and verify the manufacturer's roof edging details for accuracy to fit the wall assembly prior to fabrication. The installer shall comply with the roof edging manufacturer's installation guide when setting edging.

**E. PARAPET AND BUILDING WALLS**

1. Flash walls with EverGuard® TPO membrane adhered to the substrate with bonding adhesive, loose applied or with coated metal flashing nailed 4" (102 mm) on center to pressure-treated wood nailers.
2. Maximum flashing height without intermediate fastening is 24" (610 mm) for loose-applied flashing and 54" (1.4 m) for adhered flashing
3. Secure membrane flashing at the top edge with a termination bar. EverGuard® Water Block shall be applied between the wall surface and membrane flashing underneath all exposed termination bars. Exposed termination bars shall be mechanically fastened 6" (152 mm) on center for guarantees less than 20 years and 12" (305 mm) on center for guarantees greater than 20 years or that are counter-flashed.
4. Exposed termination bars must be sealed with Flexseal™ Caulk Grade Sealant.
5. Roof membrane must be mechanically attached along the base of walls with screws and plates 12" (305 mm) on center [6" (152 mm) on center for Ballasted Systems]
6. Metal cap flashings must have continuous cleats or be face fastened 12" (305 mm) o.c. on both the inside and outside of the walls.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

7. Flash wall scuppers with a coated metal insert that is mechanically attached to the wall and integrated as part of the wall flashing.

**F. CURBS AND DUCTS**

1. Flash curbs and ducts with EverGuard® TPO membrane adhered to the curb substrate with bonding adhesive, loose applied or with coated metal flashing nailed 4" on center to pressure-treated wood nailers.
2. Maximum flashing height without intermediate fastening is 24" (610 mm) for loose-applied flashing and 54" (1.4 m) for adhered flashing
3. Secure membrane flashing at the top edge with a termination bar. EverGuard® Water Block shall be applied between the wall surface and membrane flashing underneath all exposed termination bars. Exposed termination bars shall be mechanically fastened 6" (152 mm) on center for guarantees less than 20 years and 12" (305 mm) on center for guarantees greater than 20 years or that are counter-flashed.
4. Exposed termination bars must be sealed with Flexseal™ Caulk Grade Sealant.
5. Roof membrane must be mechanically attached along the base of walls with screws and plates 12" (305 mm) on center [6" (152 mm) on center for Ballasted Systems]
6. Metal counterflashing may be optional with fully adhered flashings depending on guarantee requirements. Exposed termination bars must be sealed with Flexseal™ Roofing Cement.
7. All coated metal curb flashings and loose applied membrane flashings must be provided with separate metal counterflashings, or metal copings

**3.5 NIGHTTIME SEALS**

- A. When the completion of flashings and terminations is not achieved by the end of the work day, a daily night seal must be installed to temporarily close the membrane to prevent water infiltration.
- B. Complete an acceptable membrane seal in accordance with the manufacturer's requirements.
- C. The use of Butyl, Hot Asphalt, or Bentonite Clay for use as a Nighttime seal will not be permitted.

**3.6 CLEAN UP**

- A. Perform daily clean-up to collect all wrappings, empty containers, paper, and other debris from the project site. Upon completion, all debris must be disposed of in a legally acceptable manner.
- B. All tools and unused materials must be collected at the end of each workday and stored properly off of the finished roof surface and protected from exposure to the elements.
- C. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.
- D. Properly clean the finished roof surface after completion, and make sure the drains and gutters are not clogged.
- E. Prior to the manufacturer's inspection for warranty, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking, counter flashings, and terminations.

**3.7 PROTECTION**

- A. Protect installed products until completion of project.
- B. Clean and restore all damaged surfaces to their original condition.

**3.8 MAINTENANCE**

- A. Maintenance Inspections to the roof shall be performed annually by an authorized professional / contractor.
- B. Damage noted is to be reported to the membrane manufacturer immediately.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 07 – THERMAL AND MOISTURE PROTECTION

## SECTION 076200 - SHEET METAL FLASHING AND TRIM

**PART 1 – GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Formed Products:
    - a. Formed roof drainage sheet metal fabrications.

## 1.3 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies as indicated shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Thermal Movements: Provide sheet metal flashing and trim that allows for thermal movements from ambient and surface temperature changes.
  - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

## 1.4 ACTION SUBMITTALS

- A. Shop Drawings: Show fabrication and installation layouts of sheet metal flashing and trim, including plans, elevations, expansion-joint locations, and keyed details. Distinguish between shop- and field-assembled work. Include the following:
  - 1. Identification of material, thickness, weight, and finish for each item and location in Project.
  - 2. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.
  - 3. Details for joining, supporting, and securing sheet metal flashing and trim, including layout of fasteners, cleats, clips, and other attachments. Include pattern of seams.
  - 4. Details of termination points and assemblies, including fixed points.
  - 5. Details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction.
  - 6. Details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counterflashings as applicable.
  - 7. Details of special conditions.
  - 8. Details of connections to adjoining work.
  - 9. Detail formed flashing and trim at a scale of not less than 3 inches per 12 inches.

## 1.5 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.
- B. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" unless more stringent requirements are specified or shown on Drawings.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

humidity, except to the extent necessary for the period of sheet metal flashing and trim installation.

**1.7 WARRANTY**

- A. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
    - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
    - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
    - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
  - 2. Finish Warranty Period: 20 years from date of Substantial Completion.

**PART 2 – PRODUCTS****2.1 SHEET METALS**

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying a strippable, temporary protective film before shipping.
- B. Aluminum Sheet: ASTM B 209, alloy as standard with manufacturer for finish required, with temper as required to suit forming operations and performance required.
  - 1. Surface: Smooth, flat.
  - 2. Color: As selected by Architect from manufacturer's full range. Each building to receive a different color.
  - 3. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil.

**2.2 MISCELLANEOUS MATERIALS**

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
  - 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
    - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating.
    - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
    - c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.
  - 2. Fasteners for Aluminum Sheet: Aluminum or Series 300 stainless steel.
- C. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.
- D. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; low modulus; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- E. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- F. Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, recommended by aluminum manufacturer for exterior nonmoving joints, including riveted joints.
- G. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D 1187.
- H. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.3 FABRICATION, GENERAL**

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, geometry, metal thickness, and other characteristics of item indicated. Fabricate items at the shop to greatest extent possible.
  - 1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
  - 2. Obtain field measurements for accurate fit before shop fabrication.
  - 3. Form sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
  - 4. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- C. Sealed Joints: Form nonexpansion but movable joints in metal to accommodate elastomeric sealant.
- D. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.
- E. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.
- F. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints where necessary for strength.
- G. Do not use graphite pencils to mark metal surfaces.

**2.4 ROOF DRAINAGE SHEET METAL FABRICATIONS**

- A. Hanging Gutters: Fabricate to cross section indicated, complete with end pieces, outlet tubes, and other accessories as required. Fabricate in minimum 96-inch- long sections. Furnish flat-stock gutter spacers and gutter brackets fabricated from same metal as gutters, of size recommended by SMACNA but not less than twice the gutter thickness. Fabricate expansion joints, expansion-joint covers, gutter bead reinforcing bars, and gutter accessories from same metal as gutters.
  - 1. Gutter Style: See drawings for profile.
  - 2. Expansion Joints: Butt type.
  - 3. Accessories: Valley baffles.
  - 4. Gutters with Girth 20 Inches: Fabricate from the following materials:
    - a. Aluminum: 0.040 inch thick.
- B. Downspouts: Manufactured downspouts complete with elbows in profile noted in the drawings . Furnish with metal hangers, from same material as downspouts, and anchors. Style and sizing as indicated on drawings, SMACNA figure designation 1-32.
  - 1. Fabricated Hanger Style: SMACNA figure designation 1-32B.
  - 2. Fabricate from the following materials:
    - a. Aluminum: 0.024 inch thick.
- C. Conductor Heads: Manufactured rectangular conductor heads complete with all accessories. Furnish with metal hangers, from same material as downspouts, and anchors. Style and sizing as indicated on drawings, SMACNA figure designation 1-25F.
  - 1. Fabricate from the following materials:
    - a. Aluminum: 0.024 inch thick.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

other conditions affecting performance of the Work.

1. Verify compliance with requirements for installation tolerances of substrates.
  2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
- B. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 INSTALLATION, GENERAL**

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
1. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
  2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
  3. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
  4. Install sealant tape where indicated.
  5. Torch cutting of sheet metal flashing and trim is not permitted.
  6. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by SMACNA.
1. Coat back side of uncoated aluminum sheet metal flashing and trim with bituminous coating where flashing and trim will contact wood, ferrous metal, or cementitious construction.
  2. Underlayment: Where installing metal flashing directly on cementitious or wood substrates, install a course of felt underlayment and cover with a slip sheet or install a course of polyethylene sheet.
- C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with sealant concealed within joints.
- D. Fastener Sizes: Use fasteners of sizes that will penetrate wood sheathing not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws.
- E. Seal joints as shown and as required for watertight construction.
1. Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is moderate, between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.
  2. Prepare joints and apply sealants to comply with requirements in Division 7 Section "Joint Sealants."
- F. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches, except reduce pre-tinning where pre-tinned surface would show in completed Work.
1. Do not solder aluminum sheet.
  2. Do not use torches for soldering. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
- G. Rivets: Rivet joints in sheet metal where necessary for strength.

**3.3 ROOF DRAINAGE SYSTEM INSTALLATION**

- A. General: Install sheet metal roof drainage items to produce complete roof drainage system according to SMACNA recommendations and as indicated. Coordinate installation of roof perimeter flashing with installation of roof drainage system.
- B. Hanging Gutters: Join sections with riveted and soldered joints or with lapped joints sealed with sealant.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

Provide for thermal expansion. Attach gutters at eave or fascia to firmly anchored gutter brackets spaced not more than 36 inches apart. Provide end closures and seal watertight with sealant. Slope to downspouts.

1. Fasten gutter spacers to front and back of gutter.
  2. Loosely lock straps to front gutter bead and anchor to roof deck.
  3. Anchor and loosely lock back edge of gutter to continuous eave or apron flashing.
  4. Anchor back of gutter that extends onto roof deck with cleats spaced not more than 24 inches apart.
  5. Anchor gutter with spikes and ferrules spaced not more than 24 inches apart.
  6. Install gutter with expansion joints at locations indicated, but not exceeding, 50 feet apart. Install expansion-joint caps.
- C. Downspouts: Join sections with 1-1/2-inch telescoping joints.
1. Provide hangers with fasteners designed to hold downspouts securely to walls. Locate hangers at top and bottom and at approximately 60 inches o.c. in between.
  2. Provide elbows at base of downspout to direct water away from building.
  3. Connect downspouts to underground drainage system indicated.
- D. Splash Pans: Install where downspouts discharge on low-slope roofs. Set in elastomeric sealant compatible with roofing membrane.
- E. Conductor Heads: Anchor securely to wall with elevation of conductor head rim 1 inch below gutter discharge.
- F. Expansion-Joint Covers: Install expansion-joint covers at locations and of configuration indicated. Lap joints a minimum of 4 inches in direction of water flow.

**3.4 ROOF FLASHING INSTALLATION**

- A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
- B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in SMACNA's "Architectural Sheet Metal Manual" and as indicated. Interlock bottom edge of roof edge flashing with continuous cleat anchored to substrate at staggered 3-inch centers.
- C. Copings: Anchor to resist uplift and outward forces according to recommendations in SMACNA's "Architectural Sheet Metal Manual" and as indicated.
1. Interlock exterior bottom edge of coping with continuous cleat anchored to substrate at 16-inch centers.
  2. Anchor interior leg of coping with washers and screw fasteners through slotted holes at 24-inch centers.
- D. Pipe or Post Counterflashing: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending a minimum of 4 inches over base flashing. Install stainless-steel draw band and tighten.
- E. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches over base flashing. Lap counterflashing joints a minimum of 4 inches and bed with sealant. Secure in a waterproof manner by means of.

**3.5 ERECTION TOLERANCES**

- A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- B. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerances specified in MCA's "Guide Specification for Residential Metal Roofing."

**3.6 CLEANING AND PROTECTION**

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.
- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of installation, remove unused materials and clean finished surfaces. Maintain in a clean condition during construction.
- E. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 7 – THERMAL AND MOISTURE PROTECTION

## SECTION 079200 - JOINT SEALANTS

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Urethane joint sealants.
- B. Related Sections:
  - 1. Division 9 Section "Gypsum Board" for sealing perimeter joints.
  - 2. Division 9 Section "Ceramic Tile" for sealing tile joints.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- wide joints formed between two 6-inch- long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- C. Joint-Sealant Schedule: Include the following information:
  - 1. Joint-sealant application, joint location, and designation.
  - 2. Joint-sealant manufacturer and product name.
  - 3. Joint-sealant formulation.
  - 4. Joint-sealant color.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.

## 1.6 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
  - 2. When joint substrates are wet.
  - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## 1.7 WARRANTY

- A. Special Manufacturer's Warranty: Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.
- B. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
2. Disintegration of joint substrates from natural causes exceeding design specifications.
3. Mechanical damage caused by individuals, tools, or other outside agents.
4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

**PART 2 – PRODUCTS****2.1 MATERIALS, GENERAL**

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
  1. Suitability for Immersion in Liquids: Where sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- C. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- D. Suitability for Contact with Food: Where sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.
- E. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.
- F. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction and Iowa Green Streets Criteria.

**2.2 URETHANE JOINT SEALANTS**

- A. Single-Component, Pourable, Traffic-Grade, Urethane Joint Sealant: ASTM C 920, Type S, Grade P, Class 25, for Use T.
  1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. BASF Building Systems; Sonolastic SL 1.
    - b. Tremco Incorporated; Vulkem 45.
    - c. Sonoborn NP1

**2.3 LATEX JOINT SEALANTS**

- A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.
  1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. BASF Building Systems; Sonolac.
    - b. Tremco Incorporated; Tremflex 834.

**2.4 JOINT SEALANT BACKING**

- A. General: Provide sealant backings of material that are non-staining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.5 MISCELLANEOUS MATERIALS**

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 PREPARATION**

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
    - a. Concrete.
    - b. Unglazed surfaces of ceramic tile.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
    - a. Metal.
    - b. Glass.
    - c. Porcelain enamel.
    - d. Glazed surfaces of ceramic tile.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

**3.3 INSTALLATION OF JOINT SEALANTS**

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

sealant movement capability.

1. Do not leave gaps between ends of sealant backings.
  2. Do not stretch, twist, puncture, or tear sealant backings.
  3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
1. Place sealants so they directly contact and fully wet joint substrates.
  2. Completely fill recesses in each joint configuration.
  3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
1. Remove excess sealant from surfaces adjacent to joints.
  2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
  4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
  5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.
    - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.
- F. Installation of Preformed Silicone-Sealant System: Comply with the following requirements:
1. Apply masking tape to each side of joint, outside of area to be covered by sealant system.
  2. Apply silicone sealant to each side of joint to produce a bead of size complying with preformed silicone-sealant system manufacturer's written instructions and covering a bonding area of not less than 3/8 inch. Hold edge of sealant bead 1/4 inch inside masking tape.
  3. Within 10 minutes of sealant application, press silicone extrusion into sealant to wet extrusion and substrate. Use a roller to apply consistent pressure and ensure uniform contact between sealant and both extrusion and substrate.
  4. Complete installation of sealant system in horizontal joints before installing in vertical joints. Lap vertical joints over horizontal joints. At ends of joints, cut silicone extrusion with a razor knife.
- G. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping. Do not pull or stretch material. Produce seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures, apply heat to sealant in compliance with sealant manufacturer's written instructions.
- H. Acoustical Sealant Installation: At sound-rated assemblies and elsewhere as indicated, seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations.
- 3.4 CLEANING
- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.
- 3.5 PROTECTION
- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 3.6 SCHEDULE OF SEALANTS: Provide where noted on the drawings or required elsewhere in the specifications and as listed below:
- A. Paving and sidewalk expansion or contraction joints unless noted otherwise on the drawings.
  - B. Joints at penetrations of walls, decks, and floors by piping and other services and equipment.
  - C. Perimeters of door frames and window frames.
  - E. Gypsum board, plaster, and similar interior expansion joints unless otherwise approved by the Architect.
  - F. Joints at the intersection of dissimilar materials, such as gypsum board partitions to poured concrete or masonry.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 08 – OPENINGS

SECTION 081433 - STILE AND RAIL WOOD DOORS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
  - A. Section Includes:
    - 1. Exterior stile and rail wood doors.
  - B. Related Requirements:
    - 1. Section 099300 "Staining and Transparent Finishing" and Section 099110 "Exterior Painting" for field finishing stile and rail doors.
- 1.3 ACTION SUBMITTALS
  - A. Product Data: For each type of product.
    - 1. Include details of construction and glazing.
  - B. Shop Drawings: For stile and rail wood doors. Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data, including those for stiles, rails, panels, and moldings (sticking); and other pertinent data, including the following:
    - 1. Dimensions of doors for factory fitting.
    - 2. Locations and dimensions of mortises and holes for hardware.
    - 3. Undercuts.
    - 4. Requirements for veneer matching.
  - C. Samples for Verification: Corner sections of doors, approximately [8 by 10 inches] with door faces and edgings representing typical range of color and grain for each species of veneer and solid lumber required.
- 1.4 INFORMATIONAL SUBMITTALS
  - A. Product Certificates: For each type of door, from manufacturer.
  - B. Sample Warranty: For special warranty.
- 1.5 DELIVERY, STORAGE, AND HANDLING
  - A. Comply with requirements of referenced standard and manufacturer's written instructions.
  - B. Package doors individually in opaque plastic bags or cardboard cartons.
  - C. Mark each door on top and bottom rail with opening number used on Shop Drawings.
- 1.6 FIELD CONDITIONS
  - A. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during remainder of construction period.
  - B. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining temperature between 60 and 90 deg F and relative humidity between 25 and 55 percent during remainder of construction period.
- 1.7 WARRANTY
  - A. Special Warranty: Manufacturer agrees to repair or replace doors that fail in materials or workmanship, or have warped (bow, cup, or twist) more than 1/4 inch (6.4 mm) in a 42-by-84-inch (1067-by-2134-mm) section, within specified warranty period.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
2. Warranty shall be in effect during the following period of time from date of Substantial Completion:
  - a. Exterior Doors: Five years.

**PART 2 - PRODUCTS****2.1 MANUFACTURERS**

- A. Source Limitations: Obtain stile and rail wood doors from single manufacturer.

**2.2 MATERIALS**

- A. General: Use only materials that comply with referenced standards and other requirements specified.
  1. Assemble interior doors, including components, with either dry-use or wet-use adhesives complying with ASTM D 5572 for finger joints and with ASTM D 5751 for joints other than finger joints.
- B. Panel Products: Any of the following unless otherwise indicated:
  1. Particleboard: ANSI A208.1, Grade M-2.
  2. Medium-density fiberboard, complying with ANSI A208.2, Grade 130.
  3. Hardboard complying with ANSI A135.4.
  4. Veneer-core plywood.
  5. Raised-Panel Thickness: Match existing.
  6. Molding Profile (Sticking): Match existing.
  7. Mark, label, or otherwise identify stile and rail wood doors as complying with WDMA I.S.6A and grade specified.

**2.3 INTERIOR STILE AND RAIL WOOD DOORS**

- A. Exterior Stile and Rail Wood Doors: Exterior custom doors complying with the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards" and with other requirements specified.
  1. Accepted manufacturers include:
    - a. VT Industries, Eggers Stile and Rail Collection
    - b. Masonite Architectural
    - c. ETO Doors Corp.
    - d. Others as approved by Architect.
  2. Panel Designs: Indicated on Drawings. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
  3. Grade: Custom.
  4. Finish:
    - a. Transparent – Door 103E-1
    - b. Opaque – Doors 203E-2, 205E-2
  5. Wood Species and Cut for Transparent Finish: White oak, plain sawed/sliced panels.
  6. Wood Species and Cut for Opaque Finish: Idaho white, lodgepole, ponderosa, or sugar pine, plain sawed/sliced.
  7. Door Construction for Transparent Finish:
    - a. Stile and Rail Construction: Clear lumber; may be edge glued for width. Select lumber for similarity of grain and color, and arrange for optimum match between adjacent pieces.
    - b. Raised-Panel Construction: Edge-glued, clear lumber; glued to both sides of a wood-based panel product. Select lumber for similarity of grain and color, and arrange for optimum match between adjacent pieces.
  8. Door Construction for Opaque Finish:
    - a. Stile and Rail Construction: Clear softwood; may be edge glued for width and finger jointed.
    - b. Raised-Panel Construction: Clear softwood lumber; edge glued for width.
  9. Stile and Rail Widths: Manufacturer's standard, but not less than the following:
    - a. Stiles, Top and Intermediate Rails: 5-3/8 inches (137 mm).

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- b. Bottom Rails: 11-3/8 inches (289 mm).
  - 10. Raised-Panel Thickness: Manufacturer's standard, but not less than 1-1/8 inches (29 mm).
  - 11. Molding Profile (Sticking): Ogee
  - 12. Glass: Uncoated, clear, insulating-glass units made from two lites of 3.0-mm-thick, fully tempered glass with 1/4-inch (6.4-mm) interspace, complying with Section 088000 "Glazing."
  - 13. Mark, label, or otherwise identify stile and rail wood doors as complying with WDMA I.S.6A and grade specified.
- 2.4 STILE AND RAIL WOOD DOOR FABRICATION
  - A. Fabricate stile and rail wood doors in sizes indicated for field fitting.
  - B. Factory fit doors to suit frame-opening sizes indicated, with the following uniform clearances and bevels unless otherwise indicated:
    - 1. Clearances: Provide 1/8 inch (3 mm) at heads, jambs, and between pairs of doors. Provide 1/2 inch (13 mm) from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide not more than 3/8 inch (10 mm) from bottom of door to top of threshold.
      - a. Comply with NFPA 80 for fire-rated doors.
  - C. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, BHMA-156.115-W, and hardware templates.
    - 1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.
  - D. Glazed Openings: Factory install glazing in doors, complying with Section 088000 "Glazing." Install glass using manufacturer's standard elastomeric glazing sealant complying with ASTM C 920. Secure glass in place with removable wood moldings. Miter wood moldings at corner joints.
  - E. Exterior Doors: Factory treat exterior doors after fabrication with water-repellent preservative to comply with WDMA I.S.4. Flash top of outswinging doors with manufacturer's standard metal flashing.
- 2.5 SHOP PRIMING
  - A. Doors for Opaque Finish: Shop prime faces, all four edges, edges of cutouts, and mortises with one coat of wood primer specified in Section 099110 "Exterior Painting."
  - B. Doors for Transparent Finish: Shop prime faces and all four edges with stain (if required), other required pretreatments, and first coat of finish as specified in Section 099300 "Staining and Transparent Finishing." Seal edges of cutouts and mortises with first coat of finish.
- 2.6 FINISHING
  - A. Finish wood doors at woodworking shop that are indicated to receive transparent finish.
  - B. For doors indicated to be shop finished, comply with the AWI's, AWMAC's, and WI's "Architectural Woodwork Standards" and with other requirements specified.
    - 1. Finish faces and all four edges of doors, including mortises and cutouts.
  - C. Transparent Finish: see Section 099300 "Staining and Transparent Finishing."
  - D. Opaque Finish: see Section 099110 "Exterior Painting."

**PART 3 - EXECUTION**

- 3.1 EXAMINATION
  - A. Examine doors and installed door frames, with Installer present, before hanging doors.
    - 1. Verify that installed frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
    - 2. Reject doors with defects.
  - B. Proceed with installation only after unsatisfactory conditions have been corrected.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01****3.2 INSTALLATION**

- A. Installation Instructions: Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- B. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors. Machine doors for hardware. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
  - 1. Clearances: Provide 1/8 inch (3 mm) at heads, jambs, and between pairs of doors. Provide 3/8 inch (10 mm) from bottom of door to top of decorative floor finish or covering unless otherwise indicated. Where threshold is shown or scheduled, provide 1/4 inch (6 mm) from bottom of door to top of threshold unless otherwise indicated.
    - a. Comply with NFPA 80 for fire-rated doors.
  - 2. Bevel non-fire-rated doors 1/8 inch in 2 inches (3-1/2 degrees) at lock and hinge edges.
- C. Shop Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

**3.3 ADJUSTING**

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 08 – OPENINGS

## SECTION 084110 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Exterior and interior manual-swing entrance doors and door-frame units.

## 1.3 DEFINITIONS

- A. ADA/ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disability Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities."

## 1.4 PERFORMANCE REQUIREMENTS

- A. General Performance: Aluminum-framed systems shall withstand the effects of the following performance requirements without exceeding performance criteria or failure due to defective manufacture, fabrication, installation, or other defects in construction:
  - 1. Movements of supporting structure indicated on Drawings including, but not limited to, story drift and deflection from uniformly distributed and concentrated live loads.
  - 2. Dimensional tolerances of building frame and other adjacent construction.
  - 3. Failure includes the following:
    - a. Deflection exceeding specified limits.
    - b. Thermal stresses transferring to building structure.
    - c. Framing members transferring stresses, including those caused by thermal and structural movements to glazing.
    - d. Noise or vibration created by wind and by thermal and structural movements.
    - e. Loosening or weakening of fasteners, attachments, and other components.
    - f. Sealant failure.
    - g. Failure of operating units.
- B. Structural Loads:
  - 1. Wind Loads:
    - a. Basic Wind Speed: 90 mph
    - b. Exposure Category: B.
- C. Deflection of Framing Members:
  - 1. Deflection Normal to Wall Plane: Limited to edge of glass in a direction perpendicular to glass plane shall not exceed L/175 of the glass edge length for each individual glazing lite or an amount that restricts edge deflection of individual glazing lites to 3/4 inch, whichever is less.
  - 2. Deflection Parallel to Glazing Plane: Limited to L/360 of clear span or 1/8 inch, whichever is smaller.
- D. Structural-Test Performance: Provide aluminum-framed systems tested according to ASTM E 330 as follows:
  - 1. When tested at positive and negative wind-load design pressures, systems do not evidence deflection exceeding specified limits.
  - 2. When tested at 150 percent of positive and negative wind-load design pressures, systems, including anchorage, do not evidence material failures, structural distress, and permanent deformation of main framing members exceeding 0.2 percent of span.
  - 3. Test Durations: As required by design wind velocity, but not fewer than 10 seconds.
- E. Air Infiltration: Provide aluminum-framed systems with maximum air leakage through fixed glazing and

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- framing areas of 0.06 cfm/sq. ft. of fixed wall area when tested according to ASTM E 283 at a minimum static-air-pressure difference of 6.24 lbf/sq. ft..
- F. Water Penetration under Static Pressure: Provide aluminum-framed systems that do not evidence water penetration through fixed glazing and framing areas when tested according to ASTM E 331 at a minimum static-air-pressure difference of 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft..
- G. Water Penetration under Dynamic Pressure: Provide aluminum-framed systems that do not evidence water leakage through fixed glazing and framing areas when tested according to AAMA 501.1 under dynamic pressure equal to 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft..
1. Maximum Water Leakage: No uncontrolled water penetrating aluminum-framed systems or water appearing on systems' normally exposed interior surfaces from sources other than condensation. Water leakage does not include water controlled by flashing and gutters that is drained to exterior and water that cannot damage adjacent materials or finishes.
- H. Thermal Movements: Provide aluminum-framed systems that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
  2. Test Performance: No buckling; stress on glass; sealant failure; excess stress on framing, anchors, and fasteners; or reduction of performance when tested according to AAMA 501.5.
    - a. High Exterior Ambient-Air Temperature: That which produces an exterior metal-surface temperature of 180 deg F.
    - b. Low Exterior Ambient-Air Temperature: 0 deg F.
  3. Interior Ambient-Air Temperature: 75 deg F.
- I. Condensation Resistance: Provide aluminum-framed systems with fixed glazing and framing areas having condensation-resistance factor (CRF) of not less than 45 when tested according to AAMA 1503.
- J. Thermal Conductance: Provide aluminum-framed systems with fixed glazing and framing areas having an average U-factor of not more than 0.69 Btu/sq. ft. x h x deg F when tested according to AAMA 1503.
- K. Sound Transmission: Provide aluminum-framed systems with fixed glazing and framing areas having the following sound-transmission characteristics:
1. Sound Transmission Class (STC): Minimum 30 STC when tested for laboratory sound transmission loss according to ASTM E 90 and determined by ASTM E 413.
  2. Outdoor-Indoor Transmission Class (OITC): Minimum 30 OITC when tested for laboratory sound transmission loss according to ASTM E 90 and determined by ASTM E 1332.
- 1.5 ACTION SUBMITTALS
- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for aluminum-framed systems.
- B. Shop Drawings: For aluminum-framed systems. Include plans, elevations, sections, details, and attachments to other work.
1. Include details of provisions for system expansion and contraction and for drainage of moisture in the system to the exterior.
- C. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.
- 1.6 QUALITY ASSURANCE
- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Engineering Responsibility: Prepare data for aluminum-framed systems, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in systems similar to those indicated for this Project.
- C. Product Options: Information on Drawings and in Specifications establishes requirements for systems' aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

verification by one or more methods including preconstruction testing, field testing, and in-service performance.

1. Do not revise intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If revisions are proposed, submit comprehensive explanatory data to Architect for review.
- D. Accessible Entrances: Comply with applicable provisions in ICC/ANSI A117.1.

**1.7 PROJECT CONDITIONS**

- A. Field Measurements: Verify actual locations of structural supports for aluminum-framed systems by field measurements before fabrication and indicate measurements on Shop Drawings.

**1.8 WARRANTY**

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of aluminum-framed systems that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
  1. Failures include, but are not limited to, the following:
    - a. Structural failures including, but not limited to, excessive deflection.
    - b. Noise or vibration caused by thermal movements.
    - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
    - d. Water leakage through fixed glazing and framing areas.
    - e. Failure of operating components.
  2. Warranty Period: 10 years from date of Substantial Completion.

**PART 2 – PRODUCTS****2.1 MANUFACTURERS**

- A. Basis-of-Design Product: Subject to compliance with requirements, provide EFCO Series 403T storefront framing or comparable product by one of the following:
  1. Kawneer North America; an Alcoa company.
  2. Tubelite.
  3. United States Aluminum.

**2.2 MATERIALS**

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
  1. Sheet and Plate: ASTM B 209.
  2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221.
  3. Extruded Structural Pipe and Tubes: ASTM B 429.
  4. Structural Profiles: ASTM B 308/B 308M.

**2.3 FRAMING SYSTEMS**

- A. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads. Provide heavy duty mullions where required.
  1. Construction: Thermally broken.
  2. Glazing System: Retained mechanically with gaskets on four sides.
  3. Glazing Plane: Center.
  4. Finish: Baked-enamel or powder-coat finish.
  5. Fabrication Method: Field-fabricated stick system.
  6. Mullion Size: 2" x 4 1/2"
- B. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.
- C. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
  1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. Reinforce members as required to receive fastener threads.
  - D. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing compatible with adjacent materials.
  - E. Framing System Gaskets and Sealants: Manufacturer's standard, recommended by manufacturer for joint type.
    1. Sealants used inside the weatherproofing system shall have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- 2.4 GLAZING SYSTEMS
- A. Glazing: As specified in Division 8 Section "Glazing."
  - B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, molded or extruded, of profile and hardness required to maintain watertight seal.
  - C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.
- 2.5 ENTRANCE DOOR SYSTEMS
- A. Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing operation.
    1. Door Construction: 1-3/4-inch overall thickness, with minimum 0.125-inch-thick, extruded-aluminum tubular rail and stile thermally pvc broken members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods.
    2. Door Design: Medium stile; 3-1/2-inch nominal width.
      - a. Accessible Doors: Smooth surfaced for width of door in area within 10 inches above floor or ground plane.
    3. Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.
      - a. Provide nonremovable glazing stops on outside of door.
- 2.6 ENTRANCE DOOR HARDWARE- See Section 8710 for door hardware schedule. Door supplier shall supply hardware and cylinder for all aluminum doors.
- A. General: Provide entrance door hardware for each entrance door to comply with requirements in this Section.
    1. Entrance Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and function specified.
    2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
    3. All door hardware for aluminum doors, except key cylinders, shall be supplied from one source and shall be compatible with door and window system.
    4. Opening-Force Requirements:
      - a. Egress Doors: Not more than 15 lbf to release the latch and not more than 30 lbf to set the door in motion and not more than 15 lbf to open the door to its minimum required width.
      - b. Accessible Interior Doors: Not more than 5 lbf to fully open door.
      - c. See Door Hardware Section 08710 for door hardware schedule
  - B. Opening-Force Requirements:
    1. Latches and Exit Devices: Not more than 15 lbf required to release latch.
  - C. Butt Hinges: BHMA A156.1, Grade 1, radius corner.
    1. Nonremovable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while entrance door is closed.
    2. Quantities:
      - a. For doors up to 87 inches high, provide 3 hinges per leaf.
      - b. For doors more than 87 and up to 120 inches high, provide 4 hinges per leaf.
  - D. Panic Exit Devices: BHMA A156.3, Grade 1, listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305.
  - E. Cylinders: As specified in Division 8 Section "Door Hardware."
  - F. Operating Trim: BHMA A156.6.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- G. Weather Stripping: Manufacturer's standard replaceable components.
    - 1. Compression Type: Made of ASTM D 2000, molded neoprene, or ASTM D 2287, molded PVC.
  - H. Weather Sweeps: Manufacturer's standard exterior-door bottom sweep with concealed fasteners on mounting strip.
  - I. Silencers: BHMA A156.16, Grade 1.
  - J. Thresholds: BHMA A156.21, raised thresholds beveled with a slope of not more than 1:2, with maximum height of 1/2 inch.
- 2.7 ACCESSORY MATERIALS
- A. Prefinished Aluminum Flashing: Additional prefinished aluminum flashing to match storefront finish for flashing and trim out near storefront as shown on drawings.
  - B. Joint Sealants: For installation at perimeter of aluminum-framed systems, as specified in Division 7 Section "Joint Sealants."
- 2.8 FABRICATION
- A. Form or extrude aluminum shapes before finishing.
  - B. Framing Members, General: Fabricate components that, when assembled, have the following characteristics:
    - 1. Profiles that are sharp, straight, and free of defects or deformations.
    - 2. Accurately fitted joints with ends coped or mitered.
    - 3. Means to drain water passing joints, condensation within framing members, and moisture migrating within the system to exterior.
    - 4. Physical and thermal isolation of glazing from framing members.
    - 5. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
    - 6. Provisions for field replacement of glazing from.
    - 7. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
  - C. Mechanically Glazed Framing Members: Fabricate for flush glazing without projecting stops.
  - D. Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.
    - 1. At exterior doors, provide compression weather stripping at fixed stops.
    - 2. At interior doors, provide silencers at stops to prevent metal-to-metal contact. Install three silencers on strike jamb of single-door frames and two silencers on head of frames for pairs of doors.
  - E. Entrance Doors: Reinforce doors as required for installing entrance door hardware.
    - 1. At pairs of exterior doors, provide sliding-type weather stripping retained in adjustable strip and mortised into door edge.
    - 2. At exterior doors, provide weather sweeps applied to door bottoms.
  - F. Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.
  - G. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.
- 2.9 ALUMINUM FINISHES
- A. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.
  - B. Color and Gloss: As selected by Architect from manufacturer's full range. Each building to receive a different color, see drawings.

**PART 3 – EXECUTION**

- 3.1 EXAMINATION
  - A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 INSTALLATION**

- A. General:
  - 1. Comply with manufacturer's written instructions.
  - 2. Do not install damaged components.
  - 3. Fit joints to produce hairline joints free of burrs and distortion.
  - 4. Rigidly secure nonmovement joints.
  - 5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration.
  - 6. Seal joints watertight unless otherwise indicated.
- B. Metal Protection:
  - 1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or applying sealant or tape, or by installing nonconductive spacers as recommended by manufacturer for this purpose.
  - 2. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.
- D. Set continuous sill members and flashing in full sealant bed as specified in Division 7 Section "Joint Sealants" to produce weathertight installation.
- E. Install components plumb and true in alignment with established lines and grades, and without warp or rack.
- F. Install glazing as specified in Division 8 Section "Glazing."
- G. Entrance Doors: Install doors to produce smooth operation and tight fit at contact points.
  - 1. Exterior Doors: Install to produce weathertight enclosure and tight fit at weather stripping.
  - 2. Field-Installed Entrance Door Hardware: Install surface-mounted entrance door hardware according to entrance door hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.
- H. Install perimeter joint sealants as specified in Division 7 Section "Joint Sealants" to produce weathertight installation.

**3.3 ERECTION TOLERANCES**

- A. Install aluminum-framed systems to comply with the following maximum erection tolerances:
  - 1. Location and Plane: Limit variation from true location and plane to 1/8 inch in 12 feet; 1/4 inch over total length.
  - 2. Alignment:
    - a. Where surfaces abut in line, limit offset from true alignment to 1/16 inch.
    - b. Where surfaces meet at corners, limit offset from true alignment to 1/32 inch.
- B. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch.

**3.4 ADJUSTING**

- A. Adjust operating entrance door hardware to function smoothly as recommended by manufacturer.
  - 1. For entrance doors accessible to people with disabilities, adjust closers to provide a 3-second closer sweep period for doors to move from a 70-degree open position to 3 inches from the latch, measured to the leading door edge.

END OF SECTION

**SPECIFICATIONS:**      **DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT**  
**ANAMOSA, IOWA**  
**ARCHITECT PROJECT #1919.01**

DIVISION 08 – OPENINGS

SECTION 085113 – ALUMINUM STORM WINDOWS

PART 1 – GENERAL

1.00 SUMMARY

- A. Section includes high performance storm (secondary glazing) windows.

1.01 WORK INCLUDED

- A. Furnish and install high performance acoustical aluminum secondary glazing windows, complete with hardware, and related components as shown in drawings and specified in this Section.

1.02 REFERENCES

- A. (NAFS) AAMA/WDMA/CSA 101/I.S.2/A440-11 "North American Fenestration Standard/Specification for windows, doors and skylights"
- B. ASTM E283-91 "Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen"
- C. ASTM E330-90 "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference"
- D. ASTM E331-93 "Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference"
- E. AAMA 502-00 "Voluntary Specification for Field Testing of Newly Installed Fenestration Products".
- F. ASTM E 90-09 "Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements"
- G. ASTM E 413-04 "Classification for Rating Sound Insulation"

1.03 SYSTEM PERFORMANCE

- A. Performance Requirements: Windows will conform to (NAFS) AAMA/WDMA/CSA 101/I.S.2/A440-11 Section 9.3.2 Air Leakage Resistance Test. 9.3.3 Water Penetration Resistance Test 9.3.4 Uniform Load Tests. 9.3.5 Force-entry Resistance Test. 9.4.3 Acoustical Performance. Storm Windows shall meet the optional designations SSP-FEW 30 or SSP-FWI 30 for fixed windows, SSP-VEW 30 or SSP-VWI 30 for vertical sliding windows, and SSP-HEW 30 or SSP-HWI 30 for horizontal sliding windows when tested in accordance with Section 4.3.2, "Optional Performance Grades" for higher than minimum performance class. Unit Size: Test units shall be the sizes listed below. Sill of the test buck shall have a 13 degree slope to the exterior. (See Appendix "A" for test buck details)
1. Fixed panel and removable panel storm windows: 4'0" wide x 4'0" high
  2. Horizontal sliding storm windows: 6'0" wide x 4'0" high
  3. Vertical sliding storm windows: 3' 8" wide x 5' 2" high
- B. Air Leakage Test: The storm window shall be subjected to an air leakage test in accordance with ASTM-E 283-91.
- Window units tested by an Independent Laboratory shall be glazed with 1/8" clear annealed glass. Air leakage shall meet the following performance requirements.
1. Air leakage for fixed panel storm windows shall not exceed 0.15 CFM per square foot of window area at both a positive (infiltration) and negative (exfiltration) static pressure of 1.56 PSF at 25 mph wind. Weep holes shall not be sealed during the air leakage test.
  2. With the storm sash in the closed position, air leakage in removable panel, horizontal and vertical sliding windows shall not exceed 0.50 CFM per lineal foot of sash crack at both positive and negative static pressure 1.56 PSF at 25 mph wind. Weep holes shall not be sealed during the air leakage test.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Uniform Structural Load Test: With storm sash closed position, the window shall be tested in accordance with ASTM E 330-90. Apply a both a minimum exterior positive and negative load for fixed panel, removable panel, horizontal and vertical sliding storm windows per the PSF for the one Performance Class selected below for the Project:

30.0 PSF at 108 mph wind = Class 20

37.5 PSF at 121 mph wind = Class 25

45.0 PSF at 132 mph wind = Class 30

52.5 PSF at 143 mph wind = Class 35

Each load shall be maintained for 10 seconds. At the conclusion of the test, there shall be no glass breakage, damage to fasteners, hardware or any other damage causing the storm window to be inoperable.

- D. Water Resistance Test: With storm sash in the closed position, the window shall be subjected to a water resistance test in accordance with ASTM E 331-93. When a positive static pressure of has been stabilized, 5 gallons of water per hour per square foot of window area shall be applied to the exterior face of the window, for a continuous period of 3 minutes per the PSF for the one Performance Class selected below for the Project:

2.0 PSF at 28 mph wind = Class 20

2.5 PSF at 31 mph wind = Class 25

3.0 PSF at 34 mph wind = Class 30

3.5 PSF at 37 mph wind = Class 35

No water shall run over the interior edge of the sloped test buck sill. Weep holes shall not be sealed and remain opening during the entire test period.

- E. Concentrated Load and Glass Adherence Tests: A concentrated load equal to the weight of the sash, but not less than 15 pounds, acting parallel to the plane of the glass in a direction tending to pull the sash rails off the glass and applied alternately for three minutes at the center of all sash rails of the glazed sash shall not cause the sash rails to deflect more than 1/8" each.
- F. Safety Drop Test: When the glazed lower sash of a vertical sliding storm window is allowed to "free fall" the maximum distance provided for by the latch positions, it shall automatically stop every two inches in the next lower latch position.
- G. Glass and Screen Insert Squareness Test: Take a measurement of the distance between diagonally opposite pairs of corners of an insert with a steel rule. The difference between these measurements shall not be more than 1/4".
- H. Acoustical Performance: An acoustical test report shall state the secondary glazing window to be furnished has been "solo" tested by it self in accordance with ASTM E90-09. The results of the STC "solo" test of the storm window shall include the glass type and thickness it had been glazed with for the test. If it is available, a "tandem" acoustical test report of the secondary glazing window installed together with a defined prime window shall be furnished.

**1.04 SUBMITTALS**

- A. Shop Drawings: Submit drawings under provisions of Section 01300. Include dimensions, relationships to construction of adjacent work, component anchorage, type of caulking, window locations, installation methods and installation materials. Dimensions of all windows and components will be the responsibility of the successful Bidder.
- B. Samples: Submit appropriate color Samples for Architects review and approval.
- C. Test Reports: Submit Independent Laboratory Test Reports verifying windows meet the specified requirements for air leakage, water resistance, uniform structural load, deglazing, operation and sound transmission.
- D. Certificates: Furnish an affidavit from the Window Manufacturer, certifying that materials used on this Project shall conform to these Specifications and are similar to the windows in their Independent Laboratory Reports.

**1.05 QUALITY ASSURANCE**

- A. Qualifications: Fabrication shall be by a Window Manufacturer who can furnish evidence to the Owner that it is, and has been for not less than five (5) consecutive years, regularly engaged in the manufacturing of aluminum window units similar in design and performance to those specified for this Project.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****B. Reference List:**

1. If requested by the Owner and/or its Representative, the apparent Low Bidder shall furnish Reference List from the Window Manufacturer containing not less than eight (8) completed projects with window units of similar to the window units specified for this Project. The Reference List shall include the name and location of the projects.

**1.06 WARRANTY**

- A. **Product Warranty:** The successful Bidder shall furnish a positively written, non-prorated and fully transferable warranty from the Window Manufacturer against defects in materials and workmanship of the storm window units, under normal use, for a period of ten (10) years from the date of acceptance of the installed storm window units by the Owner. The warranty shall state that the Window Manufacturer shall provide all materials required to repair or replace defective materials or workmanship. The warranty shall further state that parts used to manufacture the storm window units, or suitable replacements, shall be available throughout the warranty period.
- B. **Installation Warranty:** The Successful Bidder shall furnish a written warranty against defects in the installation workmanship and materials for a minimum period of two (2) years from the date of acceptance by the Owner. Installation warranty work will be performed at no cost to the Owner.

**PART 2 PRODUCTS****2.01 ACCEPTABLE MANUFACTURERS**

- A. **Mon-Ray, Inc.** (Manufacturer of Mon-Ray 500 Series High Performance Secondary Glazing Windows)  
7900 Excelsior Boulevard, Suite 140  
Hopkins, MN 55343  
Phone: (800) 544-3646 Fax: (763)-546-8977 Website: [www.monray.com](http://www.monray.com)  
Product: Basis of Design, Model 504-DH, flush mount.
- B. Alternates, subject to compliance with specifications:
  - a. West Window
  - b. Allied Window, INC.

**2.02 MATERIALS**

- A. **Aluminum:** All aluminum frame, sash, screen, frame expander and exterior panning members shall be accurately extruded from aluminum prime alloy 6063-T6, and have a minimum nominal wall thickness of not less than 0.050".
- B. **Glazing:** The glass type and thickness for each new fixed panel, removable panel, horizontal and vertical sliding storm window shall not exceed the square footage size allowed per the specified Uniform Structural Load Performance Class for the type and size of the window unit. The minimum glass type and thickness shall be no less than 1/8" clear annealed float glass. Safety glazing shall be used as required by code and correctly labeled on glass. The glass shall be glazed into the sash with a one-piece wrap-around, flexible vinyl glazing channel. All corners shall be secured and neatly tucked. All glass shall be factory washed.
- C. **Weather-Strip:** All weather-strip in fixed panel window units with removable glass sash shall be Santoprene compression weather-stripping, and all weather-stripping in all windows with vertical or horizontal operating sash shall be silicone treated, UV stabilized polypropylene pile with an integral polypropylene fin running through the center with bonded to a non-shrinking backing. All weather-stripping shall slide into extruded ports in the aluminum frame of the window unit and prevent any "metal-to-metal" contact between the frame and the operating sash of the window unit.
- D. **Vinyl Track:** All operating windows shall incorporate a vinyl track to eliminate metal-to-metal contact and minimize the operating force of the sash. All horizontal sliding sashes shall operate smoothly in a weather tight vinyl tracks. All vertical sliding sashes shall operate in a vinyl track with predetermined processed ventilating positions every two (2) inches. The vinyl tracks will be secured into the storm frame through the use of extruded ports.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- E. Screens: All horizontal and vertical sliding storm window shall have a half screen mounted in the sash track of the storm frame. The screen shall be pre-bowed, extruded 6063-T6 tubular aluminum with a nominal wall thickness of 0.055". Mitered corners shall be joined neatly by means of solid T6 tempered aluminum corner gussets, securely peened within the screen frame extrusion. The screen cloth shall be fiberglass 18 x 14 mesh in a charcoal color and secured into screen frame with a vinyl spline. The screen inserts if removed will not affect the operation, efficiency or performance requirements of the storm window. NOTE: Fiberglass 18 x 16 mesh shall not be acceptable.

**2.03 WINDOW TYPE AND OPERATION**

- A. Type: All windows shall be fixed panel, removable panel, horizontal sliding or vertical sliding high performance aluminum acoustical secondary glazing window with a minimum frame depth of one (1) inch including the U-Channel frame expander for mounting to the exterior of the existing prime window into a typical existing storm window pocket against the blind stop, or with an optional U-Channel or F-Channel frame expander for mounting to a non-typical detail located either to the exterior or the interior of the prime window.
- B. Removal of Sash: All the glass sash and screen inserts for the horizontal and vertical sliding secondary windows shall be removable to the interior for cleaning through the clear sash opening of the existing operating prime window. The glass sash panel of secondary window units installed to the exterior of non-operating or fixed prime windows shall be removable to the exterior, and shall be designed and constructed in a manner that allows for replacement of all parts..
- C. Non-operating Sash: All removable glass sash panels shall be securely held in place by extruded aluminum sash stops anchored to the frame around the exterior perimeter of the sash. Non-operating sash of horizontal and vertical sliding secondary windows shall slide into an extruded weather-stripped sash pocket. Vertical non-operating sash shall be securely supported by high impact nylon support blocks anchored into the frame by non-magnetic stainless steel screws.
- D. Operation: Window units with operating sash shall have a two-track, self-storing sash and screen design. Operating surfaces of sash shall be separated from metal-to-metal contact with the frame. All horizontal sliding sash shall operate smoothly in a weather tight vinyl track. All vertical sliding sash shall operate in a vinyl track with predetermined processed ventilating positions. The vinyl tracks will be secured into the frame through the use of extruded ports. The vinyl track and spring loaded pin-locks shall provide a "ratchet action" design with automatic ventilation settings every two (2) inches. In the closed and fully open positions the operating sash shall lock in non-ratcheted, secure holes. The pin-locks shall engage automatically into predetermined ventilating positions processed into each of the side storm frames.

**2.04 HARDWARE**

- A. All assembly and installation fasteners and screws incorporated in the storm window units and exterior panning shall be non-magnetic, stainless steel. All hardware parts shall be of aluminum, stainless steel, nylon, or other non-corrosive materials compatible with aluminum. NOTE: Wrought metal or plastic parts will not be acceptable.
- B. All removable glass sash panels shall be securely held in the frame of the fixed storm window with extruded aluminum sash stops installed around the sash perimeter in the window's frame with non-magnetic stainless steel screws.
- C. All horizontal sliding windows shall slide in extruded vinyl tracks, which shall be in extruded ports in the master frame.
- D. All vertical sliding sashes shall be equipped with two spring loaded stainless steel pin-lock assemblies. The pin-lock assemblies shall be located at the lower corners of the operating sash and automatically engage at each ventilation setting. Each pin-lock assembly shall consist of: One stainless steel plunger with a diameter of 3/16". One stainless steel knurl knob threaded into the plunger and extending 1/2" to the interior of the sash rail to allow for a firm and easy finger grip. One stainless steel compression spring. The spring and the plunger shall be concealed in an extruded channel within the sash rails to prevent moisture, dirt and debris from affecting the operation of the pin-lock assembly.

**2.05 FABRICATION**

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****A. Frame and Sash Construction:**

1. Frame: All aluminum head, jamb and sill members for the master frame and all frame expanders and exterior panning shall have a minimum wall thickness of 0.050". All members to be extruded 6063-T6 aluminum assembled in a secure and workman like manner to assure lasting weather resistant construction. Frame joints shall be butt-type, neatly joined and secured by means of non-magnetic stainless steel screws anchored into integral screw ports. Vinyl weather-stripping and tracks shall be shaded from direct sunlight by the frame and sash members. Unless F-Channel or exterior panning is required, the secondary glazing window units shall be mounted into the openings by using four adjustable U-Channel expanders, which shall securely slide over the master frame. All installation holes in the adjustable expanders.
2. Sash: All sash members shall be extruded 6063-T6 aluminum with a minimum wall thickness of 0.055 ". Mitered corners shall be joined by non-magnetic stainless steel corner keys, securely peened on the inside of the sash insert. All sharp corners of the sash shall be deburred and smoothed. Sash meeting rails shall interlock in the closed position. All operating glass sash shall have a full-length extruded lift handle as part of the sash rail. The lift handle shall project a minimum of 7/16" to the interior to allow adequate area to maintain a sure finger grip. Note: Weather-stripping applied to or installed on the operating sash will not be permitted.

- B. Weep System: The sill expanders of an exterior mounted storm window shall have a minimum of two weep holes, uniformly positioned to allow for water to weep to the exterior of the storm window unit.

**2.06 FINISHES****A. Organic (Painted Finish)**

1. Finish all exposed areas of aluminum storm windows and components with a factory applied spray coating in accordance with Aluminum Association Designation:  

<u>*Description</u>	<u>AAMA Guide Specification</u>
Siliconized polyester baked enamel paint (standard)	AAMA 2603
2. 207 E Main - Colors shall be one of the manufacturer's standard painted finish colors. The head of all assembly and installation screws shall be painted the same color as the master frame of the storm window.
3. 103 E Main - Custom color as selected by the architect. Polyester enamel paints to conform to AAMA 2603. The head of all assembly and installation screws shall be painted the same color as the master frame of the storm window.

**2.07 OPTIONAL FRAME ACCESSORIES**

- A. F-Channel Expanders: If project conditions require a secondary glazing window as shown in the Project drawings to be installed to the exterior or the interior of an existing prime window, a F-Channel expander with a 1/2" leg for anchorage into the perimeter of the interior opening in place of the standard U-Channel frame expanders.
- B. H-Mullion Expanders: If project conditions require two (2) or more secondary glazing windows or panels to be installed together into a single window opening as shown in the Project drawings, H-Mull expanders shall be furnished in place of the standard U-Channel or optional F-Channel frame expanders for the perimeter of the frame locations requiring either horizontal or vertical mullion connector.
- C. Exterior Panning: If project conditions require all existing exterior wood brick-molding around the window openings as shown in the Project drawings be covered, 6063-T6 extruded exterior panning trim shall be furnished in place of the standard U-Channel frame expanders. Head and jamb panning shall interlock into the storm window frame and be pre-assembled by the manufacturer. A sill expander panning shall be provided to accommodate sill variations. The panning corners shall be butt-joined, secured with stainless steel alignment clips and back-sealed by the window manufacturer.
- D. Mullions and Transoms with Exterior Panning: Where two or more exterior storm window frames with exterior panning adjoin each other either horizontally or vertically at an existing window mullion or transom location, a panning trim cover shall be incorporated to extend the exterior panning to completely cover and seal the exposed exterior surface of the mullion or transom.

**SPECIFICATIONS:****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****PART 3 EXECUTION****3.01 EXAMINATION**

- A. Bidders are expected to visit the job-site and make a complete survey of the Project prior to bid. The Successful Bidder shall be responsible for final measuring to assure the proper sizing of the new secondary glazing. Failure to do so shall not relieve the Successful Bidder from the need to furnish any and all materials, which may be required, in accordance with the Specifications, without any additional cost to the Owner.
- B. Inspect and prepare the window openings before installation to assure surfaces are clean and dry. Verify all the mounting surfaces for secondary glazing window units are correct and the sill is level.

**3.02 PREPARATION**

- A. Receive and properly handle and store all shipments received for the manufacturer of the secondary windows. Check and verify at time shipments are received that they are complete per the bill of lading from the manufacturer and free of breakage and damage. All secondary glazing units and accessories shall be properly and securely stored in an upright position and protected from the weather.
- B. Remove old storm windows and accessories from the window opening. Scrape and remove existing sealant from the opening, which will interfere with the installation of new secondary glazing window units.
- C. Install only aluminum tubing or preservative treated lumber as required and shown in the Project drawings for all blocking. All blocking shall be the full length of the head, jambs and sill.

**3.03 INSTALLATION**

- A. New secondary glazing windows shall be installed in strict accordance with the Manufacturer's instructions and Approved Installation Shop Drawings.
- B. Plumb and align the new secondary glazing window units in a single and parallel plane with the existing prime window. Erect the new secondary glazing windows and their accessories square and true, using blocking and anchors to maintain a secure and permanent position.
- C. Anchors should be not less than #8 non-magnetic, stainless steel screws. The length of the installation screws shall allow a minimum of one half (1/2) inch to penetrate into the window frame or blocking. Anchors must be adequate to handle thermal and building movement, and specified uniform load requirements.
- D. Provide single-component or multi-component, low-modulus, non-sag sealant; comply with ASTM C920, Type S or M, Grade NS, Class 25

**3.04 ADJUST AND CLEAN**

- A. Operate the installed secondary glazing windows to assure a proper installation has occurred. Make any appropriate adjustments that are necessary to assure the sash operate and remove properly.
- B. Remove excess sealant, dirt, window labels and wipe dust off all frame, sash and glass surfaces.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 8 - OPENINGS

## SECTION 085213 – ALUMINUM-CLAD WOOD WINDOWS

PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Aluminum-clad wood single-hung windows.

## 1.2 RELATED SECTIONS

- A. Section 07270 (07 27 00) - Air Barriers: Water-resistant barrier.
- B. Section 07920 (07 92 00) - Joint Sealants: Sealants and caulking.

## 1.3 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
  - 1. AAMA 502 - Voluntary Specification for Field Testing of Windows and Sliding Doors.
  - 2. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
  - 3. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
  - 4. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum.
  - 5. AAMA 612 Voluntary Specification, Performance Requirements, and Test Procedures for Combined Coatings of Anodic Oxide and Transparent Organic Coatings on Architectural Aluminum.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM B 117 - Operating Salt Spray (Fog) Apparatus.
  - 2. ASTM C 1036 - Flat Glass.
  - 3. ASTM C 1048 - Heat-Treated Flat Glass – Kind HS, Kind FT Coated and Uncoated Glass.
  - 4. ASTM D 1149 - Rubber Deterioration – Surface Ozone Cracking in a Chamber.
  - 5. ASTM D 2803 - Filiform Corrosion Resistance of Organic Coatings on Metal.
  - 6. ASTM D 3656 - Insect Screening and Louver Cloth Woven from Vinyl-Coated Glass Yarns.
  - 7. ASTM D 4060 - Abrasion Resistance of Organic Coatings by the Taber Abraser.
  - 8. ASTM E 283 - Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Difference Across the Specimen.
  - 9. ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
  - 10. ASTM E 547 - Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Differential.
  - 11. ASTM E 1105 – Standard Test Method for Field Determination of Water Penetration of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
  - 12. ASTM G 85 - Modified Salt Spray (Fog) Testing.
- C. Screen Manufacturers Association (SMA):
  - 1. SMA 1201 - Specifications for Insect Screens for Windows, Sliding Doors and Swinging Doors.
- D. Window and Door Manufacturers Association (WDMA):
  - 1. AAMA/WDMA/CSA 101/I.S.2/A440 – North American Fenestration Standard/Specification for windows, doors and skylights
  - 2. WDMA I.S.4 - Industry Specification for Preservative Treatment for Millwork.

## 1.4 PERFORMANCE REQUIREMENTS

- A. Window Unit Air Leakage, ASTM E 283, 1.57 psf (25 mph): 0.3 cfm per square foot of frame or less.
- B. Window Unit Water Penetration: No water penetration through window unit when tested in accordance with ASTM E 547, under static pressure of 7.5 psf (52 mph)] after 4 cycles of 5 minutes each, with water being applied at a rate of 5 gallons per hour per square foot.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****1.5 SUBMITTALS**

- A. Comply with Division 1 requirements.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Shop Drawings: Submit manufacturer's shop drawings, indicating dimensions, construction, component connections and locations, anchorage methods and locations, hardware locations, and installation details.
- D. Warranty: Submit manufacturer's standard warranty.

**1.7 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery: Deliver materials to site undamaged in manufacturer's or sales branch's original, unopened containers and packaging, with labels clearly identifying manufacturer and product name. Include installation instructions.
- B. Storage: Store materials in an upright position, off ground, under cover, and protected from weather, direct sunlight, and construction activities.
- C. Handling: Protect materials and finish during handling and installation to prevent damage.

**PART 2 PRODUCTS****2.1 MANUFACTURER**

- A. Aluminum-clad window specification is based on products by Pella Corporation, 102 Main Street, Pella, Iowa 50219. Toll Free (800) 54-PELLA. Phone (641) 621-1000. Website [www.pellaADM.com](http://www.pellaADM.com).
- B. Other acceptable manufacturers, subject to compliance with construction documents and specification:
  - a. Marvin
  - b. Andersen Windows, Inc.
  - c. Sierra Pacific Windows
  - d. Kolbe Windows and Doors

**2.2 ALUMINUM-CLAD WOOD SINGLE-HUNG WINDOWS**

- A. Aluminum-Clad Wood Single-hung Windows: Reserve Series, Precision Fit, factory-assembled aluminum-clad wood single-hung windows. Sash shall tilt to interior without removal for cleaning.
- B. Frame:
  - 1. Select softwood, water-repellent, preservative-treated with EnduraGuard® in accordance with WDMA I.S.-4. EnduraGuard includes water-repellency, three active fungicides and an insecticide applied to the frame.
  - 2. Interior Exposed Surfaces: Pine with no visible fastener holes.
  - 3. Exterior Surfaces: Clad with aluminum.
  - 4. Components are assembled with screws, staples and concealed corner locks.
  - 5. Vinyl jamb liner with wood / clad inserts.
  - 6. Overall Frame Depth: 5 inches (127 mm).
  - 7. Factory-applied aluminum exterior trim with finish to match exterior.
- C. Sash:
  - 1. Select softwood, water water-repellent, preservative-treated with EnduraGuard in accordance with WDMA I.S.-4. EnduraGuard includes water-repellency, three active fungicides and an insecticide applied to the sash.
  - 2. Interior Exposed Surfaces: Pine with no visible fastener holes.
  - 3. Exterior Surfaces: Clad with extruded aluminum butt-jointed at all corners of the sash with through-stile construction to reflect historic window joinery.
  - 4. Sash Profile: Exterior profile is putty glaze, interior profile is ogee.
  - 5. Corners: Mortised and tenoned, glued and secured with metal fasteners.
  - 6. Operable sash tilt to interior for cleaning or removal.
  - 7. Sash Thickness: 1-7/8 inches (47 mm).
  - 8. Sash Face to Glass Reveal: 0.63 inches (16 mm) to reflect historic window proportions.
- D. Weatherstripping:

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Water-stop santoprene wrapped foam at head and sill.
2. Thermal-plastic elastomer bulb with slip coating set into lower sash for tight contact at checkrail.
3. Vinyl-wrapped foam inserted into jamb liner to seal to sides of sash.

**2.3 GLAZING****A. Glazing:**

1. Float Glass: ASTM C 1036, Quality 1.
2. Type: Silicone-glazed 11/16-inch dual-seal, annealed, insulating glass, clear, multi-layer Low-E coated with argon with non-glare spacer.
3. Integral Light Technology Glazing and Grilles:
  - a. Insulating glass contains non-glare grid between 2 panes of glass.
  - b. Non-glare Grid: Adhered to glass to mimic the look of historic true divided light.
  - c. Room Side Grilles: 7/8" wide ogee profile that are solid Pine.
  - d. Exterior Grilles: Extruded aluminum 7/8" putty glaze profile. Dimension to match room side grilles.
  - e. Bars shall be adhered to both sides of insulating glass with VHB acrylic adhesive tape and aligned with foam grid.
  - f. Grille edge to glass Reveal: 0.63 inches (16 mm) to reflect historic window proportions.
  - g. Finish: Finish color matches interior and exterior finish colors.

**2.4 OPTIONS****A. Insect Screens: Standard half.**

1. Compliance: ASTM D 3656 and SMA 1201.
2. Screen Cloth: Vinyl-coated fiberglass, 18/16 mesh.
3. Set in [standard] [extruded (optional on clad exterior units < 84" height, standard on units >84")]  
aluminum frame fitted on exterior side of window.
4. Complete with necessary hardware.
5. Full screen spreader bar placed on units > 37" width or > 65" height.
6. Screen Frame Finish: Baked enamel.
  - a. Color: Finish to match exterior window cladding.

**2.5 HARDWARE****A. Balances:**

1. Block-and-tackle balances connected to self-locking shoes with zinc die cast terminals concealed within the frame.
2. Balances are attached to frame and connected to sash with polyester cord.

**B. Locking System:**

1. Two piece locking system with lock and keeper historic spoon-style.
2. One installed on units with frame width less than 37 inches, 2 locks installed on units with frame width of 37 inches or greater.

**C. Sash Lifts:**

1. Sash lift furnished for field installation.
2. One sash lift on units with frame width less than 37 inches, 2 sash lifts on units with frame width of 37 inches or greater.

**D. Lock and Sash Lift Finish: oil-rubbed bronze****2.6 TOLERANCES****A. Windows shall accommodate the following opening tolerances:**

1. Vertical Dimensions Between High and Low Points: Plus 1/4 inch, minus 0 inch.
2. Width Dimensions: Plus 1/4 inch, minus 0 inch.
3. Building Columns or Masonry Openings: Plus or minus 1/4 inch from plumb.

**2.7 FINISH**

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- A. Exterior Finish System: Pella EnduraClad.
  - 1. Exterior aluminum surfaces shall be finished with the following multi-stage system:
    - a. Clean and etch aluminum surface of oxides.
    - b. Pre-treat with conversion coating.
    - c. Top coat with baked-on polyester enamel.
  - 2. Color: To be chosen from manufacturer's standard. Each building to receive a different color.
  - 3. Performance Requirements: Exterior aluminum finishes shall meet or exceed all performance requirements of AAMA 2603 and the following performance requirements of AAMA 2605:
    - a. Dry Film Hardness: Eagle Turquoise Pencil, H minimum.
    - b. Film Adhesion: 1 mm crosshatch, dry, wet, boiling water.
    - c. Impact Resistance: 1/10-inch distortion, no film removal.
    - d. Chemical Resistance: 10 percent Muriatic acid, 15 minutes. Mortar pat test, 24 hours.
    - e. Detergent Resistance: 3 percent at 100 degrees F, 72 hours.
    - f. Corrosion Resistance: ASTM G85-A5, 2000 hours. Humidity, 3,000 hours. Salt spray exceeds 3,000 hours.
- B. Interior Finish: Factory prefinished color to be chosen from manufacturer's standard. Each building to receive a different color.

**2.8 INSTALLATION ACCESSORIES**

- A. Flashing/Sealant Tape: Pella SmartFlash.
  - 1. Aluminum-foil-backed butyl window and door flashing tape.
  - 2. Maximum Total Thickness: 0.013 inch.
  - 3. UV resistant.
  - 4. Verify sealant compatibility with sealant manufacturer.
- B. Interior Insulating-Foam Sealant: Low-expansion, low-pressure polyurethane insulating window and door foam sealant.
- C. Exterior Perimeter Sealant: "Pella Window and Door Installation Sealant" or equivalent high quality, multi-purpose sealant as specified in the joints sealant section.

**2.9 SOURCE QUALITY CONTROL**

- A. Factory Testing: Factory test individual standard operable windows for air infiltration in accordance with ASTM E 283, to ensure compliance with this specification.

**PART 3 EXECUTION****3.1 EXAMINATION**

- A. Examine areas to receive windows. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

**3.2 INSTALLATION**

- A. Install windows in accordance with manufacturer's instructions and approved shop drawings.
- B. Install windows to be weather-tight and freely operating.
- C. Maintain alignment with adjacent work.
- D. Secure assembly to framed openings, plumb and square, without distortion.
- E. Integrate window system installation with exterior weather-resistant barrier using flashing/sealant tape. Apply and integrate flashing/sealant tape with weather-resistant barrier using watershed principles in accordance with window manufacturer's instructions.
- F. Place interior seal around window perimeter to maintain continuity of building thermal and air barrier using backer rod and sealant.
- G. Seal window to exterior wall cladding with sealant and related backing materials at perimeter of assembly.
- H. Leave windows closed and locked.

**3.4 CLEANING**

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- A. Clean window frames and glass in accordance with Division 1 requirements.
  - B. Do not use harsh cleaning materials or methods that would damage finish.
  - C. Remove labels and visible markings.
- 3.5 PROTECTION
- A. Protect installed windows to ensure that, except for normal weathering, windows will be without damage or deterioration at time of substantial completion.

END OF SECTION

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

DIVISION 8 – OPENINGS

SECTION 085920 - HISTORIC TREATMENT OF WOOD WINDOWS

PART 1 - GENERAL

1.1 SUMMARY

- A. This project includes multiple separate buildings. The building plans, elevations, floor plans, and window schedules outline the work to be performed on each building. Work ranges from minor filling and repair of existing windows prior to painting, through sash and frame repair, sash and frame partial replacement, and removal and installation of new units in existing openings.
- B. Related Requirements:
  - 1. Section 08800 Glazing

1.2 DEFINITIONS

- A. Window: Includes window frame, sash, hardware, trim, and storm window unless otherwise indicated by context.
- B. Exterior Trim: Exterior casing, brick mold, and cornice or drip cap.
- C. Interior Trim: Casing, stool, and apron.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review methods and procedures related to historic treatment of wood windows.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, elevations, and sections showing locations and details of each new unit and its corresponding window locations in the building on annotated plans and elevations.
- C. Samples: For each exposed product and for each color and texture specified.

1.5 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic wood window specialist, experienced in repairing, refinishing, and replacing wood windows in whole and in part. Experience only in fabricating and installing new wood windows is insufficient experience for wood-window historic treatment work.
- B. Wood-Repair-Material Manufacturer Qualifications: A firm regularly engaged in producing wood consolidant and wood-patching compound that have been used for similar historic wood-treatment applications with successful results, and with factory-authorized service representatives who are available for consultation and Project-site inspection and on-site assistance.
- C. Mockups: Prepare mockups of historic treatment repair processes to demonstrate aesthetic effects and to set quality standards for materials and execution and for fabrication and installation. Prepare mockups so they are as inconspicuous as practicable.
  - 1. Wood Window Repair: Prepare one entire window unit to serve as mockup to demonstrate samples of each type of repair of wood window members including frame, sash, glazing, and hardware.

PART 2 - PRODUCTS

2.1 HISTORIC TREATMENT OF WOOD WINDOWS, GENERAL

- A. Quality Standard: Comply with applicable standards from the "Window Preservation Standards" current edition by the Window Preservation Standard Collaborative (WPSC).

2.2 REPLICATED WOOD WINDOW UNITS

- A. Replicated Wood Window Frames and Sash: Custom-fabricated replacement wood units and trim for large-format storefront windows (including interior storm windows) and double-hung windows.

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

1. Manufacturers: Subject to compliance with requirements, provide products by the following:
    - a. Adams Architectural Millwork Co.; Subsidiary of Dubuque Sash & Door Mfg.
    - b. Allegheny Restoration & Builders Inc.
    - c. Architectural Components, Inc.
    - d. Bear Wood Windows, Inc.
    - e. Cleary and Son, Inc.
    - f. Custom Wood Reproductions Inc.
    - g. Grabill Windows & Doors.
    - h. H. Hirschmann LTD.
    - i. Kingsland Architectural Millwork.
    - j. Olek Lejbzon & Co.
    - k. Parrett Manufacturing, Inc.
    - l. Replica Windows.
    - m. Smith Restoration Sash.
    - n. Weston Millwork Company.
    - o. Wewoka Window Works.
    - p. Woodstone Company (The).
    - q. Wood Window Workshop.
  2. Large-format Storefront Windows: Sash set.
  3. Wood Species: Match wood species of exterior window trim and sash parts.
  4. Wood Window Members and Trim: Match profiles and detail of existing window members and trim.
  5. Glazing Stops: Provide replacement glazing stops coordinated with glazing system indicated.
  6. Exposed Hardware: Reuse existing hardware on repaired windows. Match existing exposed window hardware on buildings where some existing sash is to remain.
  7. Weather Stripping: Full-perimeter and meeting rail weather stripping for each operable sash.
- 2.3 WOOD-REPLACEMENT MATERIALS
- A. Wood, General: Clear fine-grained lumber; kiln dried to a moisture content of 6 to 12 percent at time of fabrication; free of visible finger joints, blue stain, knots, pitch pockets, and surface checks larger than 1/32 inch (0.8 mm) deep by 2 inches (51 mm) wide.
    1. Species: Match species of each existing type of wood component or assembly unless otherwise indicated.
- 2.4 WOOD-REPAIR MATERIALS
- A. Wood Consolidant: Ready-to-use product designed to penetrate, consolidate, and strengthen soft fibers of wood materials that have deteriorated due to weathering and decay and designed specifically to enhance the bond of wood-patching compound to existing wood.
    1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
      - a. Abatron, Inc.; LiquidWood.
      - b. ConServ Epoxy LLC; Flexible Epoxy Consolidant 100.
      - c. Gougeon Brothers, Inc.; West System.
      - d. Protective Coating Company; PC-Petrifier or PC-Rot Terminator.
      - e. System Three Resins, Inc.; RotFix.
  - B. Wood-Patching Compound: Two-part epoxy-resin wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated due to weathering and decay. Compound shall be capable of filling deep holes and spreading to feather edge.
    1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
      - a. Abatron, Inc.; LiquidWood with WoodEpox.
      - b. Advanced Repair Technology, Inc.; Primatrate with Flex-Tec HV.

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- c. ConServ Epoxy LLC; Flexible Epoxy Consolidant 100 with Flexible Epoxy Patch 200.
- d. Gougeon Brothers, Inc.; West System thickened with filler.
- e. Polymeric Systems, Inc.; QuickWood.
- f. Protective Coating Company; PC-Woody.
- g. System Three Resins, Inc.; Sculpwood.

**2.5 GLAZING MATERIALS**

- A. Glass: See Section 08800 "Glazing"
- B. Glazing Systems:
  - 1. Traditional Glazing Products: Glazing points and oil-based glazing putty or latex glazing compound.
  - 2. Modern Glazing Products: Glazing points and single-component polyurethane glazing compound; struck to match taper of existing glazing putty (removed); colored as required to match painted sash to be used in new units to match existing.
  - 3. Primers and Cleaners for Glazing: As recommended in writing by glazing material manufacturer.

**2.6 HARDWARE**

- A. Window Hardware: Provide complete sets of window hardware consisting of sash balances, hinges, pulls, latches, and accessories indicated for each window or required for proper operation. Sets shall include replacement hardware to complement repaired and refinished, existing hardware. Window hardware shall smoothly operate, tightly close, and securely lock wood windows and be sized to accommodate sash or ventilator weight and dimensions.
- B. Replacement Hardware: Replace existing damaged or missing hardware with new hardware.
- C. Material and Design:
  - 1. Material: Solid bronze, cast or wrought aluminum or nonmagnetic stainless steel unless otherwise indicated.
  - 2. Design: Manufacturer's standard hardware.
  - 3. Weight and Pulley Sash-Balance: Concealed weight and pulley balance system including steel or cast iron weights, cast-bronze pulleys, sash cord or sash chain; size and capacity to hold sash stationary at any open position.
  - 4. Spring Sash-Balance: To be used where weight pockets are not present. All units are to have sash removed, prepped and spring sash balances sized for the weight of the sash installed. All spring sash balances are to be concealed. Select tape-spring, spiral-tube, spring-loaded, or block-and-tackle type balances according to sash configuration and weight of unit. Balance shall be of size and capacity to hold sash stationary at any open position.
- D. Hardware Finishes: Comply with BHMA A156.18 for base material and finish requirements indicated.

**2.7 WEATHER STRIPPING**

- A. Compression-Type Weather Stripping: Compressible weather stripping designed for permanently resilient sealing under bumper or wiper action; completely concealed when window is closed.
  - 1. Weather-Stripping Material: Match existing materials and profiles as much as possible unless otherwise indicated.
    - a. Cellular Elastomeric Gaskets: Preformed; complying with ASTM C 509.
    - b. Dense Elastomeric Gaskets: Preformed; complying with ASTM C 864.
- B. Metal Weather Stripping: Bronze or Zinc weather stripping; designed either as one piece to seal by sliding into a groove in the sash or as two pieces that interlock; and completely concealed when window is closed.

**2.8 MISCELLANEOUS MATERIALS**

- A. Borate Preservative Treatment: Inorganic, borate-based solution, with disodium octaborate tetrahydrate as the primary ingredient; manufactured for preserving weathered and decayed wood from further damage by decay fungi and wood-boring insects; complying with AWWA P5; containing no boric acid.
- B. Cleaning Materials:

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

1. Detergent Solution: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium pyrophosphate (TSPP), 1/2 cup (125 mL) of laundry detergent that contains no ammonia, 5 quarts (5 L) of 5 percent sodium hypochlorite bleach, and 15 quarts (15 L) of warm water for each 5 gal. (20 L) of solution required.
  2. Mildewcide: Commercial, proprietary mildewcide or a solution prepared by mixing 1/3 cup (80 mL) of household detergent that contains no ammonia, 1 quart (1 L) of 5 percent sodium hypochlorite bleach, and 3 quarts (3 L) of warm water.
  - C. Adhesives: Wood adhesives for exterior exposure, with minimum 15- to 45-minute cure at 70 deg F (21 deg C), in gunnable and liquid formulations as recommended in writing by adhesive manufacturer for each type of repair.
  - D. Fasteners: Use fastener metals that are noncorrosive and compatible with each material joined.
    1. Match existing fasteners in material and type of fastener unless otherwise indicated.
    2. Use concealed fasteners for interconnecting wood components.
    3. Use concealed fasteners for attaching items to other work unless exposed fasteners are the existing fastening method or are unavoidable.
    4. For fastening metals, use fasteners of same basic metal as fastened metal unless otherwise indicated.
    5. For exposed fasteners, use Phillips-type machine screws of head profile flush with metal surface unless otherwise indicated.
    6. Finish exposed fasteners to match finish of metal fastened unless otherwise indicated.
  - E. Anchors, Clips, and Accessories: Fabricate anchors, clips, and window accessories of aluminum, nonmagnetic stainless steel, or hot-dip zinc-coated steel complying with requirements in ASTM B 633 for SC 3 (Severe) service condition.
- 2.9 WOOD WINDOW FINISHES
- A. Unfinished Replacement Units: Provide exposed exterior and interior wood surfaces of replacement units unfinished; smooth, filled, and suitably prepared for on-site priming and finishing. Verify interior priming with Architect before ordering.

**PART 3 - EXECUTION**

- 3.1 PREPARATION
- A. Clean wood windows of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. After cleaning, rinse thoroughly with fresh water. Allow to dry before repairing or painting.
  - B. Condition replacement wood members and replacement units to prevailing conditions at installation areas before installing.
- 3.2 HISTORIC TREATMENT OF WOOD WINDOWS, GENERAL
- A. General: In treating historic items, disturb them as minimally as possible and as follows:
    1. Stabilize and repair wood windows to reestablish structural integrity and weather resistance while maintaining the existing form of each item.
    2. Remove coatings and apply borate preservative treatment before repair. Remove coatings according to Section 09991 "Historic Treatment of Plain Painting" unless otherwise indicated.
    3. Repair items in place where possible.
    4. Install temporary protective measures to protect wood window work that is indicated to be completed later.
    5. Refinish historic wood windows according to Section 09991 "Historic Treatment of Plain Painting" unless otherwise indicated.
  - B. Mechanical Abrasion: Where mechanical abrasion is needed for the work, use only the gentlest mechanical methods, such as scraping and natural-fiber bristle brushing, that will not abrade wood substrate, reducing clarity of detail. Do not use abrasive methods such as sanding, wire brushing, or power tools except as approved by Architect. It is assumed for all existing windows that lead based paint and finishes have been used in past applications. Employ methods to minimize dust on surfaces containing lead.

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- C. Repair and Refinish Existing Hardware: Dismantle window hardware; strip paint, repair, and refinish it to match finish samples; and lubricate moving parts just enough to function smoothly.
  - D. Repair Wood Windows: Match existing materials and features, retaining as much original material as possible to perform repairs.
    - 1. Unless otherwise indicated, repair wood windows by consolidating, patching, splicing, or otherwise reinforcing wood with new wood matching existing wood or with salvaged, sound, original wood.
    - 2. Where indicated, repair wood windows by limited replacement matching existing material.
    - 3. Sash Balance: All existing sash balances are to be removed and replaced unless specifically noted in the drawings. Provide new sash balances to function according to type as specified in "Hardware" Article" above. Where existing counter balanced sash balances are being replaced, window weights, ropes, and pulleys are to be removed through the balance access, the void space filled with insulation, and the balance reinstalled.
  - E. Replace Wood Units: Where indicated, duplicate and replace units with units made from salvaged, sound, original wood or with new wood matching existing wood. Use surviving prototypes to create patterns for duplicate replacements.
  - F. Protection of Openings: Where sash or windows are indicated for removal, cover resultant openings with temporary enclosures so that openings are weathertight and secure during repair period.
  - G. Identify removed windows, frames, sash, and members with numbering system corresponding to window locations to ensure reinstallation in same location.
- 3.3 WOOD WINDOW PATCH-TYPE REPAIR
- A. General: Patch wood members that exhibit depressions, holes, or similar voids, and that have limited amounts of rotted or decayed wood. For each window unit to be repaired select one of the following methods of repair.
    - 1. Treat wood members with wood consolidant before applying patching compound. Coat wood surfaces by brushing, applying multiple coats until wood is saturated and unable to absorb more. Allow treatment to harden before filling void with patching compound.
    - 2. Remove rotted or decayed wood down to sound wood.
  - B. Apply borate preservative treatment to accessible surfaces either before applying wood consolidant or after removing rotted or decayed wood.
  - C. Apply wood-patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood.
    - 1. Prime patch area with application of wood consolidant or manufacturer's recommended primer.
    - 2. Apply patching compound in layers as recommended in writing by manufacturer until the void is completely filled.
    - 3. Sand patch surface smooth and flush with adjacent wood, without voids in patch material, and matching contour of wood member.
- 3.4 WOOD WINDOW MEMBER-REPLACEMENT REPAIR
- A. General: Replace parts of or entire wood window members at locations indicated on Schedules in the Drawings. See additional notes on the drawings.
  - B. Scheduled Repairs:
    - 1. Replacement of wood frame or sash members with new members as part of the existing unit. Do not splice sash members. Frame members may be spliced.
    - 2. Replacement of entire sash units.
    - 3. Secure new wood using finger joints, multiple dowels, or splines with adhesive and nailing to ensure maximum structural integrity at each splice. Use only concealed fasteners. Fill nail holes and patch surface to match surrounding sound wood.
    - 4. Repair of broken or cracked glass. Provide new glazing to match glass type and thickness of the original unit.
  - C. General Repairs: The following identify the general type of repairs to be conducted on all existing wood windows in addition to the repairs noted in the schedules.

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Wood Repair: Remove broken, rotted, and decayed wood down to sound wood and repair with consolidants, wood filler and joint tightening.
  2. Repair remaining depressions, holes, or similar voids with patch-type repairs.
  3. Apply borate preservative treatment to accessible new and existing bare wood surfaces after replacements are made. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom.
  4. Glazing: Reglaze existing units before reinstallation. Remove existing glazing material and install new. Provide new glazing stops coordinated with the existing or new glass and setting system.
  5. Weather Stripping: Replace nonfunctioning and install missing weather stripping to ensure full-perimeter and meeting rail weather stripping for each operable sash.
  6. Tighten loose joints and conform to existing opening with concealed hardware.
  7. Hardware- Replace missing or damaged hardware with new to match existing or as specified.
  8. Install new sash balances as specified on all window units, remove all sash balances including weights, and fill weight pockets with insulation.
- D. Reinstall units removed for repair into original openings.
- E. If repairs beyond the scheduled number are indicated during the repair process, notify the Architect at once and document the conditions with photographs and descriptions.
- 3.5 GLAZING
- A. Comply with combined written instructions of manufacturers of glass, glazing systems, and glazing materials,
  - B. Remove cracked and damaged glass and glazing materials from openings and prepare surfaces for reglazing.
  - C. Size glass as required by Project conditions to provide necessary bite on glass, minimum edge and face clearances, with reasonable tolerances.
  - D. Apply primers to joint surfaces where required for adhesion of glazing system, as determined by preconstruction testing.
  - E. Install setting bead, side beads, and back bead against stop in glazing rabbets before setting glass.
  - F. Install glass with proper orientation so that coatings, if any, face exterior or interior as required.
  - G. Disposal of Removed Glass: Remove from Owner's property and legally dispose of it unless otherwise indicated.
- 3.6 WOOD WINDOW UNIT REPLACEMENT
- A. General: Replace existing wood window frame, sash, storm window, and screen units with new custom-fabricated units to match existing at locations indicated on drawings and schedules.
  - B. Apply borate preservative treatment to accessible surfaces before finishing. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom.
  - C. Mill glazed members to accommodate glass thickness. Glaze units before installation.
  - D. Install units level, plumb, square, true to line, without distortion or impeding movement; anchored securely in place to structural support; and in proper relation to wall flashing, trim, and other adjacent construction.
  - E. Set sill members in bed of sealant for weathertight construction unless otherwise indicated.
  - F. Install window units with new anchors into existing openings.
  - G. Weather Stripping: Install full-perimeter and meeting rail weather stripping for each operable sash.
  - H. Metal Protection: Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.
  - I. Disposal of Removed Units: Remove from Owner's property and legally dispose of them unless otherwise indicated.
- 3.7 STORM WINDOW INSTALLATION
- A. Install interior or exterior storm windows at each window jamb indicated on drawings.
- 3.8 INSECT-SCREEN INSTALLATION
- A. Provide aluminum insect screen frames as part of each interior operable aluminum storm window.

**SPECIFICATIONS- DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

- B. Install insect screening to be smooth, flat, and uniformly taut.
- 3.9 WEATHER STRIPPING INSTALLATION
  - A. Install weather stripping for tight seal of joints as determined by preconstruction testing and demonstrated in mockup.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 08 – OPENINGS

## SECTION 087100 – DOOR HARDWARE

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
  - 1. Swinging doors.
- B. Door hardware includes, but is not necessarily limited to, the following:
  - 1. Mechanical door hardware.
  - 2. Cylinders specified for doors in other sections.
- C. Related Sections:
  - 1. Division 08 Section "Stile and Rail Wood Doors".
  - 2. Division 08 Section "Aluminum-Framed Entrances and Storefronts".
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
  - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC - International Building Code.
  - 3. NFPA 70 - National Electrical Code.
  - 4. NFPA 80 - Fire Doors and Windows.
  - 5. NFPA 101 - Life Safety Code.
  - 6. NFPA 105 - Installation of Smoke Door Assemblies.
  - 7. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
  - 1. ANSI/BHMA Certified Product Standards - A156 Series.
  - 2. UL10C – Positive Pressure Fire Tests of Door Assemblies.
  - 3. ANSI/UL 294 – Access Control System Units.
  - 4. ULC-S319 - Electronic Access Control Systems.
  - 5. ULC-60839-11-1, Alarm and Electronic Security Systems - Part 11-1: Electronic Access Control Systems - System and Components Requirements.
  - 6. UL 305 – Panic Hardware.
  - 7. ULC-S132, Emergency Exit and Emergency Fire Exit Hardware.
  - 8. ULC-S533 – Egress Door Securing and Releasing Devices.
  - 9. ANSI/UL 437- Key Locks.
  - 10. ULC-S328, - Burglary Resistant Key Locks.

## 1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:
  - a. Type, style, function, size, label, hand, and finish of each door hardware item.
  - b. Manufacturer of each item.
  - c. Fastenings and other pertinent information.
  - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
  - e. Explanation of abbreviations, symbols, and codes contained in schedule.
  - f. Mounting locations for door hardware.
  - g. Door and frame sizes and materials.
  - h. Warranty information for each product.
4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- D. Informational Submittals:
  1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

**1.4 QUALITY ASSURANCE**

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
  1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
  1. Function of building, purpose of each area and degree of security required.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

2. Plans for existing and future key system expansion.
  3. Requirements for key control storage and software.
  4. Installation of permanent keys, cylinder cores and software.
  5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
  2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
  3. Review sequence of operation narratives for each unique access controlled opening.
  4. Review and finalize construction schedule and verify availability of materials.
  5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
  - B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
  - C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".
- 1.6 COORDINATION
- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
  - B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
  - C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.
- 1.7 WARRANTY
- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
  - B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
    1. Structural failures including excessive deflection, cracking, or breakage.
    2. Faulty operation of the hardware.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  4. Electrical component defects and failures within the systems operation.
  - C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
  - D. Special Warranty Periods:
    1. Five years for exit hardware.
    2. Twenty five years for manual overhead door closer bodies.
- 1.8 MAINTENANCE SERVICE
- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

**PART 2 - PRODUCTS**

- 2.1 SCHEDULED DOOR HARDWARE
- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
  - B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
    1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
  - C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.
- 2.2 HANGING DEVICES
- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
    1. Quantity: Provide the following hinge quantity:
      - a. Two Hinges: For doors with heights up to 60 inches.
      - b. Three Hinges: For doors with heights 61 to 90 inches.
      - c. Four Hinges: For doors with heights 91 to 120 inches.
      - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
    2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
      - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
      - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
    3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
      - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
      - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
    4. Hinge Options: Comply with the following:
      - a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
    5. Manufacturers:
      - a. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK).
      - b. Stanley Hardware (ST).

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.
  - 1. Manufacturers:
    - a. Bommer Industries (BO).
    - b. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).
- 2.3 DOOR OPERATING TRIM
  - A. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
    - 1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
    - 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
    - 3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
    - 4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
    - 5. Manufacturers:
      - a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
      - b. Trimco (TC).
- 2.4 CYLINDERS AND KEYING
  - A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
  - B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
  - C. Cylinders: Original manufacturer cylinders complying with the following:
    - 1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
    - 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
    - 3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
    - 4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
    - 5. Keyway: Manufacturer's Standard.
  - D. Keying System: Each type of lock and cylinders to be factory keyed.
    - 1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
    - 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
    - 3. New System: Key locks to a new key system as directed by the Owner.
  - E. Key Quantity: Provide the following minimum number of keys:
    - 1. Change Keys per Cylinder: Two (2)
    - 2. Master Keys (per Master Key Level/Group): Five (5).
    - 3. Construction Keys (where required): Ten (10).
  - F. Construction Keying: Provide construction master keyed cylinders.
  - G. Key Registration List (Bitting List):
    - 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
    - 2. Provide transcript list in writing or electronic file as directed by the Owner.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****2.5 STAND ALONE ACCESS CONTROL LOCKING DEVICES**

- A. Stand Alone Touchscreen Locksets: ANSI A156.2, Series 4000, Grade 1 locking mechanism complete with integrated touchscreen for access and programming. Voice-guided programming with 12-digit PIN code selection and up to 1000 user option. Locks to accept standard, small format interchangeable core, security and patented cylinders. Battery-operated, with low power indicator, or hard-wired (9 Volt external power supply) option.
  - 1. Manufacturers:
    - a. Yale Commercial(YA) - nexTouch Series.

**2.6 LOCK AND LATCH STRIKES**

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
  - 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
  - 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
  - 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
  - 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
  - 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
  - 2. Strikes for Bored Locks and Latches: BHMA A156.2.
  - 3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
  - 4. Dustproof Strikes: BHMA A156.16.

**2.7 CONVENTIONAL EXIT DEVICES**

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
  - 1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
  - 2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
  - 3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
  - 4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
  - 5. Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
  - 6. Motorized Electric Latch Retraction: Devices with an electric latch retraction feature must use motors which have a maximum current draw of 600mA. Solenoid driven latch retraction is not acceptable.
  - 7. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
    - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
  - 8. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

9. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
  10. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
  11. Rail Sizing: Provide exit device rails factory sized for proper door width application.
  12. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.
1. Manufacturers:
    - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
    - b. Sargent Manufacturing (SA) - 80 Series.
- 2.8 DOOR CLOSERS
- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
  2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
  3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
  4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
  5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
  6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.
1. Manufacturers:
    - a. Corbin Russwin Hardware (RU) – DC8000 Series.
    - b. Norton Door Controls (NO) – 9500 Series.
    - c. Sargent Manufacturing (SA) – 281 Series.
- 2.9 DOOR STOPS AND HOLDERS
- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
1. Manufacturers:
    - a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
    - b. Trimco (TC).
- C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01**

1. Manufacturers:
  - a. Rixson Door Controls (RF).
  - b. Sargent Manufacturing (SA).
- 2.10 ARCHITECTURAL SEALS
  - A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
  - B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
    1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
  - C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
    1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.
  - D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
  - E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
  - F. Manufacturers:
    1. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).
    2. Reese Enterprises, Inc. (RE).
- 2.11 FABRICATION
  - A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.
- 2.12 FINISHES
  - A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
  - B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
  - C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

**PART 3 - EXECUTION**

- 3.1 EXAMINATION
  - A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
  - B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.
- 3.2 PREPARATION
  - A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
  - B. Wood Doors: Comply with ANSI/DHI A115-W series.

**3.3 INSTALLATION**

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
  - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
  - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
  - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
  - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
  - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

**3.4 FIELD QUALITY CONTROL**

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures" and "Cash Allowances". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
  - 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.
  - 2. Submit documentation of incomplete items in the following formats:
    - a. PDF electronic file.
    - b. Electronic formatted file integrated with the Openings Studio™ door opening management software platform.

**3.5 ADJUSTING**

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

**3.6 CLEANING AND PROTECTION**

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****3.7 DEMONSTRATION**

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

**3.8 DOOR HARDWARE SETS**

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
1. Quantities listed are for each pair of doors, or for each single door.
  2. The supplier is responsible for handing and sizing all products.
  3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
  4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.
- B. Manufacturer's Abbreviations:
1. MK - McKinney
  2. PE - Pemko
  3. YA - Yale
  4. SA - SARGENT
  5. RO - Rockwood
  6. RF - Rixson

**Hardware Sets****Set: 1.0**

Doors: 103E-1

3 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Rim Exit Device, Storeroom	8804 Less Pull	US32D	SA
1 Pull	RM3050-12 Mtg-Type 1XHD	US32	RO
1 Surf Overhead Stop	9-X36	630	RF
1 Door Closer	281 PD10	EN	SA
1 Threshold	253x3AFG		PE
1 Gasketing	2891APK TKSP8		PE
1 Sweep	3452CNB TKSP8		PE

Notes: Door normally closed, latched and secure.

Entry by pull when exit device manually dogged open by hex key or key override.

Free egress at all times.

Install gasketing prior to soffit mounted hardware. Do not notch gasketing for soffit mounted hardware.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #I1919.01****Set: 2.0**

Doors: 201E-1, 203E-1, 205E-1, 205W-1, 207E-1, 209E-1, 213E-1

1 Continuous Hinge	KCFM83-HD1 x Height Required		PE
1 Rim Exit Device, Storeroom	AD8504 Less Pull	US32D	SA
1 Pull	RM3050-12 Mtg-Type 1XHD	US32	RO
1 Conc Overhead Stop	1-X36	630	RF
1 Door Closer	281 P10	EN	SA
1 Drop Plate	281D	EN	SA
1 Blade Stop Spacer	581-2	EN	SA
1 Threshold	253x3AFG		PE
1 Sweep	3452CNB TKSP8		PE

Notes: Door normally closed, latched and secure.

Entry by pull when exit device manually dogged open by hex key or key override.

Free egress at all times.

Weatherstripping provided by aluminum door supplier.

**Set: 3.0**

Doors: 203E-2, 205E-2

3 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Push Button Lock	AUR NTM610-NR	626	YA
1 Surf Overhead Stop	9-X36	630	RF
1 Door Closer	281 PD10	EN	SA
1 Threshold	253x3AFG		PE
1 Gasketing	2891APK TKSP8		PE
1 Sweep	3452CNB TKSP8		PE

Notes: Door normally closed, latched and secure.

Entry by valid pin code or key override.

Free egress at all times.

Install gasketing prior to soffit mounted hardware. Do not notch gasketing for soffit mounted hardware.

**Set: 4.0**

Doors: 201E-2, 209W-1

1 Hardware is existing to remain			00
----------------------------------	--	--	----

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 08 – OPENINGS

## SECTION 08800 – GLAZING

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
  - 1. Doors.

## 1.3 DEFINITIONS

- A. Glass Manufacturers: Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.
- B. Glass Thicknesses: Indicated by thickness designations in millimeters according to ASTM C 1036.
- C. Interspace: Space between lites of an insulating-glass unit.

## 1.4 PERFORMANCE REQUIREMENTS

- A. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.
- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.
  - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

## 1.5 ACTION SUBMITTALS

- A. Product Data: For each glass product and glazing material indicated.
- B. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.

## 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications for Insulating-Glass Units with Sputter-Coated, Low-E Coatings: A qualified insulating-glass manufacturer who is approved and certified by coated-glass manufacturer.
- B. Installer Qualifications: A qualified installer who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.
- C. Sealant Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.
- D. Source Limitations for Glass: Obtain clear float glass, fire resistive glass and insulating glass from single source from single manufacturer for each glass type.
- E. Source Limitations for Glazing Accessories: Obtain from single source from single manufacturer for each product and installation method.
- F. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
  - 1. GANA Publications: GANA's "Laminated Glazing Reference Manual" and GANA's "Glazing Manual."
  - 2. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines."

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3. IGMA Publication for Sloped Glazing: IGMA TB-3001, "Guidelines for Sloped Glazing."
  4. IGMA Publication for Insulating Glass: SIGMA TM-3000, "North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use."
  - G. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.
- 1.7 DELIVERY, STORAGE, AND HANDLING
- A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.
  - B. Comply with insulating-glass manufacturer's written recommendations for venting and sealing units to avoid hermetic seal ruptures due to altitude change.
- 1.8 PROJECT CONDITIONS
- A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
- 1.9 WARRANTY
- A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
    1. Warranty Period: 10 years from date of Substantial Completion.
  - B. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
    1. Warranty Period: 10 years from date of Substantial Completion.
  - C. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form in which insulating-glass manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
    1. Warranty Period: 10 years from date of Substantial Completion.

**PART 2 – PRODUCTS**

- 2.1 GLASS PRODUCTS, GENERAL
- A. Color: ALL GLASS SHALL BE CLEAR, NO TINT.
  - B. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass lites in thicknesses as needed to comply with requirements indicated.
    1. Minimum Glass Thickness for Exterior Lites: Not less than 6.0 mm.
    2. All glass
  - C. Strength: Where float glass is indicated, provide annealed float glass, Kind HS heat-treated float glass, or Kind FT heat-treated float glass as needed to comply with "Performance Requirements" Article. Where heat-strengthened glass is indicated, provide Kind HS heat-treated float glass or Kind FT heat-treated float glass as needed to comply with "Performance Requirements" Article. Where fully tempered glass is indicated, provide Kind FT heat-treated float glass.
  - D. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

indicated in manufacturer's published test data, based on procedures indicated below:

1. For monolithic-glass lites, properties are based on units with lites 6.0 mm thick.
2. For laminated-glass lites, properties are based on products of construction indicated.
3. For insulating-glass units, properties are based on units of thickness indicated for overall unit and for each lite.
4. U-Factors: Center-of-glazing values, according to NFRC 100 and based on LBL's WINDOW 5.2 computer program, expressed as Btu/sq. ft. x h x deg F.
5. Solar Heat-Gain Coefficient and Visible Transmittance: Center-of-glazing values, according to NFRC 200 and based on LBL's WINDOW 5.2 computer program.
6. Visible Reflectance: Center-of-glazing values, according to NFRC 300.

**2.2 GLASS PRODUCTS**

- A. Float Glass: ASTM C 1036, Type I, Quality-Q3, Class I (clear) unless otherwise indicated.
- B. Heat-Treated Float Glass: ASTM C 1048; Type I; Quality-Q3; Class I (clear) unless otherwise indicated; of kind and condition indicated.

**2.3 INSULATING GLASS**

- A. Insulating-Glass Units: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM E 2190, and complying with other requirements specified.
  1. Sealing System: Dual seal, with manufacturer's standard primary and secondary.
  2. Spacer: Manufacturer's standard spacer material and construction.
  3. Desiccant: Molecular sieve or silica gel, or blend of both.

**2.4 GLAZING GASKETS**

- A. Dense Compression Gaskets: Molded or extruded gaskets of profile and hardness required to maintain watertight seal, made from one of the following:
  1. Neoprene complying with ASTM C 864.
  2. EPDM complying with ASTM C 864.
  3. Silicone complying with ASTM C 1115.
  4. Thermoplastic polyolefin rubber complying with ASTM C 1115.

**2.5 MISCELLANEOUS GLAZING MATERIALS**

- A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
- D. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
- F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

**2.6 FABRICATION OF GLAZING UNITS**

- A. Fabricate glazing units in sizes required to fit openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.
- B. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites to produce square edges with slight chamfers at junctions of edges and faces.
- C. Grind smooth and polish exposed glass edges and corners.

**2.7 MONOLITHIC-GLASS TYPES**

- A. Glass Type for Replacement Glass in historic wood windows and new wood storm windows : Clear fully

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

tempered where required by code float glass.

1. Thickness: 6.0 mm. or to match existing.
2. Provide safety glazing labeling where required.
3. Notify Architect if historic window cannot accommodate 1/4" glass.

**2.8 INSULATING-GLASS TYPES**

- A. Glass Type for Aluminum Storefronts: Clear Low E Type insulating glass.
  1. Overall Unit Thickness: 1 inch.
  2. Minimum Thickness of Each Glass Lite: 6 mm.
  3. Outdoor Lite: Fully tempered float glass as required by code.
  4. Interspace Content: 1/2" wide, hermetically sealed, dehydrated air space 90% argon filled.
  5. Indoor Lite: Fully tempered float glass as required by code, or as scheduled on drawings.
  6. Maximum U-Factor: 0.38
- B. Glass Type for Wood Storefront Windows: Clear Low E Type insulating glass.
  1. Overall Unit Thickness: 5/8" inch.
  2. Thickness of Each Glass Lite: 6.0 mm.
  3. Outdoor Lite: Fully tempered float glass where required by code.
  4. Interspace Content: Argon.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:
  1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
  2. Presence and functioning of weep systems.
  3. Minimum required face and edge clearances.
  4. Effective sealing between joints of glass-framing members.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 PREPARATION**

- A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.
- B. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that will leave visible marks in the completed work.

**3.3 GLAZING, GENERAL**

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Adjust glazing channel dimensions as required by Project conditions during installation to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.
- C. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
- D. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.
- E. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- F. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
  - G. Provide spacers for glass lites where length plus width is larger than 50 inches.
    - 1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.
    - 2. Provide 1/8-inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.
  - H. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.
  - I. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.
  - J. Set glass lites with proper orientation so that coatings face exterior or interior as specified.
  - K. Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.
  - L. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.
- 3.4 GASKET GLAZING (DRY)
- A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
  - B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
  - C. Installation with Drive-in Wedge Gaskets: Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
  - D. Installation with Pressure-Glazing Stops: Center glass lites in openings on setting blocks and press firmly against soft compression gasket. Install dense compression gaskets and pressure-glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
  - E. Install gaskets so they protrude past face of glazing stops.
- 3.5 CLEANING AND PROTECTION
- A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels and clean surfaces.
  - B. Protect glass from contact with contaminating substances resulting from construction operations. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer.
  - C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains; remove as recommended in writing by glass manufacturer.
  - D. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.
  - E. Wash glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 9 – FINISHES

## SECTION 092500 - GYPSUM BOARD

**PART 1 – GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Interior gypsum board.
  - 2. Texture finishes.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

## 1.4 DELIVERY, STORAGE AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

## 1.5 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
  - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

**PART 2 – PRODUCTS**

## 2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

## 2.2 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

## 2.3 INTERIOR GYPSUM BOARD

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Georgia-Pacific Gypsum LLC.
  - 2. USG Corporation.
- B. Gypsum Board, Type C & X: ASTM C 1396/C 1396M. To be used where gypsum board is noted or required in a fire resistant assembly.
  - 1. Thickness: 5/8 inch.
  - 2. Long Edges: Tapered.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #11919.01****2.4 TRIM ACCESSORIES**

- A. Interior Trim: ASTM C 1047.
  - 1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
  - 2. Shapes:
    - a. Cornerbead.
    - b. Expansion (control) joint.

**2.5 JOINT TREATMENT MATERIALS**

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
  - 2. Exterior Gypsum Soffit Board: Paper.
  - 3. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type, all-purpose compound.
    - a. Use setting-type compound for installing paper-faced metal trim accessories.
  - 3. Fill Coat: For second coat, use drying-type, all-purpose compound.
  - 4. Finish Coat: For third coat, use drying-type, all-purpose compound.

**2.6 FINISHES**

- A. Smooth Finish:
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers that may be incorporated into the Work include, but are not limited to, the following:
    - a. CertainTeed Corp.
    - b. National Gypsum Company
    - c. USG Corporation
  - 2. Finish: Level 5 smooth finish.
  - 3. Location: New sections of drywall, including the interior side of new storefront walls.
- B. Textured Finish: Pre-mixed, vinyl texture finish for spray application.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. CertainTeed Corp.; ProRoc Easi-Tex Spray Texture.
    - b. National Gypsum Company; Perfect Spray EM Texture.
    - c. USG Corporation; BEADEX FasTex Wall and Ceiling Spray Texture.
  - 2. Texture: As required to match adjacent surface.
  - 3. Primer: As recommended by textured finish manufacturer.
  - 4. Location: Where drywall is patched on an existing textured wall.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine areas and substrates including welded hollow-metal frames and framing, with Installer present, for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 APPLYING AND FINISHING PANELS, GENERAL**

- A. Comply with ASTM C 840.
- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
  - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
  - 2. Fit gypsum panels around ducts, pipes, and conduits.
  - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch- wide joints to install sealant.
- G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- I. Wood Framing: Install gypsum panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members or provide control joints to counteract wood shrinkage.
- J. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.
- K. Expansion Joints- Provide joints as recommended by the gypsum board manufacturer and required to maintain fire separation if required. Submit shop drawing of proposed joint with the gypsum board submittals.
  - 1. Provide expansion joints where dimension of gypsum board exceeds thirty (30) feet in any dimension.
  - 2. In hallways locate expansion joints at edge of doors or windows whenever possible.
  - 3. At acoustical ceilings, joint must continue above ceiling but joint trim may be omitted if not required for fire rating.
  - 4. Provide joints at corners in ceilings where hallways or similar spaces change direction.

**3.3 APPLYING INTERIOR GYPSUM BOARD**

- A. Install interior gypsum board in the following locations:
  - 1. Wallboard Type: Vertical surfaces unless otherwise indicated.
  - 2. Type X: Vertical surfaces unless otherwise indicated.
- B. Single-Layer Application:
  - 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
  - 2. On partitions/walls, apply gypsum panels horizontally (perpendicular to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
    - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
    - b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.
  - 3. On Z-furring members, apply gypsum panels vertically (parallel to framing) with no end joints. Locate edge joints over furring members.
  - 4. Fastening Methods: Apply gypsum panels to supports with steel drill screws.
- C. Multilayer Application:

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. On ceilings, apply gypsum board indicated for base layers before applying base layers on walls/partitions; apply face layers in same sequence. Apply base layers at right angles to framing members and offset face-layer joints one framing member, 16 inches minimum, from parallel base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly.
  2. On partitions/walls, apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
  3. On Z-furring members, apply base layer vertically (parallel to framing) and face layer either vertically (parallel to framing) or horizontally (perpendicular to framing) with vertical joints offset at least one furring member. Locate edge joints of base layer over furring members.
  4. Fastening Methods: Fasten base layers and face layers separately to supports with screws.
- 3.4 INSTALLING TRIM ACCESSORIES
- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
  - B. Control Joints: Install control joints at locations indicated on Drawings, indicated above, or as recommended by the manufacturer.
  - C. Interior Trim: Install in the following locations:
    1. Cornerbead: Use at outside corners.
- 3.5 FINISHING GYPSUM BOARD
- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
  - B. Prefill open joints, rounded or beveled edges, and damaged surface areas.
  - C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
  - D. At expansion joints seal joints with sealant unless otherwise requested by the Architect.
  - E. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
    1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
    2. Level 5: At panel surfaces that will be exposed to view unless otherwise indicated.
      - a. Primer and its application to surfaces are specified in other Division 9 Sections.
- 3.6 APPLYING TEXTURE FINISHES
- A. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.
  - B. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture free of starved spots or other evidence of thin application or of application patterns.
  - C. Prevent texture finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If, despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray to prevent damage according to texture-finish manufacturer's written recommendations.
- 3.7 PROTECTION
- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
  - B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
  - C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
    1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.  
Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration. - END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 9 – FINISHES

## SECTION 092900 - HISTORIC TREATMENT OF PLASTER

PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Repair and replacement of historic interior and exterior lime plaster.
2. Repair and replacement of interior gypsum plaster.

## B. Related Requirements:

1. Section 09991 "Historic Treatment of Plain Painting" for paint removal, surface preparation for refinishing, and refinishing of historic plaster surfaces.

## 1.2 PREINSTALLATION MEETINGS

## A. Preinstallation Conference: Conduct conference at Project site.

1. Review minutes of Preliminary Historic Treatment Conference that pertain to historic treatment of plaster.
2. Review methods and procedures related to historic treatment of plaster.

## 1.3 ACTION SUBMITTALS

## A. Product Data: For each type of product.

## 1.4 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic plastering specialist with expertise in matching and performing the types of historic plasterwork repairs required. Experience only in installing and repairing new plasterwork, veneer plaster, or gypsum board is insufficient experience for historic treatment work.

PART 2 - PRODUCTS

## 2.1 LIME-PLASTER MATERIALS

## A. Hydrated Lime: ASTM C 206, Type S

## B. Lime Putty: Slaked hydrated lime or factory-prepared lime putty according to ASTM C 1489].

## C. Sand Aggregates: ASTM C 897.

1. Finish-Coat Sand: Match size, texture, and gradation of existing sand as closely as possible. Blend several sands if necessary to achieve suitable match.

## D. Pigments for Colored Plaster: ASTM C 979/C 979M and having a record of satisfactory performance in lime plaster.

## E. Fiber: 1/2 to 1 inch (13 to 25 mm) in length; composed of cattle, goat, or hog hair or body hair from horses, natural linen, cotton, hemp, or jute fiber or alkali-resistant glass or polypropylene fiber; free of grease, waxes, and oils; and beaten well to separate fibers before blending into unfibered plaster material.

1. Proportion of Fiber to Unfibered Plaster Material: 3.5 oz./cu. ft. (3.5 g/L) of unfibered plaster material, adjusted as required to produce a well-fibered, cohesive, spreadable, stiff mix with fibers uniformly distributed.

## 2.2 GYPSUM PLASTER MATERIALS

## A. Gypsum Materials:

1. Lightweight Gypsum Ready-Mixed Plaster: ASTM C 28/C 28M, with mill-mixed perlite aggregate.
2. Gypsum Neat Plaster: ASTM C 28/C 28M for use with job-mixed aggregates.
3. Gypsum Wood-Fibered Plaster: ASTM C 28/C 28M.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

4. High-Strength Gypsum Neat Plaster: ASTM C 28/C 28M; with a minimum, average, dry compressive strength of 2800 psi (19 MPa) per ASTM C 472 for a mix of 100 lb (45 kg) of plaster and 2 cu. ft. (0.06 cu. m) of sand.
  5. Gypsum Gaging Plaster. ASTM C 28/C 28M.
  6. High-Strength Gypsum Gaging Plaster: ASTM C 28/C 28M; with a minimum, average, dry compressive strength of 5000 psi (34 MPa) per ASTM C 472 for a neat mix.
  7. Gypsum Ready-Mixed Finish Plaster: ASTM C 28/C 28M; manufacturer's standard, mill-mixed, gaged, interior finish.
  8. Gypsum Keene's Cement: ASTM C 61/C 61M.
  - B. Hydrated Lime: ASTM C 206, Type S or Type N.
  - C. Aggregates:
    1. Aggregate for Base-Coat Plasters: ASTM C 35, sand or perlite.
    2. Aggregate for Float Finishes: ASTM C 35, sand or perlite; graded per ASTM C 842.
  - D. Fiber: 1/2 to 1 inch (13 to 25 mm) in length; composed of cattle, goat, or hog hair or body hair from horses, free of grease, waxes, and oils; and beaten well to separate fibers before blending into unfibered plaster material.
    1. Proportion of Fiber to Unfibered Plaster Material: [3.5 oz./cu. ft. (3.5 g/L) of unfibered plaster material, adjusted as required to produce a well-fibered, cohesive, spreadable, stiff mix with fibers uniformly distributed.
  - E. Fabric Reinforcing: Coarse, open-weave, sackcloth made of natural linen, cotton, hemp, or jute; free of grease and oils or coarse, open-weave, alkali-resistant fiberglass or polypropylene fabric free of grease, waxes, and oils.
  - F. Bonding Compound: ASTM C 631.
- 2.3 LATH
- A. Wood Lath: [1/4 inch by 1-1/4 inch (6 mm by 32 mm)] or to match existing sound, straight-grained, wood strips.
  - B. Metal Lath:
    1. Expanded-Metal Lath: ASTM C 847, cold-rolled carbon-steel sheet, ASTM A 653/A 653M, G60 (Z180), hot-dip galvanized zinc coated.
      - a. Paper Backing: Kraft paper factory bonded to back of lath.
      - b. Diamond-Mesh Lath: Flat or Self-furring, 2.5 lb/sq. yd. (1.4 kg/sq. m) or 3.4 lb/sq. yd. (1.8 kg/sq. m) to match existing.
      - c. Flat Rib Lath: Rib depth of not more than 1/8 inch (3 mm), 2.75 lb/sq. yd. (1.5 kg/sq. m) 3.4 lb/sq. yd. (1.8 kg/sq. m) to match existing.
      - d. 3/8-Inch (9.5-mm) Rib Lath: 3.4 lb/sq. yd. (1.8 kg/sq. m) or 4 lb/sq. yd. (2.2 kg/sq. m) to match existing.
- 2.4 TRIM ACCESSORIES
- A. General: According to ASTM C 1063 for lime plaster and ASTM C 841 for gypsum plaster; coordinate depth of trim and accessories with thicknesses and number of plaster coats required.
  - B. Metal Accessories: Select from the following to match treatment used in the balance of the existing building.
    1. Cornerite: Fabricated from expanded-metal lath with ASTM A 653/A 653M, G60 (Z180), hot-dip galvanized zinc coating.
    2. Striplath: Fabricated from expanded-metal lath with ASTM A 653/A 653M, G60 (Z180), hot-dip galvanized zinc coating.
    3. Cornerbeads: Fabricated from zinc or zinc-coated (galvanized) steel.
      - a. Small nose cornerbead with expanded flanges; use unless otherwise indicated.
      - b. Small nose cornerbead with perforated flanges; use on curved corners.
      - c. Small nose cornerbead with expanded flanges reinforced by perforated stiffening rib; use on columns and for finishing unit masonry corners.
      - d. Bull nose cornerbead, radius of 3/4 inch (19 mm) minimum, with expanded flanges; use at locations indicated on Drawings.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

4. Casing Beads: Fabricated from zinc or zinc-coated galvanized steel; square-edged style; with expanded flanges.
5. Control Joints: Fabricated from zinc or zinc-coated (galvanized) steel; one-piece-type, folded pair of unperforated screeds in M-shaped configuration; with perforated flanges and removable protective tape on plaster face of control joint.
6. Expansion Joints: Fabricated from zinc or zinc-coated (galvanized) steel; folded pair of unperforated screeds in M-shaped configuration; with expanded flanges.
7. Two-Piece Expansion Joints: Fabricated from zinc or zinc-coated (galvanized) steel; formed to produce slip-joint and square-edged reveal that is adjustable from 1/4 to 5/8 inch (6 to 16 mm) wide; with perforated flanges.

**2.5 MISCELLANEOUS MATERIALS**

- A. Water for Mixing and Finishing Plaster: Potable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.
- B. Fasteners for Attaching Lath to Substrates:
  1. For Lime Plaster: ASTM C 1063.
  2. For Gypsum Plaster: ASTM C 841.
  3. For Wood Lath: ASTM C 841 requirements for wood-floor-runner or wood-furring fasteners unless otherwise indicated on Drawings.
- C. Wire Ties: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, not less than 0.0475-inch (1.21-mm) diameter, unless otherwise indicated.

**PART 3 - EXECUTION****3.1 HISTORIC TREATMENT OF PLASTER, GENERAL**

- A. General: In treating historic plaster, disturb it as minimally as possible and as follows unless otherwise indicated:
  1. Dismantle loose, damaged, or deteriorated plaster, lath, and support systems that cannot be repaired.
  2. Verify that substrate surface conditions are suitable for repairs.
  3. Provide lath, furring, and support systems for plaster included in the work of this Section.
  4. Replace lost details in new, wet-applied and cast plaster that replicate existing or indicated plaster configurations.
  5. Leave repaired plasterwork in proper condition for painting or applying other finishes as indicated.
  6. Install temporary protective measures to protect historic surfaces that shall be treated later.
- B. Illumination: Perform plastering work with adequate, uniform illumination that does not distort the flatness or curvature of surfaces.

**3.2 PLASTER REMOVAL AND REPLACEMENT, GENERAL**

- A. Dismantle plaster that is damaged or deteriorated to the limits indicated. Carefully dismantle areas along straight edges that lie over supports, without damaging surrounding plasterwork.
- B. Maintain lath and supporting members in an undamaged condition so far as practicable. Dismantle damaged lath and supports that cannot be repaired or resecured and replace with new work of same type.
- C. Do not deviate more than plus or minus 1/8 inch in 10 feet (3 mm in 3 m) from a true plane in finished plaster surfaces, as measured by a 10-foot (3-m) straightedge placed on surface.
- D. Clean substrate surfaces to remove grease, waxes, oils, waterborne staining, debris, and other foreign matter and deposits that could impair bond with repair material.
- E. Wet wood lath, masonry, and concrete bases before plaster application. Keep substrate damp to the touch but without visible water droplets.
- F. Wet remaining plaster abutting the replacement plaster before installing new plasterwork.
- G. Finish plaster flush with metal frames and other built-in metal items or accessories that act as a plaster ground unless otherwise indicated. Where casing bead does not terminate plaster at metal frame, cut base coat free from metal frame before plaster sets and groove finish coat at junctures with metal.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- H. Provide plaster surfaces that are ready to receive field-applied finishes indicated.

**3.3 FLAT LIME-PLASTER REMOVAL AND REPLACEMENT**

- A. General: Dismantle deteriorated plaster to existing sound plaster within the construction area of the building. Generally, where deteriorated plaster extends into areas beyond the construction area, the removal of plaster should be stopped at the project boundary. If unstable plaster is present which will present a hazard to building occupants or operations, the plasterer shall barricade the area and notify the project Superintendent immediately. The Superintendent will instruct the Plasterer as to how to proceed with repairs of the affected area. The Superintendent will notify the Architect of the conditions.
- B. Lime-Plaster Base Coats:
1. Scratch Coat: 1 part lime putty, 2-1/2 parts base-coat sand or 1 part lime putty, 2-1/2 parts base-coat sand, and fiber, or as required to match existing conditions. Add hair fiber to mix and evenly distribute it without clumps just before spreading.
  2. Brown Coat: 1 part lime putty, 3 parts base-coat sand or as required to match existing conditions.
- C. Lime-Plaster Finish Coats:
1. Finish-Coat Mix for Smooth-Troweled Finish: As required to match finish of design reference sample, 3 parts lime putty, 1 part finish-coat sand or as modified to match existing adjacent surface.
  2. Finish-Coat Mix for Smooth-Float Finish: As required to match finish of design reference sample, 1 part lime putty, 1 part finish-coat sand, or as modified to match existing adjacent surfaces.
  3. Finish-Coat Mix for Sandy Float Finish: As required to match finish of design reference sample, 1 part lime putty, 3 parts finish-coat sand or as required to match existing adjacent finish.
- D. Lime-Plaster Finishes: Plasterer shall field verify conditions of the existing sound plaster in the building and select one of the following:
1. Provide smooth-troweled finish [unless otherwise indicated] [where indicated] <Insert locations>. Apply in [one layer] [two layers] [three layers] <Insert quantity> totaling [1/16 inch (2 mm)] [1/8 inch (3 mm)] [3/16 inch (5 mm)] thick.
  2. Provide smooth-float finish [unless otherwise indicated] [where indicated] <Insert locations>. Apply in [one layer] [two layers] [three layers] <Insert quantity> totaling [1/16 inch (2 mm)] [1/8 inch (3 mm)] [3/16 inch (5 mm)] thick.
  3. Provide sandy-float finish [unless otherwise indicated] [where indicated] <Insert locations>. Apply in [one layer] [two layers] [three layers] <Insert quantity> totaling [1/16 inch (2 mm)] [1/8 inch (3 mm)] [3/16 inch (5 mm)] thick.
- E. Hairline cracking within the plaster or plaster separation at edge of a replacement is unacceptable. Completely dismantle such work and reinstall or repair as a crack repair.

**3.4 FLAT GYPSUM-PLASTER REMOVAL AND REPLACEMENT**

- A. General: Dismantle deteriorated plaster to existing sound plaster within the construction area of the building. Generally, where deteriorated plaster extends into areas beyond the construction area, the removal of plaster should be stopped at the project boundary. If unstable plaster is present which will present a hazard to building occupants or operations, the plasterer shall barricade the area and notify the project Superintendent immediately. The Superintendent will instruct the Plasterer as to how to proceed with repairs of the affected area. The Superintendent will notify the Architect of the conditions. Use replacement plaster mixes of gypsum, lime, and aggregate; and application according to ASTM C 842 unless otherwise indicated.
- B. Bonding Compound: Apply on unit masonry and concrete plaster bases.
- C. Gypsum-Plaster Base Coats:
1. Base Coats over Wood Lath: Gypsum neat plaster with job-mixed sand and fiber, wood-fibered plaster with job-mixed sand, or lightweight ready-mixed plaster with fiber as required to match existing sound plaster conditions and finishes.
  2. Base Coats over Expanded-Metal Lath: High-strength gypsum, gypsum neat plaster with job-mixed sand for scratch and brown coats.
  3. Base Coats over Expanded-Metal Lath:
    - a. Scratch Coat: Gypsum wood-fibered plaster; neat or with job-mixed sand.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- b. Brown Coat: Gypsum wood-fibered plaster with job-mixed sand, neat plaster with job-mixed sand, lightweight ready-mixed plaster, or neat plaster with job-mixed perlite.
    - 4. Base Coats over Unit Masonry: Gypsum wood-fibered plaster with job-mixed sand, neat plaster with job-mixed sand, lightweight ready-mixed plaster or other mixture as required to match conditions of existing adjacent sound plaster.
    - 5. Base-Coat Mix over Monolithic Concrete: Gypsum neat plaster with job-mixed sand or other mixture to match conditions of existing adjacent sound plaster.
  - D. Gypsum-Plaster Finish Coats:
    - 1. Finish-Coat Mix for Smooth-Troweled Finishes: Gypsum gaging plaster, gypsum ready-mixed finish plaster, high-strength gypsum gaging plaster, or gypsum Keene's cement or other mix as required to match existing adjacent sound plaster.
    - 2. Finish-Coat Mix for Float Finishes: Gypsum gaging plaster, Gypsum Keene's cement, or other mixture to match existing sound adjacent plaster.
    - 3. Finish-Coat Mix for Textured Finishes: Only if patching existing textured plaster wall - Gypsum ready-mixed finish plaster or other mixture to match existing sound adjacent plaster.
  - E. Gypsum-Plaster Finishes: Match finish(es) of design reference sample(s) or conditions of adjacent sound plaster.
- 3.5 REMOVING AND INSTALLING LATH AND ACCESSORIES
- A. General: Dismantle existing plaster as necessary to expose deteriorated or rusted lath, wire ties, and support system, back to firm substrates and supports. Repair with new materials, well secured to existing lath in good condition and to building structure.
    - 1. Cutting: Cut lath so it can be taken out completely from one support to the next. Cut to avoid cracking surrounding plaster.
    - 2. Cut out existing base-coat plaster beyond the edges of the new lath to permit new plaster to extend onto the old lath. Then step subsequent plaster coats to permit new plaster to extend over the old material.
    - 3. Fasten new lath to support system and to good existing lath. Wire tie at least every 6 inches (150 mm).
    - 4. Install new lath according to ASTM C 1063 for lime plaster and ASTM C 841 for gypsum plaster].
  - B. Wood Lath: Install wood lath in same size, orientation and spacing as remaining wood lath and with lath ends supported by furring or framing. Stagger ends of adjacent laths over different supports, not aligned, and secure with fasteners at each end and spaced a maximum of 24 inches (610 mm) o.c. into supports.
  - C. Metal Lath: Install according to ASTM C 1063 for lime plaster and ASTM C 841 for gypsum plaster.
- 3.6 PATCH-TYPE REPAIR
- A. General: Patch voids, fractured surfaces, and crushed areas in otherwise sound plaster that are larger than cracks on walls and ceilings in the construction area. Not all such areas are noted on the construction drawings.
    - 1. Inspect for deterioration of supporting plaster and lath, and repair or replace deteriorated material as required for a sound substrate.
    - 2. Rake perimeter of hole to sound plaster, and slightly undercut existing plaster to enable replacement plaster to tuck behind existing plaster.
    - 3. Replace missing lath in kind. Bridge gaps in wood lath with expanded-metal lath, overlapping wood by 6 inches (150 mm) and fastening them together.
    - 4. Clean hole to remove loose materials and other foreign matter and deposits that could impair bond with repair material.
    - 5. Wet substrate to damp condition, but without visible water droplets, then install patch material to original profiles.
  - B. Lime-Plaster Mix: 3 parts lime putty, 1 part gypsum neat plaster or gypsum gaging plaster, 1 part lime putty, 3 parts sand, 1 part lime putty, 2-1/2 parts sand, applied in two coats with fiber in first coat or repair mix demonstrated in mockup. Add hair fiber to mix and evenly distribute it without clumps just before spreading.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Gypsum-Plaster Mix: Gypsum gaging plaster gypsum neat plaster with job-mixed sand gypsum neat plaster with job-mixed sand, applied in two coats with fiber in first coat, or repair mix demonstrated in mockup. Add hair fiber to mix and evenly distribute it without clumps just before spreading.
- D. Finishing: Finish flat surfaces flush and with same texture as adjacent existing plaster. For molded plaster shapes, tool surface to restore the sharp edges and the shape of the molded shape to original contours.
- E. Hairline cracking within the plaster or plaster separation at edge of a patch is unacceptable. Completely dismantle such work and reinstall or repair.

**3.7 HAIRLINE CRACK REPAIR**

- A. General: Repair cracks 1/32 inch (1 mm) in width or narrower in otherwise sound plaster on walls and ceilings in the construction area. Not all cracks are identified in the construction documents.
- B. Existing Topcoat: Open crack in existing topcoat to at least 1/8 inch (3 mm) in width and check for broken fiber reinforcement in base coats.
- C. Existing Base Coats: Do not open crack wider in existing base coats unless inspection or other indication shows that the fiber reinforcement has broken. Where inspections indicate failure of fiber reinforcement, proceed as for a large crack repair, but only for length of crack with broken fiber reinforcement.
- D. Clean out crack to remove loose materials and other foreign matter and deposits that could impair bond with repair material.
- E. Wet substrate to damp condition, but without visible water droplets.
- F. Force finish-coat plaster without aggregate or repair material demonstrated in mockup into crack, filling crack to original plaster profile.
- G. Finishing: Finish flat surfaces flush and with same texture as adjacent existing plaster. For molded plaster shapes, tool surface to restore the sharp edges and the shape of the molded shape to original contours.

**3.8 LARGE CRACK REPAIR**

- A. General: Repair cracks over 1/32 inch (1 mm) in width in otherwise sound plaster on walls and ceilings in the construction area. Not all cracks are identified in the construction documents.
- B. Open crack to at least 1/8 inch (3 mm) in width and full depth with V-groove tool, and check for bond separation or lath deterioration.
- C. Abrade side surfaces of crack and remove inner crack debris by gouging (keying) the inside area of the crack.
- D. Clean out crack to remove loose materials and other foreign matter and deposits that could impair bond with repair material.
- E. Wet substrate to damp condition, but without visible water droplets.
- F. Install finish-coat plaster or repair material demonstrated in mockup to fill crack to original plaster profile.
- G. Finishing: Finish flat surfaces flush and with same texture as adjacent existing plaster. For molded plaster shapes, tool surface to restore the sharp edges and the shape of the molded shape to original contours.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 09 – FINISHES

## SECTION 093013 - CERAMIC TILING

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Ceramic floor tile.
  - 2. Tile backing panels.
  - 3. Metal edge strips.

## 1.3 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. ANSI A108 Series: ANSI A108.01, ANSI A108.02, ANSI A108.1A, ANSI A108.1B, ANSI A108.1C, ANSI A108.4, ANSI A108.5, ANSI A108.6, ANSI A108.8, ANSI A108.9, ANSI A108.10, ANSI A108.11, ANSI A108.12, ANSI A108.13, ANSI A108.14, ANSI A108.15, ANSI A108.16, and ANSI A108.17, which are contained in its "Specifications for Installation of Ceramic Tile."
- C. Module Size: Actual tile size plus joint width indicated.
- D. Face Size: Actual tile size, excluding spacer lugs.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations of each type of tile and tile pattern. Show widths, details, and locations of expansion, contraction, control, and isolation joints in tile substrates and finished tile surfaces.
- C. Samples for Initial Selection: For tile, grout, and accessories involving color selection.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

## 1.6 FIELD CONDITIONS

- A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Source Limitations for Tile: Obtain tile from single source or producer.
  - 1. Obtain tile of each type and color or finish from same production run and of consistent quality in appearance and physical properties for each contiguous area.
- B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from single manufacturer and each aggregate from single source or producer.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

1. Obtain setting and grouting materials, except for unmodified Portland cement and aggregate, from single manufacturer.
- C. Source Limitations for Other Products: Obtain each of the following products specified in this Section from a single manufacturer:
  1. Metal edge strips.
- 2.2 PRODUCTS, GENERAL
  - A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
    1. Provide tile complying with Standard grade requirements unless otherwise indicated.
  - B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.
  - C. Factory Blending: For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.
  - D. Mounting: For factory-mounted tile, provide back- or edge-mounted tile assemblies as standard with manufacturer unless otherwise indicated.
- 2.3 TILE PRODUCTS
  - A. Ceramic Tile Type: Hexagon colorbody porcelain mosaic floor tile.
    1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
      - a. Daltile, Keystones
    2. Face Size: 1" hexagon tile, pre-mounted (dot-mount) on 12" x 22 5/8" sheet.
    3. Thickness: 1/4"
    4. Tile Colors: Arctic White D617 and Castlerock D618 in pattern DK16
    5. Tile Pattern: Pre-mounted from factory in pattern DK16
- 2.4 TILE BACKING PANELS
  - A. Fiber-Cement Backer Board: ASTM C 1288, in maximum lengths available to minimize end-to-end butt joints.
    1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
      - a. CertainTeed Corporation.
      - b. James Hardie Building Products, Inc.
    2. Thickness: 1/2 inch (12.7 mm) or as recommended by manufacturer.
- 2.5 SETTING MATERIALS
  - A. Modified Dry-Set Mortar (Thinset): ANSI A118.4.
    1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
      - a. Bostik, Inc.
      - b. MAPEI Corporation.
    2. Provide prepackaged, dry-mortar mix containing dry, redispersible, vinyl acetate or acrylic additive to which only water must be added at Project site.
    3. Provide prepackaged, dry-mortar mix combined with acrylic resin liquid-latex additive at Project site.
    4. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.4.
- 2.6 GROUT MATERIALS
  - A. Water-Cleanable Epoxy Grout: ANSI A118.3.
    1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- a. Bostik, Inc.
  - b. MAPEI Corporation.
- 2. Grout Color: As selected by the Architect from manufacturers full range.
- 2.7 MISCELLANEOUS MATERIALS
  - A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
  - B. Metal Edge Strips: Angle or L-shaped, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; stainless-steel, ASTM A 666, 300 Series exposed-edge material.
    - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      - a. Blanke Corporation.
      - b. Ceramic Tool Company, Inc.
      - c. Schluter Systems L.P.
  - C. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.
- 2.8 MIXING MORTARS AND GROUT
  - A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
  - B. Add materials, water, and additives in accurate proportions.
  - C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

**PART 3 - EXECUTION**

- 3.1 EXAMINATION
  - A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
    - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
    - 2. Verify that concrete substrates for tile floors installed with thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
      - a. Verify that surfaces that received a steel trowel finish have been mechanically scarified.
      - b. Verify that protrusions, bumps, and ridges have been removed by sanding or grinding.
    - 3. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed.
    - 4. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
  - B. Proceed with installation only after unsatisfactory conditions have been corrected.
- 3.2 PREPARATION
  - A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
  - B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot (1:50) toward drains.
  - C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

**3.3 CERAMIC TILE INSTALLATION**

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
  - 1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
    - a. Tile floors in wet areas.
    - b. Tile floors consisting of tiles 8 by 8 inches (200 by 200 mm) or larger.
    - c. Tile floors consisting of rib-backed tiles.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Where accent tile differs in thickness from field tile, vary setting-bed thickness so that tiles are flush.
- F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
  - 1. For tile mounted in sheets, make joints between tile sheets same width as joints within tile sheets so joints between sheets are not apparent in finished work.
  - 2. Where adjoining tiles on floor, base, walls, or trim are specified or indicated to be same size, align joints.
  - 3. Where tiles are specified or indicated to be whole integer multiples of adjoining tiles on floor, base, walls, or trim, align joints unless otherwise indicated.
- G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
  - 1. Glazed wall and floor tile: 3/16 inch.
- H. Lay out tile wainscots to dimensions indicated or to next full tile beyond dimensions indicated.
- I. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
  - 1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.
- J. Metal Edge Strips: Install where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with or below top of tile and no threshold is indicated.

**3.4 TILE BACKING PANEL INSTALLATION**

- A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated. Use modified dry-set mortar for bonding material unless otherwise directed in manufacturer's written instructions.

**3.5 ADJUSTING AND CLEANING**

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
  - 1. Remove grout residue from tile as soon as possible.
  - 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3.6 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 9 – FINISHES

## SECTION 099110 - EXTERIOR PAINTING

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
  - 1. Steel.
  - 2. Cement Board Siding.
  - 3. Concrete.
  - 4. Galvanized Metal.
  - 5. Wood.
- B. Related Requirements:
  - 1. Division 9 Section "Interior Painting" for surface preparation and the application of paint systems on interior substrates.

## 1.3 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- E. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
  - 1. Submit Samples on rigid backing, 8 inches square.
  - 2. Step coats on Samples to show each coat required for system.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area.

## 1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

## 1.7 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- and 95 deg F.
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

**PART 2 – PRODUCTS****2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Diamond Vogel Paints.
  2. PPG Architectural Finishes, Inc.
  3. Sherwin-Williams Company (The).
  4. Pratt and Lambert
- B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles for the paint category indicated.

**2.2 PAINT, GENERAL**

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- B. Material Compatibility:
1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- C. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction and Iowa Green Streets Criteria.
- D. Colors: See drawings.

**2.3 WATER-BASED PAINTS (Product Names and Numbers are Sherwin Williams unless otherwise noted)**

- A. Latex, Exterior Semi-Gloss (Gloss Level 5):
1. Primer: Exterior Latex.
  2. Secondary Coat: Duration Exterior Acrylic Latex.
  3. Final Coat: Duration Exterior Acrylic Latex.

**2.4 SOLVENT-BASED PAINTS**

- A. Alkyd, Exterior, Semi-Gloss (Gloss Level 5):
1. Primer: Enamel Primer.
  2. Secondary Coat: Pro Industrial, Industrial Enamel 100.
  3. Final Coat: Pro Industrial, Industrial Enamel 100.

**2.5 SOURCE QUALITY CONTROL**

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure:
1. Owner will engage the services of a qualified testing agency to sample paint materials. Contractor will be notified in advance and may be present when samples are taken. If paint materials have already been delivered to Project site, samples may be taken at Project site. Samples will be identified, sealed, and certified by testing agency.
  2. Testing agency will perform tests for compliance with product requirements.
  3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Wood: 15 percent.
  - 2. Concrete: 12 percent.
  - 3. Fiber-Cement Board: 12 percent.
  - 4. Masonry (Clay and CMUs): 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

**3.2 PREPARATION**

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
  - 1. SSPC-SP 2, "Hand Tool Cleaning."
  - 2. SSPC-SP 3, "Power Tool Cleaning."
  - 3. SSPC-SP 7/NACE No. 4, "Brush-off Blast Cleaning."
  - 4. SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- H. Wood Substrates:
  - 1. Scrape and clean knots. Before applying primer, apply coat of knot sealer recommended in writing by topcoat manufacturer for exterior use in paint system indicated.
  - 2. Sand surfaces that will be exposed to view, and dust off.
  - 3. Prime edges, ends, faces, undersides, and backsides of wood.
  - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

**3.3 APPLICATION**

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Manual."
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation,

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- paint surfaces behind permanently fixed items with prime coat only.
- 3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
- 4. Paint entire exposed surface of window frames and sashes.
- 5. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- 6. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint undercoats same color as topcoat, but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- 3.4 CLEANING AND PROTECTION
  - A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
  - B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
  - C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
  - D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.
- 3.5 EXTERIOR PAINTING SCHEDULE
  - A. Concrete: Including cementitious siding, common brick, concrete masonry units, and concrete
    - 1. Latex System:
      - a. Prime Coat: Primer, acrylic masonry primer
      - b. Intermediate Coat: Exterior latex, satin finish
      - c. Topcoat: Same as above
  - B. Metal: Aluminum, Galvanized
    - 1. Latex Systems:
      - a. First Coat: Exterior latex, satin finish.
      - b. Topcoat: Exterior latex, satin finish
  - C. Metal: Ferrous metals including steel & iron
    - 1. Acrylic Systems:
      - a. First Coat: Exterior steel primer.
      - b. Intermediate Coat: Exterior acrylic, semi-gloss
      - c. Topcoat: Exterior acrylic, semi-gloss
  - D. Cement Board Substrates: Including siding and trim.
    - 1. Latex System:
      - a. Prime Coat: Primer, latex for exterior wood / cement board siding.
      - b. Intermediate Coat: Latex, exterior, matching topcoat.
      - c. Topcoat: Latex, exterior satin finish
  - E. Wood: Including windows, doors, trim, and siding:
    - 1. Latex System:
      - a. Prime Coat: Exterior latex wood primer
      - b. Intermediate Coat: Exterior latex, satin finish
      - c. Topcoat: same as above

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 09 – FINISHES

## SECTION 09912 - INTERIOR PAINTING

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates:
  - 1. Wood.
  - 2. Gypsum board.
  - 3. Plaster.
  - 4. Acoustic tiles.
- B. Related Requirements:
  - 1. Division 5 Sections for shop priming of metal substrates with primers specified in this Section.
  - 2. Division 6 Sections for shop priming carpentry with primers specified in this Section.
  - 3. Division 8 Sections for factory priming windows and doors with primers specified in this Section.
  - 4. Division 9 painting Sections for high-performance and special-use coatings.
  - 5. Division 9 Section "Exterior Painting" for surface preparation and the application of paint systems on exterior substrates.
  - 6. Division 9 Section "Wood Stains and Transparent Finishes" for surface preparation and the application of wood stains and transparent finishes on interior wood substrates.

## 1.3 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples for Verification: For each type of paint system and in each color and gloss of topcoat.
  - 1. Submit Samples on rigid backing, 8 inches square.
  - 2. Step coats on Samples to show each coat required for system.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area.
- C. Product List: For each product indicated, include the following:
  - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
  - 2. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.
  - 3. VOC content.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01****1.5 MAINTENANCE MATERIAL SUBMITTALS**

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

**1.7 FIELD CONDITIONS**

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

**PART 2 – PRODUCTS****2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Benjamin Moore & Co.
  - 2. Diamond Vogel Paints.
  - 3. PPG Architectural Finishes, Inc.
  - 4. Sherwin-Williams Company (The).
  - 5. Pratt and Lambert
- B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles for the paint category indicated.

**2.2 PAINT, GENERAL**

- A. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and Iowa Green Streets.
  - 1. Flat Paints and Coatings: 50 g/L.
  - 2. Nonflat Paints and Coatings: 100 g/L.
  - 3. Dry-Fog Coatings: 400 g/L.
  - 4. Primers, Sealers, and Undercoaters: 100 g/L.
  - 5. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
  - 6. Zinc-Rich Industrial Maintenance Primers: 340 g/L.
  - 7. Pretreatment Wash Primers: 420 g/L.
  - 8. Floor Coatings: 100 g/L.
  - 9. Shellacs, Clear: 730 g/L.
  - 10. Shellacs, Pigmented: 550 g/L.
- C. Colors: See drawings. Custom colors for matching existing interior finishes as required.
- D. Manufacturers: All paint numbers / names listed reference Sherwin Williams unless otherwise noted.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- 2.3 PRIMERS/SEALERS
  - A. Primer Sealer, Latex, Interior:
    - 1. ProMar 200 wall primer.
- 2.4 WATER-BASED PAINTS
  - A. Latex, Interior, (Gloss Level 3):
    - 1. ProMar 200 interior latex.
- 2.5 SOLVENT-BASED PAINTS
  - A. Alkyd, Quick Dry, Semi-Gloss (Gloss Level 5):
    - 1. ProMar 200 Interior Waterbased Acrylic-Alkyd.
- 2.6 SOURCE QUALITY CONTROL
  - A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure:
    - 1. Owner will engage the services of a qualified testing agency to sample paint materials. Contractor will be notified in advance and may be present when samples are taken. If paint materials have already been delivered to Project site, samples may be taken at Project site. Samples will be identified, sealed, and certified by testing agency.
    - 2. Testing agency will perform tests for compliance with product requirements.
    - 3. Owner may direct Contractor to stop applying coatings if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

**PART 3 – EXECUTION**

- 3.1 EXAMINATION
  - A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
  - B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
    - 1. Concrete: 12 percent.
    - 2. Fiber-Cement Board: 12 percent.
    - 3. Masonry (Clay and CMUs): 12 percent.
    - 4. Wood: 15 percent.
    - 5. Gypsum Board: 12 percent.
    - 6. Plaster: 12 percent.
  - C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
  - D. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
  - E. Proceed with coating application only after unsatisfactory conditions have been corrected.
    - 1. Application of coating indicates acceptance of surfaces and conditions.
- 3.2 PREPARATION
  - A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
  - B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
    - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
  - C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceed that permitted in manufacturer's written instructions.
- E. Wood Substrates:
1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
  2. Sand surfaces that will be exposed to view, and dust off.
  3. Prime edges, ends, faces, undersides, and backsides of wood.
  4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- F. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.

**3.3 APPLICATION**

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
1. Use applicators and techniques suited for paint and substrate indicated.
  2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
  3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
  4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
  5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting the following new or repaired work unless noted otherwise, including but not limited to:
- a. Wood trim and paneling.
  - b. Gypsum board and plaster.
  - c. Other items as directed by Architect.

**3.4 FIELD QUALITY CONTROL**

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
1. Contractor shall touch up and restore painted surfaces damaged by testing.
  2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

**3.5 CLEANING AND PROTECTION**

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

**3.6 INTERIOR PAINTING SCHEDULE**

- A. Wood Substrates:
  - 1. Low-Odor/VOC Latex System:
    - a. Prime Coat: Primer sealer, latex, interior.
    - b. Intermediate Coat: Latex, interior, low odor/VOC matching topcoat.
    - c. Topcoat: Latex, interior, low odor/VOC (Gloss Level 3).
- B. Gypsum Board Substrates:
  - 1. Low-Odor/VOC Latex System:
    - a. Prime Coat: Primer sealer, latex, interior.
    - b. Intermediate Coat: Latex, interior, low odor/VOC matching topcoat.
    - c. Topcoat: Latex, interior, low odor/VOC (Gloss Level 3).

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 09 – FINISHES

## SECTION 099310 - WOOD STAINS AND TRANSPARENT FINISHES

PART 1 – GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes surface preparation and application of wood finishes on the following substrates:
  - 1. Exterior Substrates:
    - a. Wood based panel products.
  - 2. Interior Substrates:
    - a. Dressed lumber (finish carpentry or woodwork).
- B. Related Requirements:
  - 1. Division 9 Section "Exterior Painting"
  - 2. Division 9 Section "Interior Painting"

## 1.3 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- D. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- E. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include preparation requirements and application instructions.
- B. Samples for Verification: For each type of finish system and in each color and gloss of finish indicated.
  - 1. Submit Samples on representative samples of actual wood substrates, 8 inches long.
  - 2. Label each Sample for location and application area.
- C. Product List: For each product indicated, include the following:
  - 1. Cross-reference to finish system and locations of application areas. Use same designations indicated on Drawings and in schedules.
  - 2. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the product proposed for use highlighted.
  - 3. VOC content.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

## 1.6 FIELD CONDITIONS

- A. Apply finishes only when temperature of surfaces to be finished and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply finishes when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- C. Do not apply exterior finishes in snow, rain, fog, or mist.

**PART 2 – PRODUCTS****2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Benjamin Moore & Co.
  2. Diamond Vogel Paints.
  3. PPG Architectural Finishes, Inc.
  4. Sherwin-Williams Company (The).
- B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles for the category indicated.

**2.2 MATERIALS, GENERAL**

- A. Material Compatibility:
1. Provide materials for use within each finish system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  2. For each coat in a finish system, provide products recommended in writing by manufacturers of topcoat for use in finish system and on substrate indicated.
- B. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and Iowa Green Streets Criteria.
1. Clear Wood Finishes, Varnishes: VOC not more than 350 g/L.
  2. Shellacs, Clear: VOC not more than 730 g/L.
  3. Stains: VOC not more than 250 g/L.
  4. Primers, Sealers, and Undercoaters: 200 g/L.
- C. Low-Emitting Materials: Interior stains and finishes shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- D. Stain Colors: As indicated in a color schedule.
- E. Product Manufacturers: Products Listed are Sherwin Williams unless otherwise noted.

**2.3 WOOD FILLERS**

- A. Wood Filler Paste:
1. Sherwood Natural Filler.

**2.4 STAINS**

- A. Stain, Semi-Transparent, for Interior Wood:
1. Wood Classics Interior Oil Stain.

**2.5 POLYURETHANE VARNISHES**

- A. Varnish, Interior, Polyurethane, Oil-Modified, Satin (Gloss Level 4):
1. Wood Classics Waterborne Polyurethane Varnish.

**PART 3 – EXECUTION****3.1 EXAMINATION**

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Interior Wood Substrates: 13 percent, when measured with an electronic moisture meter.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

primers.

- D. Proceed with finish application only after unsatisfactory conditions have been corrected.
  - 1. Beginning finish application constitutes Contractor's acceptance of substrates and conditions.

**3.2 PREPARATION**

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and finishing.
  - 1. After completing finishing operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean and prepare surfaces to be finished according to manufacturer's written instructions for each particular substrate condition and as specified.
  - 1. Remove dust, dirt, oil, and grease by washing with a detergent solution; rinse thoroughly with clean water and allow to dry. Remove grade stamps and pencil marks by sanding lightly. Remove loose wood fibers by brushing.
  - 2. Remove mildew by scrubbing with a commercial wash formulated for mildew removal and as recommended by stain manufacturer.
- D. Exterior Wood Substrates:
  - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
  - 2. Prime edges, ends, faces, undersides, and backsides of wood.
    - a. For solid hide stained wood, stain edges and ends after priming.
    - b. For varnish-coated stained wood, stain edges and ends and prime with varnish. Prime undersides and backsides with varnish.
  - 3. Countersink steel nails, if used, and fill with putty or plastic wood filler tinted to final color. Sand smooth when dried.
- E. Interior Wood Substrates:
  - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
  - 2. Apply wood filler paste to open-grain woods, as defined in "MPI Architectural Painting Specification Manual," to produce smooth, glasslike finish.
  - 3. Sand surfaces that will be exposed to view and dust off.
  - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

**3.3 APPLICATION**

- A. Apply finishes according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
  - 1. Use applicators and techniques suited for finish and substrate indicated.
  - 2. Finish surfaces behind movable equipment and furniture same as similar exposed surfaces.
  - 3. Do not apply finishes over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- B. Apply finishes to produce surface films without cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other surface imperfections.

**3.4 CLEANING AND PROTECTION**

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing finish application, clean spattered surfaces. Remove spattered materials by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from finish application. Correct damage by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced finished wood surfaces.

**SPECIFICATIONS-**

**DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

3.5 WOOD-FINISH-SYSTEM SCHEDULE

- A. Exterior wood substrates, including doors.
  - 1. Varnish over Stain System, MPI EXT 6.3E:
    - a. Stain Coat: Stain, exterior, solvent-based, semi-transparent.
    - b. First Intermediate Coat: Varnish matching topcoat.
    - c. Second Intermediate Coat: Varnish matching topcoat.
    - d. Topcoat: Varnish, marine spar, exterior, gloss (MPI Gloss Level 7)
- B. Interior wood substrates, nontraffic surfaces, including wood trim, doors and windows.
  - 1. Polyurethane Varnish over Stain System:
    - a. Stain Coat: Stain, semi-transparent, for interior wood.
    - b. First Intermediate Coat: Polyurethane varnish matching topcoat.
    - c. Second Intermediate Coat: Polyurethane varnish matching topcoat.
    - d. Topcoat: Varnish, interior, polyurethane, oil-modified, satin (Gloss Level 4).

END OF SECTION

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

## DIVISION 9 – FINISHES

## SECTION 099910 - HISTORIC TREATMENT OF PLAIN PAINTING

PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes historic treatment of plain painting as follows:
  - 1. Removing existing paint.
  - 2. Repairing substrates.
- B. Related Requirements:
  - 1. Section 09911 "Exterior Painting"
  - 2. Section 09912 "Interior Painting"

## 1.2 DEFINITIONS

- A. Modern Paint Materials: Paint materials not designed to match historic paint formulations but that may be required to match historic paint colors.
- B. Plain Painting: For historic treatment, this means painting that requires attention to historic treatment requirements, but no special, decorative or artistic painting skill.

## 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site
  - 1. Review methods and procedures related to historic treatment of painting.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

## 2.1 PREPARATORY CLEANING MATERIALS

- A. Water: Potable.
- B. Hot Water: Water heated to a temperature of 140 to 160 deg F.
- C. Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate (TSPP), 1/2 cup of laundry detergent that contains no ammonia, 5 quarts of 5 percent sodium hypochlorite bleach, and 15 quarts of warm water for every 5 gal. of solution required.
- D. Mildewcide: Commercial proprietary mildewcide or a job-mixed solution prepared by mixing 1/3 cup of household detergent that contains no ammonia, 1 quart of 5 percent sodium hypochlorite bleach, and 3 quarts of warm water.
- E. Abrasives for Ferrous Metal Cleaning: Aluminum oxide paper, emery paper, fine steel wool, steel scrapers, and steel-wire brushes of various sizes.
- F. Rust Remover: Manufacturer's standard phosphoric acid-based gel formulation, also called "naval jelly," for removing corrosion from iron and steel.

## 2.2 PAINT REMOVERS

- A. Low-Odor, Solvent-Type Paste Paint Remover: Manufacturer's standard low-odor, water-rinsable, solvent-type paste, gel, or foamed emulsion formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project; and containing no methanol or methylene chloride.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. ABR Products, Inc.; ABR Citrus Paint Removers
    - b. Cathedral Stone Products, Inc.; S-301
    - c. Dumond Chemicals, Inc.; Smart Strip.
    - d. EaCo Chem, Inc.; InStrip.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- e. PROSOCO, Inc.; Enviro Klean SafStrip

**PART 3 - EXECUTION****3.1 HISTORIC TREATMENT OF PAINTING, GENERAL**

- A. Execution of the Work: In treating historic items, disturb them as minimally as possible and as follows:
1. Remove failed coatings and corrosion and repaint.
  2. Verify that substrate surface conditions are suitable for painting.
  3. Allow other trades to repair items in place and retain as much original material as possible before repainting.
  4. Install temporary protective measures to protect historic painted surfaces that shall be treated later.
- B. Mechanical Abrasion: Where mechanical abrasion is needed for the work, use only the gentlest mechanical methods, such as scraping and lightly hand sanding, that will not abrade softer substrates, reducing clarity of detail. Do not use abrasive methods such as rotary sanding, rotary wire brushing, or power tools except as indicated as part of the historic treatment program and as approved by Architect. Follow applicable safety guidelines for the identification of lead bearing finishes. Avoid dry sanding or processes that create dust in lead bearing substrates.
- C. Heat Processes: Do not use torches, heat guns, or heat plates without the specific written consent of the general contractor. Do not use on lead bearing surfaces.

**3.2 EXAMINATION**

- A. Examine substrates and conditions, with historic treatment specialist present, for compliance with requirements for maximum moisture content and other conditions affecting performance of painting work. Comply with paint manufacturer's written instructions for inspection.
- B. Maximum Moisture Content of Substrates: Do not begin application of coatings unless moisture content of exposed surface is below the maximum value recommended in writing by paint manufacturer and not greater than the following maximum values when measured with an electronic moisture meter appropriate to the substrate material:
1. Concrete: 12 percent.
  2. Gypsum Board: 12 percent.
  3. Gypsum Plaster: 12 percent.
  4. Masonry (Clay and CMU): 12 percent.
  5. Portland Cement Plaster: 12 percent.
  6. Wood: 15 percent.
- C. Alkalinity: Do not begin application of coatings unless surface alkalinity is within range recommended in writing by paint manufacturer. Conduct alkali testing with litmus paper on exposed plaster, cementitious, and masonry surfaces.

**3.3 PREPARATORY CLEANING**

- A. General: Use only the gentlest, appropriate method necessary to clean surfaces in preparation for painting. Clean all surfaces, corners, contours, and interstices.
- B. Detergent Cleaning: Wash surfaces by hand using clean rags, sponges, and bristle brushes. Scrub surface with detergent solution and bristle brush until soil is thoroughly dislodged and can be removed by rinsing. Use small brushes to remove soil from joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used and that surface remains wet. Rinse with water applied by clean rags or sponges.
- C. Solvent Cleaning: Use solvent cleaning to remove oil, grease, smoke, tar, and asphalt from painted or unpainted surfaces before other preparation work. Wipe surfaces with solvent using clean rags and sponges. If necessary, spot-solvent cleaning may be employed just prior to commencement of paint application, provided enough time is allowed for complete evaporation. Use clean solvent and clean rags for the final wash to ensure that all foreign materials have been removed. Do not use solvents, including primer thinner and turpentine, that leave residue.

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

- D. Mildew: Clean off existing mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. Rinse with water applied by clean rags or sponges.
- E. Chemical Rust Removal:
  - 1. Remove loose rust scale with approved abrasives for ferrous-metal cleaning.
  - 2. Apply rust remover with brushes or as recommended in writing by manufacturer.
  - 3. Allow rust remover to remain on surface for period recommended in writing by manufacturer or as determined by preconstruction testing. Do not allow extended dwell time.
  - 4. Wipe off residue with mineral spirits and either steel wool or soft rags, or clean with method recommended in writing by manufacturer to remove residue.
  - 5. Dry immediately with clean, soft cloths. Follow direction of grain in metal.
  - 6. Prime immediately to prevent rust. Do not touch cleaned metal surface until primed.
- F. Mechanical Rust Removal:
  - 1. Remove rust with approved abrasives for ferrous-metal cleaning. Clean to bright metal.
  - 2. Wipe off residue with mineral spirits and either steel wool or soft rags.
  - 3. Dry immediately with clean, soft cloths. Follow direction of grain in metal.
  - 4. Prime immediately to prevent rust. Do not touch cleaned metal surface until primed.

**3.4 PAINT REMOVAL**

- A. General: Remove paint where indicated. Where cleaning methods have been attempted and further removal of the paint is required because of incompatible or unsatisfactory surfaces for repainting, remove paint to extent required by conditions.
  - 1. Protect all adjacent surfaces that are not receiving paint remover.
  - 2. Brushes: Use brushes that are resistant to chemicals being used.
    - a. Metal Substrates: If using wire brushes on metal use brushes of same metal composition as metal being treated.
    - b. Wood Substrates: Do not use wire brushes.
  - 3. Spray Equipment: Use spray equipment that provides controlled application at volume and pressure indicated, measured at nozzle. Adjust pressure and volume to ensure that spray methods do not damage surfaces.
    - a. Equip units with pressure gages.
    - b. Unless otherwise indicated, hold spray nozzle at least 6 inches from surface and apply material in horizontal, back-and-forth sweeping motion, overlapping previous strokes to produce uniform coverage.
    - c. For chemical spray application, use low-pressure tank or chemical pump suitable for chemical indicated, equipped with nozzle having a cone-shaped spray.
    - d. For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
    - e. For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160 deg F at flow rates indicated.
- B. Paint Removal with Hand Tools: Remove paint manually using hand-held scrapers, wire brushes, sandpaper, and metallic wool as appropriate for the substrate material. Do not use other methods except as indicated as part of the historic treatment program and as approved by Architect.
- C. Paint Removal with Low-Odor, Solvent-Type Paste Paint Remover:
  - 1. Remove loose and peeling paint using water, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
  - 2. Apply thick coating of paint remover to dry, painted surface with natural-fiber cleaning brush, deep- nap roller, or large paintbrush. Apply in one or two coats according to manufacturer's written instructions.
  - 3. Allow paint remover to remain on surface for period recommended in writing by manufacturer or as determined by preconstruction testing.
  - 4. Rinse with cold or hot water applied by low or medium-pressure spray to remove chemicals and paint residue as recommended by the material manufacturer. Vary temperature and pressure according

**SPECIFICATIONS-****DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT  
ANAMOSA, IOWA  
ARCHITECT PROJECT #1919.01**

manufacturer's recommendations or in no recommendation is made begin with cold water on the lowest possible pressure and increase water temperature. Only after hot water is found to be ineffective should the water pressure be increased.

5. Use mechanical methods recommended in writing by manufacturer to remove chemicals and paint residue.
6. Repeat process if necessary to remove all paint.

**3.5 PAINT APPLICATION, GENERAL**

- A. Prepare surfaces to be painted according to the Surface-Preparation Schedule and with manufacturer's written instructions for each substrate condition.
- B. Apply a transition coat over incompatible existing coatings.
- C. Metal Substrate: Stripe paint corners, crevices, bolts, welds, and sharp edges before applying full coat. Apply two coats to surfaces that are inaccessible after completion of the Work. Tint stripe coat different than the main coating and apply with brush.
- D. Blending Plain Painted Surfaces: When painting new substrates patched into existing surfaces or touching up missing or damaged finishes, apply coating system specified for the specific substrate. Apply final finish coat over entire surface from edge to edge and corner to corner.

END OF SECTION

1803 Pineacre Avenue  
Davenport, Iowa 52803  
December 14, 2020

Derek Lumsden, MSARP, Executive Director  
Jones County Economic Development  
107 South Ford Street  
Anamosa, Iowa 52205

Dear Derek:

Enclosed, please find the analysis, invoice, sand and fines of the set of ten mortar samples from the Anamosa Facade Rehabilitation Project in Anamosa, Iowa. I trust that you will find all to be in order.

The samples were, with two exceptions, composed of lime and sand only with a probable mix comparable to three parts of sand to each part of lime, by volume. The first and tenth samples revealed obvious Portland cement content, which is atypical of nineteenth-century mortar. In both cases the mortar was probably closest to modern Type N mortar.

Sample 5 and 7 were very odd. They were from 103 and 203 East Main, respectively. They both had separate bags with different colors of mortar and their results were similar. It appears that there may have been a mislabeling error with 103 being inverted with 203. However, because the bags were very clearly labeled we analyzed them as mixed samples.

In all cases, care must be taken to match the sand as closely as possible as the sand plays a very significant role in the appearance of mortar except where it is exceptionally fine (as in the case of the ninth sample).

Please feel free to contact me with any questions or comments you may have.

Sincerely,

David Arbogast

Enclosures

# INVOICE

Mortar Analysis  
**Anamosa Facade Rehabilitation Project**  
Anamosa, Iowa  
December 14, 2020

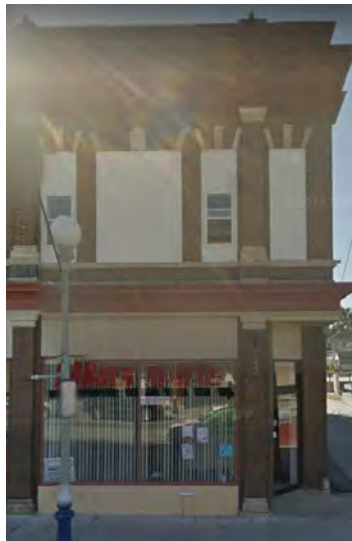
Nine mortar samples @ \$350.00 per sample .....	\$3,150.00
Postage overdue .....	3.10
<u>Overdue postage collection fee .....</u>	<u>10.00</u>
Total due .....	\$3,163.10

**David Arbogast, Architectural Conservator**  
1803 Pineacre Avenue  
Davenport, Iowa 52803  
arbogast7@gmail.com  
(563) 355-1553

Mortar Analysis  
**Anamosa Facade Rehabilitation Project**  
Anamosa, Iowa  
December 14, 2020

On Wednesday, December 2, 2020, David Arbogast, architectural conservator, of Davenport, Iowa received a set of seven mortar samples from Derek Lumsden, MSARP, Executive Director of the Jones County Economic Development in Anamosa, Iowa. The samples were taken from buildings in the Anamosa Facade Rehabilitation Project in Anamosa, Iowa and were submitted for analysis to determine their composition.

The analysis was begun on Thursday, December 3, utilizing the acid digestion testing procedure developed by E. Blaine Cliver, former Regional Historical Architect of the North Atlantic Region of the National Park Service. This relatively simple procedure dissolves the lime and/or cement content of the mortar using a 20% solution of hydrochloric acid. The carbon dioxide released as a result of the reaction displaces water, which is then measured and used to calculate the soluble content of the mortar. The insoluble fines and sand remaining from the reaction are factored into the equation resulting in a final result. In the case of cement samples, the remaining fines are used to calculate the cement content of the mortar. The remaining sand is then carefully sieved and graded by grain size to provide a means of identification of the various sand types.

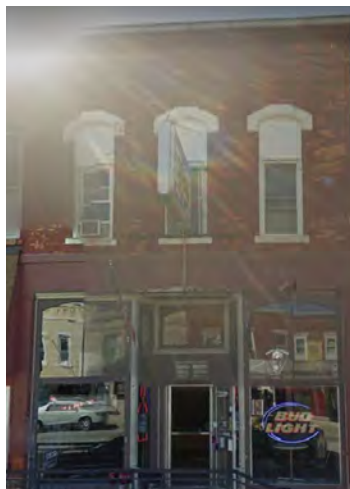


The first sample was collected from 211 West Main. It was gray tan and contained visible sand and was hard in its composition. It had a fast and bubbly reaction which resulted in a moderately large water displacement. It filtered rapidly with pale yellow green filtrate. The fines were gray- tan. The fines were probably dirt associated with the sand as well as residue from the Portland cement content of the mortar. All of the aforementioned factors point to a mortar consisting of lime and sand with a significant amount of Portland cement. The sand sieve analysis revealed moderately coarse sand. All of it passed through the largest sieve. Slightly over 2/3% failed to pass the second-largest sieve. Approximately over 10 1/3% was caught in the third-largest sieve. Slightly over 32 2/5% was stopped in the fourth largest sieve. 35 6/7% remained in the finest sieve with almost 20 7/10% collected in the base.

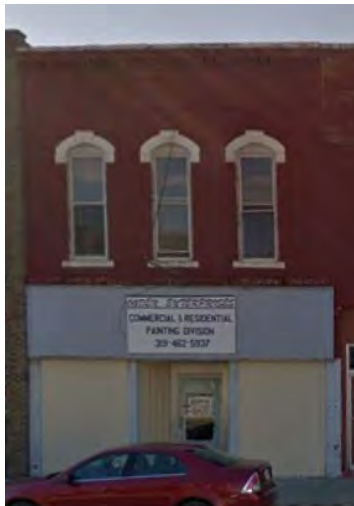
The second sample also came from 211 West Main. It was reddish brown in color with white spots and was extremely soft in its composition. It was extremely soft in its composition. It had a fast, fizzy and bubbly reaction with a very large water displacement. Its filtering time was rapid filtering with clear filtrate. The fines were red and were quite abundant, which is typical of powdered brick or stone used as a colorant. The mortar consisted of lime and sand only with no Portland cement. The sand sieve analysis revealed fine sand. All of it passed through the two largest sieves. Slightly over  $1 \frac{4}{5}\%$  was caught in the third largest sieve. Slightly over  $10 \frac{9}{10}\%$  was caught in the fourth largest sieve. Almost  $45 \frac{1}{2}\%$  remained in the finest sieve and slightly over  $41 \frac{4}{5}\%$  travelled through all the sieves.



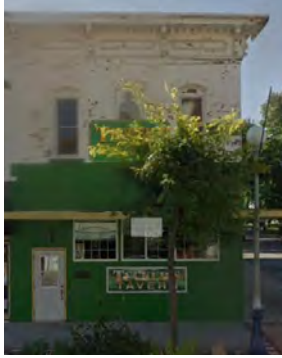
The third sample was from 209 West Main. It was brownish gray with visible sand and had white spots. It was soft in its composition. The sample had a fast, fizzy and bubbly reaction with a large water displacement. It filtered rapidly with surprisingly clear filtrate color. The proportion of fines was very small and their color was brown. They were probably dirt associated with the sand. All of the aforementioned factors point to a mortar consisting of lime and sand only. The sand sieve analysis revealed moderately coarse sand.  $9/10\%$  did not make it past the largest sieve. A tad under  $1 \frac{4}{5}\%$  found its way into the second-largest sieve. Slightly less than  $6 \frac{3}{10}\%$  was stopped in the third largest sieve. Slightly over  $14 \frac{13}{100}\%$  was caught in the third largest sieve. Slightly over  $47 \frac{1}{2}\%$  remained in the finest sieve with slightly under  $29 \frac{1}{6}\%$  collected in the base.



The fourth sample was extracted from 205 West Main. Unlike the other samples, this sample only weighed 10.1 grams, which was slightly over half of the standard 20 grams. It was light brownish-gray with visible sand and bits of dark brown. It was also soft in its composition and had a fast and bubbly reaction. When adjusted for its small size, the actual .36 liters of water displaced was approximately .71 liters for a standard-size sample, which is a moderate amount of water displaced. It filtered normally with the filtrate color being pale yellow-green. The proportion of the dull brown fines was small, indicating that they were probably dirt associated with the sand. All of the previously mentioned factors indicate a mortar consisting of lime and sand only. The sand sieve analysis showed moderate sand. All of it passed through the two largest largest sieves. A tad less than  $2 \frac{3}{4} \%$  was collected in the third largest sieve. Slightly less than  $19 \frac{1}{5} \%$  was stopped in the fourth largest sieve. Almost 48% halted in the fifth largest sieve.  $30 \frac{1}{7} \%$  was collected in the base.



The fifth sample came from 103 East Main. It actually consisted of two very different samples, one of which was sent several weeks after the first. The earlier sample was reddish brown, contained visible sand and the second sample was light tan. The tan sample was softer than the reddish brown sample, but both were soft. Both were treated as a single sample. There were also bits of brick which were removed prior to the analysis. It had a fast and bubbly reaction which resulted in a moderately large water displacement. It filtered rapidly with the filtrate color being clear. The proportion of fines was very small and their color was brown. The fines were probably dirt associated with the sand. All of the aforementioned factors point to a mortar consisting of lime and sand only. The sand sieve analysis revealed moderately coarse sand. All of it passed through the largest sieve. Slightly  $1 \frac{3}{10} \%$  was trapped in the second largest sieve. A tad under  $6 \frac{1}{2} \%$  was collected in the third largest sieve. Slightly under  $19 \frac{1}{2} \%$  remained in the fourth largest sieve. A pinch more than  $45 \frac{4}{9} \%$  was measured in the finest sieve. Slightly more than  $27 \frac{1}{4} \%$  travelled through all the sieves to the base.



The sixth sample was removed from 201 East Main. It was light tan and contained visible sand. It was very soft in its composition. The sample had a fast, fizzy, and very bubbly reaction, which resulted in a large water displacement. It filtered rapidly and the filtrate color was pale yellow-green. The proportion of fines was miniscule and were probably dirt associated with the sand. All of the factors point to a mortar consisting of lime and sand only. The sand sieve analysis revealed coarse sand. All of it passed through the largest sieve with slightly under  $4/7\%$  stopped in the second largest sieve. A tad over  $3\ 2/3\%$  remained in the third largest sieve. Almost 28% was caught in the fourth largest sieve with a tad under  $59\ 1/3\%$  remaining in the finest sieve. Somewhat under  $8\ 1/2\%$  travelled through all of the sieves.

The seventh sample came from 203 East Main. It proved to be extremely similar to the fifth sample. Like the fifth sample it consisted of two very different samples, one of which was sent several weeks after the first. The earlier sample was reddish brown, contained visible sand and the second sample was light tan. The tan sample was softer than the reddish brown sample, but both were soft. Both were treated as a single sample. It had a fast and bubbly reaction which resulted in a moderately large water displacement. It filtered rapidly with the filtrate color being pale yellow-green. The proportion of fines was very large and their color was brownish red. The fines were probably colorant used to tint the reddish brown portion of the sample. All of the aforementioned factors point to mortar consisting of lime and sand only. The sand sieve analysis revealed coarse sand. All of it passed through the largest sieve. Slightly under  $2/3\%$  was trapped in the second largest sieve. A tad under  $3\ 6/7\%$  was collected in the third largest sieve. Slightly under  $27\ 4/7\%$  remained in the fourth largest sieve. A pinch more than  $51\ 9/10\%$  was measured in the finest sieve. Somewhat over than 16% travelled through all the sieves.

The eighth sample was collected from 205 East Main. It was light gray with painted brick pieces which were mostly removed prior to the analysis. It was soft in its composition. The sample had a fast and bubbly reaction with a moderately large displacement of water. Very strangely, it also had gelatinous by-products which are typically associated with Portland cement. It filtered rapidly with the filtrate color being pale yellow-green. The proportion of fines was small and their color was reddish brown. The fines were probably the dirt associated with the sand. All of the aforementioned factors point to mortar consisting of lime and sand only because of the softness of the sample, although Portland cement cannot be dismissed because of the gelatinous by-products. The sand sieve analysis revealed coarse sand. All of it passed through largest sieve. Slightly under  $1\ 3/4\%$  stayed in the second-largest sieve. A tad under  $8\ 1/10\%$  was collected in the third largest sieve. Nearly 44% remained in fourth largest sieve. There was slightly over 41% stopped in the finest sieve. Exactly  $5\ 1/5\%$  fell to the base.



The ninth sample was collected from the 207 East Main. It was light gray and had a large piece of brick, and additional miniscule bits of paint and brick. The large piece of brick was removed prior to the analysis. The sample was soft in its composition. It had a fast and fizzy and bubbly reaction with a large water displacement. It filtered rapidly with pale yellow-green filtrate. The proportion of fines was large and their color was brown. The fines were probably the remaining bits of brick in the sample. All of the aforementioned factors point to mortar consisting of lime and sand only. The sand sieve analysis revealed extremely fine sand. All of it passed through the two largest sieves. A tad under  $1\frac{1}{3}\%$  was collected in the third largest sieve. Almost  $7\frac{3}{10}\%$  remained in fourth largest sieve. A small amount over  $30\frac{4}{9}\%$  was stopped in the finest sieve with more than  $60\frac{9}{10}\%$  falling to the base.

The tenth sample was collected from 209 East Main. It was warm gray with visible and was hard in its composition. The sample had a fast and very bubbly reaction with a large water displacement. It filtered rapidly with pale yellow-green filtrate. The proportion of fines was large and their color was light brown. The fines were possibly a colorant used to tint the mortar. All of the aforementioned factors point to mortar consisting of lime and sand with some Portland cement and possibly some colorant. The sand sieve analysis revealed coarse sand. All of it passed through the largest sieve.  $3\frac{3}{10}\%$  only made it to the second largest sieve. A tad over  $12\frac{1}{4}\%$  was collected in the third largest sieve. A tad under  $32\frac{1}{11}\%$  remained in fourth largest sieve. Slightly more than  $38\frac{2}{3}\%$  was stopped in the finest sieve with a slightly more than  $13\frac{2}{3}\%$  fell to the base.

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 1  
 Building: 211 West Main, Anamosa, Iowa  
 Location: Clay tile mortar  
 Sample Description: Gray-tan, visible sand, hard, fast and bubbly reaction followed by prolonged reaction, rapid filtering

### Test No. 1 – Soluble Fraction

#### Data:

1. <u>181.4</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>201.4</u> Container A and sample	9. <u>4.9</u> Fines and paper weight
3. <u>768.86</u> Barometric pressure	10. <u>2.7</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>193.2</u> Sand and Container A weight
5. <u>0.80</u> Liters of water displaced	12. <u>8.9</u> cc. of sand
6. <u>pale yel.-grn.</u> Filtrate color	13. <u>16.9</u> Weight of graduated cylinder and sand
7. <u>gray-tan</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

#### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>2.2</u>	Weight of fines: No. 9 – No. 10
17. <u>11.8</u>	Weight of sand: No. 11 – No. 1
18. <u>.754237288</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>6.0</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.03290896</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>3.29</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>2.71</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.03662162</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>5.15</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>1.45</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>3.06</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>47.39</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

#### Conclusions:

28. <u>18.55</u>	Gram weight of sample: No. 15 – No. 25	
29. <u>11.86</u>	Fine parts/volume:	No. 16 divided by No. 28
30. <u>47.98</u>	Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>30.54</u>	Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

#### Cement (if present)

32. _____	Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____	Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. <u>2.61</u>	Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.2</u>	<u>140.1</u>	<u>0.1</u>	<u>0.69</u>
No. 30	<u>134.0</u>	<u>132.5</u>	<u>1.5</u>	<u>10.34</u>
No. 40	<u>127.9</u>	<u>123.2</u>	<u>4.7</u>	<u>32.41</u>
No. 50	<u>118.2</u>	<u>113.0</u>	<u>5.2</u>	<u>35.86</u>
Base	<u>73.5</u>	<u>70.5</u>	<u>3.0</u>	<u>20.69</u>

### Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 2  
 Building: 211 West Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Reddish brown, white spots, extremely soft, fast and fizzy and bubbly reaction, rapid filtering

#### Test No. 1 – Soluble Fraction

##### Data:

1. <u>180.2</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>200.4</u> Container A and sample	9. <u>4.9</u> Fines and paper weight
3. <u>768.10</u> Barometric pressure	10. <u>2.8</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>190.1</u> Sand and Container A weight
5. <u>1.51</u> Liters of water displaced	12. <u>5.8</u> cc. of sand
6. <u>clear</u> Filtrate color	13. <u>15.0</u> Weight of graduated cylinder and sand
7. <u>red</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

##### Computations:

15. <u>20.2</u>	Starting weight of sample: No. 2 – No. 1
16. <u>2.1</u>	Weight of fines: No. 9 – No. 10
17. <u>9.9</u>	Weight of sand: No. 11 – No. 1
18. <u>.58585858</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>8.2</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.06287199</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>6.29</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>1.91</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.0258108108</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>6.56</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>2.77</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>3.90</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>71.03</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

##### Conclusions:

28. <u>17.43</u> Gram weight of sample: No. 15 – No. 25	
29. <u>12.05</u> Fine parts/volume:	No. 16 divided by No. 28
30. <u>33.28</u> Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>41.40</u> Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

##### Cement (if present)

32. _____ Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____ Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. _____ Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

#### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.1</u>	<u>140.1</u>	<u>0.0</u>	<u>0.00</u>
No. 30	<u>132.6</u>	<u>132.4</u>	<u>0.2</u>	<u>1.82</u>
No. 40	<u>124.4</u>	<u>123.2</u>	<u>1.2</u>	<u>10.91</u>
No. 50	<u>118.0</u>	<u>113.0</u>	<u>5.0</u>	<u>45.45</u>
Base	<u>75.1</u>	<u>70.5</u>	<u>4.6</u>	<u>41.82</u>

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 3  
 Building: 209 West Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Brownish gray, visible sand, white spots, soft, fast and fizzy and bubbly reaction, rapid filtering

### Test No. 1 – Soluble Fraction

#### Data:

1. <u>176.5</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>196.5</u> Container A and sample	9. <u>3.2</u> Fines and paper weight
3. <u>767.84</u> Barometric pressure	10. <u>2.7</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>190.9</u> Sand and Container A weight
5. <u>0.92</u> Liters of water displaced	12. <u>8.7</u> cc. of sand
6. <u>clear</u> Filtrate color	13. <u>19.5</u> Weight of graduated cylinder and sand
7. <u>brown</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

#### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>0.5</u>	Weight of fines: No. 9 – No. 10
17. <u>14.4</u>	Weight of sand: No. 11 – No. 1
18. <u>.604166667</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>5.1</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.0382931454</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>3.83</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>1.27</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.0171621622</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>4.10</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>1.68</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>2.44</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>68.85</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

#### Conclusions:

28. <u>18.32</u>	Gram weight of sample: No. 15 – No. 25
29. <u>2.73</u>	Fine parts/volume: No. 16 divided by No. 28
30. <u>47.49</u>	Sand parts/volume: (No. 17 divided by No. 28) x No. 18
31. <u>24.62</u>	Lime parts/volume: (No. 24 divided by No. 28) x 1.1

#### Cement (if present)

32. _____	Portland cement parts/volume: (No. 16 divided by No. 28) x 0.78
33. _____	Natural cement parts/volume: (No. 16 divided by No. 28) x 0.86
34. _____	Lime with cement parts/volume: (No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.5</u>	<u>158.3</u>	<u>0.2</u>	<u>0.90</u>
No. 20	<u>140.5</u>	<u>140.1</u>	<u>0.4</u>	<u>1.79</u>
No. 30	<u>133.9</u>	<u>132.5</u>	<u>1.4</u>	<u>6.28</u>
No. 40	<u>126.4</u>	<u>123.2</u>	<u>3.2</u>	<u>14.35</u>
No. 50	<u>123.6</u>	<u>113.0</u>	<u>10.6</u>	<u>47.53</u>
Base	<u>77.0</u>	<u>70.5</u>	<u>6.5</u>	<u>29.15</u>

### Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 4  
 Building: 205 West Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Light brownish-gray, visible sand, bits of dark brown, soft, fast and bubbly reaction, rapid filtering

#### Test No. 1 – Soluble Fraction

##### Data:

1. <u>216.1</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>226.2</u> Container A and sample	9. <u>3.2</u> Fines and paper weight
3. <u>767.59</u> Barometric pressure	10. <u>2.7</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>223.6</u> Sand and Container A weight
5. <u>0.36</u> Liters of water displaced	12. <u>4.6</u> cc. of sand
6. <u>pale yel.-grn.</u> Filtrate color	13. <u>12.6</u> Weight of graduated cylinder and sand
7. <u>brown</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

##### Computations:

15. <u>10.1</u>	Starting weight of sample: No. 2 – No. 1
16. <u>0.5</u>	Weight of fines: No. 9 – No. 10
17. <u>7.5</u>	Weight of sand: No. 11 – No. 1
18. <u>.613333333</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>2.1</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.0149793956</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>1.50</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>0.60</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.0081081081</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>1.71</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>0.66</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>1.02</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>64.71</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

##### Conclusions:

28. <u>9.44</u>	Gram weight of sample: No. 15 – No. 25	
29. <u>5.30</u>	Fine parts/volume:	No. 16 divided by No. 28
30. <u>48.73</u>	Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>19.93</u>	Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

##### Cement (if present)

32. _____	Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____	Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. _____	Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

#### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.1</u>	<u>140.1</u>	<u>0.0</u>	<u>0.00</u>
No. 30	<u>132.7</u>	<u>132.5</u>	<u>0.2</u>	<u>2.74</u>
No. 40	<u>124.6</u>	<u>123.2</u>	<u>1.4</u>	<u>19.18</u>
No. 50	<u>116.5</u>	<u>113.0</u>	<u>3.5</u>	<u>47.95</u>
Base	<u>72.7</u>	<u>70.5</u>	<u>2.2</u>	<u>30.14</u>

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 5  
 Building: 103 East Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Reddish brown with visible sand (first bag) and light tan (second bag), bits of brick removed prior to analysis, soft, fast and very bubbly reaction, rapid filtering

### Test No. 1 – Soluble Fraction

#### Data:

1. <u>181.4</u> Container A weight	8. <u>No</u> Hair or fiber <u>      </u> type
2. <u>201.4</u> Container A and sample	9. <u>3.2</u> Fines and paper weight
3. <u>758.19</u> Barometric pressure	10. <u>2.6</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>196.3</u> Sand and Container A weight
5. <u>0.88</u> Liters of water displaced	12. <u>9.2</u> cc. of sand
6. <u>clear</u> Filtrate color	13. <u>19.9</u> Weight of graduated cylinder and sand
7. <u>brown</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

#### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>0.6</u>	Weight of fines: No. 9 – No. 10
17. <u>14.9</u>	Weight of sand: No. 11 – No. 1
18. <u>.617449664</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>4.3</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.03616789</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>3.62</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>0.68</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>.00918919</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>3.36</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>1.59</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>1.97</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>80.71</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

#### Conclusions:

28. <u>18.15</u>	Gram weight of sample: No. 15 – No. 25	
29. <u>3.26</u>	Fine parts/volume:	No. 16 divided by No. 28
30. <u>49.97</u>	Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>20.08</u>	Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

#### Cement (if present)

32. <u>      </u>	Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. <u>      </u>	Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. <u>      </u>	Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.4</u>	<u>140.1</u>	<u>0.3</u>	<u>1.30</u>
No. 30	<u>134.0</u>	<u>132.5</u>	<u>1.5</u>	<u>6.49</u>
No. 40	<u>127.8</u>	<u>123.2</u>	<u>4.5</u>	<u>19.48</u>
No. 50	<u>123.5</u>	<u>113.0</u>	<u>10.5</u>	<u>45.45</u>
Base	<u>76.8</u>	<u>70.5</u>	<u>6.3</u>	<u>27.27</u>

### Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 6  
 Building: 201 East Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Light tan, visible sand, very soft, fast and very bubbly and fizzy reaction, rapid filtering

#### Test No. 1 – Soluble Fraction

Data:

- |  |   |
|--|---|
| 1. <u>180.2</u> Container A weight       | 8. <u>No</u> Hair or fiber <u>      </u> type         |
| 2. <u>200.2</u> Container A and sample   | 9. <u>2.7</u> Fines and paper weight                  |
| 3. <u>769.34</u> Barometric pressure     | 10. <u>2.6</u> Filter paper weight                    |
| 4. <u>22</u> Temperature                 | 11. <u>194.4</u> Sand and Container A weight          |
| 5. <u>1.04</u> Liters of water displaced | 12. <u>8.7</u> cc. of sand                            |
| 6. <u>pale yel.-grn.</u> Filtrate color  | 13. <u>19.3</u> Weight of graduated cylinder and sand |
| 7. <u>brown</u> Fines color              | 14. <u>5.1</u> Weight of graduated cylinder           |

#### Computations:

- |                       |  |
|-----------------------|--|
| 15. <u>20.0</u>       | Starting weight of sample: No. 2 – No. 1   |
| 16. <u>0.1</u>        | Weight of fines: No. 9 – No. 10  |
| 17. <u>14.2</u>       | Weight of sand: No. 11 – No. 1   |
| 18. <u>.612679056</u> | Sand density: No. 12 divided by (No. 13 – No. 14)                                |
| 19. <u>5.7</u>        | Weight of soluble content: No. 15 – (No. 16 + No. 17)                            |
| 20. <u>0.04337247</u> | Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.) |
| 21. <u>4.34</u>       | Gram weight of CaCO <sub>3</sub> : 100 x No. 20                                  |
| 22. <u>1.36</u>       | Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21                             |
| 23. <u>0.01841558</u> | Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74                              |
| 24. <u>4.57</u>       | Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)                |
| 25. <u>1.05</u>       | Gram weight CO <sub>2</sub> : No. 20 x 44  |
| 26. <u>2.71</u>       | Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)              |
| 27. <u>38.75</u>      | %CO <sub>2</sub> gain: No. 25 divided by No. 26                                  |

#### Conclusions:

- |   |                                     |
|---|-------------------------------------|
| 28. <u>18.95</u> Gram weight of sample: No. 15 – No. 25 |                                     |
| 29. <u>0.53</u> Fine parts/volume:                      | No. 16 divided by No. 28            |
| 30. <u>45.91</u> Sand parts/volume:                     | (No. 17 divided by No. 28) x No. 18 |
| 31. <u>25.53</u> Lime parts/volume:                     | (No. 24 divided by No. 28) x 1.1    |

#### Cement (if present)

- |  |  |
|--|--|
| 32. <u>      </u> Portland cement parts/volume:  | (No. 16 divided by No. 28) x 0.78      |
| 33. <u>      </u> Natural cement parts/volume:   | (No. 16 divided by No. 28) x 0.86      |
| 34. <u>      </u> Lime with cement parts/volume: | (No. 16 x 0.2) divided by No. 28 x 1.1 |

#### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.3</u>	<u>140.1</u>	<u>0.2</u>	<u>0.56</u>
No. 30	<u>133.8</u>	<u>132.5</u>	<u>1.3</u>	<u>3.67</u>
No. 40	<u>133.1</u>	<u>123.2</u>	<u>9.9</u>	<u>27.97</u>
No. 50	<u>134.0</u>	<u>113.0</u>	<u>21.0</u>	<u>59.32</u>
Base	<u>73.5</u>	<u>70.5</u>	<u>3.0</u>	<u>8.47</u>

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 7  
 Building: 203 East Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Reddish brown with visible sand (first bag) and light tan (second bag), soft, fast and very bubbly reaction, rapid filtering

### Test No. 1 – Soluble Fraction

Data:

1. <u>216.4</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>236.4</u> Container A and sample	9. <u>5.2</u> Fines and paper weight
3. <u>766.83</u> Barometric pressure	10. <u>2.7</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>228.8</u> Sand and Container A weight
5. <u>0.84</u> Liters of water displaced	12. <u>8.8</u> cc. of sand
6. <u>pale yel.-grn.</u> Filtrate color	13. <u>17.5</u> Weight of graduated cylinder and sand
7. <u>brownish red</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>2.5</u>	Weight of fines: No. 9 – No. 10
17. <u>12.4</u>	Weight of sand: No. 11 – No. 1
18. <u>.704</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>5.1</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.03486534</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>3.49</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>1.61</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.02175676</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>4.19</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>1.53</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>2.49</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>61.45</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

### Conclusions:

28. <u>18.47</u> Gram weight of sample: No. 15 – No. 25	
29. <u>13.54</u> Fine parts/volume:	No. 16 divided by No. 28
30. <u>47.26</u> Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>24.95</u> Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

### Cement (if present)

32. _____ Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____ Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. _____ Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.2</u>	<u>140.1</u>	<u>0.1</u>	<u>0.64</u>
No. 30	<u>133.1</u>	<u>132.5</u>	<u>0.6</u>	<u>3.85</u>
No. 40	<u>127.5</u>	<u>123.2</u>	<u>4.3</u>	<u>27.56</u>
No. 50	<u>121.1</u>	<u>113.0</u>	<u>8.1</u>	<u>51.92</u>
Base	<u>73.0</u>	<u>70.5</u>	<u>2.5</u>	<u>16.03</u>

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 8  
 Building: 205 East Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Light gray, painted brick pieces removed prior to analysis, soft, fast and very bubbly reaction, gelatinous by-products, moderate filtering

### Test No. 1 – Soluble Fraction

#### Data:

1. <u>181.3</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>201.3</u> Container A and sample	9. <u>3.5</u> Fines and paper weight
3. <u>765.81</u> Barometric pressure	10. <u>2.7</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>195.6</u> Sand and Container A weight
5. <u>0.92</u> Liters of water displaced	12. <u>8.6</u> cc. of sand
6. <u>pale yel.-grn.</u> Filtrate color	13. <u>19.4</u> Weight of graduated cylinder and sand
7. <u>reddish brown</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

#### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>0.8</u>	Weight of fines: No. 9 – No. 10
17. <u>14.3</u>	Weight of sand: No. 11 – No. 1
18. <u>.601398601</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>4.9</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.03819191</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>3.82</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>1.08</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.01459459</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>3.91</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>1.68</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>2.32</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>72.41</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

#### Conclusions:

28. <u>18.32</u> Gram weight of sample: No. 15 – No. 25	
29. <u>4.37</u> Fine parts/volume:	No. 16 divided by No. 28
30. <u>46.94</u> Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>23.48</u> Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

#### Cement (if present)

32. _____ Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____ Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. _____ Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.4</u>	<u>140.1</u>	<u>0.3</u>	<u>1.73</u>
No. 30	<u>133.9</u>	<u>132.5</u>	<u>1.4</u>	<u>8.09</u>
No. 40	<u>130.8</u>	<u>123.2</u>	<u>7.6</u>	<u>43.93</u>
No. 50	<u>120.1</u>	<u>113.0</u>	<u>7.1</u>	<u>41.04</u>
Base	<u>71.4</u>	<u>70.5</u>	<u>0.9</u>	<u>5.20</u>

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 9  
 Building: 207 East Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Light gray, large piece of brick removed prior to analysis (also miniscule bits of paint and brick), soft, fast and fizzy and bubbly reaction, rapid filtering

### Test No. 1 – Soluble Fraction

Data:

1. <u>216.2</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>236.2</u> Container A and sample	9. <u>4.3</u> Fines and paper weight
3. <u>758.45</u> Barometric pressure	10. <u>2.6</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>228.3</u> Sand and Container A weight
5. <u>1.12</u> Liters of water displaced	12. <u>6.9</u> cc. of sand
6. <u>pale yel.-grn.</u> Filtrate color	13. <u>17.2</u> Weight of graduated cylinder and sand
7. <u>brown</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>1.7</u>	Weight of fines: No. 9 – No. 10
17. <u>12.1</u>	Weight of sand: No. 11 – No. 1
18. <u>.570247934</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>6.2</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.04605372</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>4.61</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>1.59</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.02148649</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>4.99</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>2.03</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>2.97</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>68.35</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

### Conclusions:

28. <u>17.97</u> Gram weight of sample: No. 15 – No. 25	
29. <u>9.46</u> Fine parts/volume:	No. 16 divided by No. 28
30. <u>38.40</u> Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>30.55</u> Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

### Cement (if present)

32. _____ Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____ Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. _____ Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.1</u>	<u>140.1</u>	<u>0.0</u>	<u>0.00</u>
No. 30	<u>132.7</u>	<u>132.5</u>	<u>0.2</u>	<u>1.32</u>
No. 40	<u>124.3</u>	<u>123.2</u>	<u>1.1</u>	<u>7.28</u>
No. 50	<u>117.6</u>	<u>113.0</u>	<u>4.6</u>	<u>30.46</u>
Base	<u>79.7</u>	<u>70.5</u>	<u>9.2</u>	<u>60.93</u>

## Mortar/Plaster/Stucco Analysis Test Sheet

Sample No. 10  
 Building: 209 East Main, Anamosa, Iowa  
 Location: Unidentified  
 Sample Description: Warm gray, visible sand, hard, fast and very bubbly reaction, rapid filtering

### Test No. 1 – Soluble Fraction

#### Data:

1. <u>176.5</u> Container A weight	8. <u>No</u> Hair or fiber _____ type
2. <u>196.5</u> Container A and sample	9. <u>4.4</u> Fines and paper weight
3. <u>759.21</u> Barometric pressure	10. <u>2.6</u> Filter paper weight
4. <u>22</u> Temperature	11. <u>188.8</u> Sand and Container A weight
5. <u>1.03</u> Liters of water displaced	12. <u>9.0</u> cc. of sand
6. <u>pale yel.-grn.</u> Filtrate color	13. <u>17.4</u> Weight of graduated cylinder and sand
7. <u>light brown</u> Fines color	14. <u>5.1</u> Weight of graduated cylinder

#### Computations:

15. <u>20.0</u>	Starting weight of sample: No. 2 – No. 1
16. <u>1.8</u>	Weight of fines: No. 9 – No. 10
17. <u>12.3</u>	Weight of sand: No. 11 – No. 1
18. <u>.731707317</u>	Sand density: No. 12 divided by (No. 13 – No. 14)
19. <u>5.9</u>	Weight of soluble content: No. 15 – (No. 16 + No. 17)
20. <u>0.04238983</u>	Mols. Of CO <sub>2</sub> : No. 5 x No. 3. x 0.016 divided by (No. 4 + 273.16 C.)
21. <u>4.24</u>	Gram weight of CaCO <sub>3</sub> : 100 x No. 20
22. <u>1.66</u>	Gram weight of Ca(OH) <sub>2</sub> : No. 19 – No. 21
23. <u>0.02243243</u>	Mols. of Ca(OH) <sub>2</sub> : No. 22 divided by 74
24. <u>4.79</u>	Gram total weight of Ca(OH) <sub>2</sub> : 74 x (No. 20 + No. 23)
25. <u>1.87</u>	Gram weight CO <sub>2</sub> : No. 20 x 44
26. <u>2.85</u>	Gram weight total possible CO <sub>2</sub> : 44 x (No. 20 + No. 23)
27. <u>65.61</u>	%CO <sub>2</sub> gain: No. 25 divided by No. 26

#### Conclusions:

28. <u>18.13</u> Gram weight of sample: No. 15 – No. 25	
29. <u>9.93</u> Fine parts/volume:	No. 16 divided by No. 28
30. <u>49.64</u> Sand parts/volume:	(No. 17 divided by No. 28) x No. 18
31. <u>29.06</u> Lime parts/volume:	(No. 24 divided by No. 28) x 1.1

#### Cement (if present)

32. _____ Portland cement parts/volume:	(No. 16 divided by No. 28) x 0.78
33. _____ Natural cement parts/volume:	(No. 16 divided by No. 28) x 0.86
34. <u>2.18</u> Lime with cement parts/volume:	(No. 16 x 0.2) divided by No. 28 x 1.1

### Test No. 2 – Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>158.3</u>	<u>158.3</u>	<u>0.0</u>	<u>0.00</u>
No. 20	<u>140.8</u>	<u>140.1</u>	<u>0.7</u>	<u>3.30</u>
No. 30	<u>135.1</u>	<u>132.5</u>	<u>2.6</u>	<u>12.26</u>
No. 40	<u>130.0</u>	<u>123.2</u>	<u>6.8</u>	<u>32.08</u>
No. 50	<u>121.2</u>	<u>113.0</u>	<u>8.2</u>	<u>38.68</u>
Base	<u>73.4</u>	<u>70.5</u>	<u>2.9</u>	<u>13.68</u>



## ASBESTOS INSPECTION REPORT

205 W Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
205 W Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 205 W Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

205 W Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
Door Caulking	Tan	Storefront Door	20 LF

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**205 W Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 205 W Main Street  
**CEI LAB CODE:** B2011506

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 205 W Main Street

LAB CODE: B2011506

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 4

# SAMPLES >1% ASBESTOS: 1



CEI

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 205 W Main Street

**LAB CODE:** B2011506

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174215	Tan	Door Caulking	Chrysotile 5%
002		B174216	White	Window Caulking	None Detected
003		B174217	White	Window Glazing	None Detected
004		B174218	White	Window Caulking	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011506  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 205 W Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
<b>001</b> B174215	Door Caulking	Heterogeneous		3% Paint	5% Chrysotile
		Tan		77% Caulk	
		Fibrous		15% Calc Carb	
		Bound			
<b>002</b> B174216	Window Caulking	Heterogeneous		3% Paint	None Detected
		White		82% Caulk	
		Non-fibrous		15% Binder	
		Bound			
<b>003</b> B174217	Window Glazing	Heterogeneous		3% Paint	None Detected
		White		82% Caulk	
		Non-fibrous		15% Binder	
		Bound			
<b>004</b> B174218	Window Caulking	Heterogeneous		3% Paint	None Detected
		White		82% Caulk	
		Non-fibrous		15% Binder	
		Bound			

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

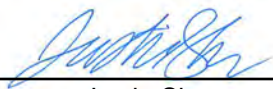
**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

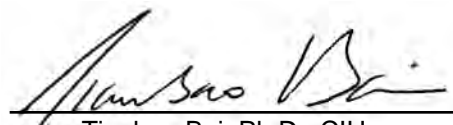
Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Justin Shu

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011506

CEI Lab I.D. Range:

B174215-B174218

4

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamasa Facade Project	
		Project ID#: 205 W Main	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:



Accept Samples



Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	NR	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of 2

## CEI

COMPANY CONTACT INFORMATION	
Company: Hawkeye Environmental	Job Contact:
Project Name:	
Project ID #:	Tel:

[illegible]



Storefront Door  
Caulking contains  
asbestos



## ASBESTOS INSPECTION REPORT

209 W Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
209 W Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 209 W Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



### C. SUMMARY OF ASBESTOS BUILDING MATERIALS

209 W Main Street

#### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

#### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

#### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
Roof Flashing	Black	Upper Roof (Shared w/ 211)	100 LF
Roof Membrane	Black	Upper Roof (Shared w/ 211)	1700SF

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**209 W Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 209 W. Main Street  
**CEI LAB CODE:** B2011508

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 209 W. Main Street

LAB CODE: B2011508

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 13

# SAMPLES >1% ASBESTOS: 1

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 209 W. Main Street

**LAB CODE:** B2011508

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174227	Black,White	Membrane	None Detected
002		B174228	Black	Built-Up Roofing	None Detected
003	Layer 1	B174229	Black	Cap Tar	None Detected
	Layer 2	B174229	Gray,Silver	Caulking	None Detected
004	Layer 1	B174230	Black	Tar ( Knobs)	None Detected
	Layer 2	B174230	Gray,Silver	Caulking	None Detected
005	Layer 1	B174231	Black	Tar ( Vents)	None Detected
	Layer 2	B174231	Gray,White	Caulking	None Detected
006		B174232	Black	Flashing Membrane - Top	None Detected
007		B174233	Black	Flashing Membrane - Middle	None Detected
008		B174234	Brown,White	Flashing Membrane - Bottom	None Detected
009	Layer 1	B174235	Brown,White	Flashing Tar	Chrysotile 10%
	Layer 2	B174235	Black,White	Membrane	None Detected
010		B174236	Brown,Gray	Caulking	None Detected
011		B174237	Gray	Window Caulking	None Detected
012	Layer 1	B174238	White,Tan	Window Caulking	None Detected
	Layer 2	B174238	Brown,Silver	Window Caulking	None Detected
013		B174239	Tan	Window Glazing	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011508  
**Date Received:** 11-24-20  
**Date Analyzed:** 12-01-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 209 W. Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
001 B174227	Membrane	Heterogeneous	25%	Fiberglass	45%	Tar	None Detected
		Black,White	25%	Synthetic Fiber	5%	Binder	
		Fibrous Bound					
002 B174228	Built-Up Roofing	Heterogeneous	35%	Cellulose	55%	Tar	None Detected
		Black			5%	Binder	
		Fibrous Bound			5%	Silicates	
003 Layer 1 B174229	Cap Tar	Homogeneous	35%	Cellulose	60%	Tar	None Detected
		Black			5%	Binder	
		Fibrous Bound					
Layer 2 B174229	Caulking	Homogeneous			100%	Caulk	None Detected
		Gray,Silver Non-fibrous Bound					
004 Layer 1 B174230	Tar ( Knobs)	Homogeneous	35%	Cellulose	60%	Tar	None Detected
		Black			5%	Binder	
		Fibrous Bound					
Layer 2 B174230	Caulking	Homogeneous			100%	Caulk	None Detected
		Gray,Silver Non-fibrous Bound					
005 Layer 1 B174231	Tar ( Vents)	Homogeneous	35%	Cellulose	60%	Tar	None Detected
		Black			5%	Binder	
		Fibrous Bound					

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011508  
**Date Received:** 11-24-20  
**Date Analyzed:** 12-01-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 209 W. Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 B174231	Caulking	Homogeneous Gray,White Non-fibrous Bound			100%	Caulk	None Detected
006 B174232	Flashing Membrane - Top	Heterogeneous Black Fibrous Bound	25%	Fiberglass	45%	Tar	None Detected
			25%	Synthetic Fiber	5%	Binder	
007 B174233	Flashing Membrane - Middle	Heterogeneous Black Fibrous Bound	45%	Cellulose	45%	Tar	None Detected
					5%	Binder	
					5%	Gravel	
008 B174234	Flashing Membrane - Bottom	Heterogeneous Brown,White Fibrous Bound	25%	Fiberglass	45%	Tar	None Detected
			20%	Synthetic Fiber	5%	Binder	
					5%	Mastic	
009 Layer 1 B174235	Flashing Tar	Heterogeneous Brown,White Fibrous Bound	5%	Fiberglass	85%	Tar	10% Chrysotile
Layer 2 B174235	Membrane	Heterogeneous Black,White Non-fibrous Bound			100%	Binder	None Detected
010 B174236	Caulking	Heterogeneous Brown,Gray Non-fibrous Bound			95%	Caulk	None Detected
					5%	Paint	

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011508  
**Date Received:** 11-24-20  
**Date Analyzed:** 12-01-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 209 W. Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
<b>011</b> B174237	Window Caulking	Homogeneous Gray Non-fibrous Bound		100% Caulk	None Detected
<b>012</b> Layer 1 B174238	Window Caulking	Heterogeneous White, Tan Non-fibrous Bound		95% Caulk 5% Paint	None Detected
Layer 2 B174238	Window Caulking	Heterogeneous Brown, Silver Non-fibrous Bound		95% Caulk 5% Paint	None Detected
<b>013</b> B174239	Window Glazing	Heterogeneous Tan Non-fibrous Bound		95% Caulk 5% Paint	None Detected

---

---

**LEGEND:**      Non-Anth      = Non-Asbestiform Anthophyllite  
                      Non-Trem      = Non-Asbestiform Tremolite  
                      Calc Carb      = Calcium Carbonate

---

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

---

**REPORTING LIMIT:** <1% by visual estimation

---

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

---

**REGULATORY LIMIT:** >1% by weight

---

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.


Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Kathryn Wescott

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
 Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011504

CEI Lab I.D. Range:

B174227-B174239

13

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamosa Facade Project	
		Project ID#: 209 W. Main street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:		<input checked="" type="checkbox"/> Accept Samples <input type="checkbox"/> Reject Samples	
Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/28/20	NW	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of 1



## SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: Hawkeye Environmental	Job Contact:
Project Name:	
Project ID #:	Tel:

[illegible]



This photo shows the roof shared between buildings 209 and 211 W Main Street. The edge flashing and top layer roof membrane contain asbestos.



## ASBESTOS INSPECTION REPORT

211 W Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
211 W Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 211 W Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

### 211 W Main Street

#### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

#### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

#### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
Roof Flashing	Black	Upper Roof (Shared w/ 209)	100 LF
Roof Membrane	Black	Upper Roof (Shared w/ 209)	1700 SF
Window Caulking	Gray	Storefront	60 LF

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**211 W Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 211 W Main Street  
**CEI LAB CODE:** B2011496

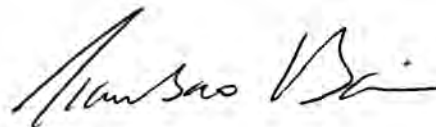
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 211 W Main Street

LAB CODE: B2011496

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 15

# SAMPLES >1% ASBESTOS: 3

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 211 W Main Street

**LAB CODE:** B2011496

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001	Layer 1	B174131	Black,Brown	Roof Field Membrane	None Detected
	Layer 2	B174131	Brown	Fiberboard	None Detected
002	Layer 1	B174132	Black,Brown	Roof Field Membrane	Chrysotile 5%
	Layer 2	B174132	Brown	Fiberboard	None Detected
003		B174133	Black,Brown	Flashing Membrane	None Detected
004		B174134	Black,Brown	Flashing Membrane	None Detected
005		B174135	Black,Brown	Flashing Membrane	None Detected
006		B174136	Black	Flashing Tar	Chrysotile 10%
007		B174137	Gray	Door Caulking	None Detected
008		B174138	Gray	Window Caulking	Chrysotile 5%
009	Layer 1	B174139	Tan	Window Glazing (type 1)	None Detected
	Layer 2	B174139	Black	Window Glazing (type 2)	None Detected
010		B174140	Black,Gray	Vent Tar	None Detected
011		B174141	Black	Knob Tar	None Detected
012		B174142	Black,Gray	Cap Tar	None Detected
013		B174143	Gray,Off-white	Window Caulking	None Detected
014		B174144	Gray,Off-white	Window Glazing	None Detected
015		B174145	Gray,Off-white	Ceiling Tile	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011496  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 211 W Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>001</b> Layer 1 B174131	Roof Field Membrane	Heterogeneous	<1%	Cellulose	40%	Tar	None Detected
		Black,Brown	20%	Synthetic Fiber	30%	Gravel	
		Fibrous			10%	Binder	
		Bound					
Layer 2 B174131	Fiberboard	Heterogeneous	75%	Cellulose	25%	Binder	None Detected
		Brown					
		Fibrous					
		Bound					
<b>002</b> Layer 1 B174132	Roof Field Membrane	Heterogeneous	<1%	Cellulose	35%	Tar	5% Chrysotile
		Black,Brown	20%	Synthetic Fiber	30%	Gravel	
		Fibrous			10%	Binder	
		Bound					
Layer 2 B174132	Fiberboard	Heterogeneous	75%	Cellulose	25%	Binder	None Detected
		Brown					
		Fibrous					
		Bound					
<b>003</b> B174133	Flashing Membrane	Heterogeneous	<1%	Cellulose	40%	Tar	None Detected
		Black,Brown	20%	Synthetic Fiber	30%	Gravel	
		Fibrous			10%	Binder	
		Bound					
<b>004</b> B174134	Flashing Membrane	Heterogeneous	<1%	Cellulose	40%	Tar	None Detected
		Black,Brown	20%	Synthetic Fiber	30%	Gravel	
		Fibrous			10%	Binder	
		Bound					
<b>005</b> B174135	Flashing Membrane	Heterogeneous	<1%	Cellulose	40%	Tar	None Detected
		Black,Brown	20%	Synthetic Fiber	30%	Gravel	
		Fibrous			10%	Binder	
		Bound					

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011496  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 211 W Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
006 B174136	Flashing Tar	Heterogeneous	<1%	Cellulose	65%	Tar	10% Chrysotile
		Black	15%	Fiberglass	10%	Binder	
		Fibrous					
		Bound					
007 B174137	Door Caulking	Heterogeneous	<1%	Cellulose	95%	Caulk	None Detected
		Gray			5%	Binder	
		Non-fibrous					
		Bound					
008 B174138	Window Caulking	Heterogeneous	<1%	Cellulose	85%	Caulk	5% Chrysotile
		Gray			5%	Binder	
		Fibrous			5%	Paint	
		Bound					
009 Layer 1 B174139	Window Glazing (type 1)	Heterogeneous	<1%	Cellulose	95%	Caulk	None Detected
		Tan			5%	Binder	
		Non-fibrous					
		Bound					
Layer 2 B174139	Window Glazing (type 2)	Heterogeneous	<1%	Cellulose	95%	Caulk	None Detected
		Black			5%	Binder	
		Non-fibrous					
		Bound					
010 B174140	Vent Tar	Heterogeneous	10%	Cellulose	60%	Tar	None Detected
		Black,Gray			30%	Binder	
		Fibrous					
		Bound					
011 B174141	Knob Tar	Heterogeneous	10%	Cellulose	75%	Tar	None Detected
		Black			15%	Binder	
		Fibrous					
		Bound					

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011496  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 211 W Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
012 B174142	Cap Tar	Heterogeneous Black,Gray Fibrous Bound	10%	Cellulose	60%	Tar 30% Binder	None Detected
013 B174143	Window Caulking	Heterogeneous Gray,Off-white Non-fibrous Bound	<1%	Cellulose	90%	Caulk 5% Binder 5% Paint	None Detected
014 B174144	Window Glazing	Heterogeneous Gray,Off-white Non-fibrous Bound	<1%	Cellulose	90%	Caulk 5% Binder 5% Paint	None Detected
015 B174145	Ceiling Tile	Heterogeneous Gray,Off-white Fibrous Bound	35% 25%	Cellulose Fiberglass	15% 5% 20%	Binder Paint Perlite	None Detected

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

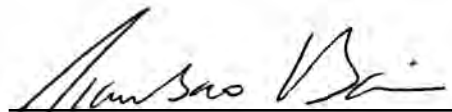
Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Scott Minyard

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

## CHAIN OF CUSTODY

LAB USE ONLY:

CEI Lab Code:

B2011496

CEI Lab I.D. Range:

B174131- B174145

15

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamosa Facade Project	
		Project ID#: 211 W Main Street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:



Accept Samples



Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	NW	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of 1





Storefront Window  
Caulking



This photo shows the roof shared  
between buildings 209 and 211 W Main  
Street. The edge flashing and top layer  
roof membrane contain asbestos.



## ASBESTOS INSPECTION REPORT

213 E Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
213 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 213 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

213 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
Window Caulking	Gray	Storefront Windows	40 LF

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**213 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 213 E Main Street  
**CEI LAB CODE:** B2011507


Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 213 E Main Street

LAB CODE: B2011507

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 8

# SAMPLES >1% ASBESTOS: 1



CEI

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 213 E Main Street

**LAB CODE:** B2011507

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174219	White	Drywall	None Detected
002		B174220	White	Tape	None Detected
003		B174221	White	Compound	None Detected
004		B174222	Brown	Vinyl Base	None Detected
005		B174223	Tan	Vinyl Base Adhesive	None Detected
006		B174224	Gray	Window Caulking	None Detected
007		B174225	Gray	Window Caulking	Chrysotile 10%
008		B174226	White	Door Caulking	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011507  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 213 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
001 B174219	Drywall	Heterogeneous White Fibrous Bound	15%	Cellulose	85%	Gypsum	None Detected
002 B174220	Tape	Homogeneous White Fibrous Bound	100%	Cellulose			None Detected
003 B174221	Compound	Homogeneous White Non-fibrous Bound			60% 40%	Binder Calc Carb	None Detected
004 B174222	Vinyl Base	Homogeneous Brown Non-fibrous Tightly Bound			100%	Vinyl	None Detected
005 B174223	Vinyl Base Adhesive	Homogeneous Tan Non-fibrous Bound			100%	Mastic	None Detected
006 B174224	Window Caulking	Homogeneous Gray Non-fibrous Bound			100%	Caulk	None Detected
007 B174225	Window Caulking	Homogeneous Gray Non-fibrous Bound			90%	Caulk	10% Chrysotile

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011507  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 213 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
<b>008</b> B174226	Door Caulking	Homogeneous White Non-fibrous Bound		100% Caulk	None Detected

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

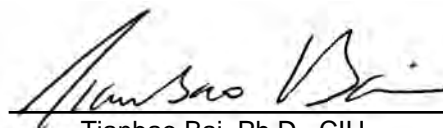
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**

  
Ryan Steele

**APPROVED BY:**

  
Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

730 SE Maynard Road, Cary, NC 27511

Tel: 866-481-1412; Fax: 919-481-1442

## CHAIN OF CUSTODY

LAB USE ONLY:

CEI Lab Code:

B2011507

CEI Lab I.D. Range:

B174219- B174226

6

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamesa Facade Project	
		Project ID#: 213 E Main Street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:



Accept Samples



Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	M	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of



## SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: Hawkeye Environmental	Job Contact:
Project Name:	
Project ID #:	Tel:

[illegible]

Page \_\_\_\_\_ of \_\_\_\_\_





## ASBESTOS INSPECTION REPORT

209 E Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## ASBESTOS INSPECTION REPORT

103 E Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
103 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 103 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

103 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**103 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 103 E Main Street  
**CEI LAB CODE:** B2011505

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 103 E Main Street

LAB CODE: B2011505

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 2

# SAMPLES >1% ASBESTOS:

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 103 E Main Street

**LAB CODE:** B2011505

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174213	White,Clear	Window Glazing	None Detected
002		B174214	White,Clear	Window Caulking	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011505  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 103 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
<b>001</b> B174213	Window Glazing	Heterogeneous		95% Caulk	None Detected
		White,Clear		5% Paint	
		Non-fibrous			
		Bound			
<b>002</b> B174214	Window Caulking	Heterogeneous		95% Caulk	None Detected
		White,Clear		5% Paint	
		Non-fibrous			
		Bound			

---

---

**LEGEND:**      Non-Anth      = Non-Asbestiform Anthophyllite  
                      Non-Trem      = Non-Asbestiform Tremolite  
                      Calc Carb      = Calcium Carbonate

---

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

---

**REPORTING LIMIT:** <1% by visual estimation

---

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

---

**REGULATORY LIMIT:** >1% by weight

---

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Kathryn Wescott

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
 Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511

Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011505

CEI Lab I.D. Range:

B174213-B174442 14

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #:	Job Contact:
Company: Hawkeye Environmental	Email / Tel:
Address: 814 wood lily road, Solon, IA 52333	Project Name: Anamosa Facade Project
	Project ID#: 103 E Main Street
Email: Cody@HawkeyeEnv.com	PO #:
Tel: 319-930-8044 Fax:	STATE SAMPLES COLLECTED IN:

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:

☒ Accept Samples  
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	NH	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of





## ASBESTOS INSPECTION REPORT

201 E Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
201 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 201 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

201 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**201 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 201 E Main Street  
**CEI LAB CODE:** B2011502

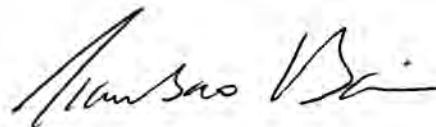
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 201 E Main Street

LAB CODE: B2011502

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 3

# SAMPLES >1% ASBESTOS:



CEI

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 201 E Main  
Street

**LAB CODE:** B2011502

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174202	White	Window Caulking	None Detected
002		B174203	White,Gray	Window Caulking	None Detected
003		B174204	Gray	Caulking	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011502  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 201 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
<b>001</b> B174202	Window Caulking	Homogeneous White Non-fibrous Bound		100% Caulk	None Detected
<b>002</b> B174203	Window Caulking	Heterogeneous White, Gray Non-fibrous Bound		95% Caulk 5% Paint	None Detected
<b>003</b> B174204	Caulking	Heterogeneous Gray Non-fibrous Bound		95% Caulk 5% Paint	None Detected

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Kathryn Wescott

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511

Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011502

CEI Lab I.D. Range:

B174202- B174204



3

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: <i>201 Ammonia Facade Project</i>	
		Project ID#: <i>201 E Main Street</i>	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:		 Accept Samples  Reject Samples	
Relinquished By:	Date/Time	Received By:	Date/Time
<i>Cody Henneberry</i>	<i>11/23/20</i>	<i>NA</i>	<i>11/24/20 10:10</i>

Samples will be disposed of 30 days after analysis

Page 1 of



## CEI

[illegible]

Version: CCOC.01.18.2/2.LD



## ASBESTOS INSPECTION REPORT

203 E Main Street  
Anamosa, IA



Project Report Dated: December 3<sup>rd</sup>, 2020



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
203 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 203 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

203 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**203 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 203 E Main Street  
**CEI LAB CODE:** B2011504

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 203 E Main Street

LAB CODE: B2011504

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 4

# SAMPLES >1% ASBESTOS:



CEI

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 203 E Main Street

**LAB CODE:** B2011504

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174209	Gray	Window Glazing	None Detected
002		B174210	White	Window Caulking	None Detected
003		B174211	White	Ceiling Tile	None Detected
004		B174212A	Beige	Linoleum	None Detected
		B174212B	Tan	Mastic	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011504  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 203 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
001 B174209	Window Glazing	Homogeneous Gray Non-fibrous Bound			100%	Binder	None Detected
002 B174210	Window Caulking	Homogeneous White Non-fibrous Bound			100%	Caulk	None Detected
003 B174211	Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	40% 25%	Cellulose Fiberglass	30% 5%	Perlite Binder	None Detected
004 B174212A	Linoleum	Heterogeneous Beige Fibrous Bound	50%	Cellulose	50%	Vinyl	None Detected
B174212B	Mastic	Homogeneous Tan Non-fibrous Bound	2%	Cellulose	98%	Mastic	None Detected

---

---

**LEGEND:**      Non-Anth      = Non-Asbestiform Anthophyllite  
                      Non-Trem      = Non-Asbestiform Tremolite  
                      Calc Carb      = Calcium Carbonate

---

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

---

**REPORTING LIMIT:** <1% by visual estimation

---

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

---

**REGULATORY LIMIT:** >1% by weight

---

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

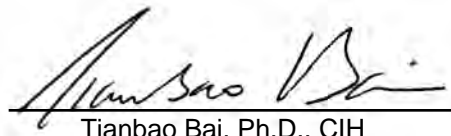
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**

  
 Ryan Steele

**APPROVED BY:**

  
 Tianbao Bai, Ph.D., CIH  
 Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011504

CEI Lab I.D. Range:

B174209 - B174212

4

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamosa Facade Project	
		Project ID#: 203 E Main Street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:		<input checked="" type="checkbox"/> Accept Samples <input type="checkbox"/> Reject Samples	
Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	NH	11/24/20 10:10

Samples will be disposed of 30 days after analysis

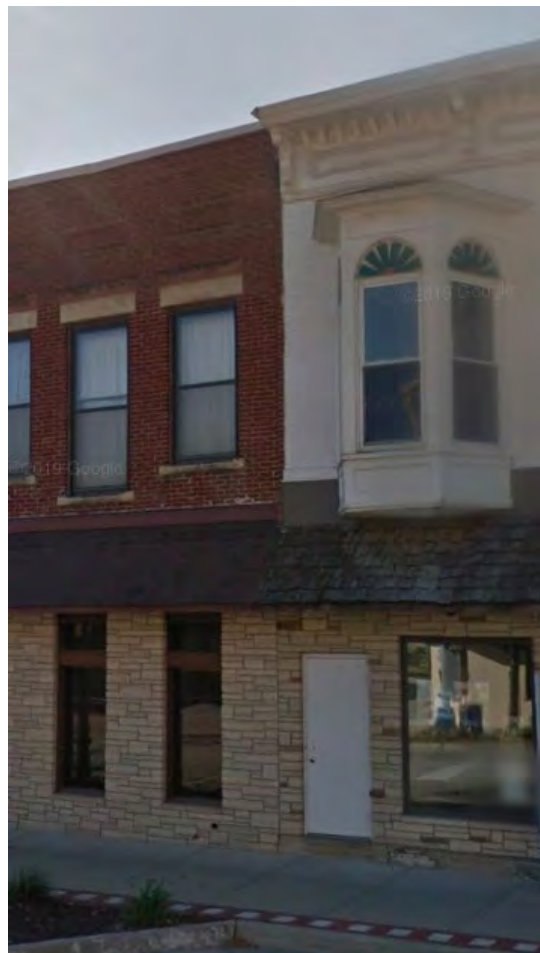
Page 1 of





## **ASBESTOS INSPECTION REPORT**

**205 E Main Street  
Anamosa, IA**



**Project Report Dated: December 3<sup>rd</sup>, 2020**



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
205 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 205 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

205 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**205 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 205 E Main Street  
**CEI LAB CODE:** B2011497

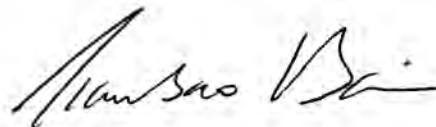
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 205 E Main Street

LAB CODE: B2011497

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 3

# SAMPLES >1% ASBESTOS:

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 205 E Main Street

**LAB CODE:** B2011497

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174146	Gray	Window Caulking	None Detected
002		B174147	Brown	Window Glazing	None Detected
003		B174148	White	Ceiling Tile	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011497  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 205 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
001 B174146	Window Caulking	Homogeneous Gray Non-fibrous Bound			100%	Caulk	None Detected
002 B174147	Window Glazing	Homogeneous Brown Non-fibrous Bound			100%	Caulk	None Detected
003 B174148	Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	35%	Cellulose	5%	Paint	None Detected
			35%	Fiberglass	25%	Perlite	

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

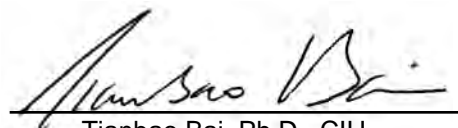
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**

  
Greg Ruff

**APPROVED BY:**

  
Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011497

CEI Lab I.D. Range:

B174146 - B174148

3

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamessa Facade Project	
		Project ID#: 205 E Main Street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:



Accept Samples



Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	MW	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of



## CEI

[illegible]

Page \_\_\_\_\_ of \_\_\_\_\_



## **ASBESTOS INSPECTION REPORT**

**207 E Main Street  
Anamosa, IA**



**Project Report Dated: December 3<sup>rd</sup>, 2020**



**I. CONTENTS**

**A. ASBESTOS INSPECTION REPORT**

- 1. LOCATION**
- 2. CONTACT PERSONS**
- 3. DATE OF INSPECTION**
- 4. FIRM PERFORMING THE INSPECTION**
- 5. BULK SAMPLE LABORATORY**
- 6. LABORATORY ACCREDITATION**

**B. SCOPE OF WORK / INSPECTION NOTES**

**C. SUMMARY OF ASBESTOS MATERIALS**

**D. BULK SAMPLE ANALYSIS / CHAIN OF CUSTODY**



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
207 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 207 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

207 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**207 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 207 E Main Street  
**CEI LAB CODE:** B2011503

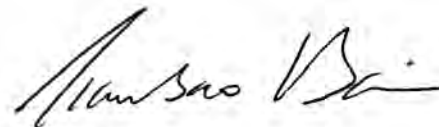
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 207 E Main Street

LAB CODE: B2011503

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 4

# SAMPLES >1% ASBESTOS:

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 207 E Main Street

**LAB CODE:** B2011503

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174205	Brown	Window Glazing	None Detected
002		B174206	Gray	Window Caulking	None Detected
003		B174207	Clear	Door Caulking	None Detected
004		B174208	White	Ceiling Tile	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011503  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 207 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>001</b> B174205	Window Glazing	Homogeneous Brown Non-fibrous Bound			100% Binder		None Detected
<b>002</b> B174206	Window Caulking	Homogeneous Gray Non-fibrous Bound			100% Caulk		None Detected
<b>003</b> B174207	Door Caulking	Homogeneous Clear Non-fibrous Bound			100% Caulk		None Detected
<b>004</b> B174208	Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	35% 35%	Cellulose Fiberglass	5% 25%	Paint Perlite	None Detected

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

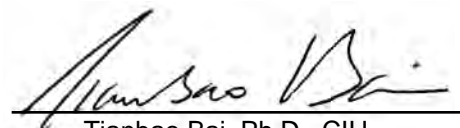
This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**

  
Greg Ruff

**APPROVED BY:**

  
Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

## CHAIN OF CUSTODY

LAB USE ONLY:

CEI Lab Code:

B2011503

CEI Lab I.D. Range:

B174205-B174206

4

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Arumosa Facade Project	
		Project ID#: 207 E Main Street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:



Accept Samples



Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	MM	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of 1



## CEI

COMPANY CONTACT INFORMATION	
Company: Hawkeye Environmental	Job Contact:
Project Name:	
Project ID #:	Tel:

[illegible]

Page \_\_\_\_\_ of \_\_\_\_\_



## **A. ASBESTOS INSPECTION REPORT DATA**

### **1. LOCATION**

Commercial Property  
209 E Main Street  
Anamosa, Iowa

### **2. CLIENT CONTACT**

Mr. Derek Lumsden  
Jones County Development

### **3. DATE(s) OF INSPECTION**

November 30, 2020

### **4. FIRM PERFORMING INSPECTION**

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

### **5. LABORATORY USED FOR BULK SAMPLE ANALYSIS**

Eurofins CEI  
730 SE Maynard Road  
Cary, North Carolina, 27511

### **6. LABORATORY ACCREDITATION**

NVLAP (Nation Voluntary Laboratory Accreditation Program)  
Lab Code: 103025



## B. SCOPE OF WORK

### Methods and Procedures:

**The property located 209 E Main Street, Anamosa, Iowa** was inspected prior to scheduled renovation activities which may disturb asbestos containing building materials in accordance with NESHAPS (National Emission Standards for Hazardous Air Pollutants) regulations. Field sampling methods were based on (NESHAPS) National Emission Standards for Hazardous Air Pollutants) protocols. Representative samples of suspect building materials were taken from Homogeneous Areas (HA-defined as similar in age, appearance and function). The purpose of this inspection was to identify quantities and locations of asbestos containing building materials prior to demolition of the structures. Bulk samples of suspect asbestos containing materials (ACM) were analyzed by Polarized Light Microscopy (PLM) with dispersion staining, as described in 40 CFR Part 763 and NESHAPs. Each sample was analyzed for the six different types of fibrous asbestos forms, of which a percentage, by volume, is estimated and summarized. If further analysis and quantification is warranted, this analysis is performed by EPA 600/R-93/116 with 400 or 600 Point Count Procedure. Further analysis of samples may also be performed at the client's request using Transmission Electron Microscopy (TEM). Sample analysis was performed by SanAir Technologies Laboratory. Sanair is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP (National Voluntary Lab Accreditation Program). Asbestos Containing Building Materials (ACBM)s and their control during renovation or demolition activities is regulated in Iowa by the Iowa Department of Natural Resources. Specific questions about testing or abatement activities may be directed to Mr. Tom Wuehr, Iowa DNR - Air Quality Division. [Tom.Wuehr@DNR.iowa.gov](mailto:Tom.Wuehr@DNR.iowa.gov) 515-494-8212 Additional forms, guidance and technical information regarding asbestos can be found on the DNR website at:  
***<http://www.iowadnr.gov/air/prof/asbestos/asbestos.html>***



## **INSPECTION NOTES**

In accordance with your request and authorization Hawkeye Environmental, LLC has performed and asbestos survey for the project referenced above. It is our understanding that the subject property will be renovated. Renovation has the potential to disturb all building materials. It is the intent of this survey to determine if any of the materials with potential for disturbance are asbestos containing.

The structure is a commercial storefront. The property is in average condition for its age and state of use.

A representative number of samples were collected from suspect asbestos building materials that may be disturbed during the renovation process.



## C. SUMMARY OF ASBESTOS BUILDING MATERIALS

209 E Main Street

### Surfacing Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Thermal Systems Insulation

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

### Miscellaneous Materials

<u>Material</u>	<u>Description</u>	<u>Location</u>	<u>Quantity</u>
None			

Quantities supplied are estimates. Contractors must field verify all material quantities, locations and conditions.



## **BULK SAMPLE ANALYSIS**

**209 E Main Street  
Anamosa, Iowa**

December 1, 2020

Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**CLIENT PROJECT:** Anamosa Facade Project, 209 E Main Street  
**CEI LAB CODE:** B2011501

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on November 24, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



---

## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Hawkeye Environmental**

---

CLIENT PROJECT: Anamosa Facade Project, 209 E Main Street

LAB CODE: B2011501

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 12/01/20

TOTAL SAMPLES ANALYZED: 2

# SAMPLES >1% ASBESTOS:

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** Anamosa Facade Project, 209 E Main Street

**LAB CODE:** B2011501

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
001		B174200	White, Tan	Ceiling Tile	None Detected
002		B174201	Brown	Window Glazing	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Hawkeye Environmental  
814 Wood Lily Road  
Solon, IA 52333

**Lab Code:** B2011501  
**Date Received:** 11-24-20  
**Date Analyzed:** 11-30-20  
**Date Reported:** 12-01-20

**Project:** Anamosa Facade Project, 209 E Main Street

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
001 B174200	Ceiling Tile	Heterogeneous	60%	Cellulose	15%	Perlite	None Detected
		White, Tan	20%	Fiberglass	5%	Paint	
		Fibrous					
		Loosely Bound					
002 B174201	Window Glazing	Heterogeneous			100%	Binder	None Detected
		Brown			<1%	Paint	
		Non-fibrous			<1%	Silicates	
		Bound					

**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

**REPORTING LIMIT:** <1% by visual estimation

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

**REGULATORY LIMIT:** >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Kathryn Wescott

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
Laboratory Director





CEI

## CHAIN OF CUSTODY

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:

CEI Lab Code:

B2011501

CEI Lab I.D. Range:

B 174200- B174201

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: Hawkeye Environmental		Email / Tel:	
Address: 814 wood lily road, Solon, IA 52333		Project Name: Anamosa Facade Project	
		Project ID#: 209 E Main Street	
Email: Cody@HawkeyeEnv.com		PO #:	
Tel: 319-930-8044 Fax:		STATE SAMPLES COLLECTED IN:	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:		<input checked="" type="checkbox"/> Accept Samples <input type="checkbox"/> Reject Samples	
Relinquished By:	Date/Time	Received By:	Date/Time
Cody Henneberry	11/23/20	MV	11/24/20 10:10

Samples will be disposed of 30 days after analysis

Page 1 of 1



# Appendix A

## Green Development Plan and Checklist

### Green Development Plan

Developer Name: City of Anamosa

Project Name: Downtown Façade Revitalization

Address (Street/City/State): Main Street, Anamosa Iowa

#### Description of Process

A description of the process that was used to select the green building strategies, systems and materials that will be incorporated into the project. (500 word maximum)

The process used to select the green building strategies to be used on this project are the result of an ongoing effort by the City of Anamosa and the design project team. The main project goals are primarily historic preservation and conservation with a strong emphasis on economic impact. There are a number of strategies employed. These include energy conservation through repair of existing doors and windows, adding storm windows and the replacement of inappropriate and deteriorated storefront with low maintenance materials, repair of existing masonry and other building features to minimize the need for building replacement and to recycle and refurbish our existing buildings, and painting to enhance the appearance and provide a protective coating. The strategies are heavily influenced by the Secretary of the Interiors Standards for Rehabilitation and the "Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings". The project will meet the Green Streets criteria where financially feasible and applicable.

#### Project Team Members

A listing of the team members who participated in the integrated design charrette. Please include name, affiliation/company, and discipline.

City of Anamosa, Project Owner

ECICOG, Grant Application

Individual Building Owners

Martin Gardner Architecture (MGA), Architect (LEED Accredited)

Integrated design charrette to be held at future time if grant is awarded.

#### Goals

Bullet points of the overall green development goals of the project and the expected intended outcomes from addressing those goals.

- Historic preservation - Maintain the fabric and wholeness of the downtown area, and the history of the community for future generations.
- Preserve Non-Renewable Resources - Preserve and maintain non-renewable resources, like stone, old growth wood, and other building materials.
- Neighborhood viability - New economic vitality as an existing retail and commercial/upper level residential district attracts new customers due to its improved appearance.
- Energy conservation - Reduced operating costs because of lower utility bills and increased building occupant comfort.
- Reduced building maintenance - Reduced maintenance costs, improved building appearance, and higher occupant satisfaction.
- Reduction of Landfill waste - Keep existing good buildings from deteriorating to the point of requiring demolition and replacement.
- High-quality, healthy building environment - Provide high-quality, healthy living and working environments for the building occupants.
- Construction Waste Recycling - Recycle construction waste through recycling and reuse of materials where feasible.

# Appendix A

## Green Development Plan and Checklist

☒ Mandatory

☐ Optional

Item		Intended Method of Satisfying Green Criteria	Yes, No or NA	Points	Champion (name and profession/role)
Section 1: Integrated Design					
1-1a	Green Development Plan: Integrative Design Meeting(s)	Conduct one or more integrative design meeting(s) as appropriate for the project and submit a completed Appendix A Green Development Plan	Yes	0	All
1-1b	Green Development Plan: Criteria Documentation	Create design and construction documentation (plans, details, specifications) to include information on implementation of appropriate Green Streets Criteria. Use the Project Plan and Spec Book Checklist for reference.	Yes	0	MGA, Architect
1-2	Applicant/Recipient, Architect/Project Designer, Contractor Certification	Each Appendix certification form will be completed where applicable.	Yes	0	All
1-3	Accessibility Rehabilitation (Optional, <i>see full criteria</i> )	All of the participating property entrances currently appear to comply with ADA.	No		
Section 1 Subtotal				0	
Section 2: Site, Location and Neighborhood Fabric					
2-1	Downtown Design Standards (Optional 15 points)	N/A	No		
2-2	Passive Solar Heating / Cooling (Optional 4 points) (Site map must demonstrate that project satisfies this item)	New windows will meet current energy code requirements (2018 IECC). Existing windows will be supplemented with	Yes	2	MGA, Architect

		storms windows were allowed by SOI Standards. All properties face north.			
2-3a	Grayfield or Brownfield (Optional 15 points)	4 of 10 properties are vacant, blighted, obsolete or otherwise underutilized meeting IEDA's requirements for grayfield.	Yes	15	Owner
2-3b	Adaptive Reuse Site (Optional 12 points)	All properties are existing buildings that will be reused.	Yes	12	Owner
2.4	Previous Historic Efforts (Optional 12 points)	In addition to the NRHP nomination, the City has compiled historic photos and have 2 books from local historians: "A Guide to Historic Main Street Anamosa" and "Anamosa...A Reminiscence 1838-1988"	Yes	12	City
2.5	Historic District Listing (Optional 30 points)	All participating properties are contributing buildings to the Anamosa Main Street Historic District listed on the NRHP.	Yes	30	City
2.6	Individual Listings (Optional 5 points per building)	No participating properties are individually listed on the NRHP.	No		
Section 2 Subtotal				71	
Section 3: Site Improvements					
3-1	Erosion and Sedimentation Control	The project is not anticipated to disturb the ground or sidewalks.	N/A		
3-2	Surface Water Management	The project is not anticipated to modify the ground or sidewalks.	N/A		
Section 3 Subtotal				0	
Section 4: Water Conservation					
4-1	Water Reuse (Optional, <i>see full criteria</i> )	The project is not anticipated to modify roof drainage, ground or sidewalks.	N/A		
Section 4 Subtotal				0	

Item		Intended Method of Satisfying Green Criteria	Yes, No or NA	Points	Champion (name and profession/role)
Section 5: Energy Efficiency					
5-1	Efficient Lighting - Exterior	Where lights are installed or replaced, LED lighting will be used with daylight sensors, timers or photocells as applicable and following current electrical code.	Yes	0	MGA, Architect
Section 5 Subtotal				0	
Section 6: Materials Beneficial to the Environment					
6-1a	Construction Waste Management	Historic building material will be repaired and reused. Salvaged brick will be used when replacing or repairing damaged brick. Metal removed from buildings will be recycled where possible. Maintaining and repairing buildings prevents the need for demolition.	Yes	0	MGA, Architect; Contractor
6-1b	Construction Waste Management: Additional Diversion (Optional 5 to 15 points)	This will be explored with the selected Contractor, but is not anticipated to be included at this time.	No		
6-2	Durable & Low Maintenance Exteriors	Durable siding material such as masonry and fiber cement will be used where possible. Aluminum storefront windows will be used where allowed by SOI Standards. High quality primer and paint will be used where finishes are painted to extend paint life and minimize the need for repainting.	Yes	0	MGA, Architect

6-3	Recycled Content Material (Optional, <i>see full criteria</i> )	Salvaged brick will be used when replacing or repairing damaged brick. Where fiber cement is used, manufacturer's with recycled content will be preferred but some products that use fly ash don't perform well in our climate. Most fiberglass insulation is made with post-consumer recycled glass.	Yes	4	MGA, Architect
6-4	Certified, Salvaged and Engineered Wood (Optional 5 points)	N/A	N/A		
6-5	Reducing Heat-Island Effect – Roofing (Optional 5 points)	Where roofs are to be replaced, white or light gray TPO will be used that meets the solar reflectance and emissivity requirements under Option 1.	Yes	5	MGA, Architect
Section 6 Subtotal				9	
Section 7: Healthy Living Environment					
7-1	Low/No VOC Paints and Primers	Specify low or no VOC paints and primers.	Yes	0	MGA, Architect
7-2	Low/No VOC Adhesives and Sealants	Low or no VOC adhesives and sealants (that meet the VOC limits referenced in the Green Streets criteria) will be used where possible. Jones County is near the transition from climate zone 5 to 6.	Yes	0	MGA, Architect
7-3	Composite Wood Products that Emit Low/ No Formaldehyde	Specify composite wood products (plywood, OSB, MDF) that emit low/no formaldehyde, OR have all sides/edges sealed with low VOC sealants.	Yes	0	MGA, Architect
7-4	Lead Paint and Asbestos Abatement	Asbestos testing will be conducted for each building. ACMs will be abated where required. Lead-safe work practices will be followed.	Yes	0	MGA, Architect; Contractor

7-5	Ventilation: Moderate Rehab (Optional 10 points)	N/A	N/A		
7-6	Basements and Concrete Slabs - Vapor Barrier	The project is not anticipated to include basement or concrete slab work.	N/A		
7-7	Water Drainage	All new wall and roof systems will incorporate proper flashing to keep building envelope weather-tight.	Yes	0	MGA, Architect
7-8	Integrated Pest Management	Seal all joint penetrations within the project scope of work with caulking to prevent pest entry.	Yes	0	MGA, Architect
7-9	Smoke-free Building (Optional 2 points)	Iowa's Smokefree Air Act prohibits smoking in these buildings.	Yes	2	Owner
Section 7 Subtotal				2	
Section 8: Operations and Maintenance					
8-1	Building Maintenance Manual	It is not anticipated that individual property owners will receive property specific O&M binders.	N/A		
8-2	Occupant Manual	It is not anticipated that individual property owners will receive property specific occupant manuals.	N/A		
8-3	Homeowner /Tenant Orientation	Based on answer to 8-2 this is N/A	N/A		
8-4	Project Data Collection and Monitoring System (Optional 35 points)	N/A	N/A		
Section 8 Subtotal				0	
Grand Total				82	

**CSI Form 1.5C****SUBSTITUTION  
REQUEST  
(During the Bid Period)**

Project: \_\_\_\_\_ Substitution Request Number: \_\_\_\_\_  
\_\_\_\_\_  
From: \_\_\_\_\_  
To: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_\_\_\_  
A/E Project Number: \_\_\_\_\_  
Re: \_\_\_\_\_ Contract For: \_\_\_\_\_  
\_\_\_\_\_  
Specification Title: \_\_\_\_\_ Description: \_\_\_\_\_  
Section: \_\_\_\_\_ Page: \_\_\_\_\_ Article/Paragraph: \_\_\_\_\_  
\_\_\_\_\_

Proposed Substitution: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Trade Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: \_\_\_\_\_  
Signed by: \_\_\_\_\_  
Firm: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone: \_\_\_\_\_  
\_\_\_\_\_

**A/E's REVIEW AND ACTION**

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.  
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.  
☐ Substitution rejected - Use specified materials.  
☐ Substitution Request received too late - Use specified materials.

Signed by: \_\_\_\_\_

Date: \_\_\_\_\_

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ \_\_\_\_\_

# DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT

## ANAMOSA, IOWA 52205

OWNER

CITY OF ANAMOSA  
107 SOUTH FORD STREET  
ANAMOSA, IOWA 52205  
319-462-6055

ARCHITECT:

MARTIN GARDNER ARCHITECTURE, P.C.  
700 11TH STREET  
SUITE 200  
MARION, IOWA 52302  
BETHANY JORDAN  
BETHANYJ@MARTINGARDNERARCH.COM  
319-377-7604



LOCATION MAP

APPLICABLE BUILDING CODES:

- 2015 INTERNATIONAL EXISTING BUILDING CODE
- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL FIRE CODE
- 2018 INTERNATIONAL MECHANICAL CODE, WITH STATE AMENDMENTS
- 2015 INTERNATIONAL RESIDENTIAL CODE
- 2012 NATIONAL FIRE PROTECTION ASSOCIATION 101 LIFE SAFETY CODE
- 2010 AMERICANS WITH DISABILITIES ACT
- 2018 UNIFORM PLUMBING CODE, WITH STATE AMENDMENTS
- 2020 NATIONAL ELECTRIC CODE, WITH STATE AMENDMENTS

GENERAL CONSTRUCTION NOTES:

- ALL WORK ON THIS PROJECT IS TO BE BUILT IN ACCORDANCE TO ALL FEDERAL, STATE, AND LOCAL BUILDING CODES. CONTRACTOR SHALL BRING TO ARCHITECT'S ATTENTION ALL ITEMS REQUIRING INTERPRETATION.
- ALL CONTRACTORS ON THIS PROJECT MUST BE REGISTERED WITH THE STATE OF IOWA. GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE STATE REGISTRATION AND INSURANCE CERTIFICATES FROM EACH CONTRACTOR AND TRANSMIT TO ARCHITECT PRIOR TO START OF CONSTRUCTION.
- THIS PROJECT HAS FUNDING SOURCES WHICH REQUIRE FOLLOWING "THE SECRETARY OF THE INTERIOR'S STANDARDS FOR TREATMENT OF HISTORIC PROPERTIES" FOR THE RESTORATION OF THE HISTORIC AND CONTRIBUTING STRUCTURES. A COPY OF THIS STANDARD IS AVAILABLE AT WWW.NPS.GOV
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO MATERIAL FABRICATION AND CONSTRUCTION.
- WHEN DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT, THE BIDDER SHALL REQUEST WRITTEN CLARIFICATION PRIOR TO BIDDING OR CONSTRUCTION. IF NOT CLARIFIED PRIOR TO BIDDING, THE FOLLOWING PRECEDENCE SHALL BE USED TO DETERMINE SCOPE OF THE BID, SIZE/QUANTITY CONTROLLED BY DRAWINGS, MATERIAL QUALITY CONTROL BY SPECIFICATION. FINAL INTERPRETATION MUST BE ISSUED BY THE ARCHITECT PRIOR TO MATERIAL FABRICATION OR CONSTRUCTION.
- MISCELLANEOUS METAL BRACKETS, FASTENERS, ETC. REMAINING ON FACADE ARE TO BE CLEANED AND PAINTED TO MATCH ADJACENT SURFACES, UNLESS NOTED OTHERWISE.
- PATCH BACK INTERIOR PLASTER OR GYPSUM BOARD FINISH WHERE DEMO IS REQUIRED FOR NEW WORK. MATCH FINISH/TEXTURE OF ADJACENT WALL SURFACE. SEE ASBESTOS TESTING REPORT.
- NEW GYP BOARD WALLS ARE TO HAVE SMOOTH LEVEL 5 FINISH. ALL NEW AND PATCHED WALLS ARE TO BE PAINTED TO MATCH EXISTING ROOM COLOR, UNLESS NOTED OTHERWISE.
- "RESEAL JOINT" - REMOVE EXISTING SEALANT AND BACKER ROD AND PREPARE JOINT FOR NEW BACKER ROD AND SEALANT. INSTALL NEW BACKER ROD AND SEALANT.
- THE CONSTRUCTION DOCUMENTS WERE DEVELOPED BASED OFF OF THE ARCHITECT'S OBSERVATION OF VISIBLE EXISTING SURFACE CONDITIONS. THE ARCHITECT WAS NOT ABLE TO VERIFY EXISTING CONSTRUCTION CONDITIONS OF ROOFING, PARAPET OR COPING CONDITIONS. THE ARCHITECT PERFORMED NO DESTRUCTIVE INVESTIGATION TO VERIFY CONCEALED CONDITIONS. THE CONTRACTOR SHALL INFORM THE ARCHITECT OF EXISTING CONDITIONS THAT ARE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS.
- PRIOR TO BEGINNING WORK IN AN AREA, THOROUGHLY EXAMINE WORK AREA FOR SAFETY. COLORS NOTED IN THE DRAWINGS ARE NOT TO BE CONSIDERED FINAL UNTIL SHOP DRAWINGS FOR PAINT AND OTHER MATERIALS ARE COMPLETE AND COLORS CONFIRMED.
- FASTENERS IN NEW COMPOSITE CORNICES, PILASTERS OR COLUMN COVERS SHALL BE CONCEALED, PLACED IN RETURN EDGES OR MINIMIZED WHEREVER POSSIBLE.
- THE PERIMETER OF ALL NEW DOORS AND WINDOWS AND THE JOINT BETWEEN NEW WOOD TRIM AND EXISTING WALLS IS TO BE SEALED. PROVIDE BACKER ROD WHERE REQUIRED.
- ALL NEW EXTERIOR DOORS TO RECEIVE NEW METAL THRESHOLD SET IN WATER CUTOFF MASTIC. BUILDING TO SIDEWALK JOINT.
- WHERE EXISTING JOINT REMAINS EXPOSED, SEAL.
- WHERE EXISTING JOINT IS COVERED, NO NEW WORK IS REQUIRED.
- WHERE NEW TRIM ABUTS SIDEWALK, ALLOW 1/2" GAP AND SEAL WITH BACKER ROD AND SEALANT.

GENERAL DEMOLITION NOTES:

- REMOVE EXISTING SIGNAGE AS REQUIRED FOR NEW WORK. REINSTALL UNLESS NEW SIGNAGE IS NOTED. TURN UNUSED SIGNAGE OVER TO OWNER.
- WHERE STOREFRONT WALLS, DOORS OR WINDOWS ARE REMOVED AND REINSTALLED, CLEAN MASONRY SURFACE OF PAINT AND SEALANT AND PATCH ANY EXPOSED HOLE TO MATCH ADJACENT SURFACES.
- PROTECT ALL EXISTING MATERIALS TO REMAIN. CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING MATERIALS DAMAGED DURING CONSTRUCTION WITH MATERIALS SALVAGED OR NEW MATERIALS TO MATCH EXISTING.
- REMOVE MISCELLANEOUS METAL BRACKETS AND ANCHORS, NOT IN USE, FROM BUILDING FACADES UNLESS OTHERWISE NOTED. PATCH ALL HOLES TO MATCH ADJACENT SURFACES.
- IT IS LIKELY THAT ORIGINAL PAINT ON STEEL LINTELS, WINDOWS, ETC., WILL HAVE LEAD PAINT. THIS MAY BE UNDER LAYERS OF NEW PAINT. ASSUME ORIGINAL MATERIALS HAVE LEAD PAINT AND REMOVE PER LEAD SAFE PRACTICES.
- IN WALLS, SOFFITS, AND CEILINGS TO BE DEMOLISHED, REMOVE ANY EXISTING OUTLETS AND TERMINATE PER CODE, UNLESS NOTED OTHERWISE.
- IN WALLS TO BE DEMOLISHED, RELOCATE ANY EXISTING LIGHT SWITCHES TO THE NEAREST ADJACENT WALL, UNLESS NOTED OTHERWISE.

GENERAL MASONRY REPAIR NOTES:

- ALL MASONRY WORK SHALL FOLLOW "PRESERVATION BRIEF 2: REPOINTING MORTAR JOINTS IN HISTORIC MASONRY BUILDINGS"
- MASONRY WALLS ARE NOT ALLOWED TO BE SPRAYED WITH WATER UNTIL AFTER ALL DETERIORATED MORTAR JOINTS HAVE BEEN REPOINTING
- NEW MORTAR SHALL MATCH THE COLOR AND JOINT PROFILE OF THE HISTORIC MORTAR.
- MORTAR REMOVAL METHOD:
  - HEAD JOINTS MUST BE REMOVED BY HAND, NO SAWS, GRINDING, OR MECHANICAL REMOVAL METHODS ARE ALLOWED ON HEAD JOINTS.
  - BED JOINTS MAY BE REMOVED VIA MECHANICAL MEANS, BUT EXTREME CARE MUST BE TAKEN TO NOT CUT INTO MASONRY.
  - ANY MASONRY DAMAGED DURING CONSTRUCTION WILL BE REQUIRED TO BE REPLACED TO MATCH EXISTING AT THE CONTRACTOR'S EXPENSE.
- SEE SPECIFICATIONS FOR OTHER REQUIREMENTS

GENERAL WINDOW NOTES:

- TEMPERED GLAZING WHERE REQUIRED BY CODE
- PROVIDE SCREENS FOR ALL OPERABLE UNITS

DRAWING SHEET INDEX

3 - ARCHITECTURAL	
A100	103 EAST MAIN STREET
A110	201 EAST MAIN STREET
A111	201 EAST MAIN STREET
A112	201 EAST MAIN STREET
A120	203 EAST MAIN STREET
A130	205 EAST MAIN STREET
A140	205 WEST MAIN STREET
A150	207 EAST MAIN STREET
A160	209 EAST MAIN STREET
A170	209 WEST MAIN STREET
A180	211 WEST MAIN STREET
A181	211 WEST MAIN STREET
A182	209-211 WEST MAIN STREET
A190	213 EAST MAIN STREET
A300	DETAILS
A301	DETAILS
A302	DETAILS

HAZARDOUS MATERIAL:

- MULTIPLE PROPERTIES HAVE ASBESTOS CONTAINING MATERIALS (ACM) - SEE ASBESTOS REPORT ATTACHED TO SPECIFICATIONS. PROPERTIES WITH ACM ARE:
  - 205 W MAIN STREET
  - 209 W MAIN STREET
  - 211 W MAIN STREET
  - 213 E MAIN STREET
- ACM TO BE DISTURBED AS PART OF THE RENOVATION PROJECT WILL BE REMOVED BY THE OWNER'S ABATEMENT CONTRACTOR, PRIOR TO THE START OF THE GENERAL CONTRACTORS WORK. GC WILL BE REQUIRED TO COORDINATE SCHEDULING AND SEQUENCING OF RELATED CONSTRUCTION ACTIVITIES WITH OWNER'S ABATEMENT CONTRACTOR SO THAT THE BUILDING IS ALWAYS KEPT WATERTIGHT.
- SHOULD THE CONTRACTOR OR SUBCONTRACTORS ENCOUNTER MATERIAL WHICH THEY SUSPECT TO CONTAIN OR BE CONTAMINATED WITH ASBESTOS OR OTHER HAZARDOUS MATERIAL IN HAZARDOUS FORM, THEY SHOULD IMMEDIATELY:
  - CEASE ALL OPERATIONS IN THE AREA OF SUSPECTED MATERIAL.
  - NOTIFY THE OWNER VERBALLY AND CONFIRM THE NOTIFICATION IN WRITING. ONCE NOTIFIED, THE OWNER WILL BE RESPONSIBLE FOR TESTING AND, IF NECESSARY, REMOVAL OR STABILIZATION OF ACM.

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed architect under the laws of the state of Iowa

Kyle David Martin Date:  
License number: 06709  
License expires: Date issued:  
Pages or sheets covered by this seal:

CITY OF ANAMOSA



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM

11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

CV

11919.01

103E MAIN DOOR AND FRAME SCHEDULE							
DOOR NO.	DOOR					FRAME	COMMENTS
	WIDTH	HEIGHT	THICK	MATER IAL	GLAZING	MATERIAL	
103E-1	3' - 0"	7' - 0"	1 3/4"	WOOD	INSULATED TEMP	WOOD	

103E MAIN WINDOW SCHEDULE						
MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				
103E-A	6' - 9 1/2"	10' - 6 1/2"	WOOD	FIXED	INSULATED	
103E-B	3' - 6 19/32"	10' - 6 1/2"	WOOD	FIXED	INSULATED	
103E-C	4' - 9"	4' - 11 1/4"	WOOD	FIXED	INSULATED	
103E-D	3' - 6 19/32"	10' - 6 1/2"	WOOD	FIXED	INSULATED	
103E-E	6' - 10"	10' - 6 1/2"	WOOD	FIXED	INSULATED	
103E-F	3' - 1"	7' - 0"	EXISTING	EXISTING	EXISTING	1, 3, 4, 5
103E-G	3' - 1"	7' - 0"	EXISTING	EXISTING	EXISTING	1, 3, 4, 5
103E-H	3' - 1"	7' - 0"	WOOD	FIXED	1/4"	1, 2, 3, 5

WINDOW SCHEDULE COMMENTS:

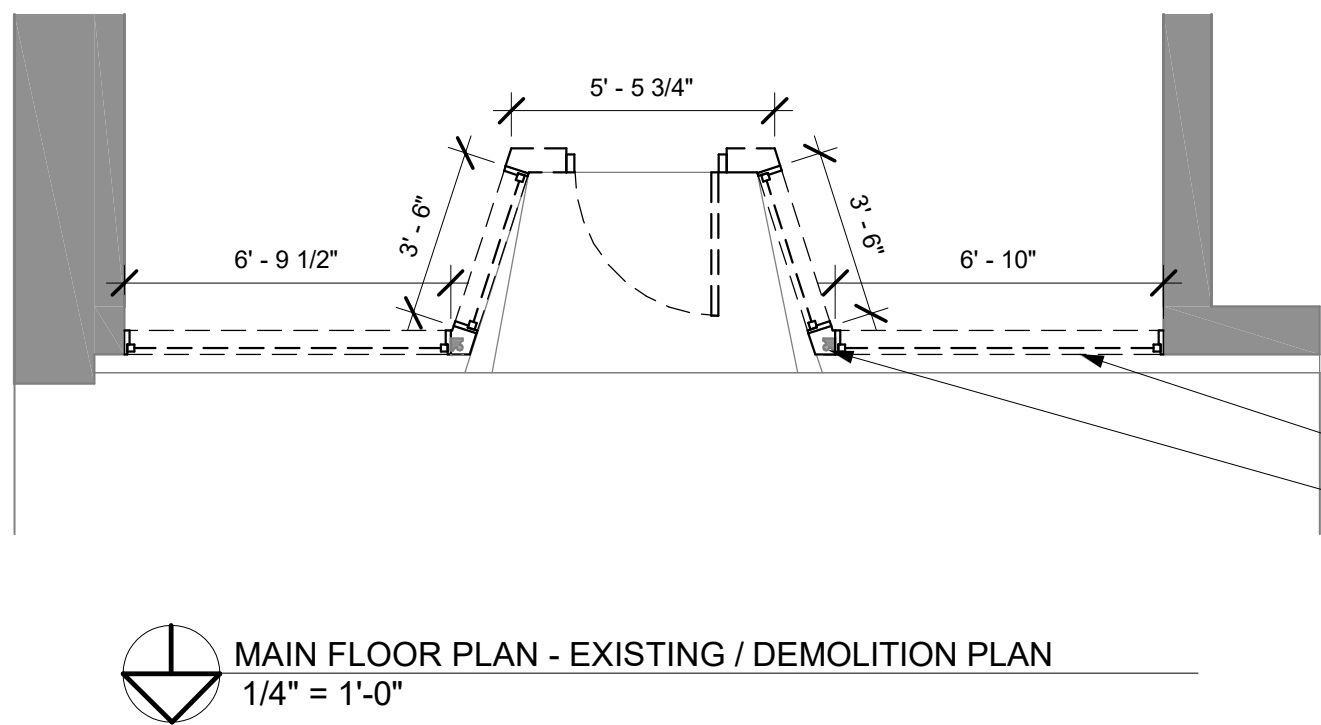
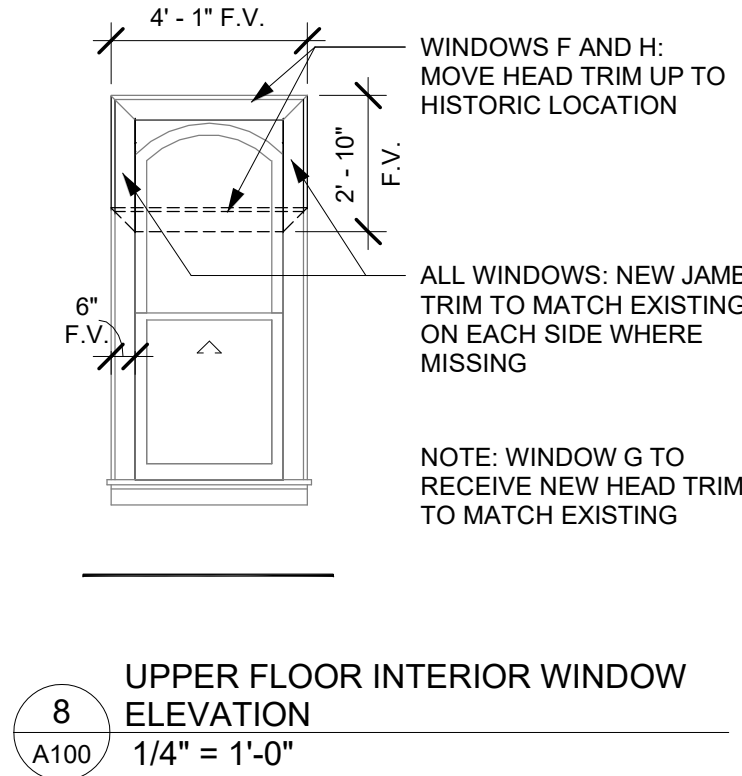
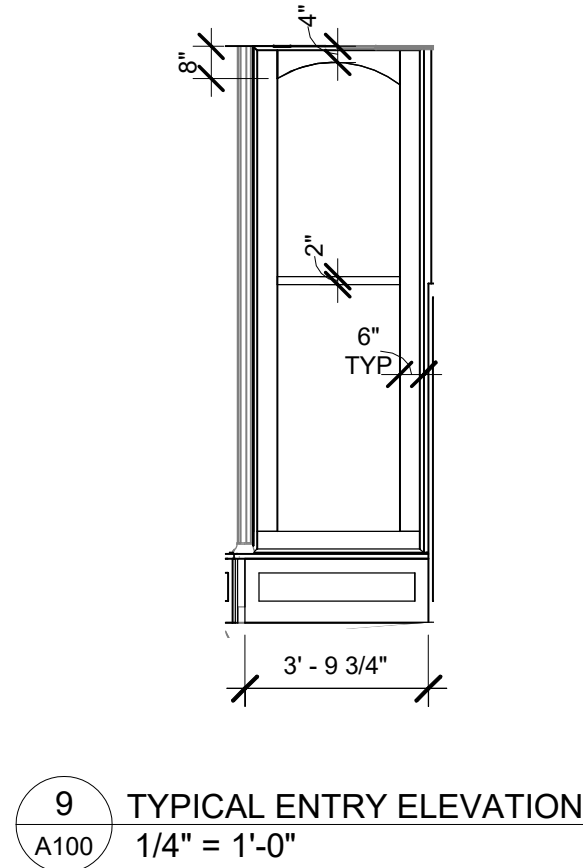
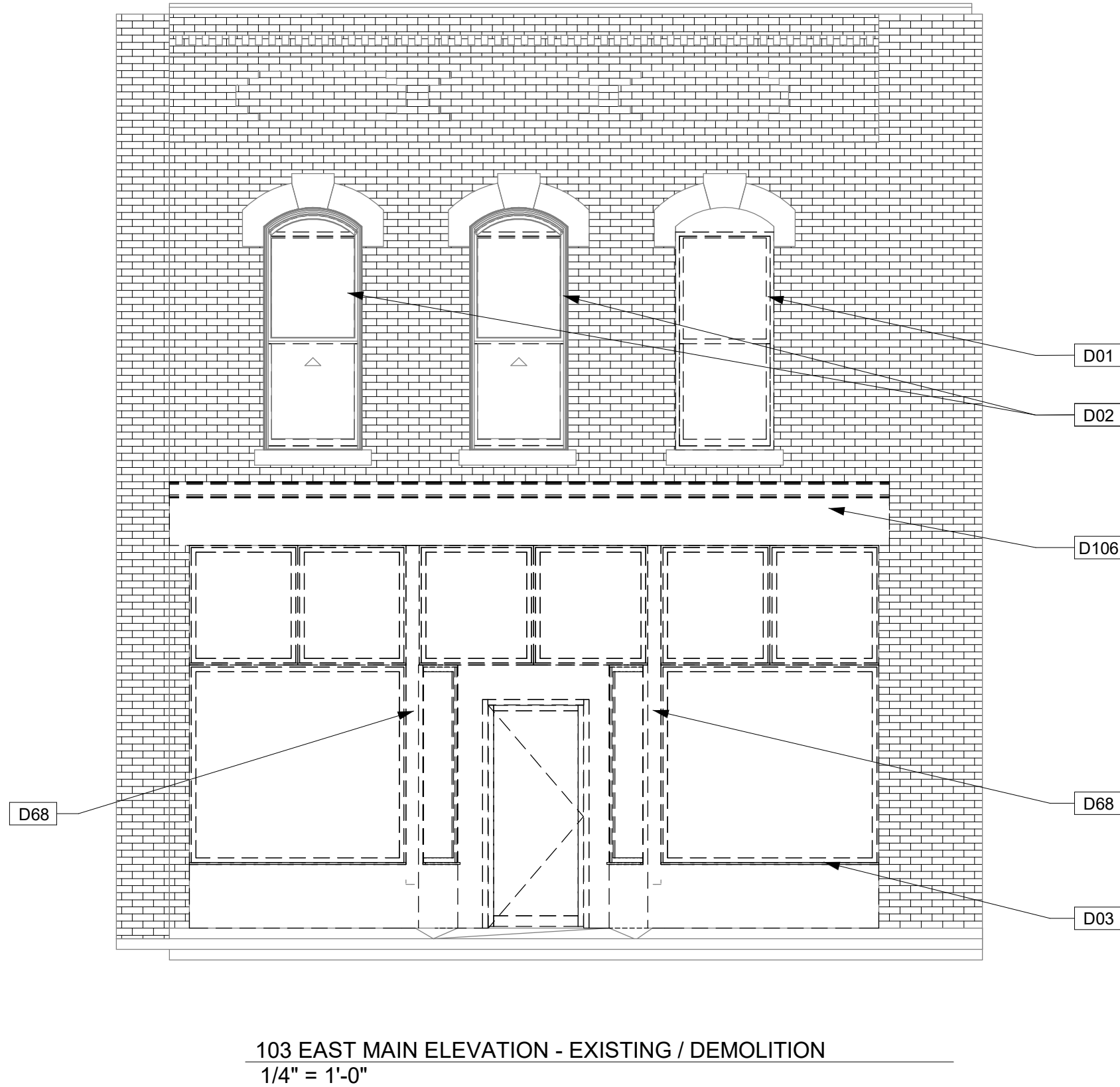
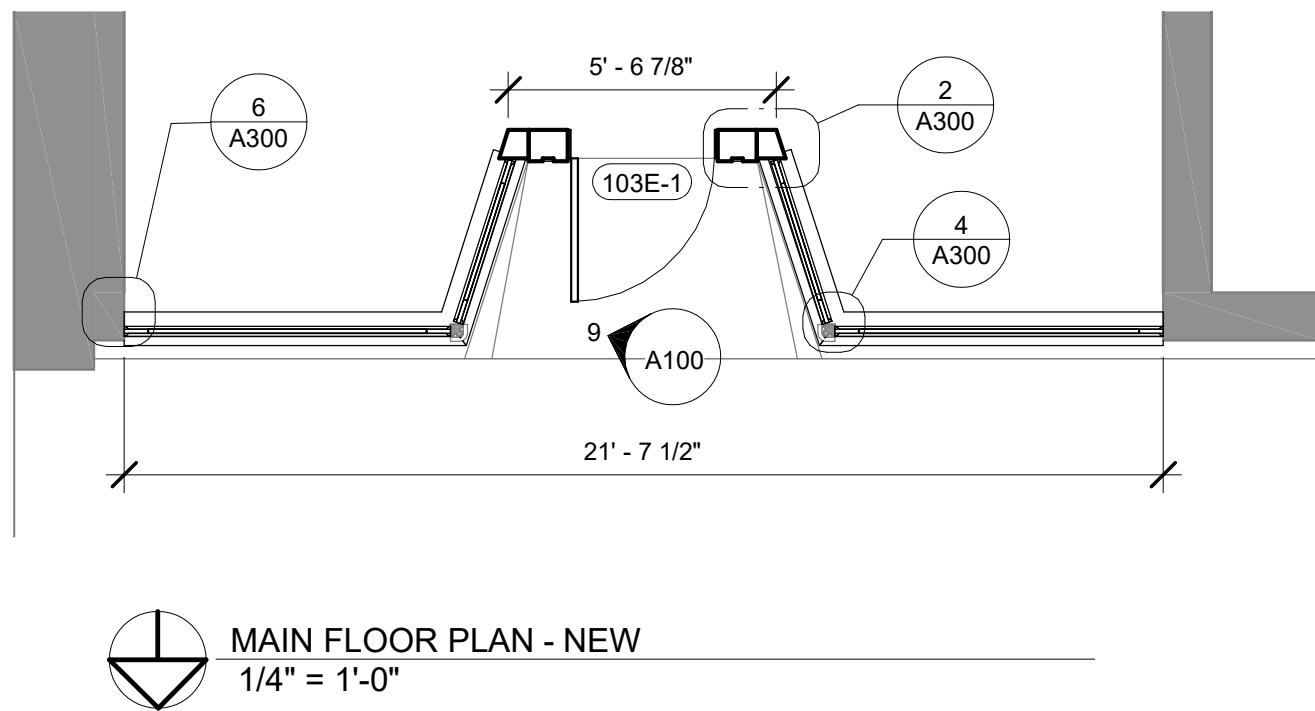
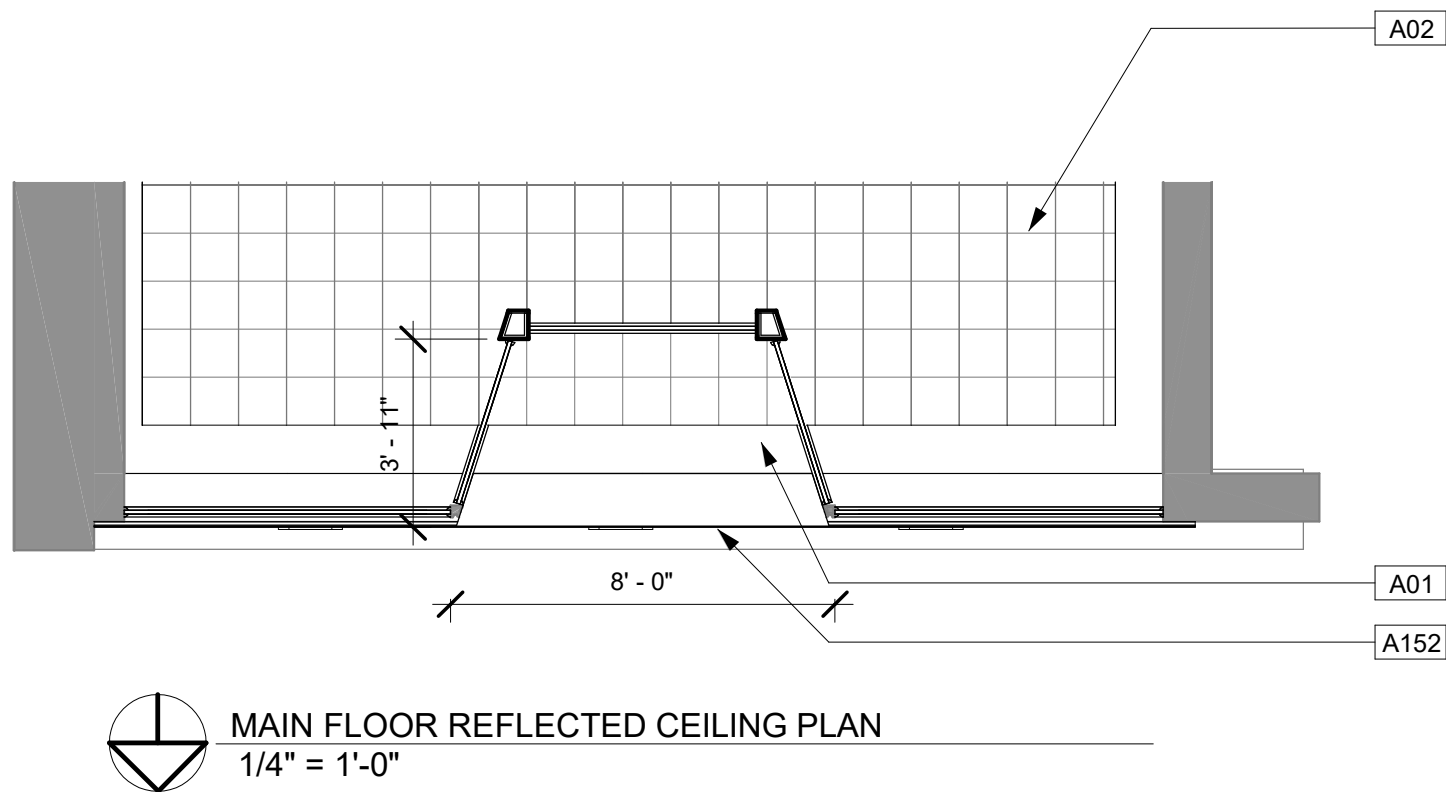
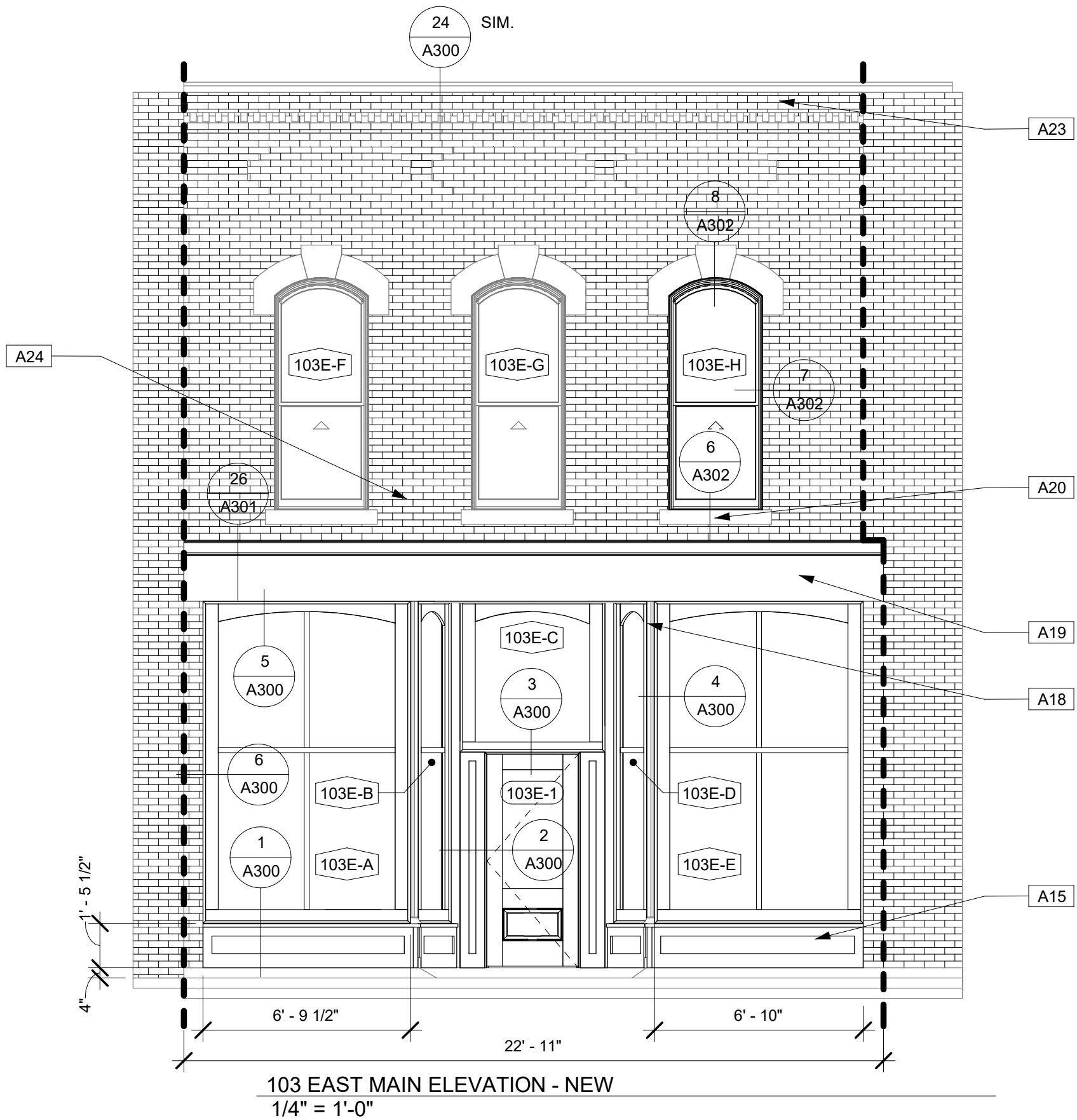
1. REPAINT WINDOW SASHES AND ALL TRIM ON INTERIOR AND EXTERIOR. PROVIDE NEW WOOD UPPER SASH AND LOWER SASH WITHIN EXISTING FRAME. MATCH EXISTING WINDOW PROFILES AND DIMENSIONS. IF POSSIBLE, RETAIN AND REPAIR EXISTING UPPER SASH - CONDITION COULD NOT BE VERIFIED.
2. PROVIDE NEW EXTERIOR ALUMINUM STORM WINDOW.
3. REMOVE EXISTING GLAZING PUTTY AND RE GLAZE WINDOW. INSTALL NEW SASH CORDS AND TIE TO EXISTING COUNTERWEIGHTS. PROVIDE NEW SPOON LOCK AT MEETING RAIL.
4. REPAIR EXISTING SILL WITH EPOXY WOOD COMPOUND.

KEYNOTE LEGEND	
KEY #	KEYNOTE
A01	EXISTING METAL CEILING TO REMAIN. CUT BACK ELECTRICAL CONDUIT AND BOX, TERMINATE ON INTERIOR SIDE OF ENTRY PER CODE. REPAINT METAL CEILING.
A02	EXISTING DECORATIVE METAL CEILING TO REMAIN
A15	BULKHEAD WITH INSET PANELS, PAINT
A18	REPAINT EXISTING CAST IRON COLUMNS
A19	NEW BEAM, SEE DETAIL
A20	REPAINT ALL EXISTING STONE ACCENTS BUFF COLOR
A23	RELAY TOP ~5 ROWS OF BRICK CORNICE AND PROVIDE NEW CAST STONE CAP TO MATCH EXISTING. REPAINT BRICK TO MATCH WALL.
A24	REPOINT DETERIORATED MORTAR JOINTS WHERE REQUIRED, ASSUME 50 SF. REPAINT ALL BRICK.
A152	NEW PREFINISHED METAL TO COVER BOTTOM OF NEW BEAM AND TIE INTO EXISTING METAL CEILING
D01	DEMO ALUMINUM STORM, SALVAGE UPPER SASH FOR RE-USE IF POSSIBLE
D02	DEMO ALUMINUM STORMS, WOOD WINDOWS TO REMAIN
D03	REMOVE EXISTING STOREFRONT WINDOWS AND EXTERIOR BULKHEAD COVERING. BULKHEAD FRAMING AND INTERIOR BEADBOARD TO REMAIN.
D68	EXISTING COLUMNS TO REMAIN
D108	REMOVED CRACKED STONE BEAM, SEE NEW WORK



COLOR SCHEME  
1/4" = 1'-0"

EXTERIOR PAINT LEGEND	
	PT-1: SHERWIN WILLIAMS - INDIGO BATIK SW 7602
	PT-2: SHERWIN WILLIAMS - BRACING BLUE SW 6242
	PT-3: SHERWIN WILLIAMS - ANEW GRAY SW 7030
	PT-4: SHERWIN WILLIAMS - RED THEATRE SW 7578




103 EAST MAIN STREET

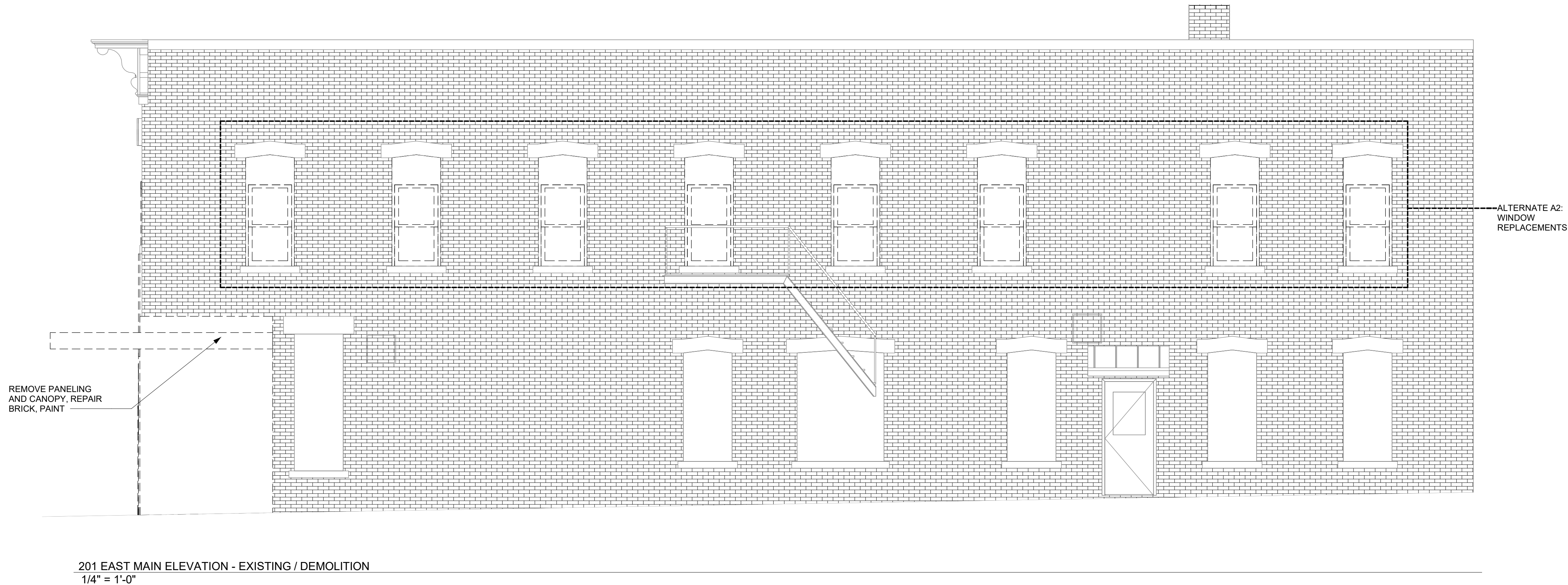


1/20/2021 4:22:15 PM  
Bldg 302 / Anamosa Downtown Facade Revitalization / Anamosa Facade Restoration 11919.01.rvt  
REV 1/20/2021

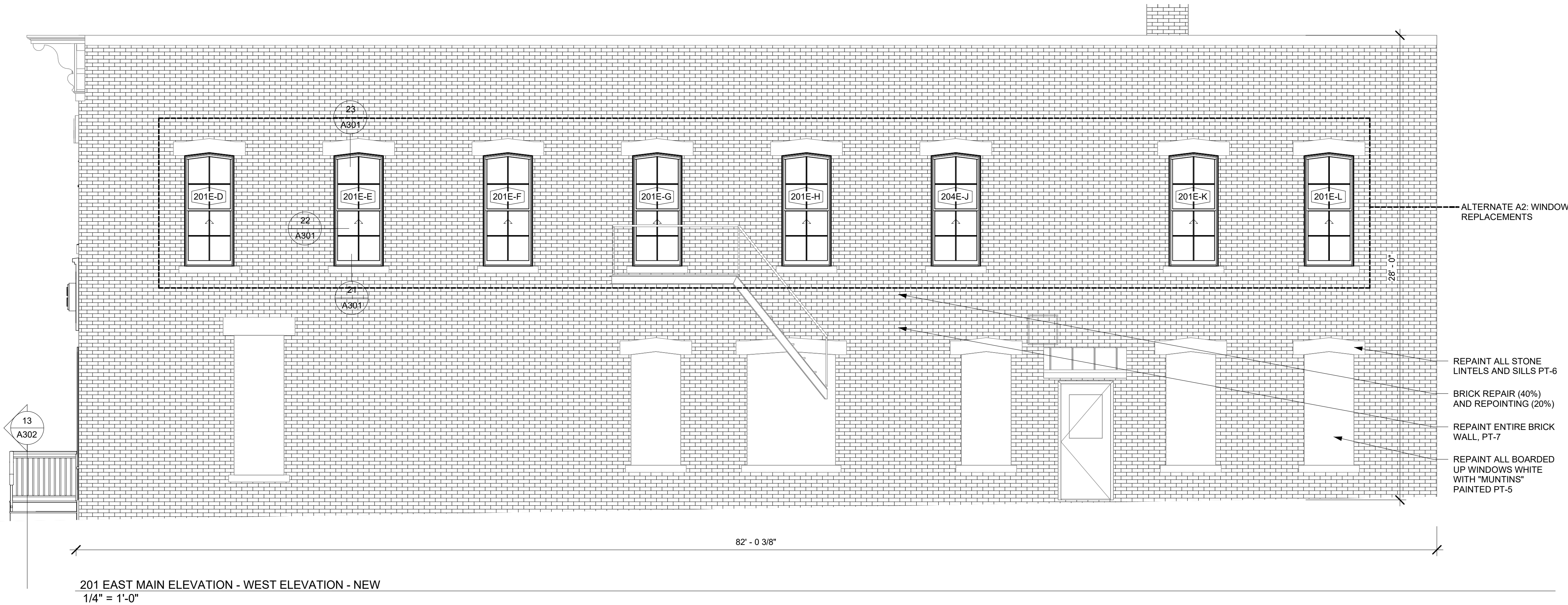


COLOR SCHEME  
1/4" = 1'-0"

EXTERIOR PAINT LEGEND	
	PT-5: SHERWIN WILLIAMS - FORESTWOOD SW 7730
	PT-6: SHERWIN WILLIAMS - MEGA GREIGE SW 7031
	PT-7: SHERWIN WILLIAMS - RUSTIC RED SW 7593
	PT-8: SHERWIN WILLIAMS - IRON ORE SW 7069



201 EAST MAIN ELEVATION - EXISTING / DEMOLITION  
1/4" = 1'-0"



201 EAST MAIN ELEVATION - WEST ELEVATION - NEW  
1/4" = 1'-0"

201 EAST MAIN STREET

100% CDS: 1/20/21	
REVISION	
NUMBER	
DATE	

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A111  
11919.01

1/20/2021 4:22:37 PM  
Bldg 3452 / Anamosa Downtown Facade Revitalization / Anamosa Facade Revitalization 11919.01.rvt  
REV: 1/20/2021

PROVIDE NEW TERMINATION  
BAR AND REGLETTED  
PREFINISHED METAL COUNTER  
FLASHING AT CHIMNEY



5 CHIMNEY PHOTO  
3" = 1'-0"



9 ROOF EDGE  
3" = 1'-0"



PROVIDE TERMINATION BARS  
AS REQUIRED FOR PROPER  
TERMINATION



10 PARAPET PHOTO  
3" = 1'-0"

PROVIDE TPO RIDGE CAP  
WHERE MISSING



8 RIDGE PHOTO  
3" = 1'-0"

REMOVE EXISTING  
CONDUCTOR, PROVIDE  
NEW CONDUCTOR

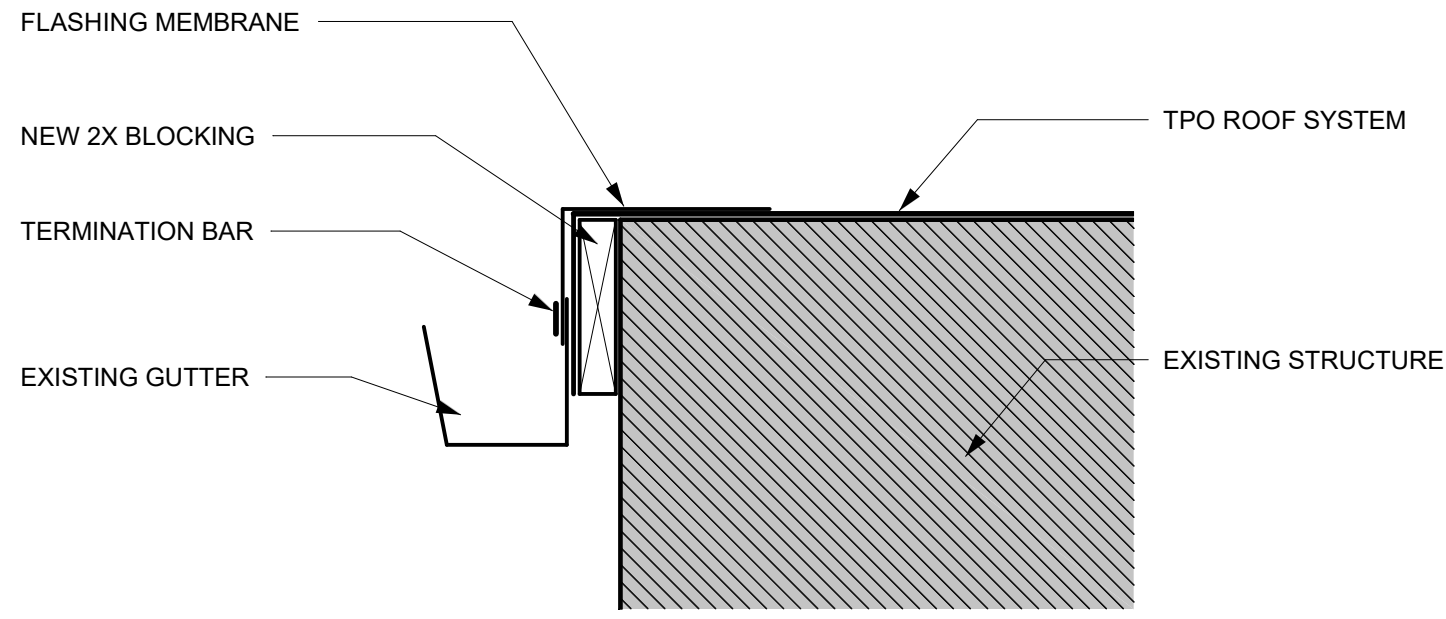


6 CHIMNEY PHOTO  
3" = 1'-0"

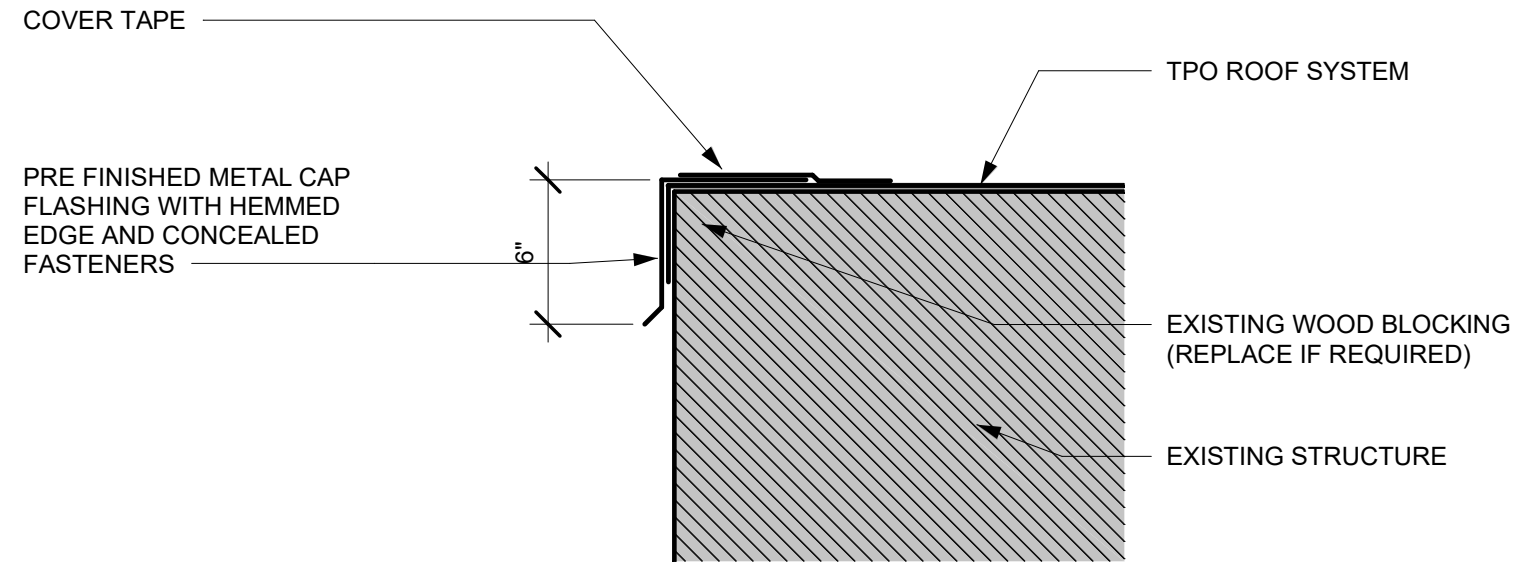
REPAIR EXISTING METAL  
TRIM AND APPLY TPO  
PATCH. SEAL OPEN  
JOINTS



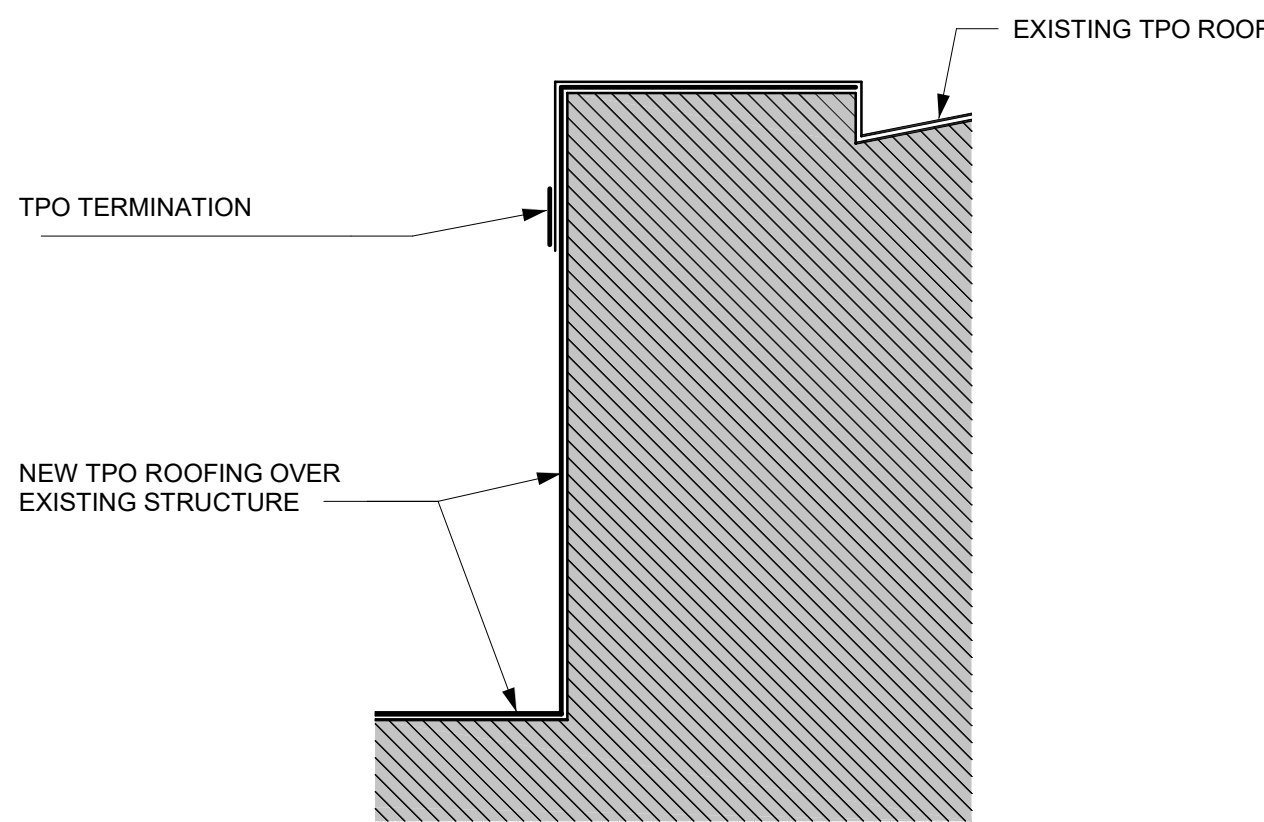
4 PARAPET PHOTO  
3" = 1'-0"



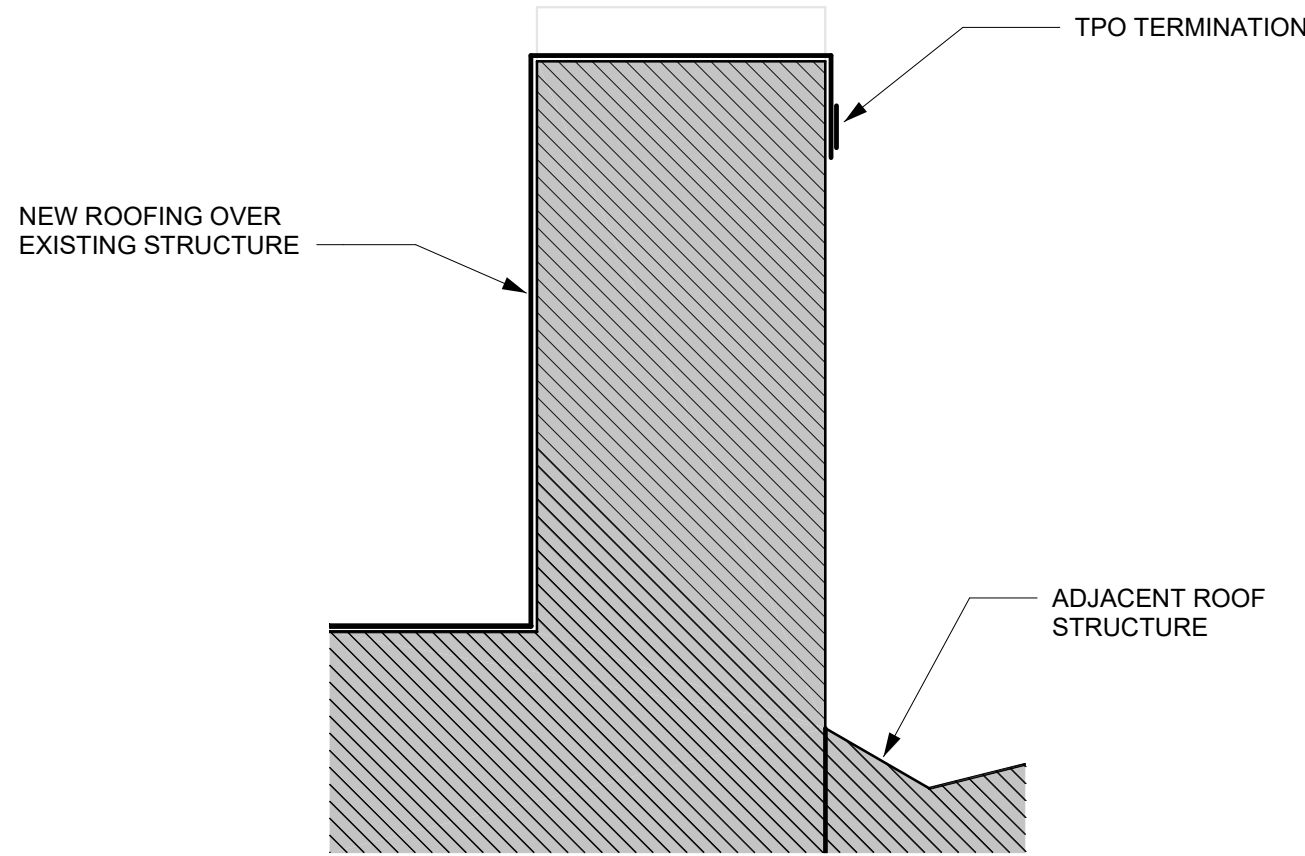
12 DETAIL  
1 1/2" = 1'-0"



11 DETAIL  
1 1/2" = 1'-0"



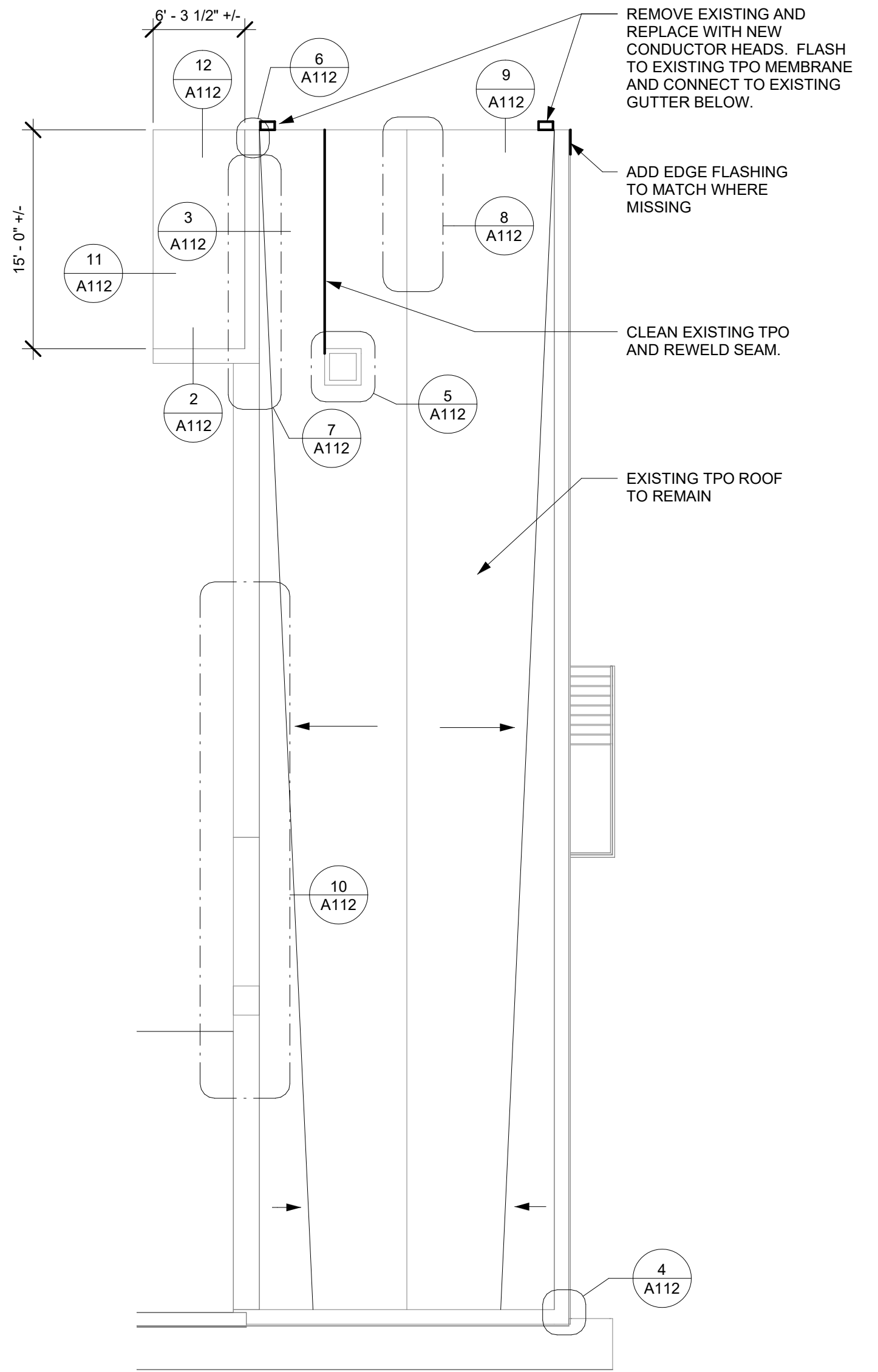
3 PARAPET DETAIL  
1 1/2" = 1'-0"



2 PARAPET DETAIL  
1 1/2" = 1'-0"

#### ROOF PLAN NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING TPO ROOF SYSTEM.  
CLEAN AREAS REQUIRING REPAIR AND NEW WORK.
- CONTRACTOR TO INSPECT AND REWELD ALL LOOSE SEAMS.



201 East Main Roof Plan  
1/8" = 1'-0"

201 EAST MAIN STREET

100% CDS: 1/20/21	REVISION	DATE:
NUMBER:		

## CITY OF ANAMOSA DOWNTOWN REVITALIZATION FACADE IMPROVEMENT PROJECT



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A112

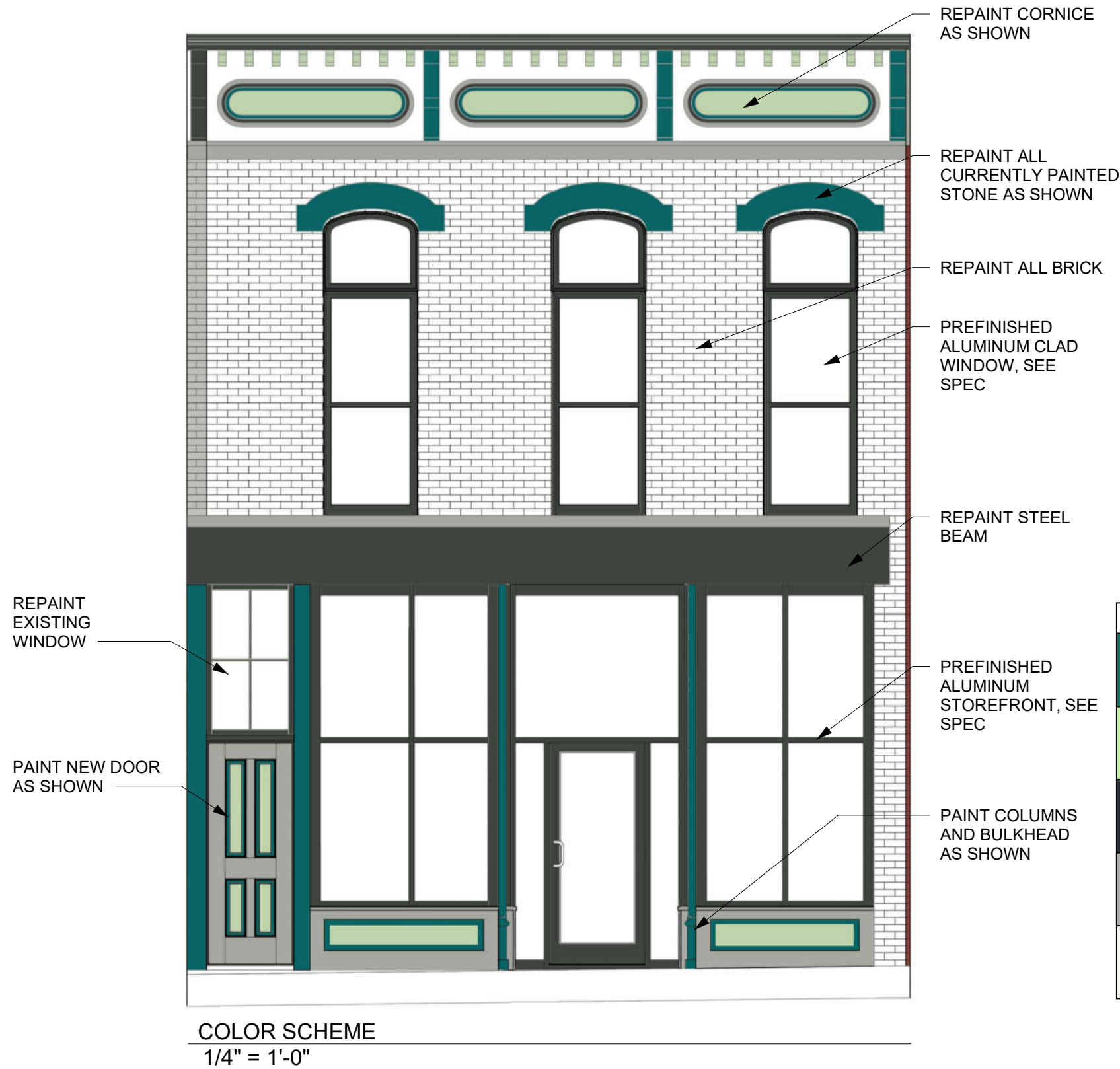
11919.01

203E MAIN DOOR AND FRAME SCHEDULE							
DOOR NO.	DOOR					FRAME	COMMENTS
	WIDTH	HEIGHT	THICK	MATERIAL	GLAZING	MATERIAL	
203E-1	3' - 0"	7' - 0"	1 3/4"	ALUMINUM	INSULATED	ALUMINUM	
203E-2	2' - 7 1/2"	7' - 0"	1 3/4"	WOOD	INSULATED	WOOD	

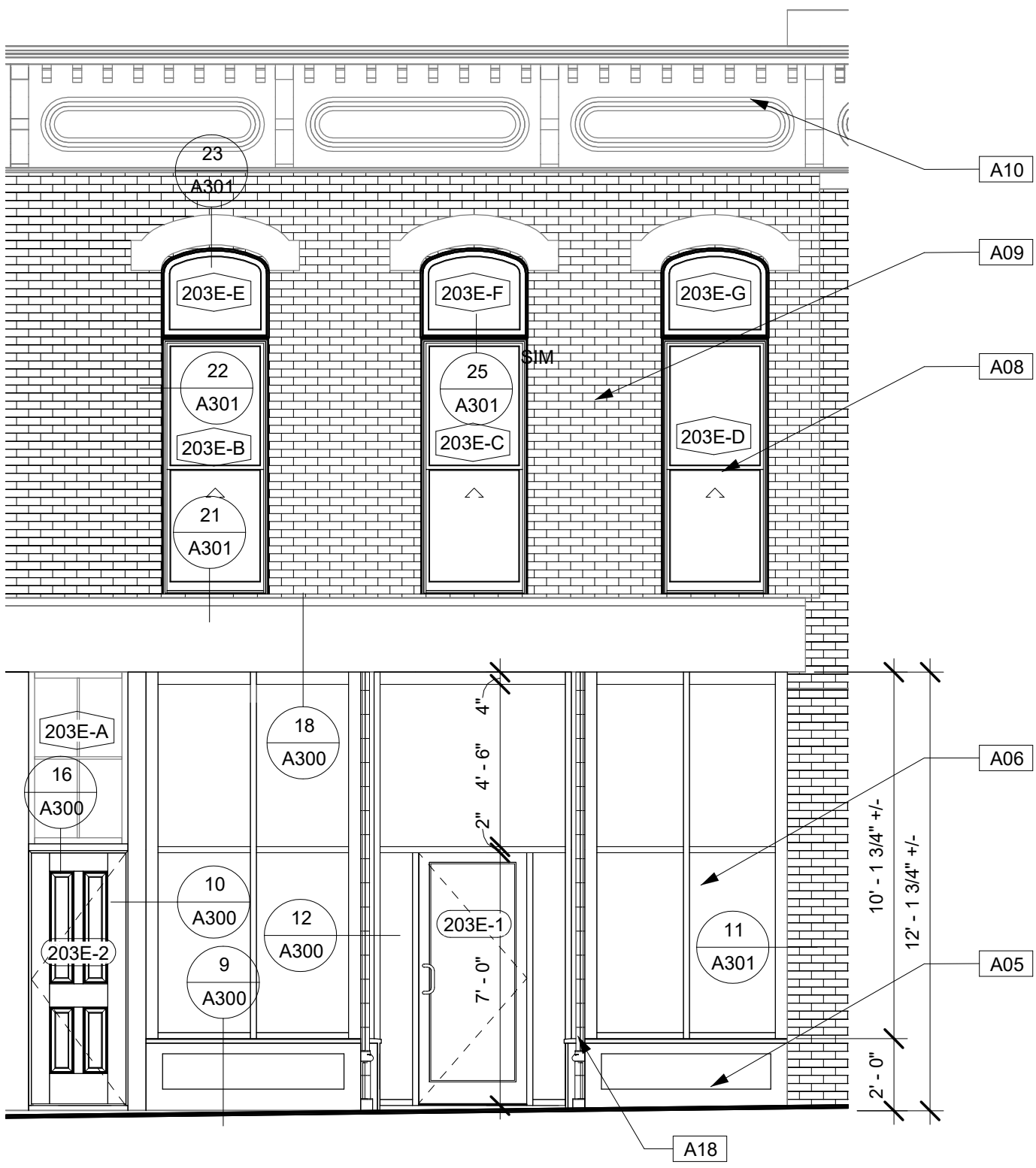
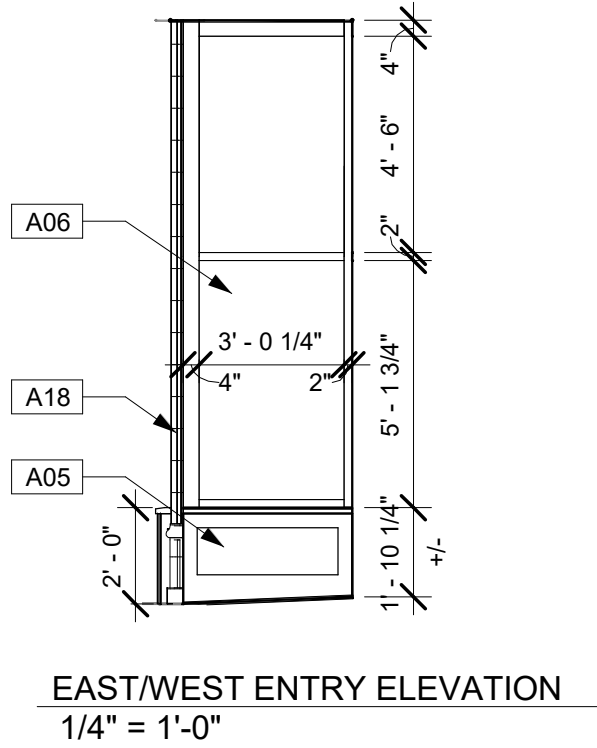
203E MAIN WINDOW SCHEDULE						
MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				
203E-A	2' - 9"	4' - 9"	EXISTING WOOD	EXISTING	1/4"	2
203E-B	2' - 11 1/2"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
203E-C	2' - 11 1/2"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
203E-D	2' - 11 1/2"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
203E-E	3' - 0"	1' - 9 1/2"	CLAD WOOD	TRANSOM	INSULATED	1
203E-F	3' - 0"	1' - 9 1/2"	CLAD WOOD	TRANSOM	INSULATED	1
203E-G	3' - 0"	1' - 9 1/2"	CLAD WOOD	TRANSOM	INSULATED	1

- WINDOW SCHEDULE COMMENTS:
- REPAINT EXTERIOR BRICKMOLD AND SILL.
  - PROVIDE NEW GLAZING. REPAINT EXTERIOR SASH AND TRIM.

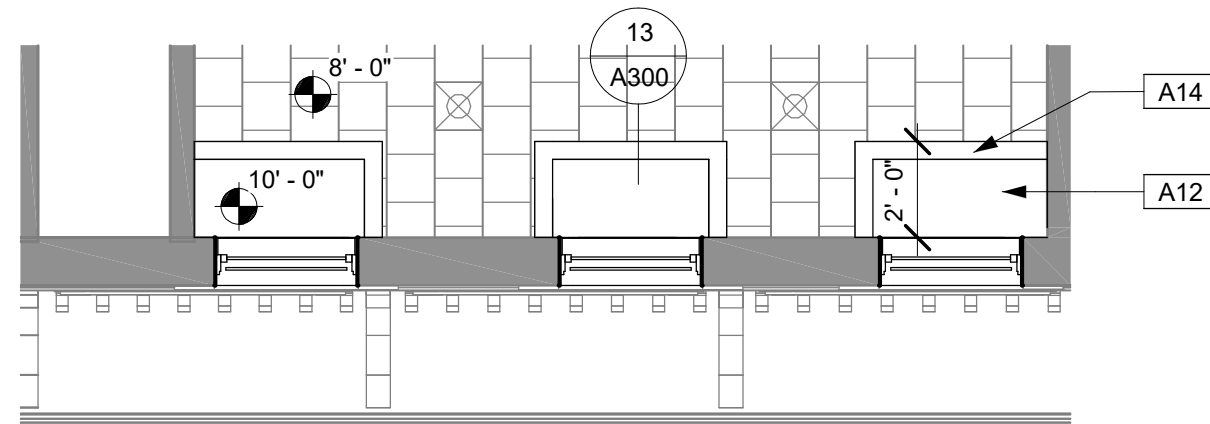
KEYNOTE LEGEND	
KEY #	KEYNOTE
A03	NEW 1" HEX TILE AT LANDING FLOOR
A05	BULKHEAD WITH INSET PANELS, PAINTED
A06	ALUMINUM STOREFRONT WINDOWS AND DOOR
A08	NEW ALUM-CLAD WOOD WINDOWS
A09	REPOINT DETERIORATED MORTAR JOINTS WHERE REQUIRED, ASSUME 25 SF
A10	REPAINT CORNICE BRICK AND DETAILS
A11	NEW SOFFIT, PAINT
A12	NEW 5/8" GYPSUM BOARD ON 1x FURRING OVER EXISTING PLASTER CEILING, PAINT
A13	NEW COMBO EXIT SIGN AND EMERGENCY EGRESS LIGHT MOUNTED TO BOTTOM OF SOFFIT
A14	NEW SOFFITS, TYP.
A18	REPAINT EXISTING CAST IRON COLUMNS
A45	RELOCATED CAN LIGHT
A108	EXTEND EXISTING 2x4 FRAMED WALL UP TO PLASTER CEILING, APPROXIMATELY 27". PAINT TO MATCH EXISTING WALL
A109	RELOCATED ELECTRICAL OUTLET
A155	REMOVE EXISTING CARPET AND FLOOR INFILL OVER PRESUMED EXTANT RAMP, THIS AREA. FIELD VERIFY AREA BASED ON WALL OUTLINES REMAINING ON PLASTER CEILING ABOVE
A156	NEW 1" HEX TILE OVER NEW 3/4" PLYWOOD RAMP AND SLEEPER SYSTEM, ON TOP OF PRESUMED EXTANT RAMP, ASSUMED DIFFERENCE BETWEEN FINISHED FLOOR AND SIDE WALK IS 1-1/2"
A157	ALIGN NEW ENTRY WALLS WITH WALL OUTLINES REMAINING ON PLASTER CEILING ABOVE AND PRESUMED EXTANT RAMP UNDER FLOOR, FIELD VERIFY
A158	NEW BEADBOARD CEILING ON EXISTING PLASTER CEILING, PAINT PT-15
D04	REMOVE WOOD FRAMED ELEVATED LANDING
D05	REMOVE EXISTING GYPSUM BOARD COLUMN COVERS, CAST IRON COLUMNS TO REMAIN
D06	REMOVE EXISTING STOREFRONT WINDOWS, STONE VENEER AND FRAMING. ORIGINAL FABRIC ASSUMED NON-EXTANT, NOTIFY ARCHITECT IF FOUND. ALL BRICK ENCOUNTERED IS TO REMAIN
D07	REMOVE (2) AC UNITS, TURN OVER TO OWNER
D08	REMOVE WALL INFILL UNDER WINDOW TO HISTORIC OPENING
D09	EXTANT CAST IRON COLUMNS TO REMAIN
D10	REMOVE EXISTING NON-HISTORIC WINDOW, BRICK MOULD AND WOOD SILLS TO REMAIN, TYP.
D11	UNCOVER EXISTING STONE BEAM
D12	DEMO EXISTING SOFFIT AND CAN LIGHTS
D13	RELOCATE EXISTING ELECTRICAL OUTLET TO SIDE WALL, SEE NEW RCP
D14	REMOVE EXISTING LAY-IN CEILING, THIS AREA
D15	EXISTING LAY-IN CEILING TO REMAIN
D16	EXISTING CAN LIGHTS TO BE RELOCATED
D17	EXISTING ACOUSTIC CEILING TO REMAIN
D18	EXISTING HVAC REGISTER TO REMAIN, TYP.
D19	REMOVE EXISTING CEILING AND FRAMING, TYP.



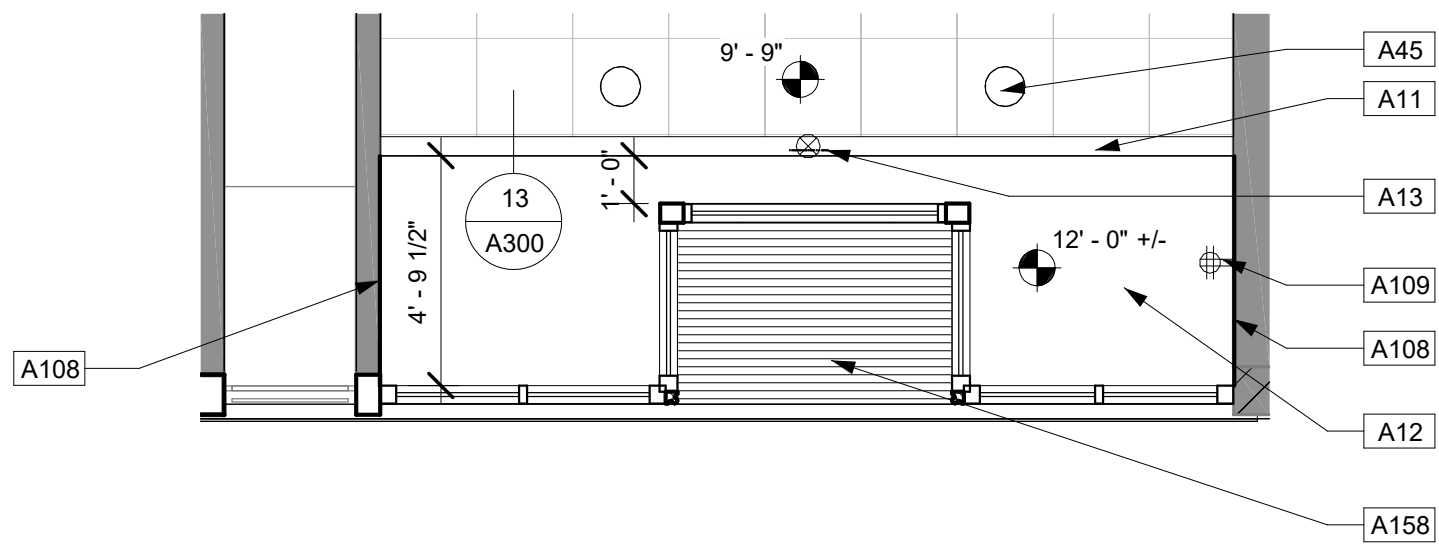
EXTERIOR PAINT LEGEND	
	PT-9: SHERWIN WILLIAMS - REALLY TEAL SW 6489
	PT-10: SHERWIN WILLIAMS - ROMAINE SW 6730
	PT-8: SHERWIN WILLIAMS - IRON ORE SW 7069
	PT-11: SHERWIN WILLIAMS - GRAY MATTERS SW 7066
	PT-15: SHERWIN WILLIAMS - SNOWBOUND SW 7004



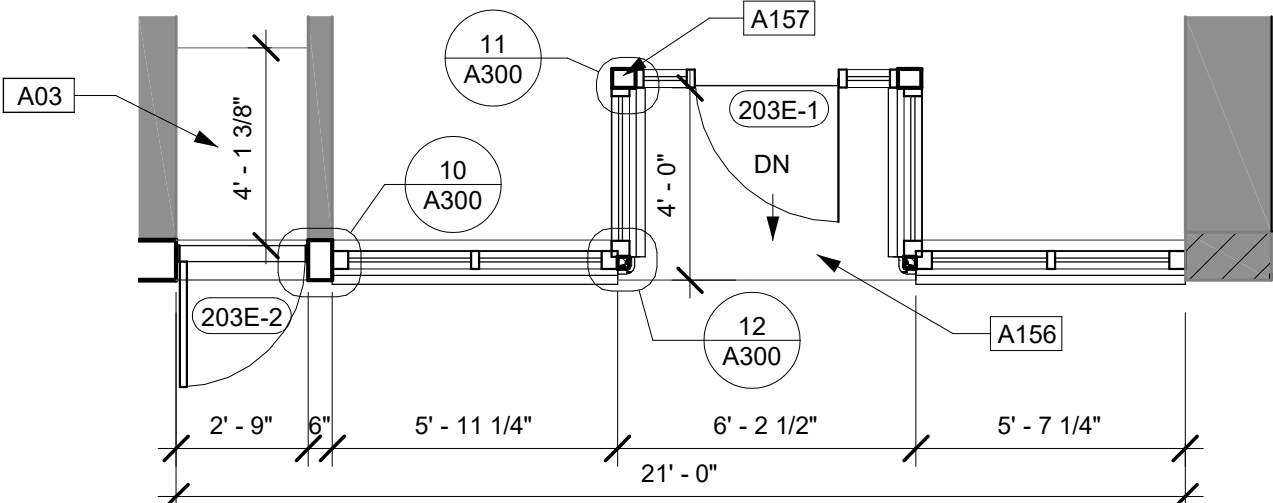
203 EAST MAIN ELEVATION - NEW  
1/4" = 1'-0"



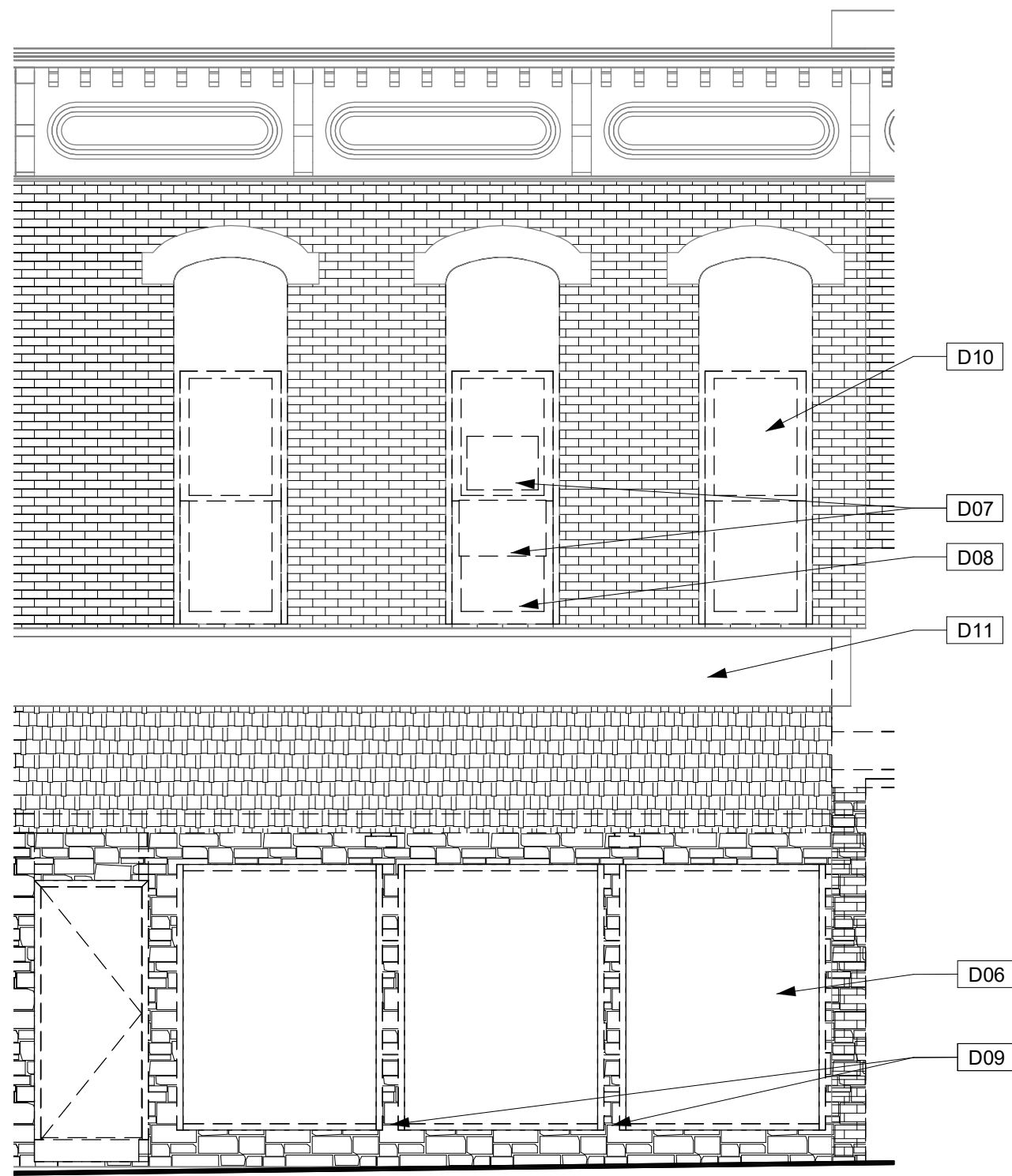
UPPER FLOOR REFLECTED CEILING PLAN  
1/4" = 1'-0"



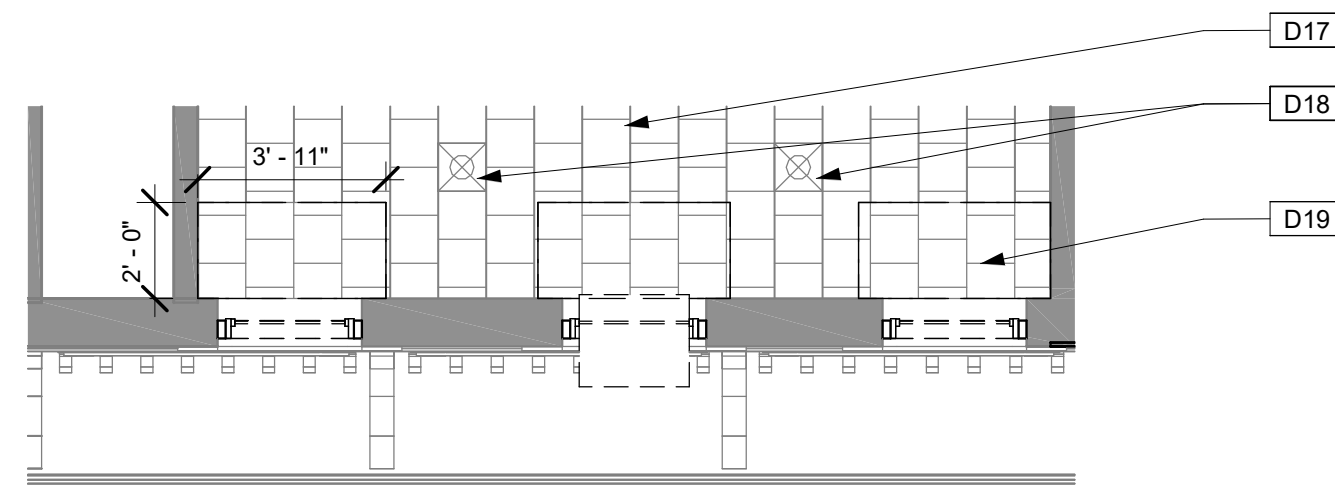
MAIN FLOOR REFLECTED CEILING PLAN  
1/4" = 1'-0"



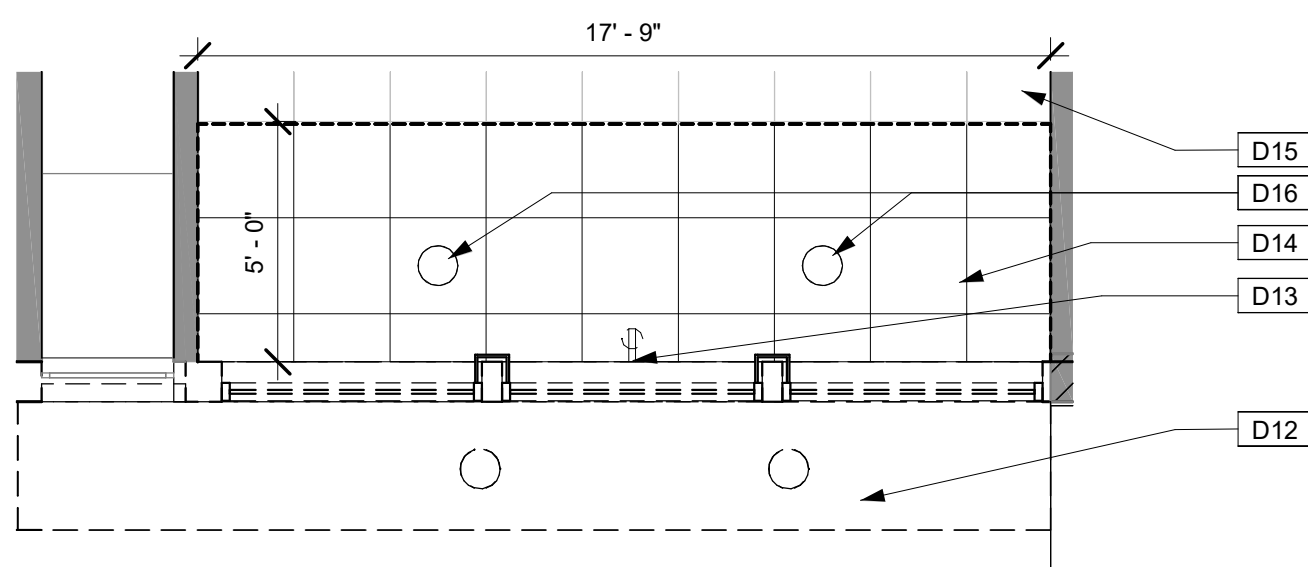
MAIN FLOOR PLAN - NEW  
1/4" = 1'-0"



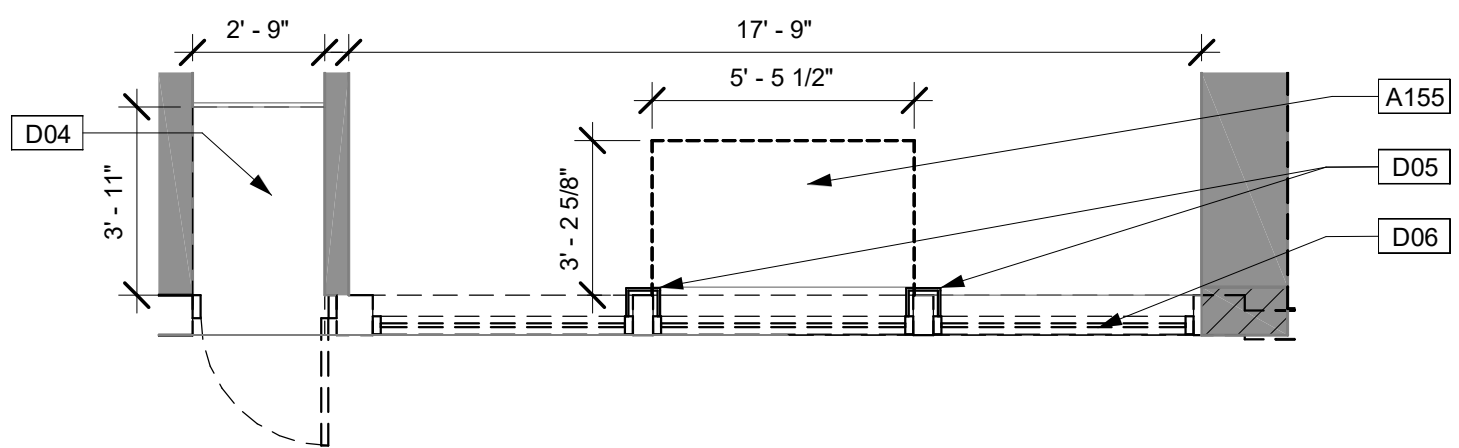
203 EAST MAIN ELEVATION - EXISTING / DEMOLITION  
1/4" = 1'-0"



UPPER FLOOR REFLECTED CEILING DEMOLITON PLAN  
1/4" = 1'-0"



MAIN FLOOR REFLECTED CEILING DEMOLITION PLAN  
1/4" = 1'-0"



MAIN FLOOR PLAN - EXISTING / DEMOLITION PLAN  
1/4" = 1'-0"

203 EAST MAIN STREET

100% CDS: 1/20/21	REVISION	DATE:
	NUMBER:	

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A120

11919.01

DOOR NO.	DOOR					FRAME	COMMENTS
	WIDTH	HEIGHT	THICK	MATERIAL	GLAZING	MATERIAL	
205E-1	3' - 0"	7' - 0"	1 3/4"	ALUMINUM	INSULATED	ALUMINUM	
205E-2	2' - 9"	7' - 0"	1 3/4"	WOOD/		WOOD	

MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				
205E-A	2' - 11"	5' - 1"	EXISTING WOOD	EXISTING	1/4"	2
205E-B	2' - 8"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
205E-C	2' - 8"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
205E-D	2' - 8"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
205E-E	2' - 8"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1
205E-F	2' - 8"	7' - 1"	CLAD WOOD	SINGLE HUNG	INSULATED	1






WINDOW SCHEDULE COMMENTS:

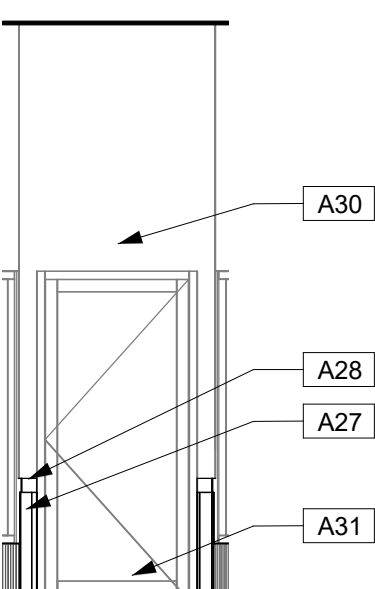
1. REPAINT EXTERIOR BRICKMOLD AND SILL.
2. PROVIDE NEW GLAZING. REPAINT EXTERIOR SASH AND TRIM.

KEY #	KEYNOTE
A26	VINYL BASE TO MATCH EXISTING
A27	NEW FAUX BEADBOARD PANELING TO MATCH EXISTING
A28	1x4 WOOD TRIM, STAINED TO MATCH EXISTING AT TOP OF PANELING AND AROUND EXISTING WINDOWS AND DOORS AS REQUIRED FROM STONE REMOVAL
A29	EXISTING WINDOW
A30	NEW 5/8" GYPSUM BOARD ON EXISTING WOOD FRAMING
A31	EXISTING ALUMINUM DOOR & FRAME
A33	NEW 1" HEX FLOOR TILE
A34	BULKHEAD WITH INSET PANELS, PAINTED
A35	ALUMINUM STOREFRONT WINDOWS AND DOOR
A36	UNCOVER BEAM
A37	NEW ALUMINUM CLAD WOOD WINDOWS
A38	REPOINT DETERIORATED MORTAR JOINTS WHERE REQUIRED, ASSUME 25 SF.
A39	REPAINT CORNICE, BRICK AND DETAILS IN NEW PAINT SCHEME
A41	EXISTING TRANSOM WINDOW
A42	REPLACE METAL CLADDING ON BOTTOM OF ORIEL WINDOW WITH NEW TO MATCH, PAINT
A43	REPAINT FLAT SEAM METAL ROOF
A44	NEW 5/8" GYPSUM BOARD ON 1x FURRING OVER EXISTING PLASTER CEILING, PAINT
A45	RELOCATED CAN LIGHT
A46	NEW SOFFIT
A110	EXTEND EXISTING 2x4 FRAMED WALL UP TO PLASTER CEILING, APPROXIMATELY 27". PAINT TO MATCH EXISTING WALL
A111	RELOCATED ELECTRICAL OUTLET
A153	NEW BEADBOARD CEILING ON EXISTING PLASTER CEILING, PAINT PT-15
A154	NEW SEMI-FLUSH SCHOOLHOUSE LIGHT FIXTURE, PROVIDE NEW WIRING AND WIREMOLD ON NEW BEADBOARD CEILING. RECONNECT TO EXISTING LIGHT SWITCH
D12	DEMO EXISTING SOFFIT AND CAN LIGHTS
D20	REMOVE EXISTING STOREFRONT WINDOWS, STONE VENEER AND FRAMING. ORIGINAL FABRIC ASSUMED NON-EXTANT, NOTIFY ARCHITECT IF FOUND. ALL BRICK ENCOUNTERED IS TO REMAIN
D21	WINDOWS TO REMAIN
D22	DEMO STORE VENEER, WALL STRUCTURE AND INTERIOR FINISH TO REMAIN
D23	REMOVE EXISTING FLOOR TILE, PREP FOR NEW TILE
D24	EXISTING INTERIOR FINISH TO REMAIN ON WALLS
D25	EXTANT CAST IRON COLUMNS TO REMAIN
D26	REMOVE EXISTING STOREFRONT WINDOWS, STONE VENEER AND FRAMING. ORIGINAL FABRIC ASSUMED NON-EXTANT, NOTIFY ARCHITECT IF FOUND. ALL BRICK ENCOUNTERED IS TO REMAIN
D27	UNCOVER EXISTING STONE BEAM
D28	REMOVE EXISTING NON-HISTORIC WINDOW, BRICK MOULD AND WOOD SILLS TO REMAIN, TYP.
D29	RELOCATE EXISTING ELECTRICAL OUTLET TO SIDE WALL, SEE NEW RCP
D30	REMOVE EXISTING LOWER VESTIBULE CEILING AND LIGHT
D31	REMOVE PARTIAL EXISTING ACOUSTIC CEILING
D32	CAN LIGHT TO BE RELOCATED
D33	EXISTING LIGHT TO REMAIN

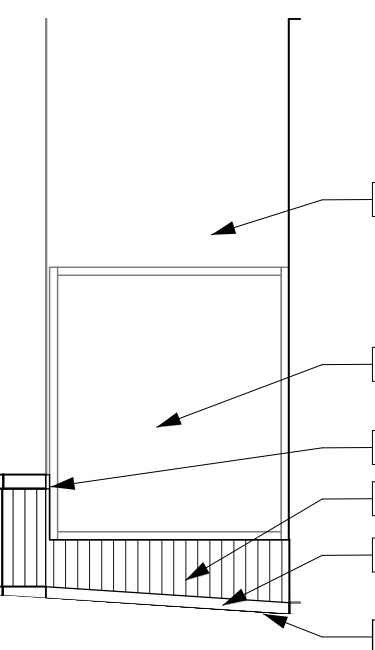


COLOR SCHEME  
1/4" = 1'-0"

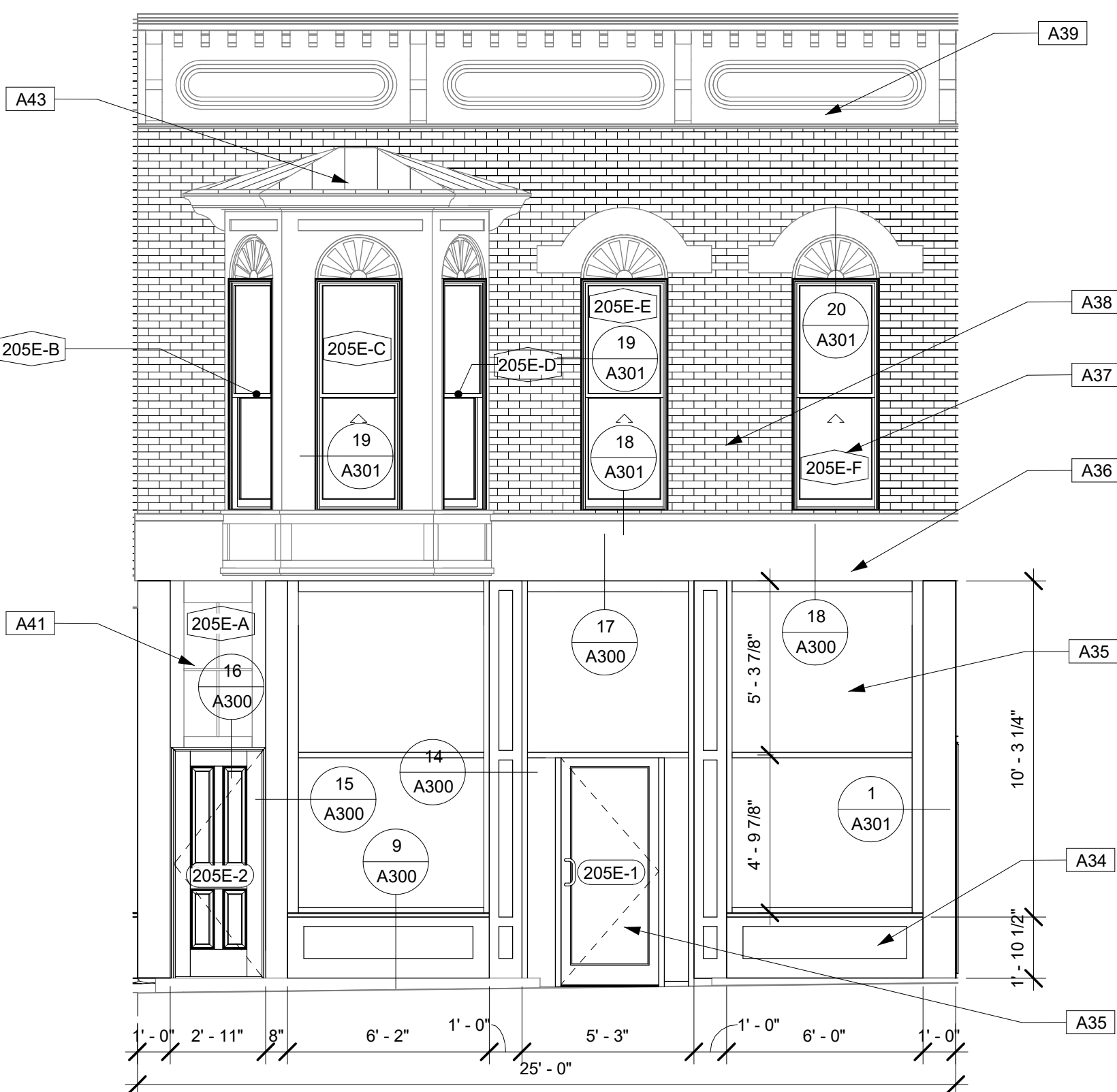
EXTERIOR PAINT LEGEND	
	PT-12: SHERWIN WILLIAMS - SUNBEAM YELLOW SW 0078
	PT-13: SHERWIN WILLIAMS - ROBUST ORANGE SW 6628
	PT-8: SHERWIN WILLIAMS - IRON ORE SW 7069
	PT-11: SHERWIN WILLIAMS - GRAY MATTERS SW 7066
	PT-15: SHERWIN WILLIAMS - SNOWBOUND SW 7004



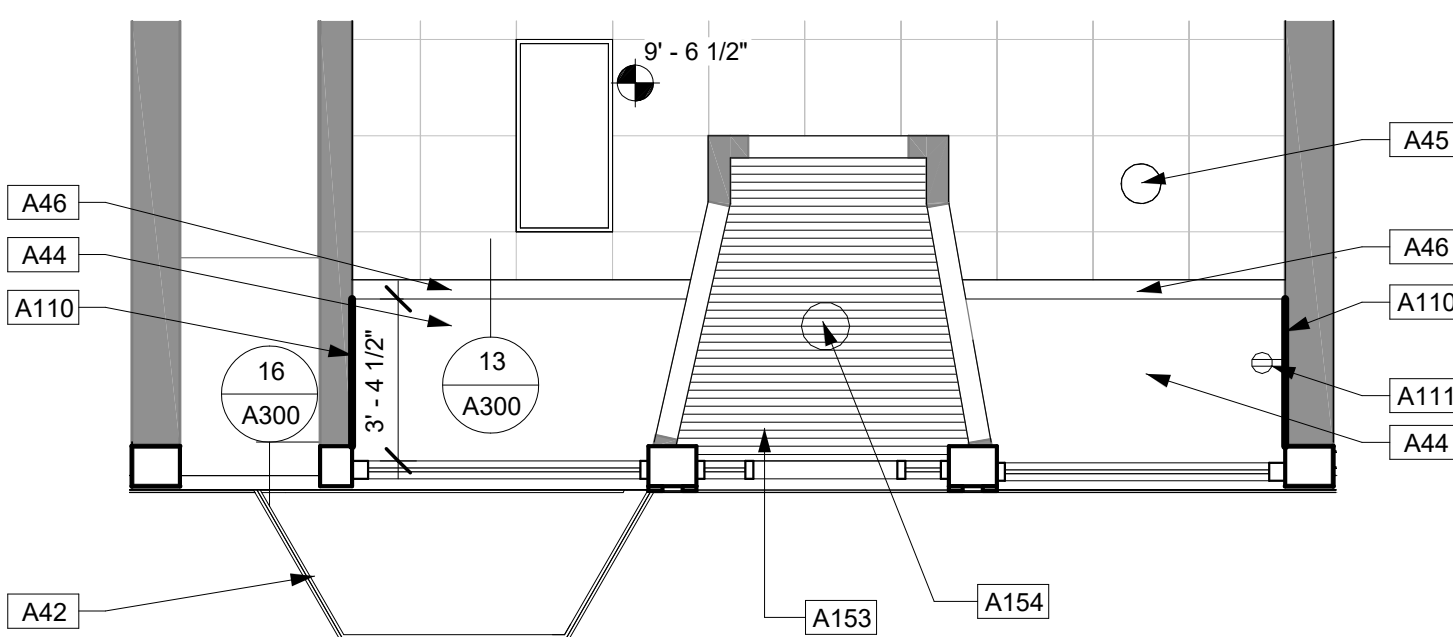
SOUTH INTERIOR ENTRY ELEVATION  
1/4" = 1'-0"



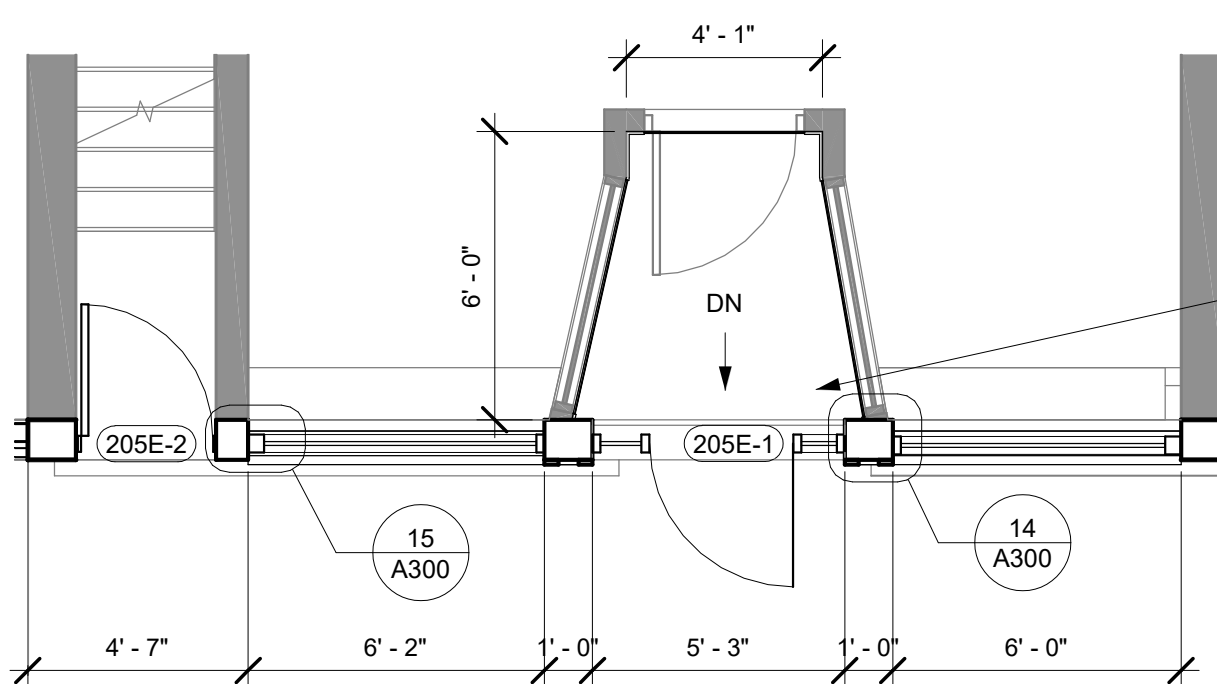
EAST/WEST INTERIOR ENTRY ELEVATION  
1/4" = 1'-0"



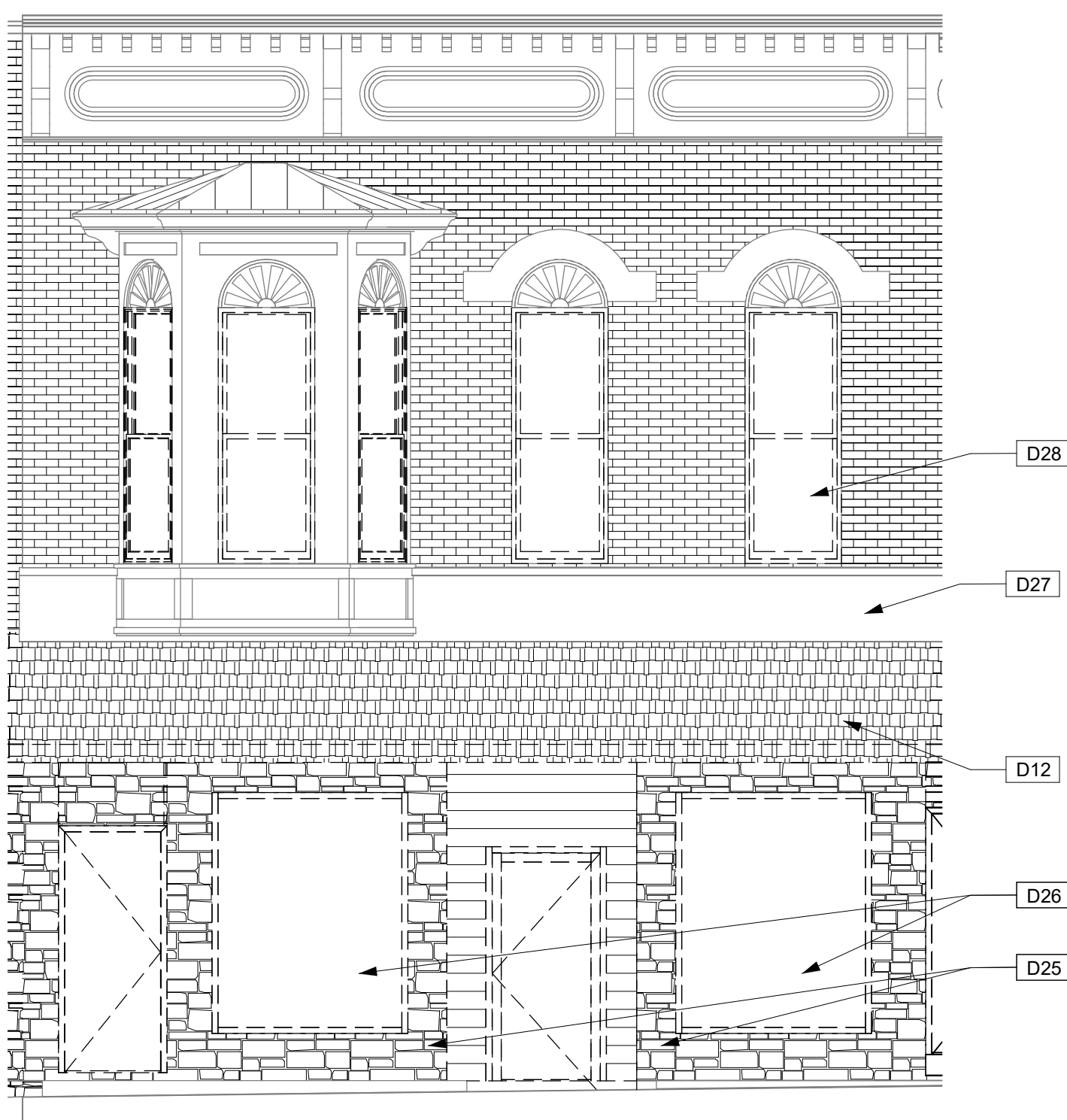
205 EAST MAIN ELEVATION - NEW  
1/4" = 1'-0"



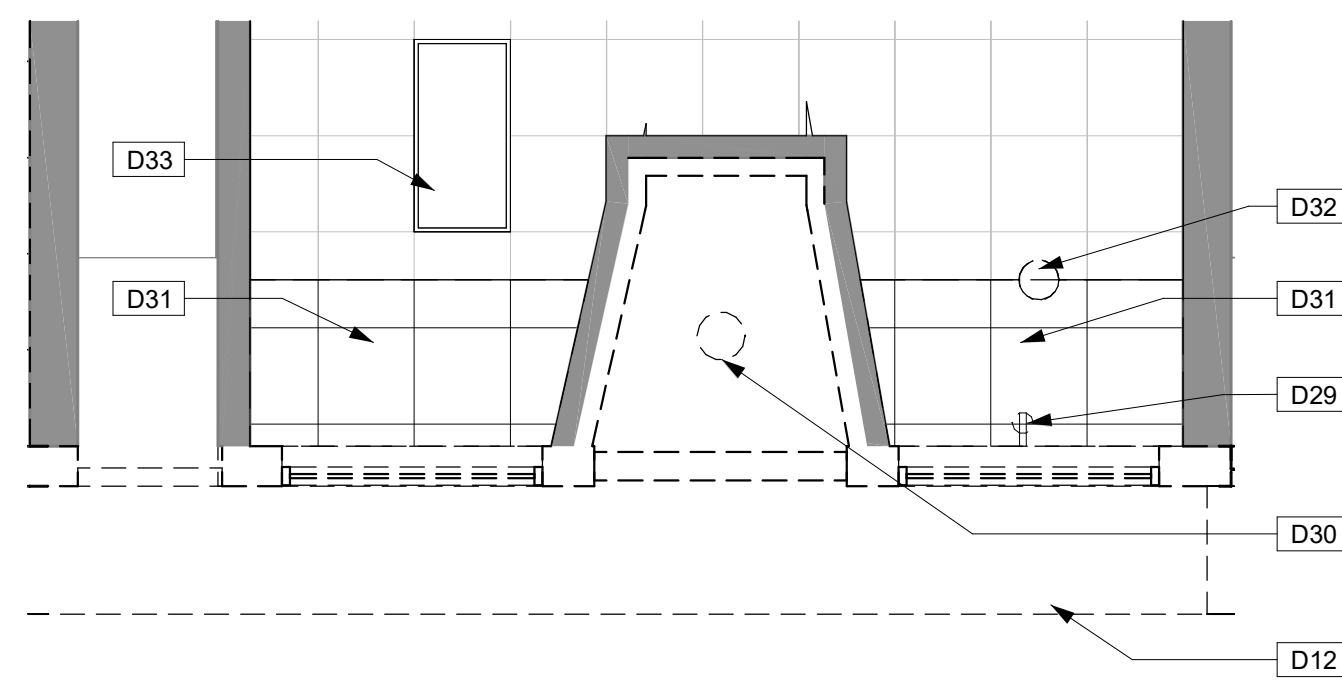
 MAIN FLOOR REFLECTED CEILING PLAN  
1/4" = 1'-0"



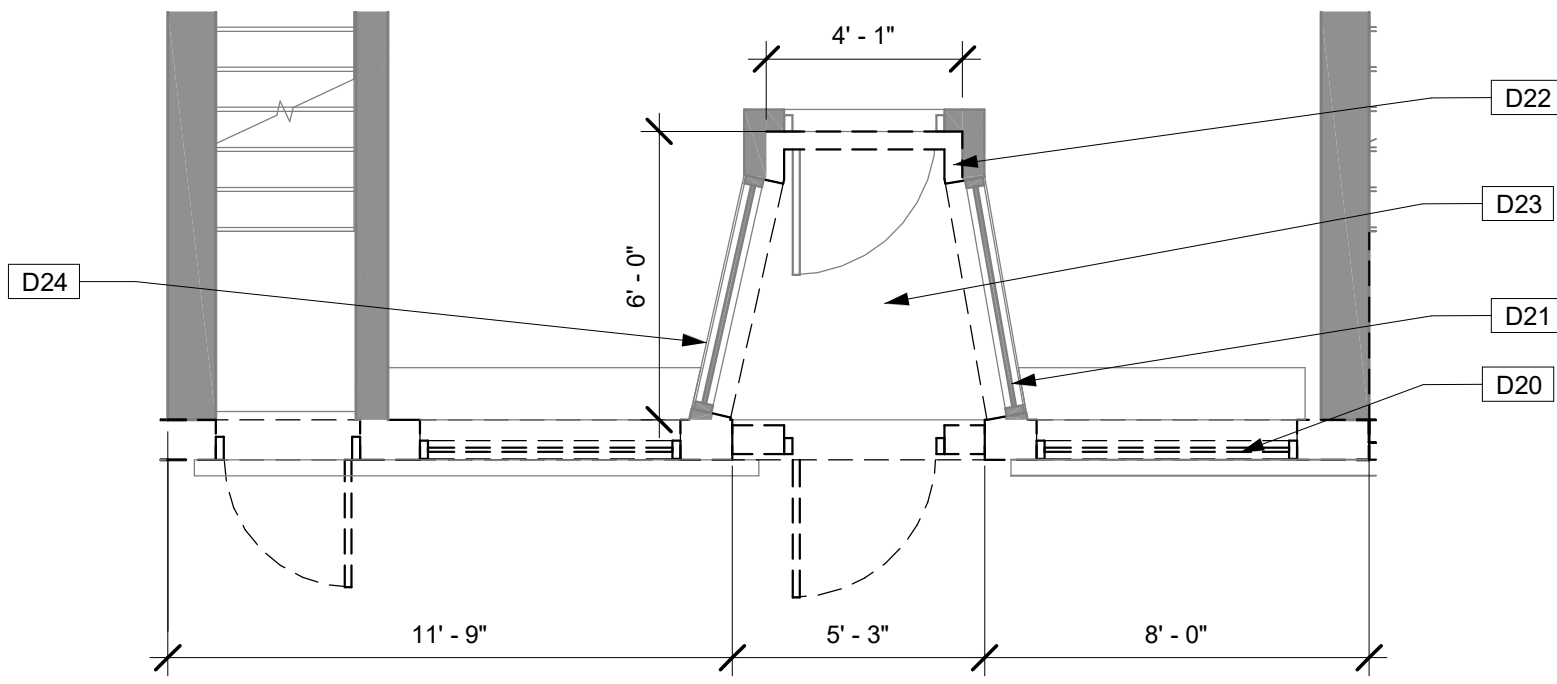
MAIN FLOOR PLAN - NEW  
1/4" = 1'-0"




205 EAST MAIN ELEVATION - EXISTING / DEMOLITION  
1/4" = 1'-0"



MAIN FLOOR REFLECTED CEILING DEMOLITION PLAN  
1/4" = 1'-0"




**MAIN FLOOR PLAN - EXISTING / DEMOLITION PLAN**  
 1/4" = 1'-0"

WINDOW GENERAL NOTES

1. PROVIDE TEMPERED GLAZING IN NEW WINDOWS, WHERE REQUIRED BY CODE
2. REPAINT ALL EXISTING WINDOWS, SEE PAINT SCHEME
3. ALL STOREFRONT WINDOWS TO RECEIVE INTERIOR WOOD STORM, SEE DETAILS

WINDOW SCHEDULE SPECIFIC COMMENTS

1. REPLACE BROKEN GLAZING
2. REPLACE MIDDLE HORIZONTAL MUNTIN TO MATCH EXISTING
3. IF INTERIOR WOOD STORM WINDOW CANNOT BE MADE IN (1) SASH, WINDOW MAY BE BROKEN HORIZONTALLY INTO (2) SASHES, ALIGN MUNTINS.

REPAINT ALL BRICK

REPAINT ALL CURR  
PAINTED STONE

PREFINISHED ALUM  
STORM, CUSTOM C  
SEE SPEC

NO PAINT ON NEW






PAINT COLUMNS AN  
STOREFRONT WIND  
AS SHOWN

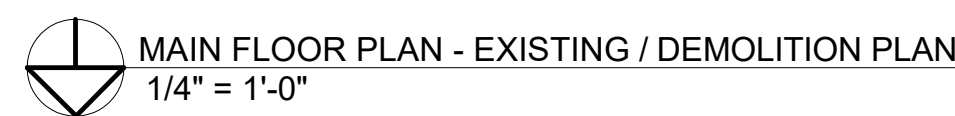
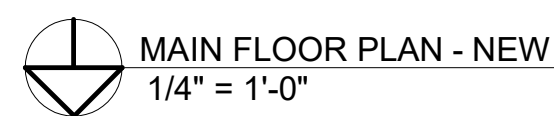
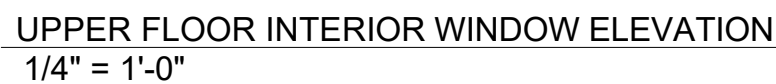
PREFINISHED  
ALUMINUM DOOR, S  
SPEC

REPAINT PANELING  
SHOWN

REPAINT COAL DOO

COLOR SCHEME  
1/4" = 1'-0"

EXTERIOR PAINT LEGEND	
	PT-7: SHERWIN WILLIAMS - RED THEATRE SW 7578
	PT-14: SHERWIN WILLIAMS - FOLKSTONE SW 6005
	PT-11: SHERWIN WILLIAMS - GRAY MATTERS SW 7066
	PT-6: SHERWIN WILLIAMS - IRON ORE SW 7069
	PT-3: SHERWIN WILLIAMS - ANEW GRAY SW 7030



207E MAIN DOOR AND FRAME SCHEDULE							
DOOR NO.	DOOR					FRAME	COMMENTS
	WIDTH	HEIGHT	THICK	MATERIAL	GLAZING	MATERIAL	
207E-1	3' - 0"	7' - 0"	1 3/4"	ALUMINUM/	INSULATED	ALUMINUM/	

207E MAIN WINDOW SCHEDULE						
MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				
207E-A	3' - 8"	7' - 4"	EXISTING WOOD	EXISTING	EXISTING	1, 2, 3
207E-B	3' - 8"	8' - 5"	EXISTING WOOD	EXISTING	EXISTING	1, 2, 3
207E-C	3' - 8"	7' - 4"	EXISTING WOOD	EXISTING	EXISTING	1, 2, 3

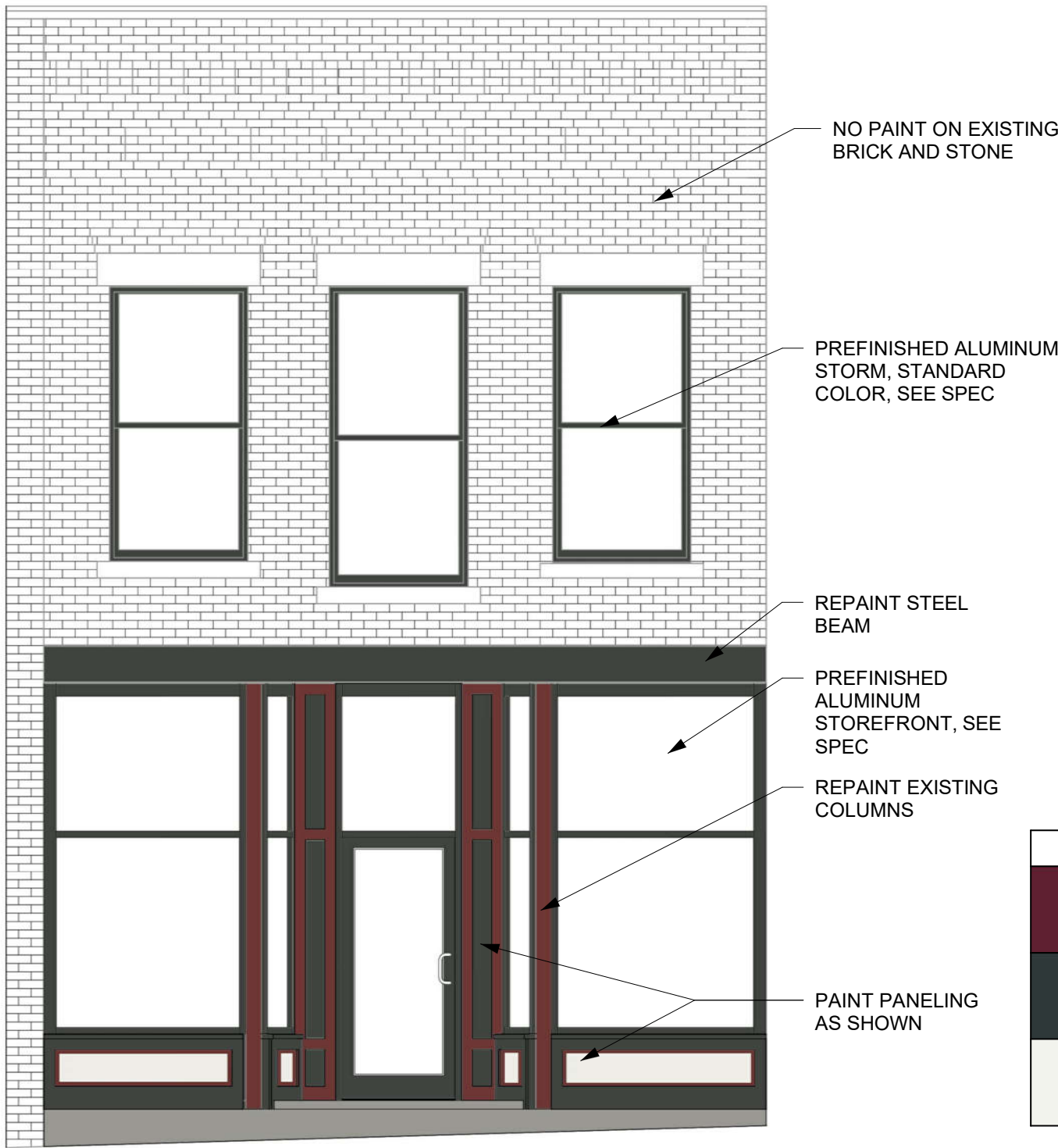
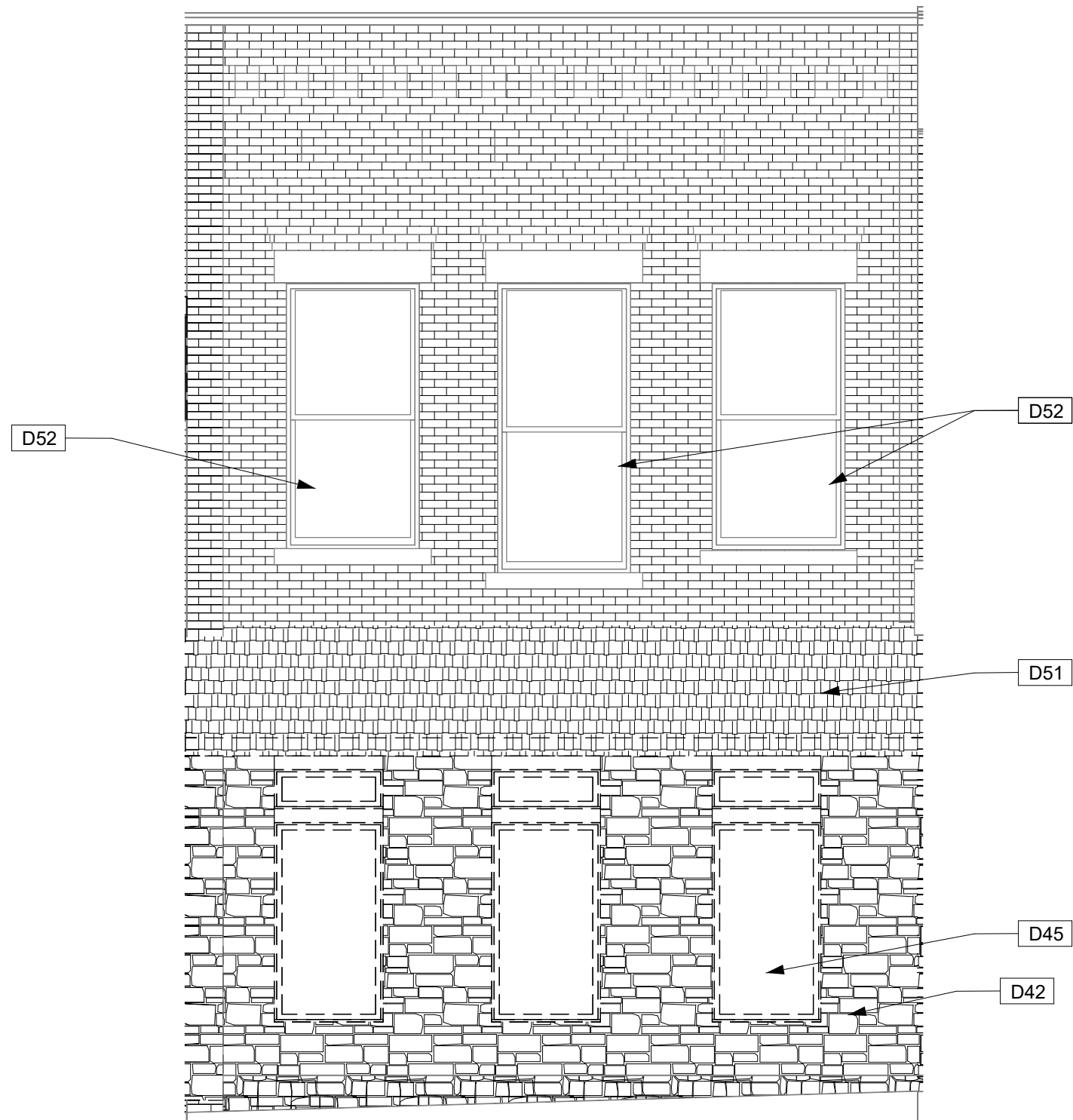
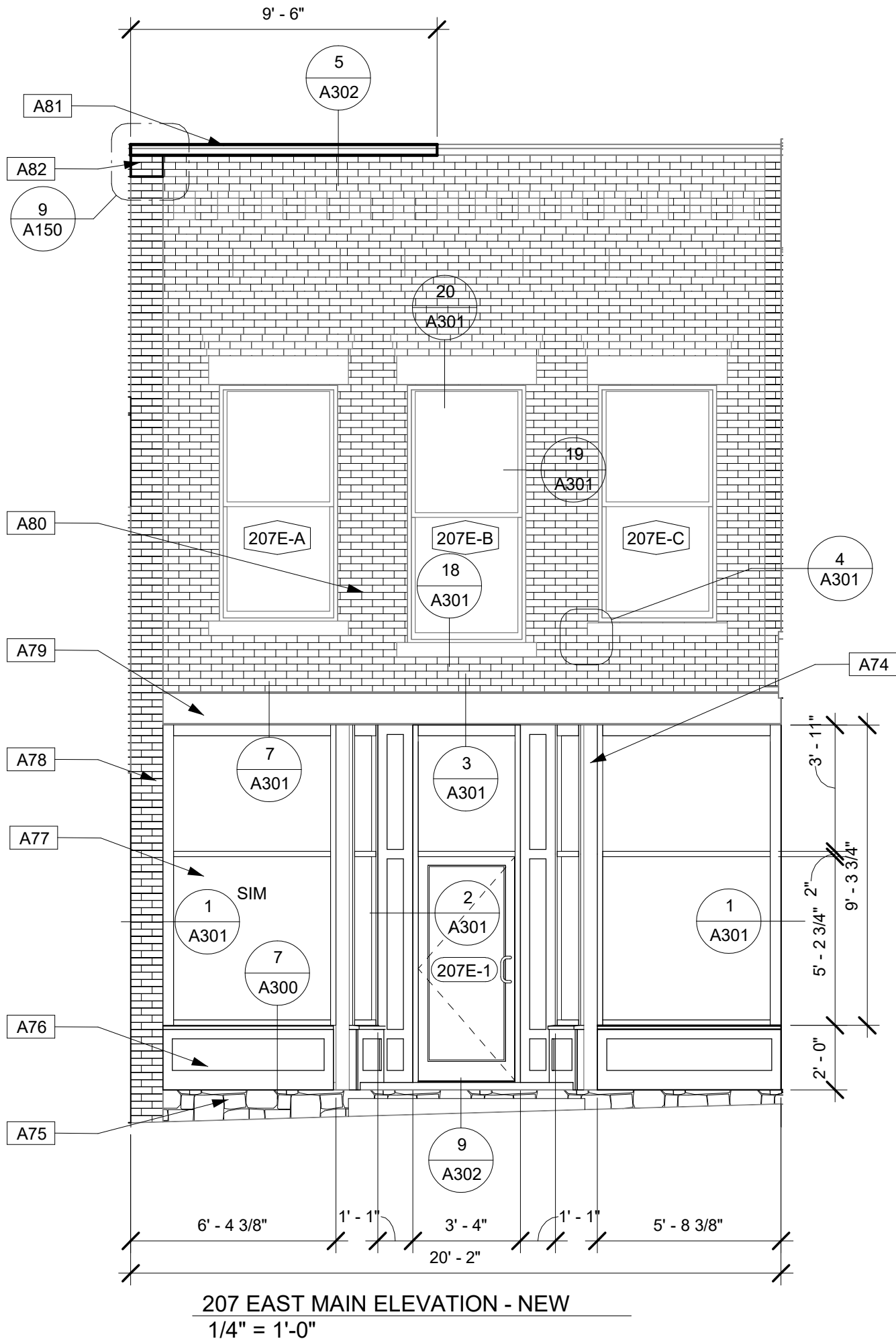
WINDOW SCHEDULE COMMENTS:

- PROVIDE NEW EXTERIOR ALUMINUM STORM WINDOWS.
- REMOVE EXISTING GLAZING PUTTY AND RE GLAZE WINDOW. INSTALL NEW SASH CORDS AND TIE TO EXISTING COUNTERWEIGHTS
- STRIP AND REFINISH WINDOW AND TRIM. INTERIOR TO BE RESTAINED TO MATCH EXISTING, EXTERIOR TO BE PAINTED.

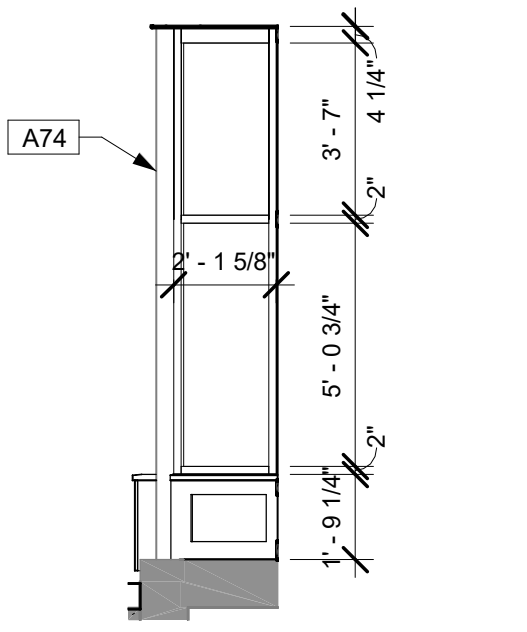
KEY #	KEYNOTE
A69	NEW 1" HEX TILE ON LANDING
A70	LAY OUT NEW RECESSED ENTRY WALLS BASED ON INTACT HISTORIC CEILING ABOVE, F.V.
A71	NEW WOOD BEADBOARD CEILING. PAINT. PROVIDE 2x4 SUPPORT FRAMING AS REQUIRED
A72	CAREFULLY BEND BACK EXISTING METAL CEILING TO MEET NEW WINDOWS
A73	EXISTING DECORATIVE METAL CEILING TO REMAIN
A74	REPAINT EXISTING CAST IRON COLUMNS
A75	EXISTING STONE FOUNDATION
A76	NEW RAISED PANEL BULKHEAD
A77	NEW ALUMINUM STOREFRONT
A78	REPLACE OUTER WYTHE OF BRICK, ASSUMED TO BE DAMAGED FROM LIMESTONE VENEER, ASSUME 28 SF
A79	PAINT EXISTING BEAM
A80	REPOINT DETERIORATED MORTAR JOINTS WHERE NEEDED, ASSUME 30 SF
A81	NEW METAL PARAPET CAP TO MATCH EXISTING, SEE DETAIL
A82	REBUILD STEPPED OF PARAPET TO SIT FLUSH WITH EXISTING STONE CAP, SEE PHOTOS
D42	REMOVE EXISTING STONE VENEER CAREFULLY. ANY BRICK, STONE WATERTABLE OR STONE FOUNDATION FOUND INTACT TO REMAIN
D43	CAST IRON COLUMNS TO REMAIN, F.V. DO NOT DAMAGE DURING DEMO
D44	REMOVE CARPET, THIS ROOM
D45	REMOVE EXISTING STOREFRONT WINDOWS, STONE VENEER AND FRAMING. ORIGINAL FABRIC ASSUMED NON-EXTANT, NOTIFY ARCHITECT IF FOUND. ALL BRICK ENCOUNTERED IS TO REMAIN
D51	REMOVE EXISTING WOOD FRAMED AWNING IN ITS ENTIRETY
D52	REMOVE EXISTING ALUMINUM STORM WINDOW, HISTORIC WOOD WINDOW TO REMAIN
D103	REMOVE EXISTING ACOUSTIC CEILING SYSTEM COMPLETELY FROM THIS ROOM
D104	REMOVE REMAINING CUT OFF DOOR FRAME ABOVE ACOUSTIC CEILING - F.V.
D105	REMOVE EXISTING DUCT, TERMINATE AT REAR WALL OF ROOM



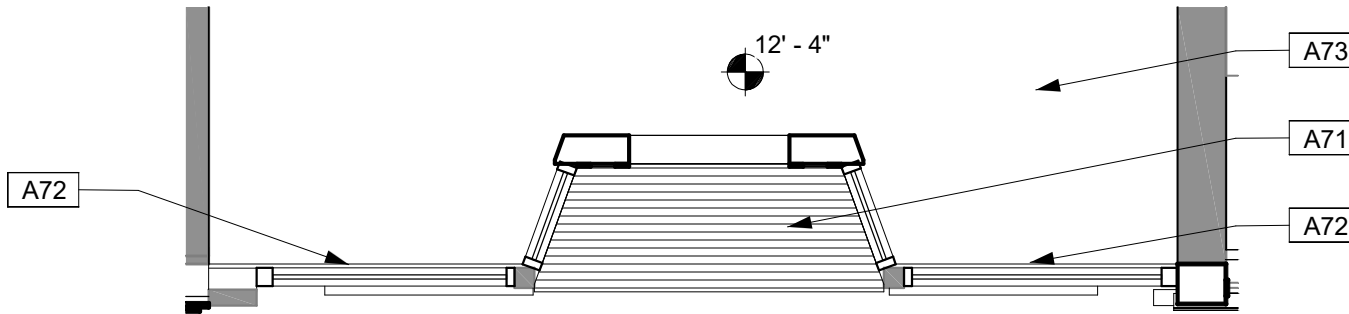
9 PARAPET PHOTOS  
1 1/2" = 1'-0"



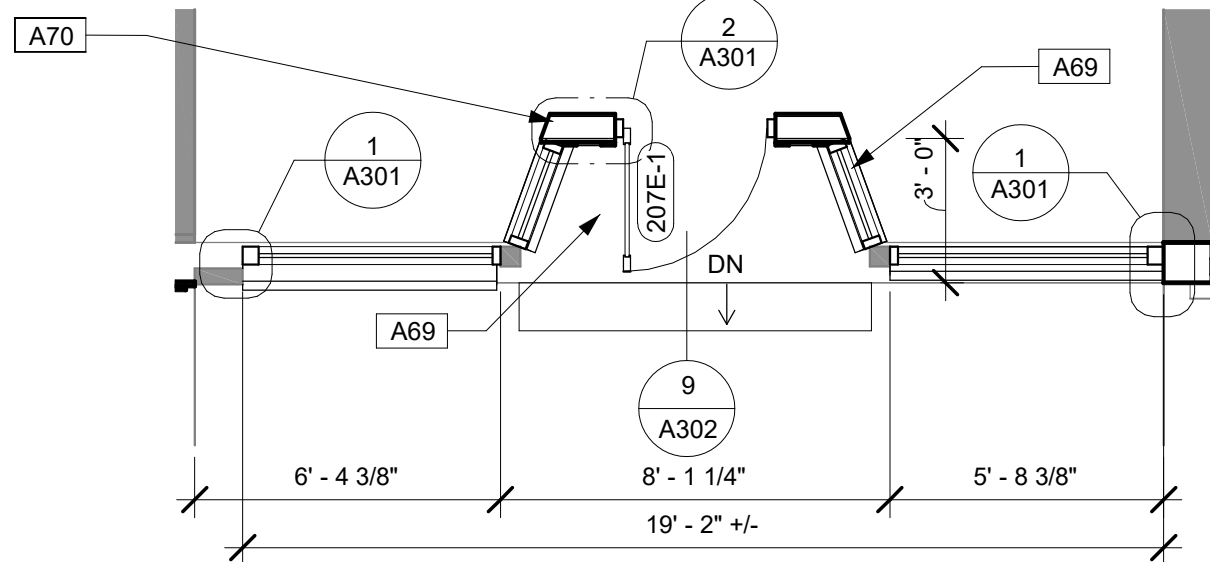
EXTERIOR PAINT LEGEND	
	PT-4: SHERWIN WILLIAMS - RED THEATRE SW 7578
	PT-8: SHERWIN WILLIAMS - IRON ORE SW 7069
	PT-15: SHERWIN WILLIAMS - SNOWBOUND SW 7004



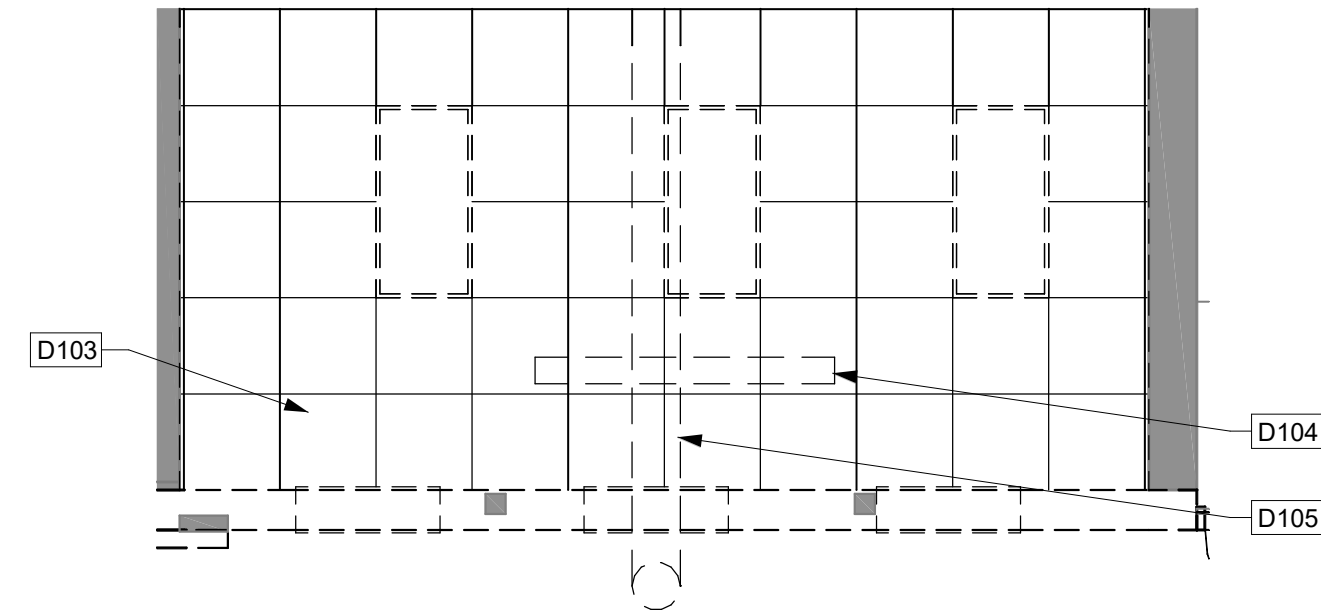
3 EXTERIOR ELEVATION  
1/4" = 1'-0"



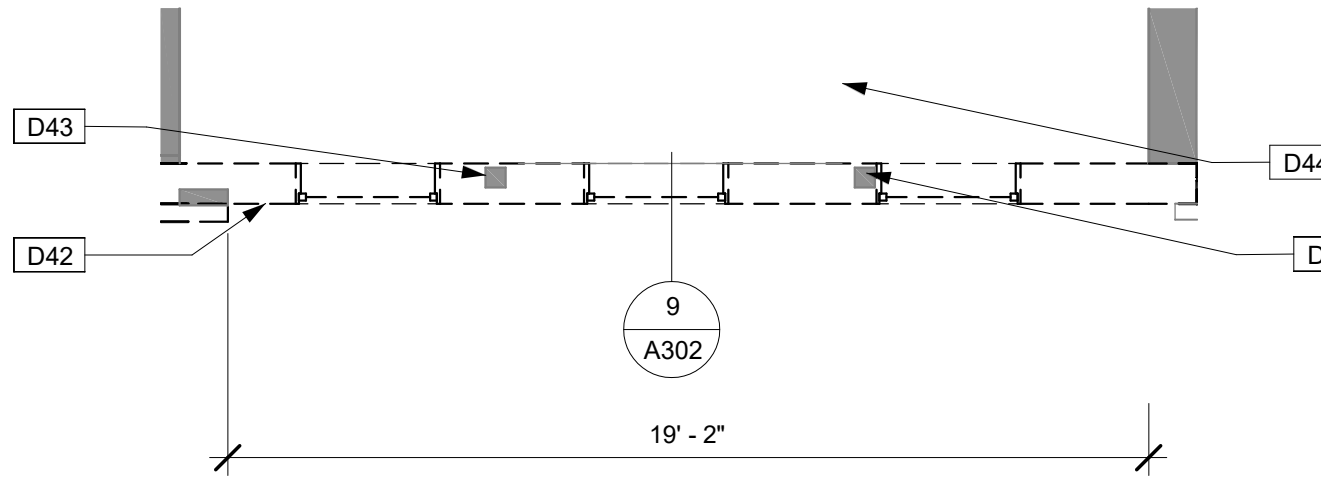
MAIN FLOOR REFLECTED CEILING PLAN  
1/4" = 1'-0"



MAIN FLOOR PLAN - NEW  
1/4" = 1'-0"



MAIN FLOOR REFLECTED CEILING DEMOLITION PLAN  
1/4" = 1'-0"



MAIN FLOOR PLAN - EXISTING / DEMOLITION PLAN  
1/4" = 1'-0"



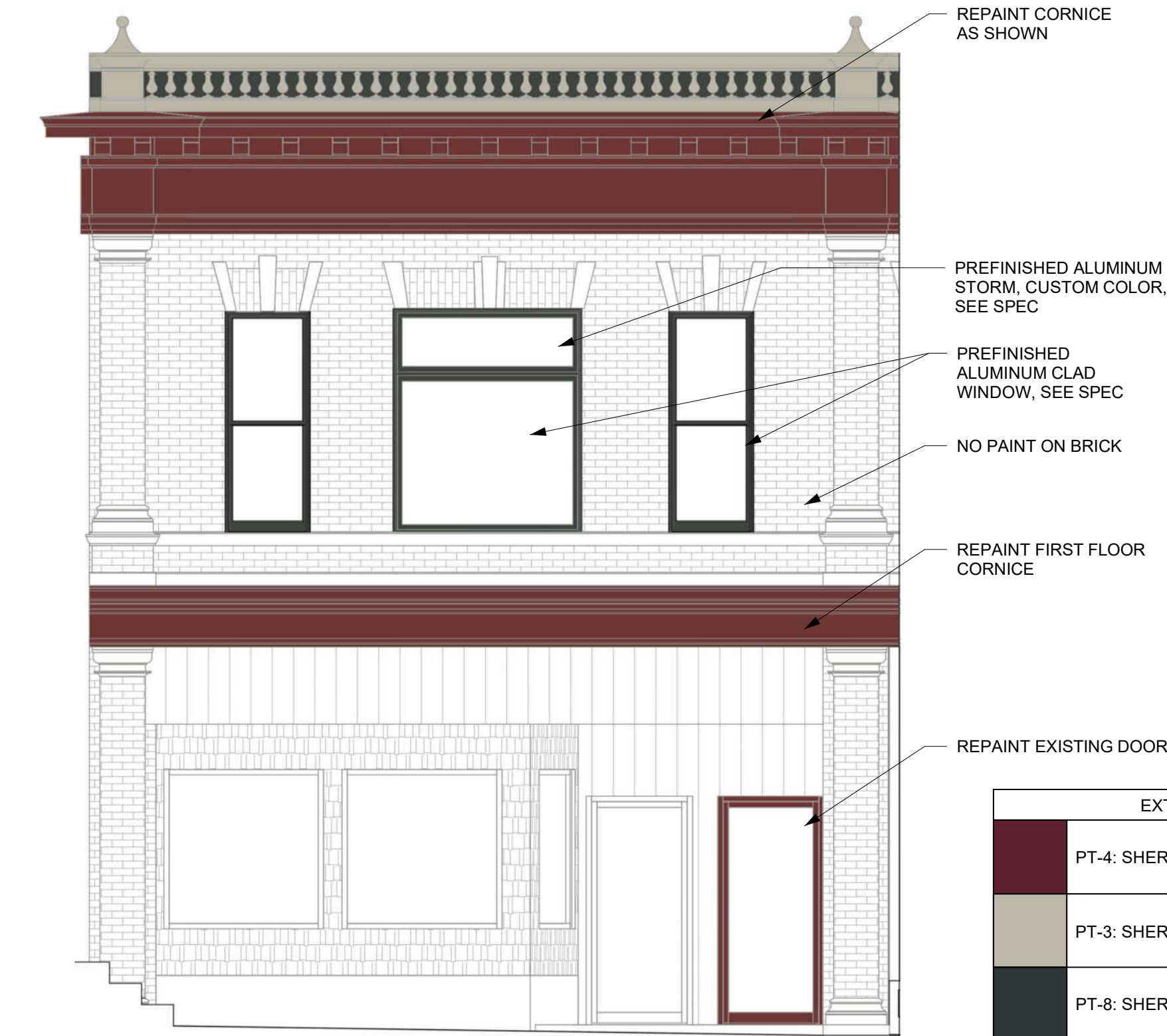
209W MAIN DOOR AND FRAME SCHEDULE							
DOOR NO.	WIDTH	HEIGHT	THICK	MATERIAL	GLAZING	FRAME MATERIAL	COMMENTS
209W-1	3' - 0"	7' - 0"	1 3/4"	ALUMINUM	EXISTING	ALUMINUM	REPAINT DOOR

209W MAIN WINDOW SCHEDULE						
MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				
209W-A	2' - 8"	6' - 11"	CLAD WOOD	SINGLE HUNG	INSULATED	3
209W-B	5' - 8"	4' - 10"	CLAD WOOD	FIXED	INSULATED	3
209W-C	2' - 8"	6' - 11"	CLAD WOOD	SINGLE HUNG	INSULATED	3
209W-D	5' - 8"	1' - 10 1/4"	EXISTING WOOD	FIXED	EXISTING	1, 2

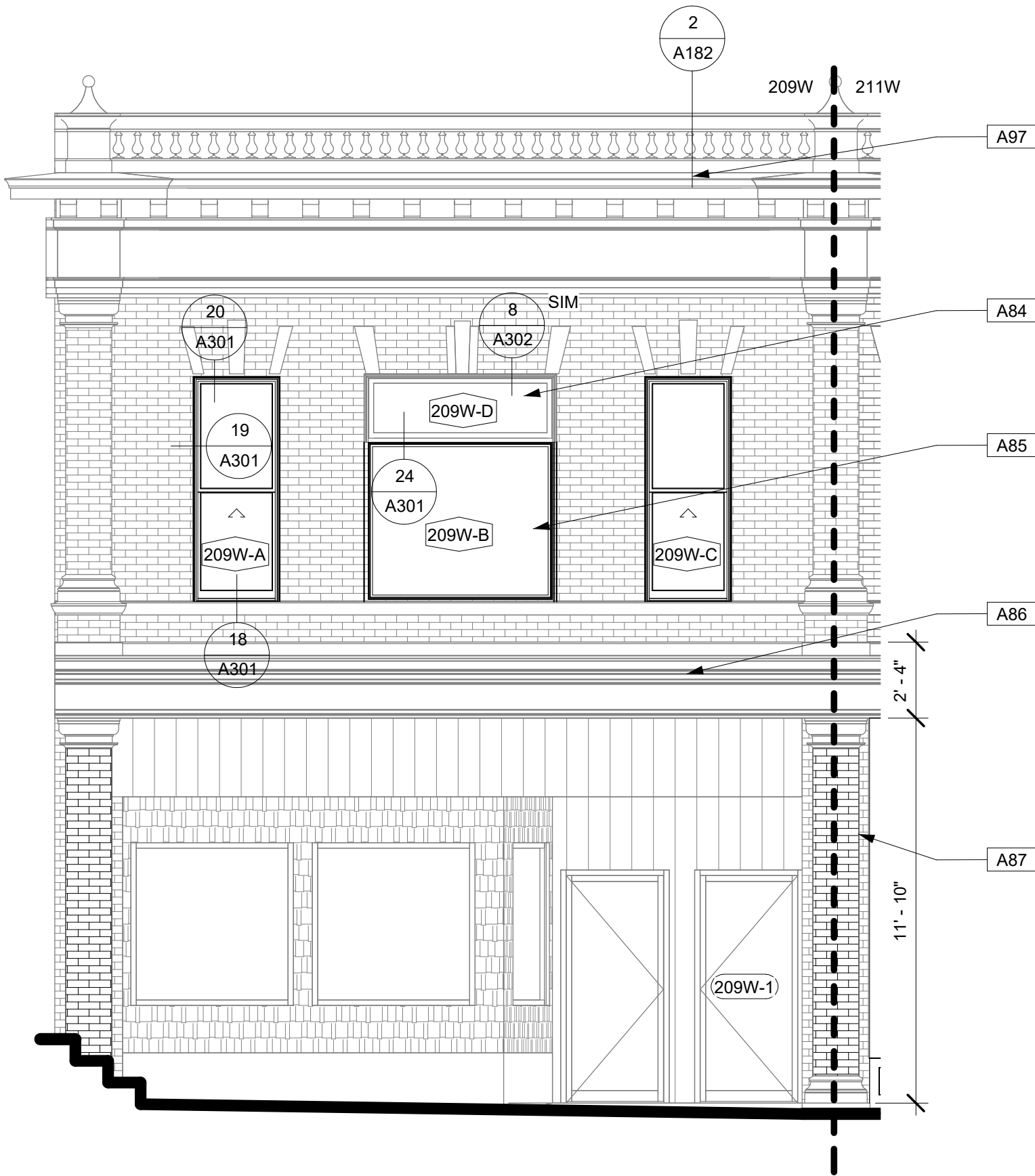
WINDOW SCHEDULE COMMENTS:

- PROVIDE NEW ALUMINUM STORM WINDOW ON EXTERIOR.
- REPAINT EXTERIOR OF WINDOW AND EXISTING FRAME.
- REPAINT EXISTING BRICK MOLD AND SILL.

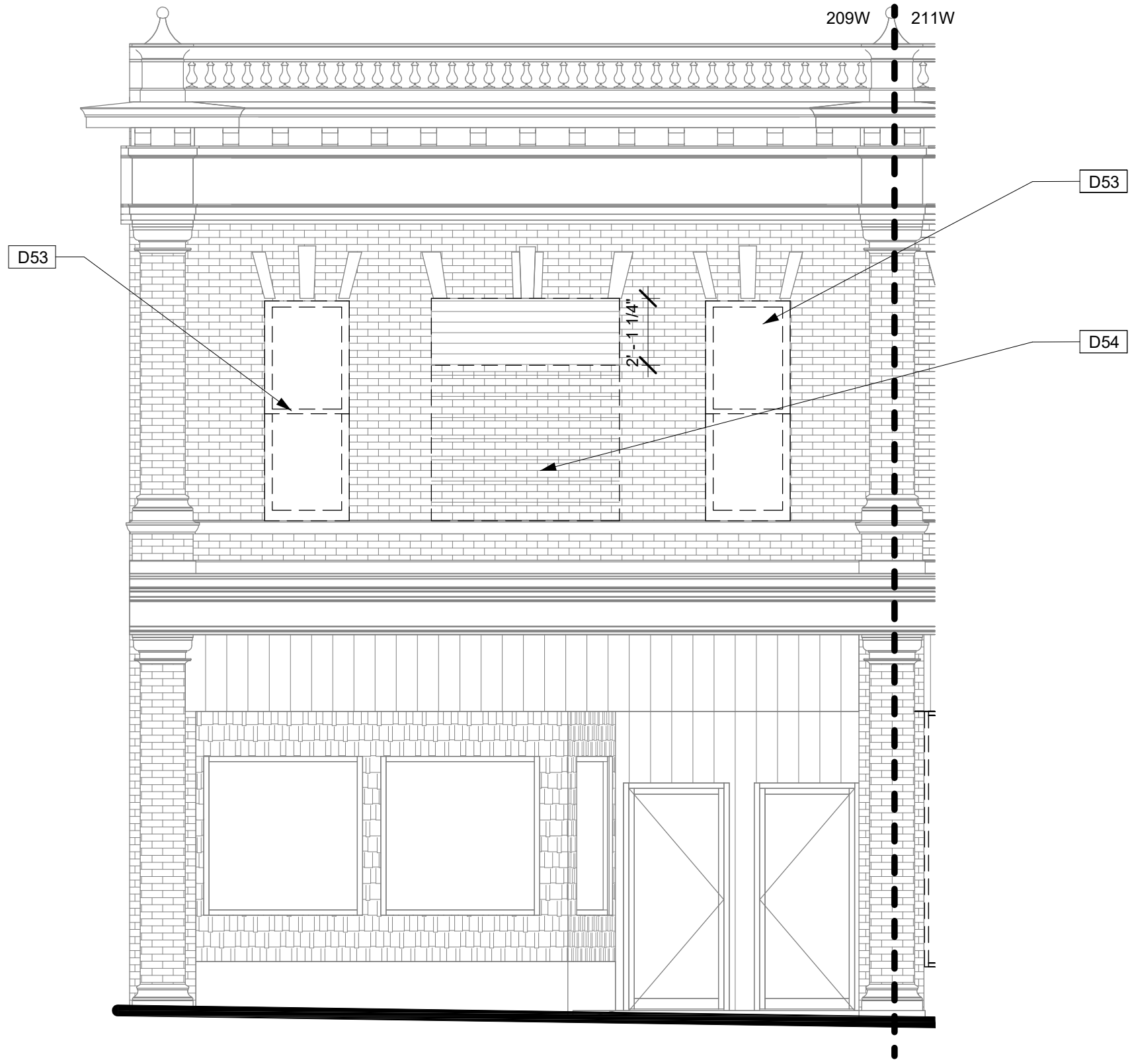
KEYNOTE LEGEND	
KEY #	KEYNOTE
A84	EXISTING TRANSOM WINDOW WITH NEW ALUMINUM STORM WINDOW, SEE SCHEDULE
A85	NEW WINDOW, SEE SCHEDULE, NOTIFY ARCHITECT IF HISTORIC WINDOW IS FOUND EXTANT
A86	REPOINT JOINTS IN STONE CORNICE (100%)
A87	REPOINT BRICK COLUMNS (100%)
A88	NEW WOOD STOOL TO MATCH EXISTING
A89	REPAIR WATER DAMAGED PLASTER CEILING THESE AREAS, TEXTURE AND PAINT TO MATCH EXISTING (ASSUME 21 SF TOTAL)
A90	REPOINT MORTAR JOINTS (100%)
A97	REPAINT METAL CORNICE, SEAL ALL OPEN JOINTS (ASSUME 100LF OF CAULK)
D53	DEMO EXISTING VINYL WINDOW AND INFILL, ORIGINAL WOOD WINDOW FRAME AND TRIM TO REMAIN
D54	REMOVE PLYWOOD, INSULATION AND VINYL SIDING COVERING EXISTING TRANSOM AND PICTURE WINDOW, ALL ORIGINAL WOOD WINDOWS AND TRIM TO REMAIN WHERE INTACT
D55	REMOVE EXISTING SHELING, WOOD WINDOW TRIM TO REMAIN
D56	CAREFULLY REMOVE EXISTING INTERIOR WOOD STOOL



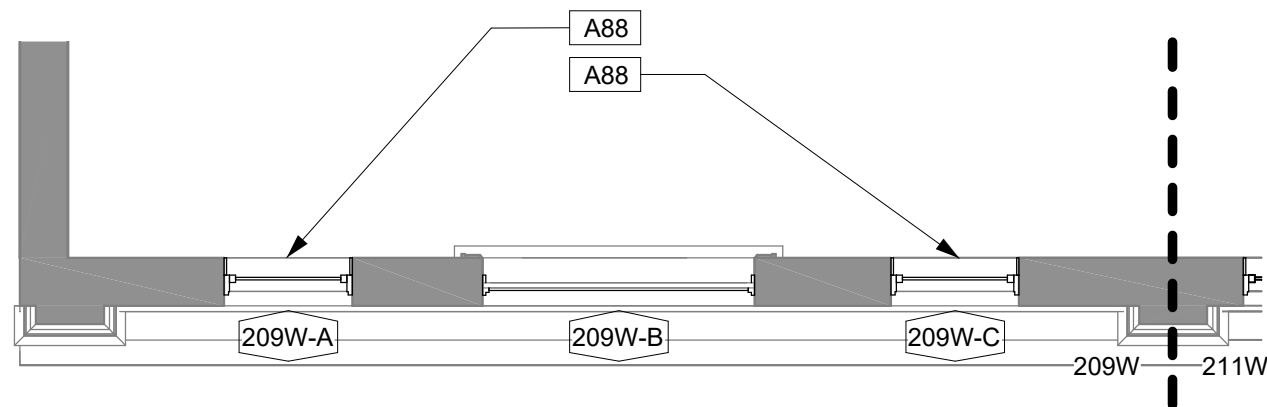
COLOR SCHEME  
1/4" = 1'-0"



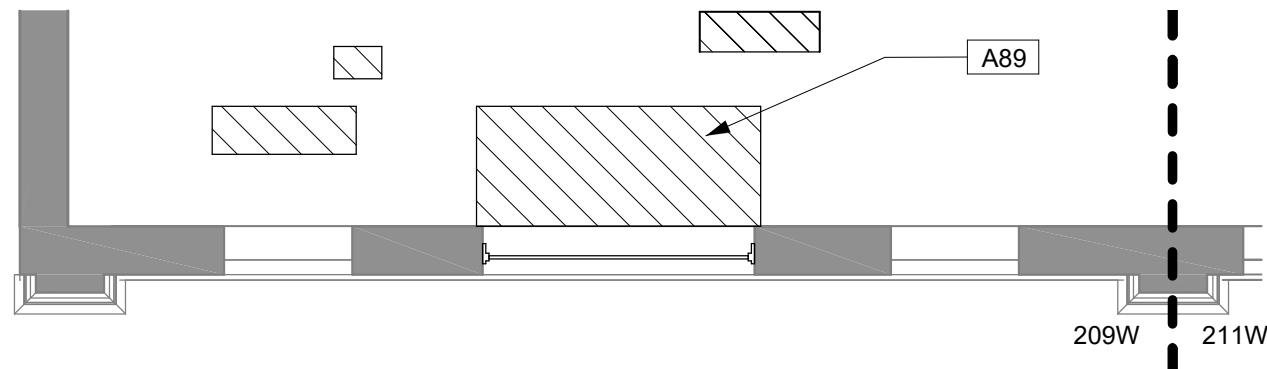
209 WEST MAIN ELEVATION - NEW  
1/4" = 1'-0"



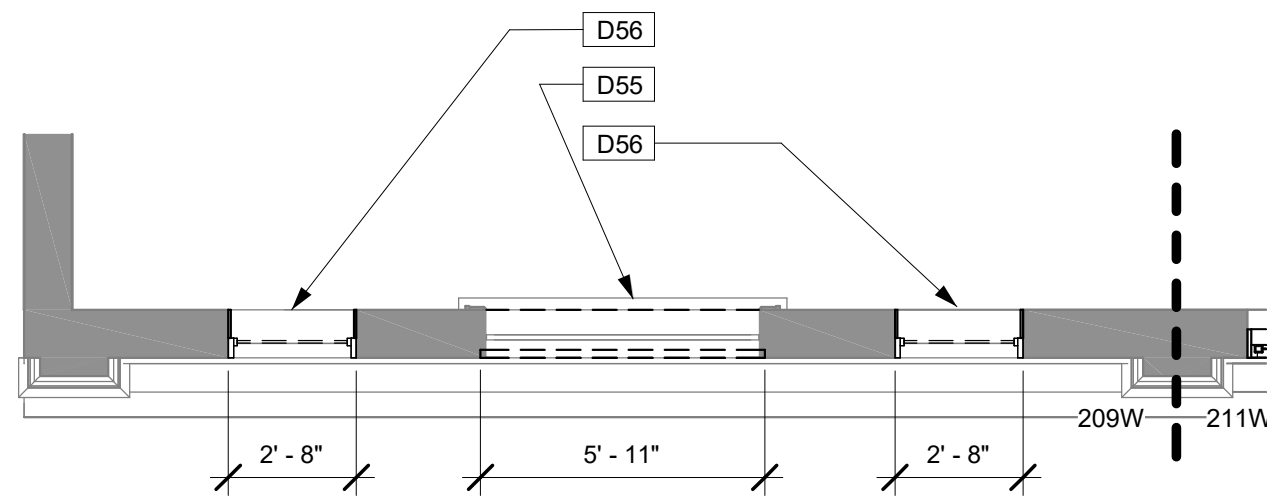
209 WEST MAIN ELEVATION - DEMO  
1/4" = 1'-0"



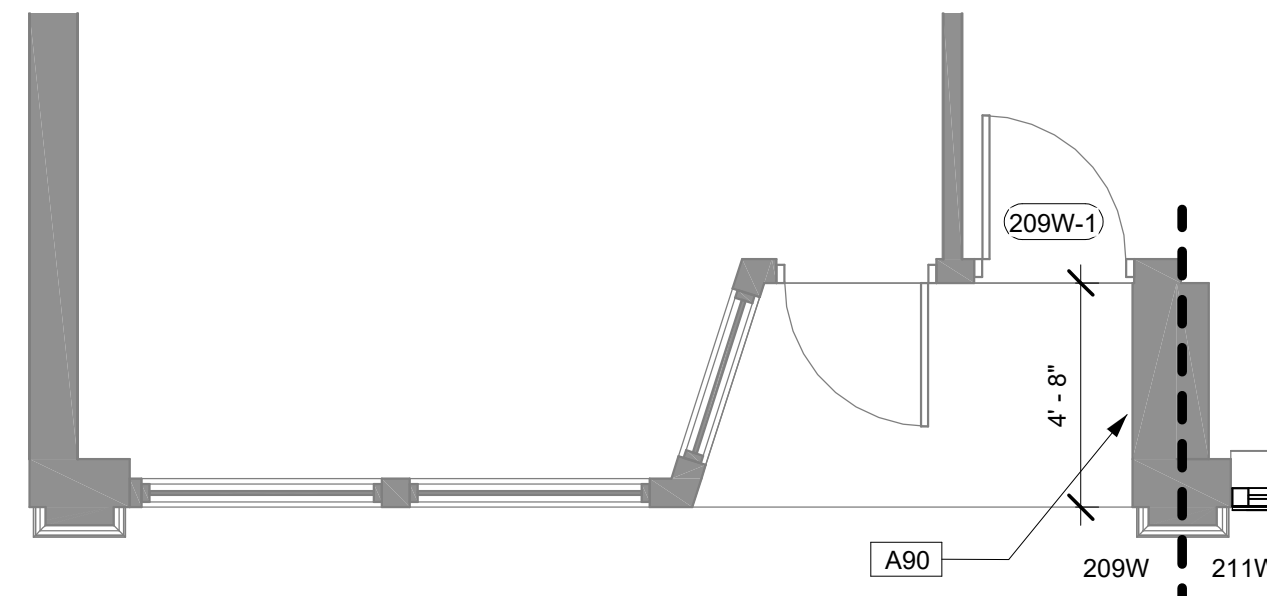
UPPER FLOOR PLAN - NEW  
1/4" = 1'-0"



UPPER FLOOR RCP  
1/4" = 1'-0"



UPPER FLOOR PLAN - EXISTING / DEMOLITION  
1/4" = 1'-0"



MAIN FLOOR PLAN - NEW  
1/4" = 1'-0"

209 WEST MAIN STREET

100% CDS: 1/20/21	REVISION	DATE:
	NUMBER:	

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A170

11919.01

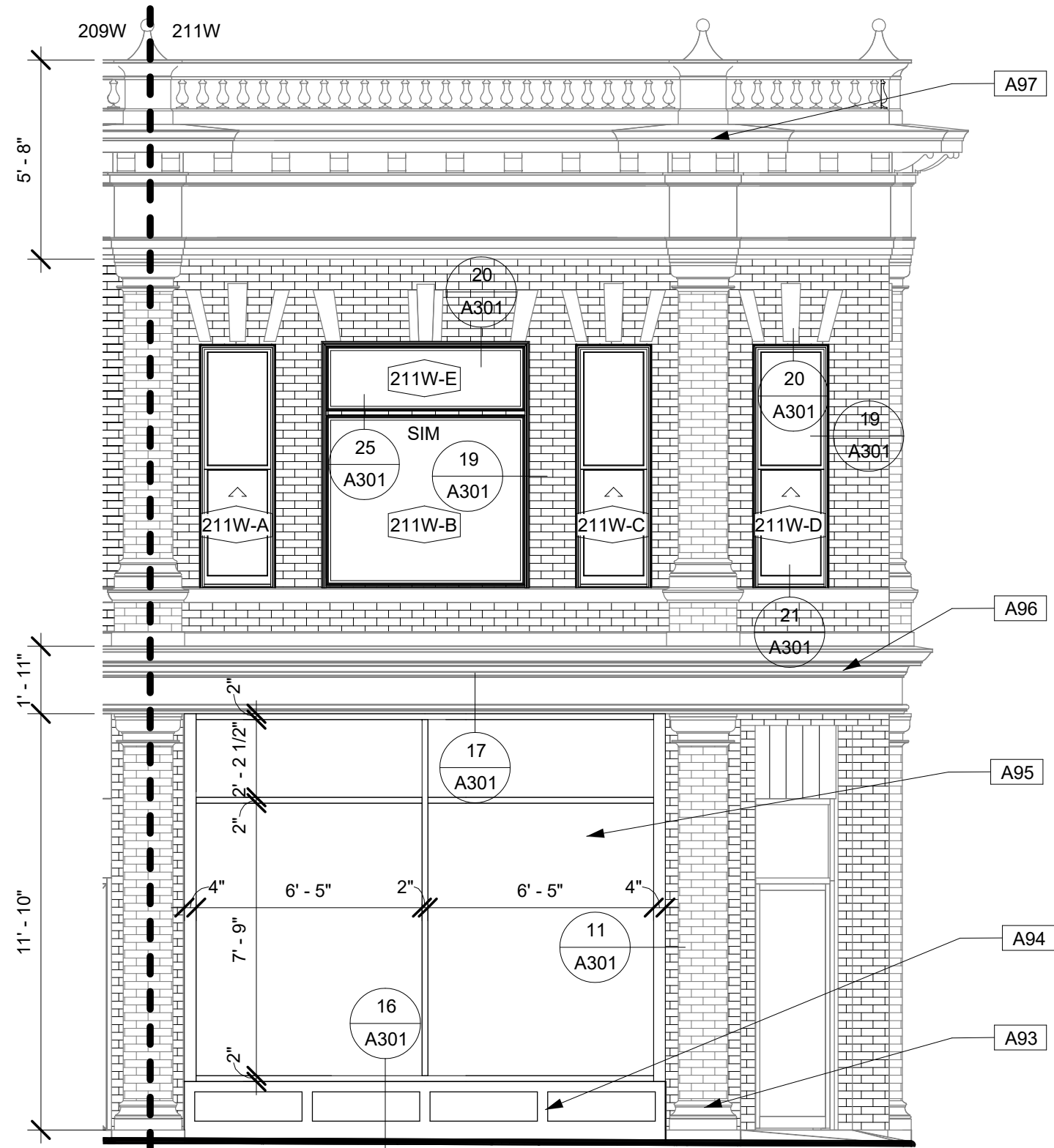
1/20/2021 4:23:11 PM  
B:\1305 - Anamosa Downtown Facade Revitalization\Anamosa Facade Revitalization - 11919.01.rvt  
REVISED

211W MAIN DOOR AND FRAME SCHEDULE							
DOOR NO.	DOOR					FRAME	COMMENTS
	WIDTH	HEIGHT	THICK	MATERIAL	GLAZING	MATERIAL	

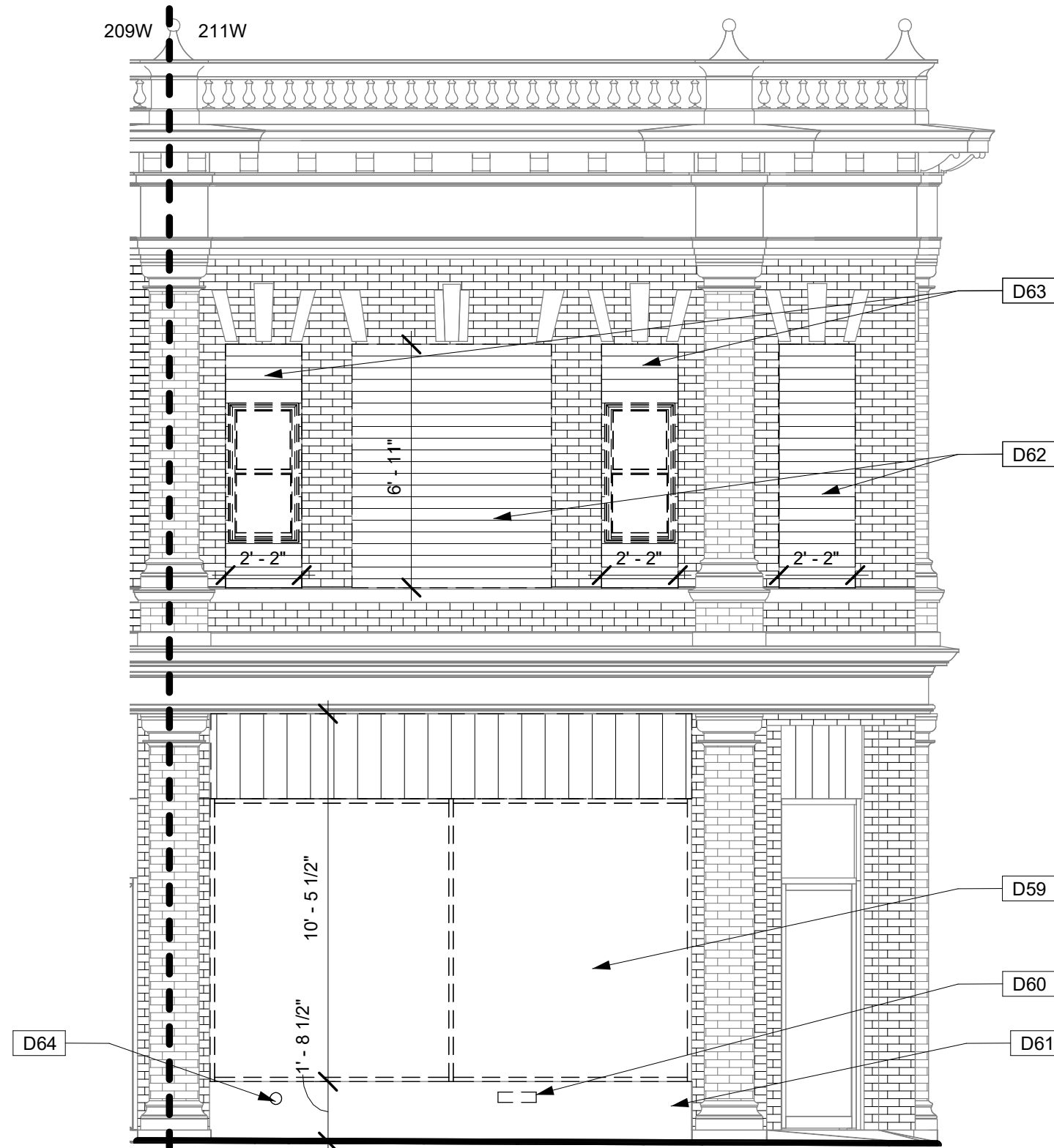
211W MAIN WINDOW SCHEDULE						
MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				
211W-A	2' - 2"	6' - 11"	CLAD WOOD	SINGLE HUNG	INSULATED	1
211W-B	5' - 8"	4' - 10"	CLAD WOOD	FIXED	INSULATED	1
211W-C	2' - 2"	6' - 11"	CLAD WOOD	SINGLE HUNG	INSULATED	1
211W-D	2' - 2"	6' - 11"	CLAD WOOD	SINGLE HUNG	INSULATED	1
211W-E	5' - 8"	1' - 10 1/4"	CLAD WOOD	FIXED	INSULATED	1
211W-F	2' - 2"	6' - 11"	CLAD WOOD	SINGLE HUNG	INSULATED	1

KEYNOTE LEGEND	
KEY #	KEYNOTE
A91	NEW GYPSUM BOARD ON EACH SIDE WINDOW JAMB WHERE FRP WAS REMOVED
A93	REPOINT FIRST FLOOR MASONRY (100%)
A94	NEW PANELING ON EXISTING BULKHEAD FRAMING, PAINT
A95	NEW ALUMINUM STOREFRONT WINDOWS
A96	REPOINT JOINTS IN STONE CORNICE (100%) REPOINT TO MATCH EXISTING
A97	REPAINT METAL CORNICE. SEAL ALL OPEN JOINTS (ASSUME 100LF OF CAULK)
A98	EXISTING TIN CEILING, PAINT EXPOSED AREA
A99	NEW SOFFIT, PAINT, SEE DETAIL
A100	RELOCATED ELECTRICAL BOXES ABOVE CEILING AND OUTLET BELOW CEILING
D57	REMOVE INTERIOR SILL, FRAMING BELOW TO REMAIN
D58	REMOVE FRP PANEL ON JAMB, AT EACH SIDE OF WINDOW
D59	REMOVE EXISTING STOREFRONT WINDOWS, AND SIDING ABOVE
D60	REMOVE EXISTING MAIL SLOT
D61	REMOVE EXTERIOR BULKHEAD COVERING. BULKHEAD FRAMING AND INTERIOR FINISH TO REMAIN. NOTIFY ARCHITECT IF HISTORIC PANELING IS FOUND BENEATH COVER
D62	CAREFULLY REMOVE WALL INFILL IN HISTORIC OPENING. NOTIFY ARCHITECT IF ORIGINAL WINDOWS ARE EXTANT
D63	DEMO EXISTING VINYL WINDOW AND WALL INFILL WITHIN HISTORIC OPENING. ALL ORIGINAL WOOD TRIM TO REMAIN WHERE EXTANT
D64	REMOVE ABANDONED HOSE BIB AND REMAINING CUT OFF PIPE
D65	REMOVE EXISTING ACOUSTIC CEILING. THIS AREA
D66	RELOCATE (2) ELECTRICAL BOXES ABOVE CEILING, (1) OUTLET BELOW CEILING AND ASSOCIATED CONDUIT THAT CONFLICTS WITH NEW SOFFIT, F.V.
D67	LIGHT FIXTURE TO REMAIN

WINDOW SCHEDULE COMMENTS:  
1. REPAINT EXISTING BRICK MOLD AND SILL.



211 WEST MAIN ELEVATION - NEW  
1/4" = 1'-0"

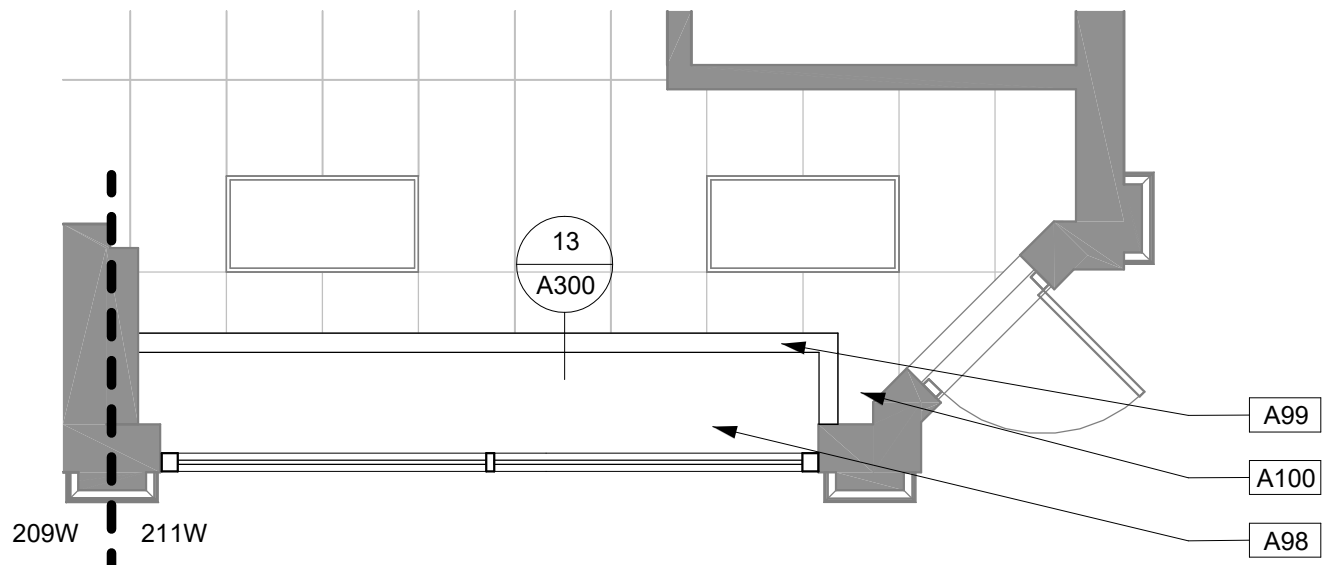


211 WEST MAIN ELEVATION - EXISTING / DEMOLITION  
1/4" = 1'-0"

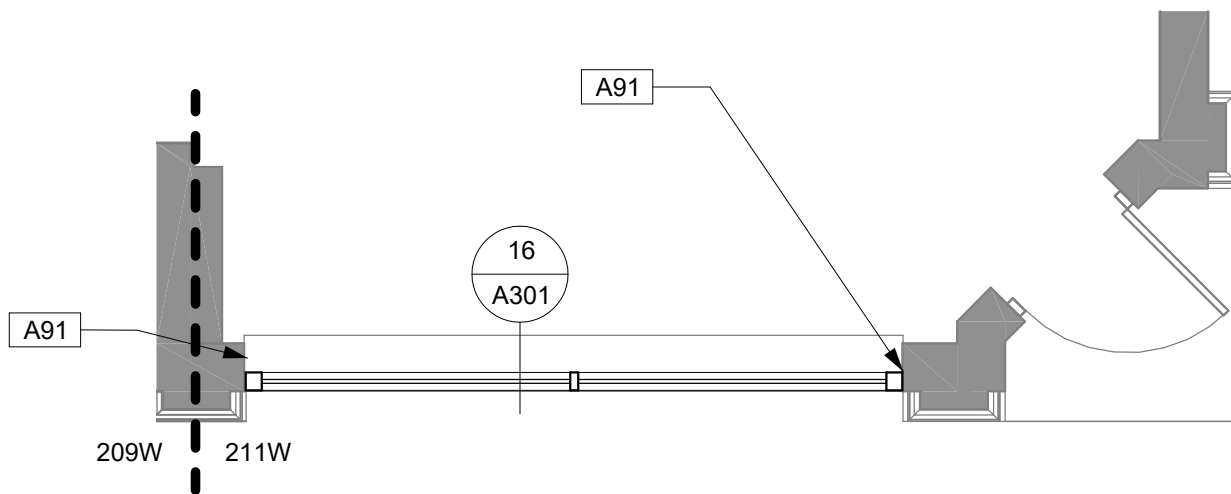


COLOR SCHEME  
1/4" = 1'-0"

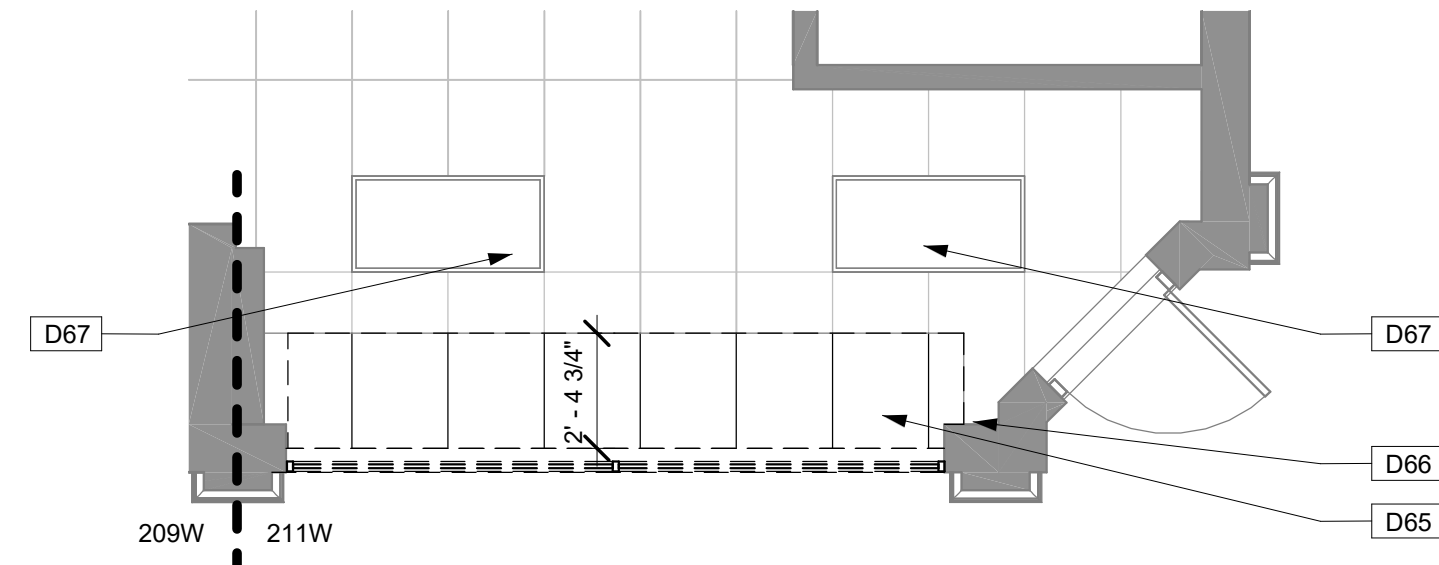
EXTERIOR PAINT LEGEND	
PT-4: SHERWIN WILLIAMS - RED THEATRE SW 7578	
PT-3: SHERWIN WILLIAMS - ANEW GRAY SW 7030	
PT-8: SHERWIN WILLIAMS - IRON ORE SW 7069	
PT-15: SHERWIN WILLIAMS - SNOWBOUND SW 7004	



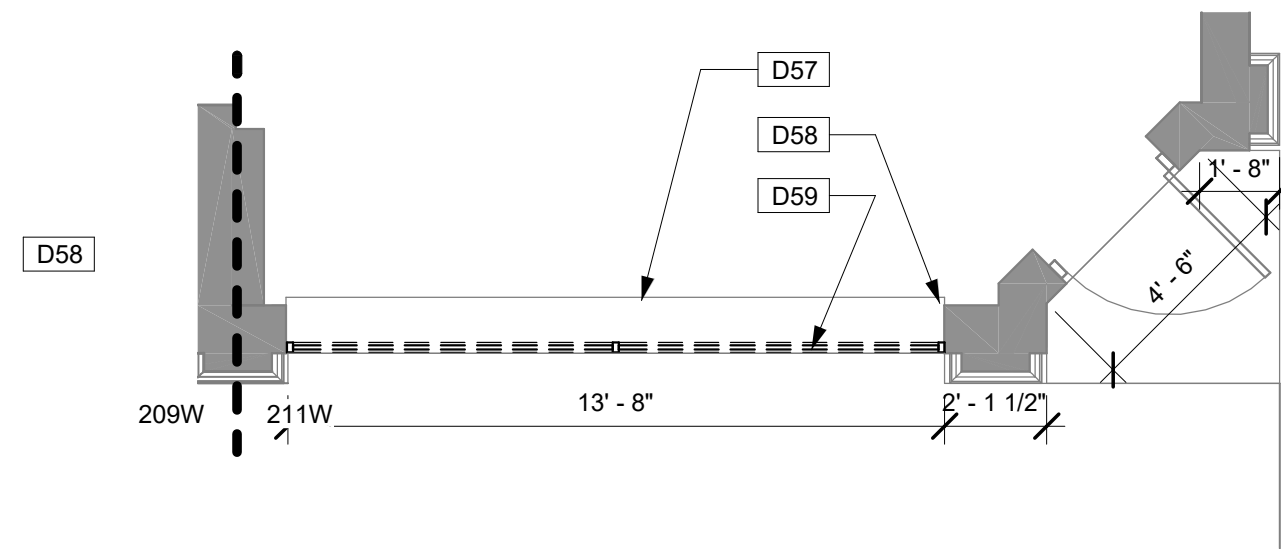
MAIN FLOOR REFLECTED CEILING PLAN  
1/4" = 1'-0"



MAIN FLOOR PLAN - NEW  
1/4" = 1'-0"



MAIN FLOOR REFLECTED CEILING DEMOLITION PLAN  
1/4" = 1'-0"



MAIN FLOOR PLAN - EXISTING / DEMOLITION PLAN  
1/4" = 1'-0"

211 WEST MAIN STREET

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT

MGA  
MARTIN GARDNER  
ARCHITECTURE  
© 2020

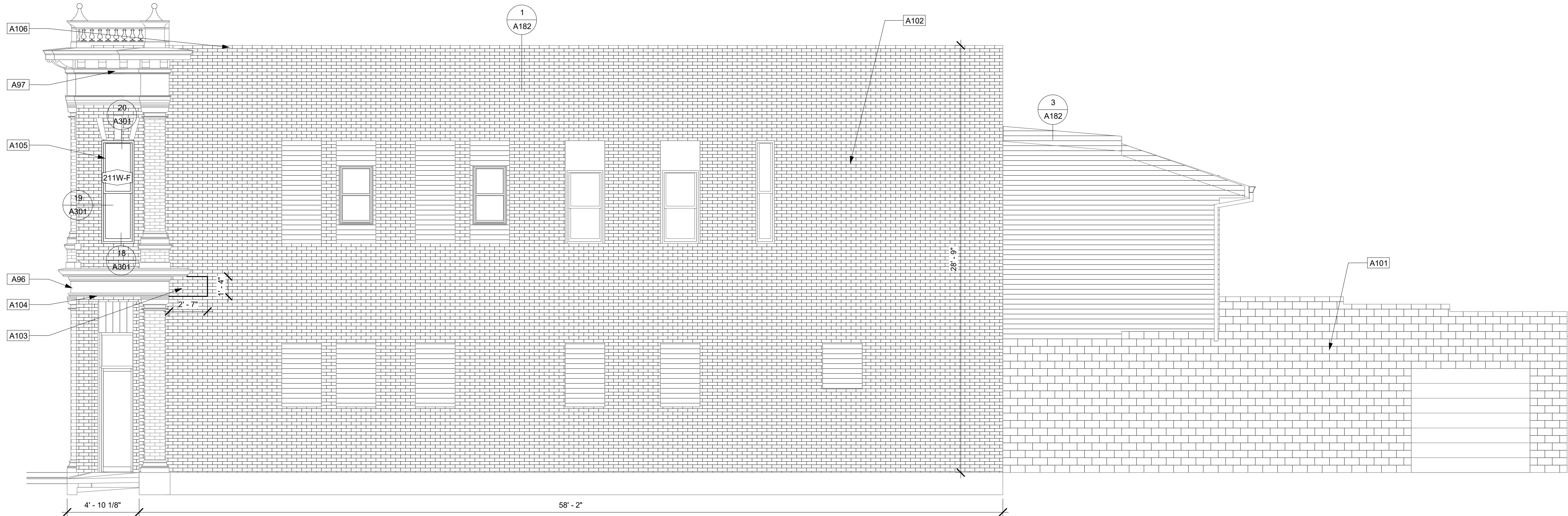
700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A180

11919.01

1/20/2021 4:23:13 PM  
B:\2020\2020\Anamosa Downtown Facade Revitalization\Anamosa Facade Revitalization - 11919.01.rvt  
REVISED 1/20/2021

KEYNOTE LEGEND	
KEY #	KEYNOTE
A96	REPOINT JOINTS IN STONE CORNICE (100%) REPAINT TO MATCH EXISTING
A97	REPAINT METAL CORNICE. SEAL ALL OPEN JOINTS (ASSUME 100LF OF CAULK)
A101	SELECTIVELY REPLACE BROKEN/SPALLED CLAY TILES TO MATCH EXISTING AS CLOSELY AS POSSIBLE. ASSUME 50 UNIT REPLACEMENTS
A102	REPOINT MORTAR JOINTS (100%)
A103	NEW IRON SPOT THIN BRICK VENEER AT MATCH EXISTING BRICK WHERE MISSING OVER STEEL BEAM. PAINT STEEL WITH RUST INHIBITING PRIMER PRIOR TO BRICK INSTALL - TOOTH IN EXISTING
A104	REPLACE DETERIORATED WOOD 1x3 WOOD TRIM. PRIME ALL SIDES AND EDGES PRIOR TO INSTALL. FINISH PAINT TO MATCH EXISTING COLOR
A105	REMOVE WALL INFILL IN HISTORIC OPENING FOR NEW WINDOW. SEE SCHEDULE. NOTIFY ARCHITECT IF ORIGINAL WINDOW FOUND EXTANT
A106	NEW METAL PARAPET CAP, SEE DETAIL



211 W MAIN - WEST ELEVATION - NEW  
1/4" = 1'-0"

211 WEST MAIN STREET

100% CDS: 1/20/21	
REVISION	
NUMBER	
DATE	

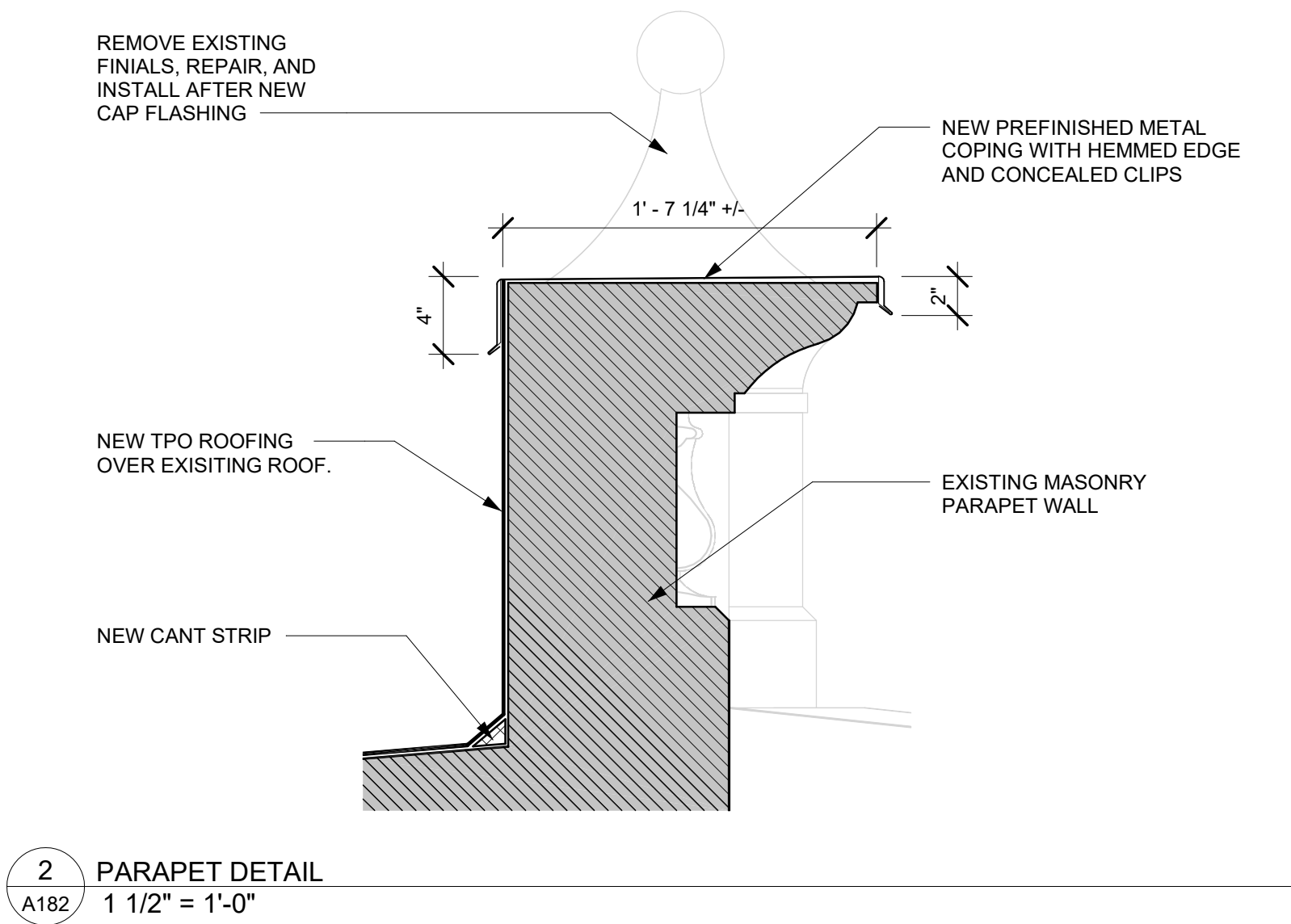
CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT



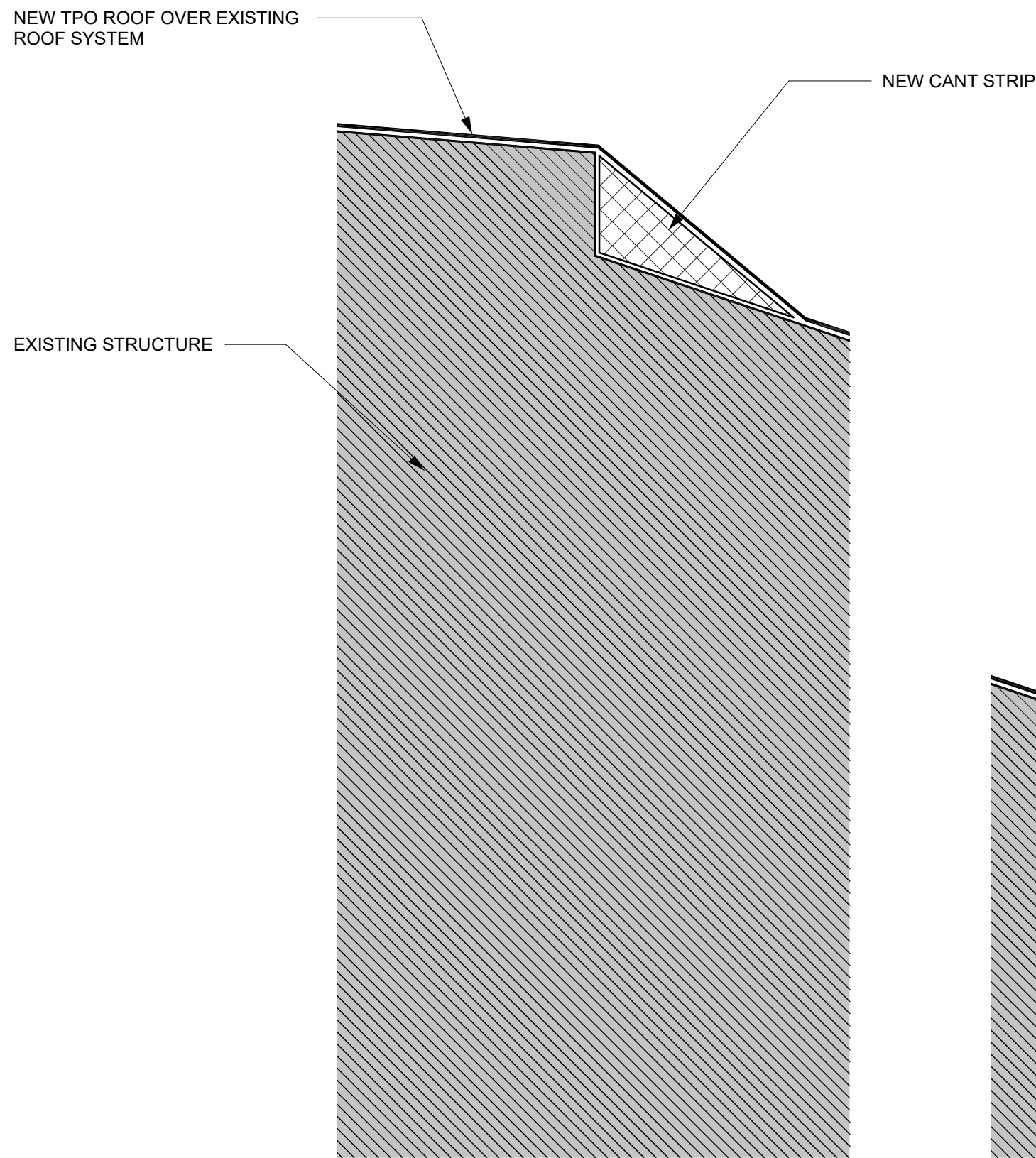
700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A181

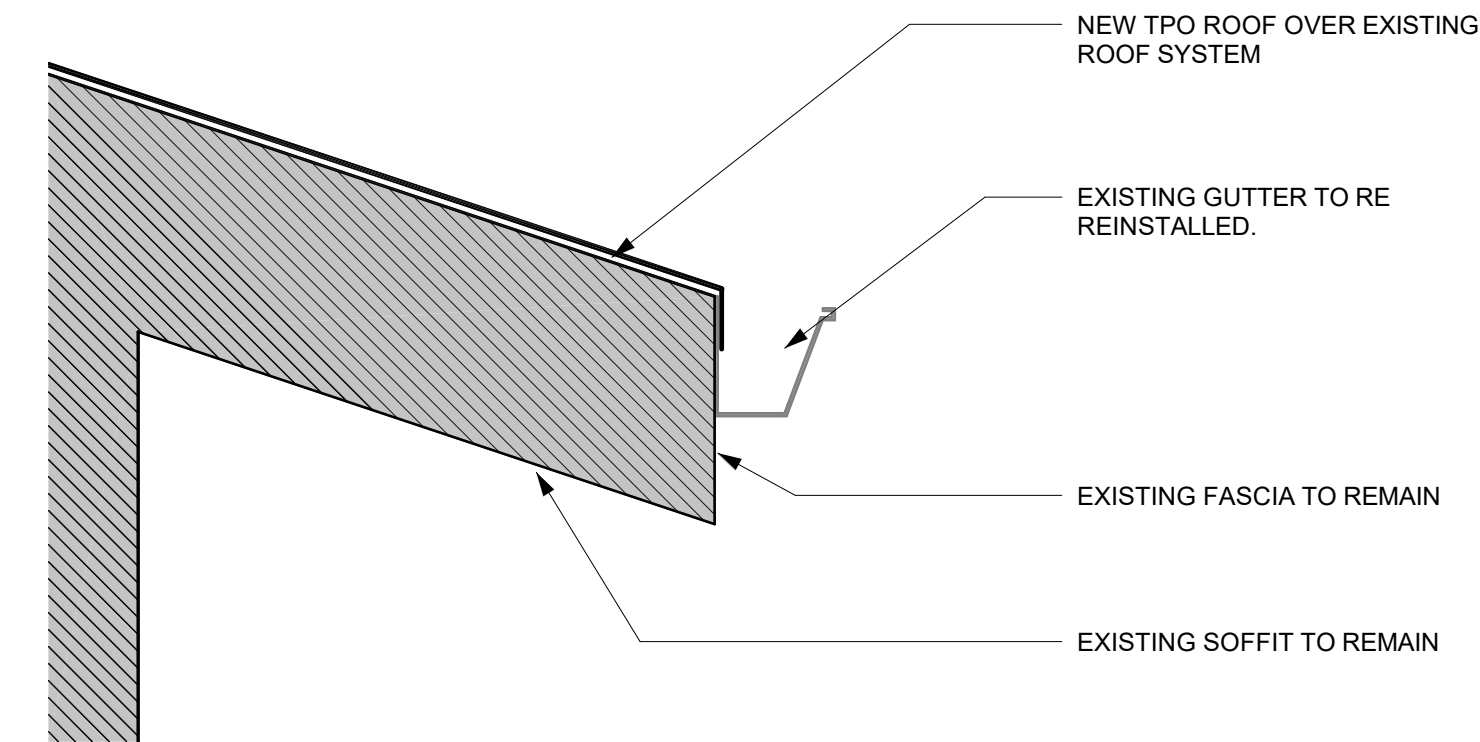
11919.01



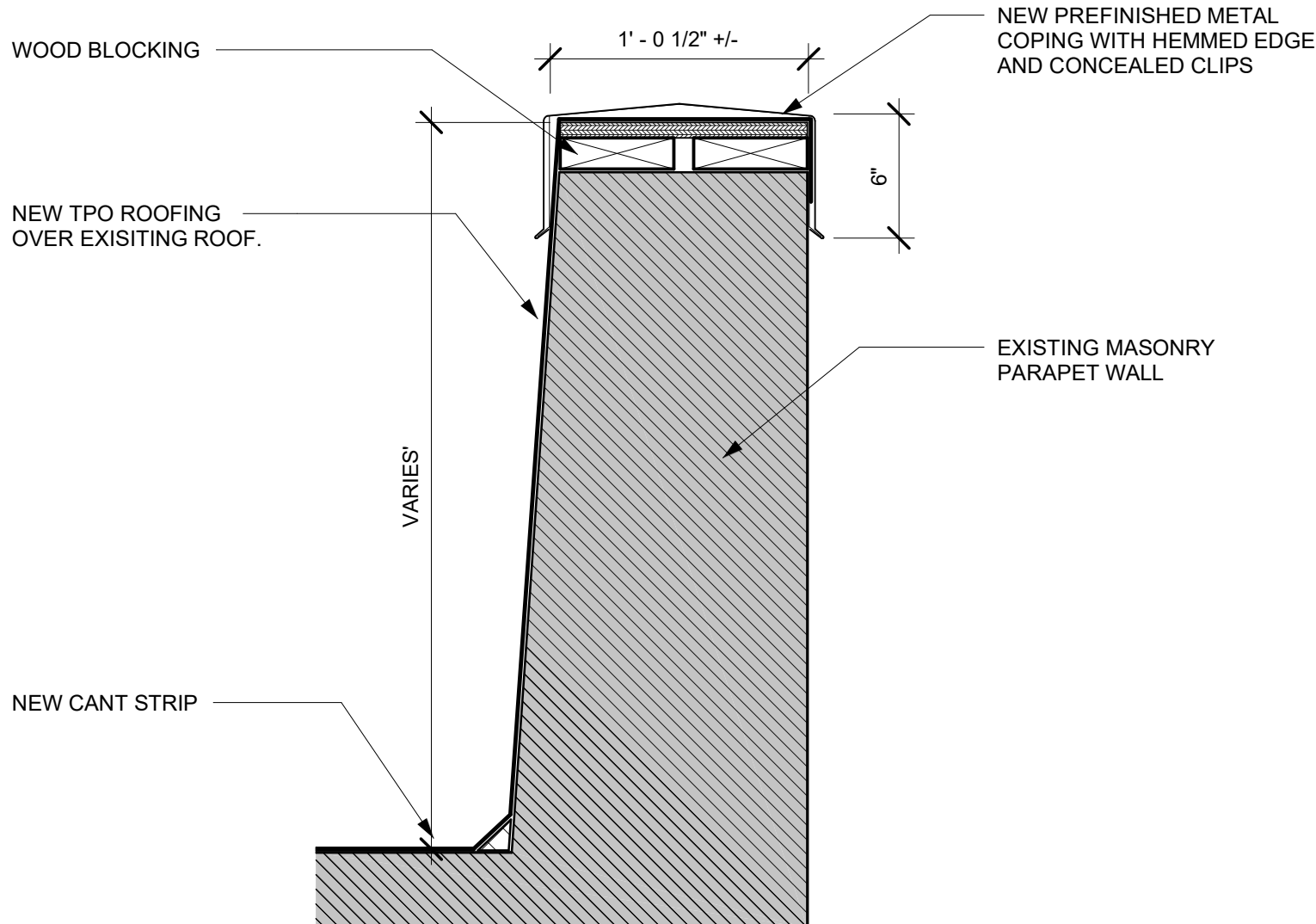
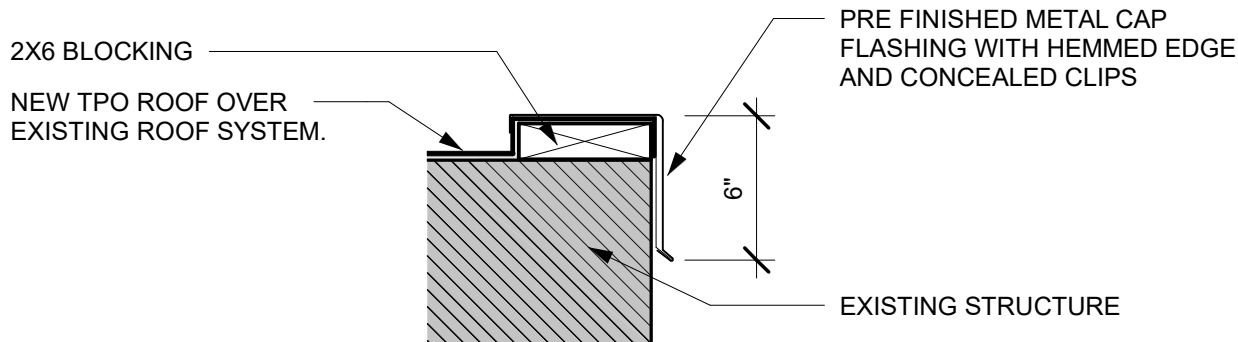
2  
A182  
PARAPET DETAIL  
1 1/2" = 1'-0"



4  
A182  
DETAIL  
1 1/2" = 1'-0"

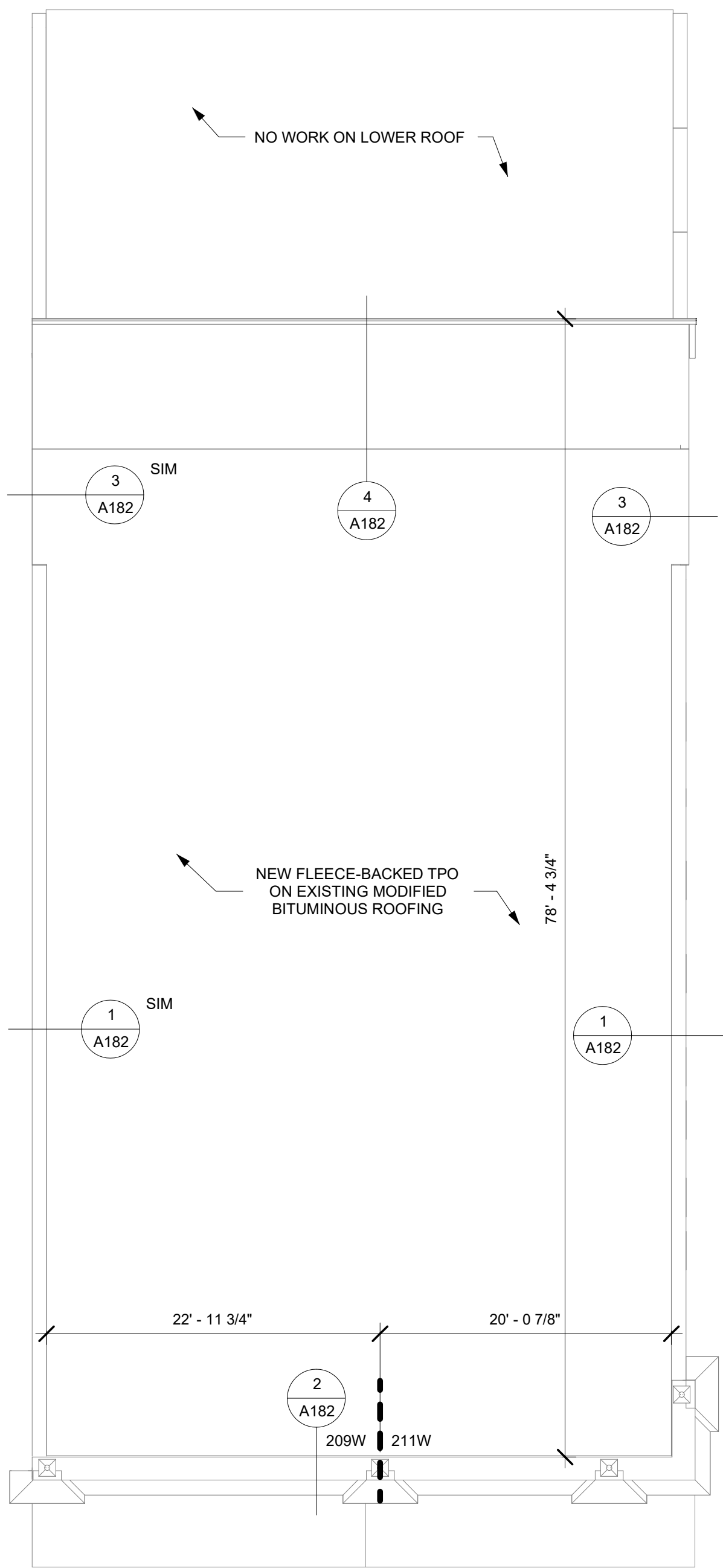


3  
A182  
TERMINATION DETAIL  
1 1/2" = 1'-0"



1  
A182  
PARAPET DETAIL  
1 1/2" = 1'-0"

- GENERAL ROOFING NOTES:**
- PARTS OF THE ROOF SYSTEM ARE ASBESTOS CONTAINING MATERIALS (ACM). DO NOT DISTURB THE ROOF FIELD. ACM FLASHING IS LOCATED AT THE BASE OF THE PARAPET WALLS WHERE IT MEETS THE ROOF FIELD. THE MEMBRANE ON THE PARAPET WALLS AND TAR ABOVE THE ACM FLASHING GOING UP TO THE TOP CAP ARE NOT ACM. I.E., REMOVAL AND REPLACEMENT OF METAL PARAPET CAP WILL NOT DISTURB ACM.
  - THE ROOFING CONTRACTOR MUST HAVE ASBESTOS AWARENESS TRAINING AND FOLLOW ALL OSHA REQUIREMENTS.
  - REFLASH ALL EXISTING ROOF PENETRATIONS. PITCH PANS ARE NOT ALLOWED.
  - CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND QUANTITIES. NOTIFY ARCHITECT IF DISCREPANCIES EXIST.



209-211 WEST MAIN ROOF PLAN - DEMO  
1/8" = 1'-0"

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A182

11919.01

209-211 WEST MAIN STREET

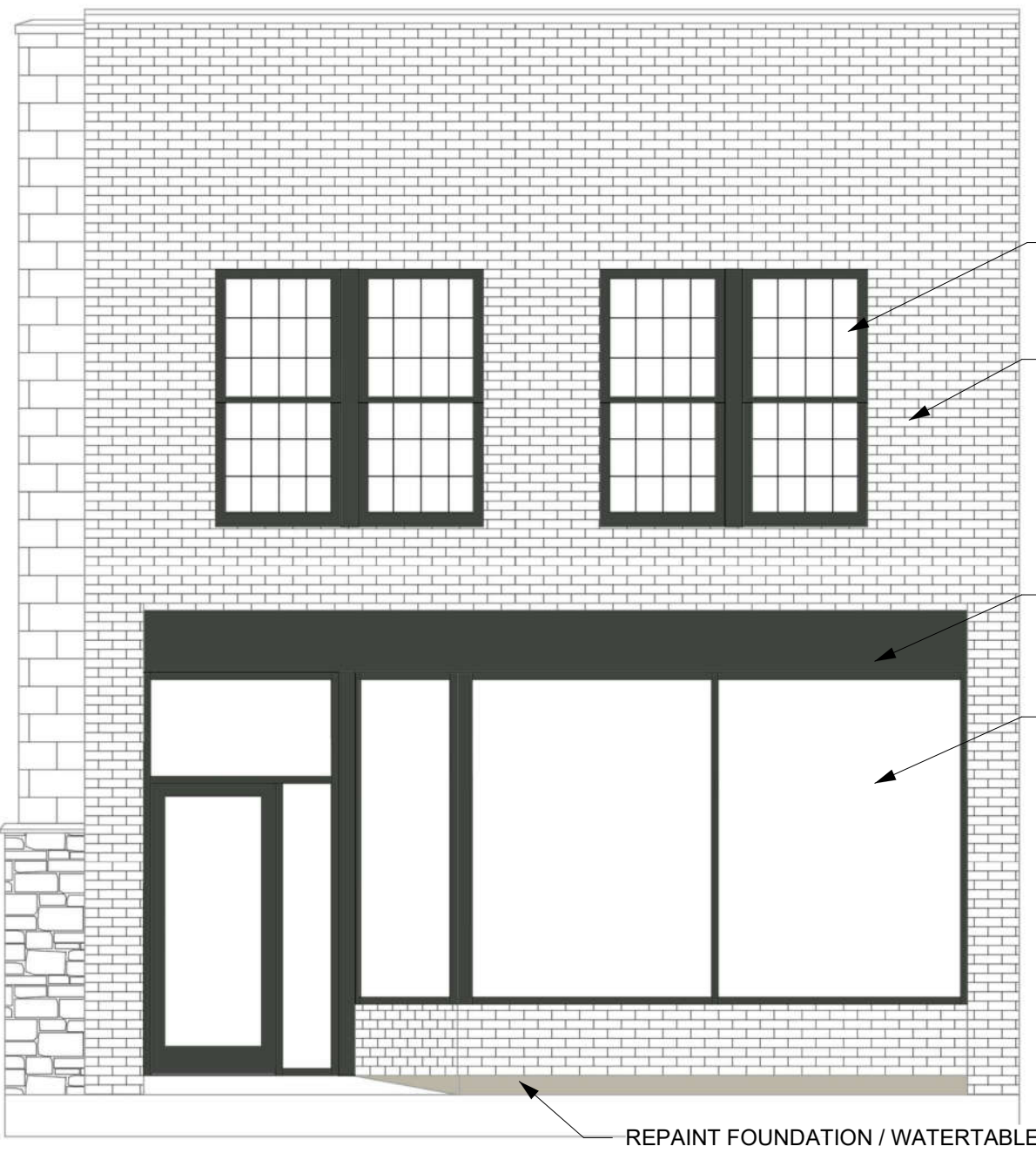
213E DOOR AND FRAME SCHEDULE							
DOOR NO.	DOOR					FRAME	COMMENTS
	WIDTH	HEIGHT	THICK	MATERIAL	GLAZING	MATERIAL	
213E-1	3' - 0"	7' - 0"	1 3/4"	ALUMINUM	INSULATED	ALUMINUM	

213E MAIN WINDOW SCHEDULE						
MARK	R.O.		MATERIAL	TYPE	GLAZING	COMMENTS
	WIDTH	HEIGHT				

KEYNOTE LEGEND	
KEY #	KEYNOTE
A123	PROVIDE NEW BROADLOOM CARPET TO MATCH EXISTING, THIS AREA
A124	REPAINT CURRENTLY PAINTED BRICK AREA, PT-7
A125	RELOCATE LIGHT SWITCH TO NEW WALL
A126	INFILL DEMO'D DOOR OPENING TO MATCH EXISTING WALL
A140	REPAINT WOOD ENTRY CEILING, PT-3
A141	NEW SOFFIT TO MATCH EXISTING PAINT ALL EXPOSED SURFACES TO MATCH ADJACENT WALL COLOR
A142	RAISE EXISTING LAY-IN CEILING APPROXIMATELY 8" TO BE JUST ABOVE NEW TRANSOM WINDOW
A143	NEW LAY-IN CEILING TO MATCH EXISTING, PROVIDE NEW FULL TILES
A144	REPAINT CONCRETE FOUNDATION WALL, PT-3
A146	NEW BEAM COVER, SEE DETAIL
D80	REMOVE EXISTING STOREFRONT WINDOWS. MASONRY WALL BELOW TO REMAIN
D81	REMOVE EXISTING RAISED WINDOW DISPLAY IN ITS ENTIRETY
D82	REMOVE INTERIOR FIXED WINDOW
D83	REMOVE EXISTING WALL FROM FINISHED FLOOR TO TOP OF EXISTING INTERIOR WINDOW. TOP OF WALL TO BECOME NEW SOFFIT, SEE NEW WORK
D84	REMOVE EXISTING DOOR & WALL
D86	REMOVE CERAMIC FLOOR TILE IN CLOSET ONLY. TAKE CARE NOT TO DAMAGE TILE TO REMAIN
D87	REMOVE THIS WALL IN ITS ENTIRETY
D88	SALVAGE DOOR & HARDWARE, TURN OVER TO OWNER
D89	EXISTING CEILING TO REMAIN OVER DISPLAY AREA. REMOVE ONLY AT EXTERIOR EDGE AS REQUIRED FOR NEW WINDOWS
D90	REMOVE EXISTING CLOSET CEILING AND LIGHT FIXTURE
D91	RAISE EXISTING LAY-IN CEILING APPROXIMATELY 8", SEE NEW WORK. RETAIN EXISTING CAN LIGHT AND DIFFUSER (REMOVE AND REINSTALL IF REQUIRED)
D93	REMOVE COVER OVER EXISTING BEAM. BEAM TO REMAIN
D94	REMOVE EXISTING WINDOW AND INFILL TO HISTORIC MASONRY OPENING

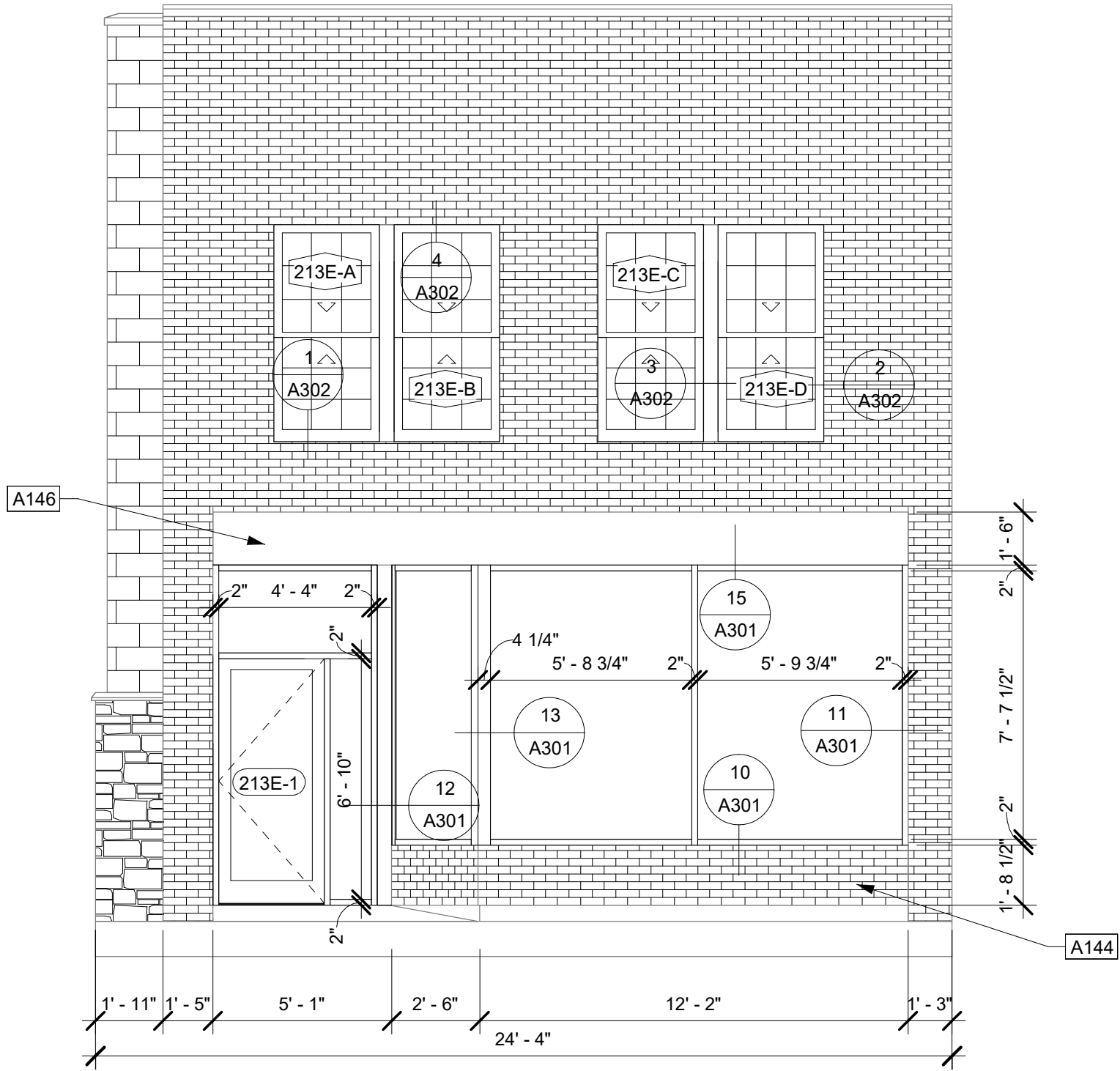


4  
A190 CONCRETE RAMP REPAIR  
1/4" = 1'-0"

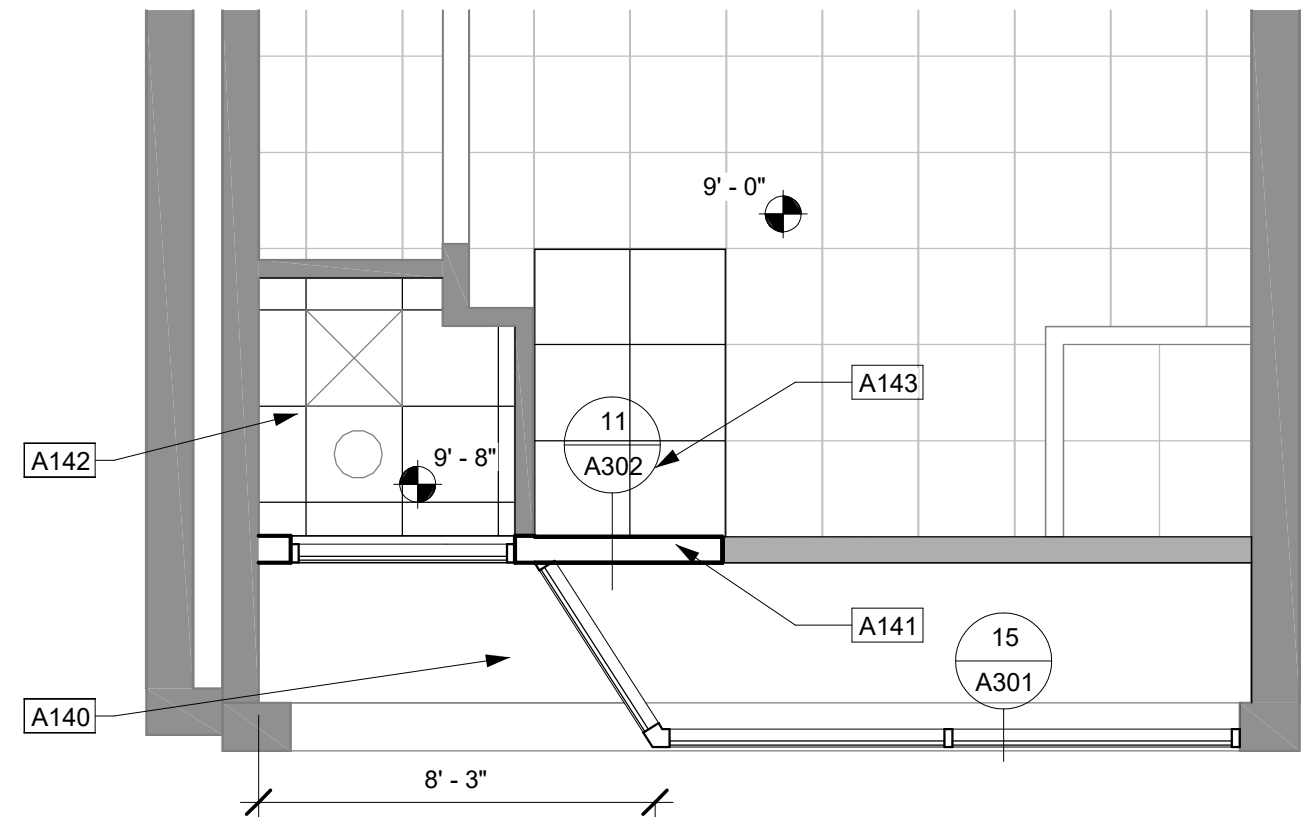


COLOR SCHEME  
1/4" = 1'-0"

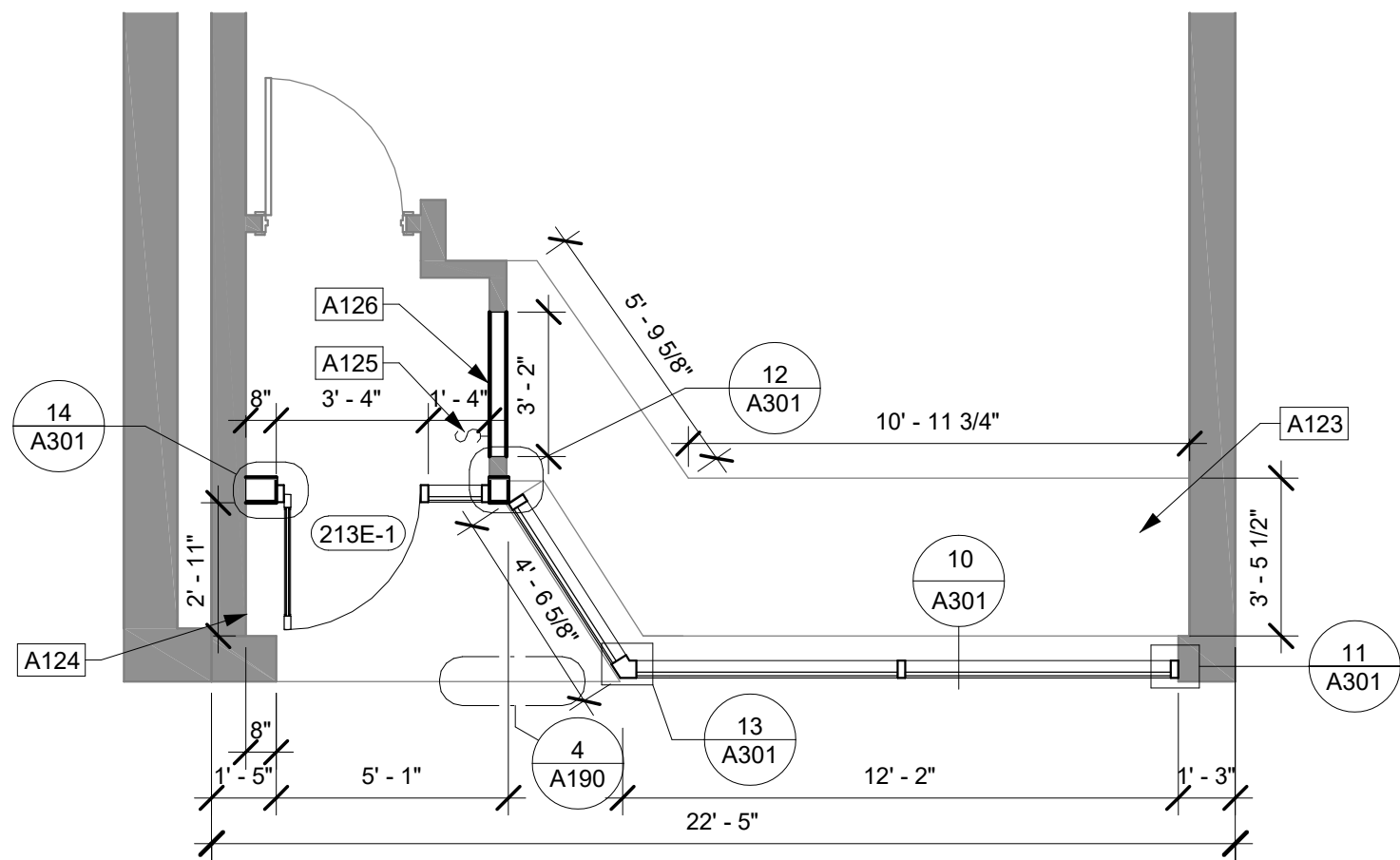
EXTERIOR PAINT LEGEND	
	PT-7: SHERWIN WILLIAMS - RUSTIC RED SW 7593 (SEE PLAN)
	PT-3: SHERWIN WILLIAMS - ANEW GRAY SW 7030
	PT-8: SHERWIN WILLIAMS - IRON ORE SW 7069



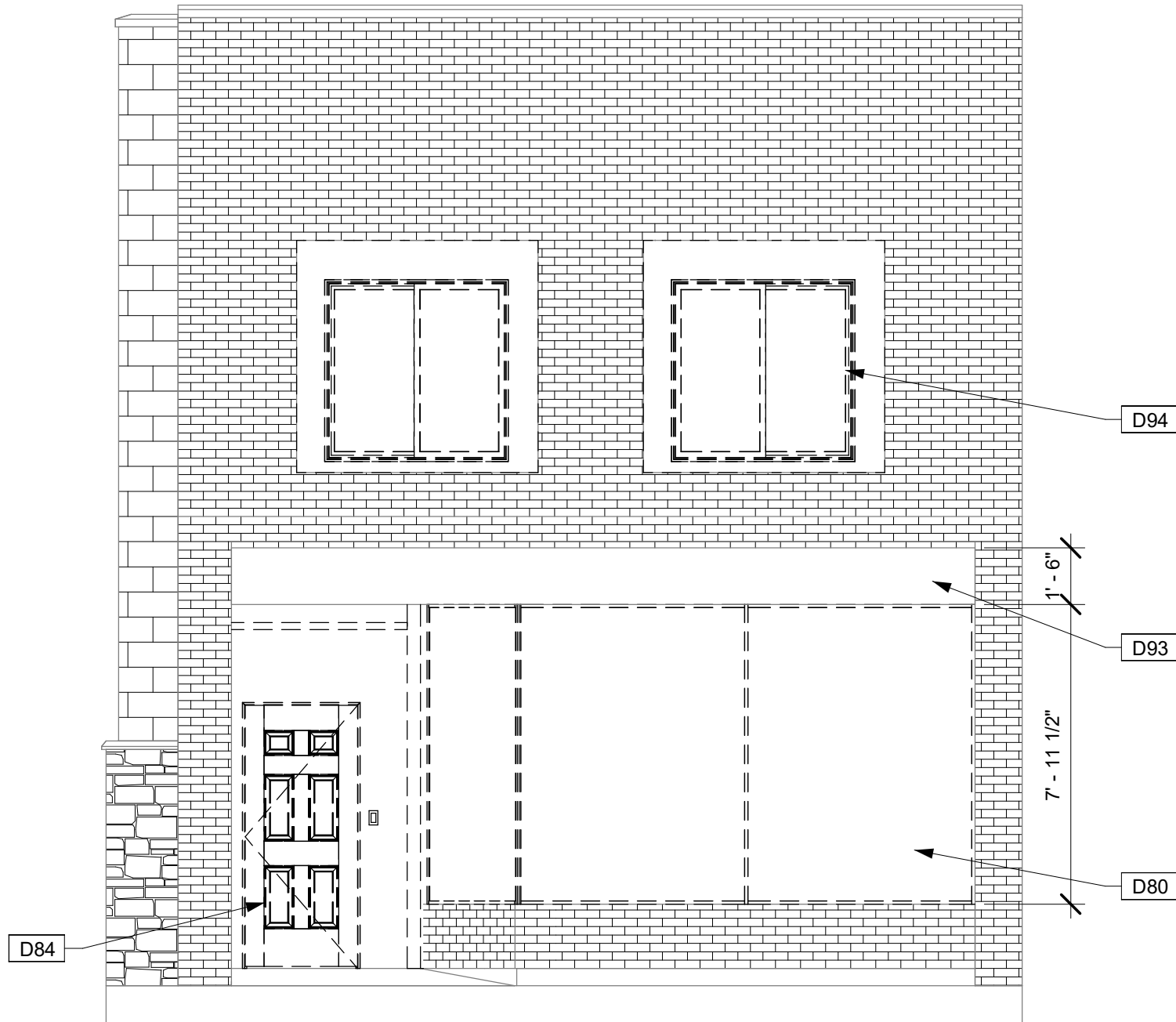
213 E MAIN FACADE ELEVATION - NEW  
1/4" = 1'-0"



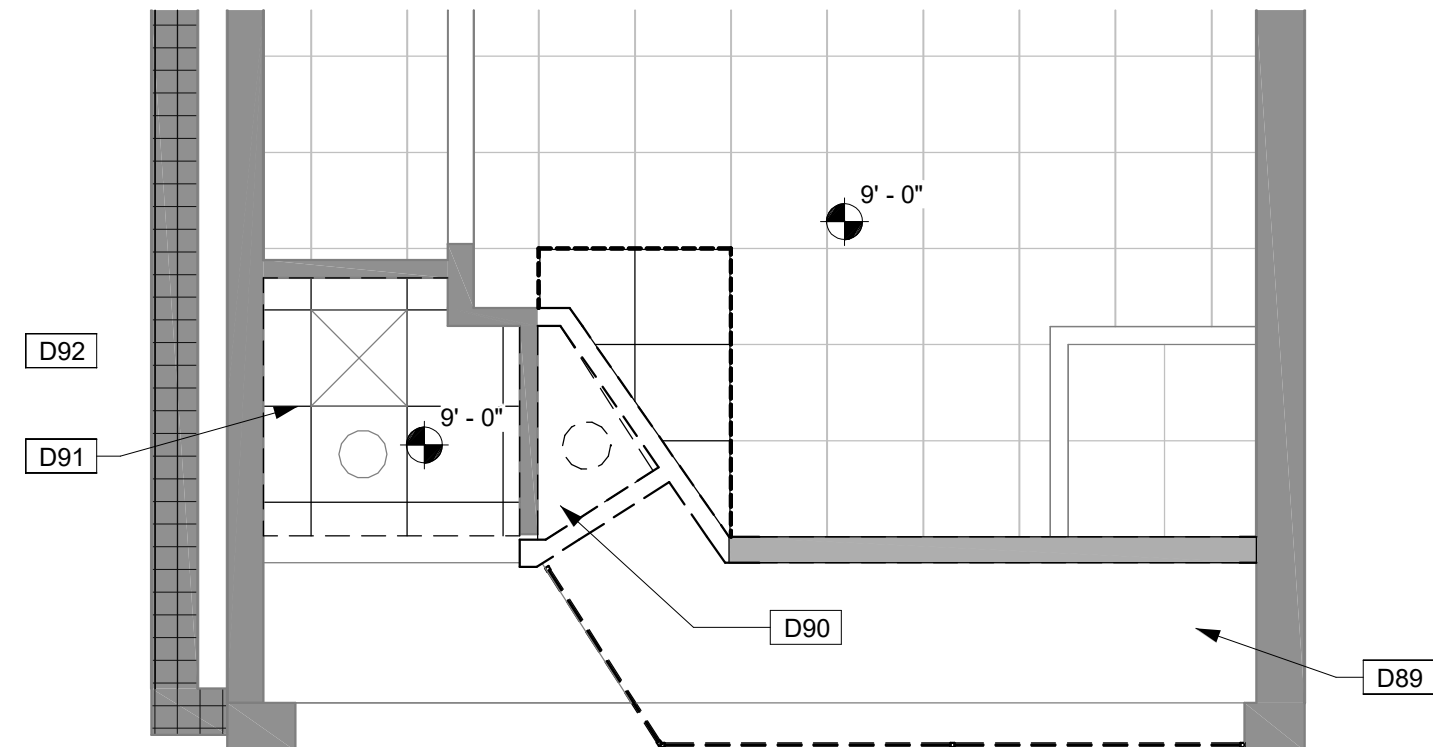
MAIN FLOOR REFLECTED CEILING PLAN  
1/4" = 1'-0"



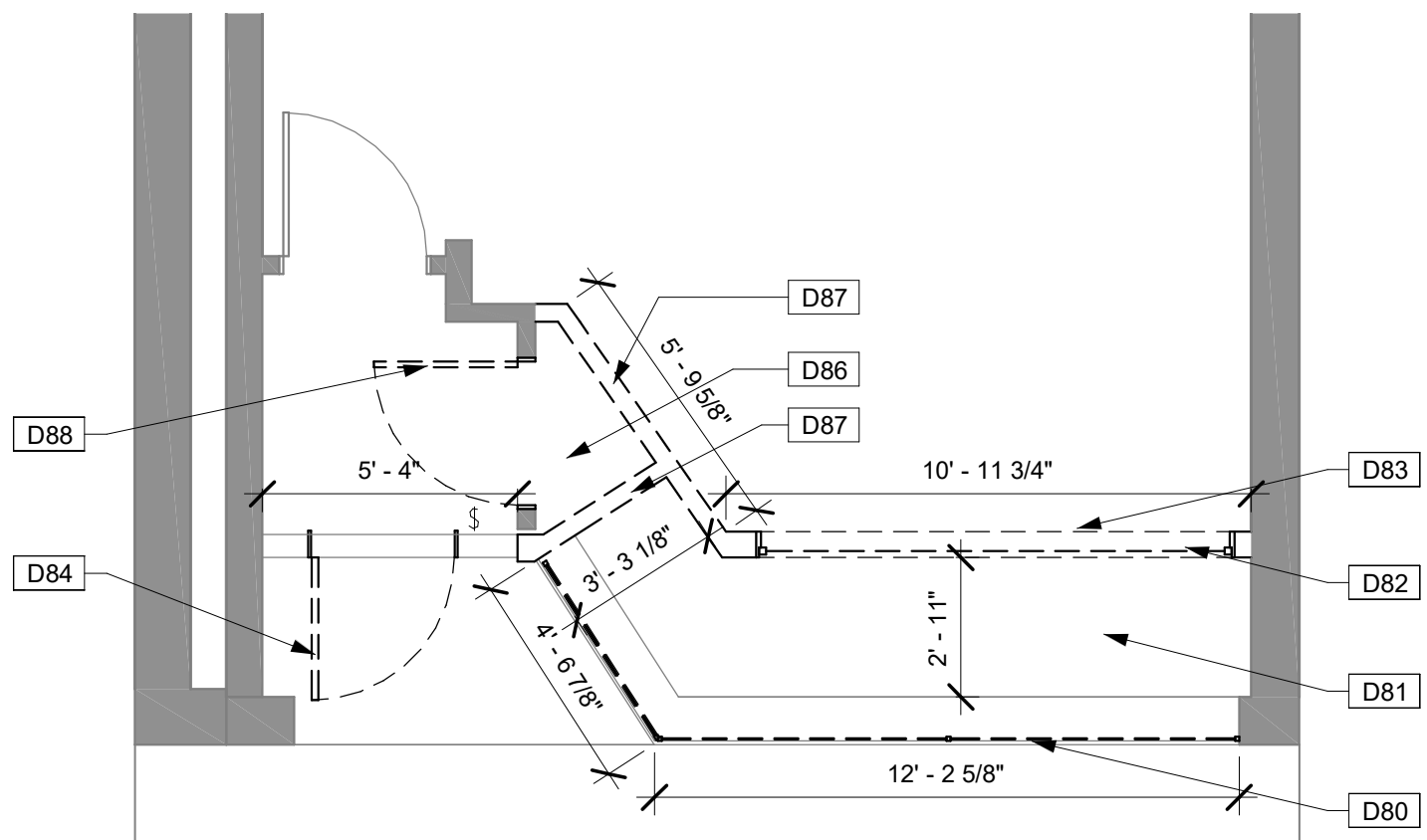
MAIN FLOOR PLAN - NEW  
1/4" = 1'-0"



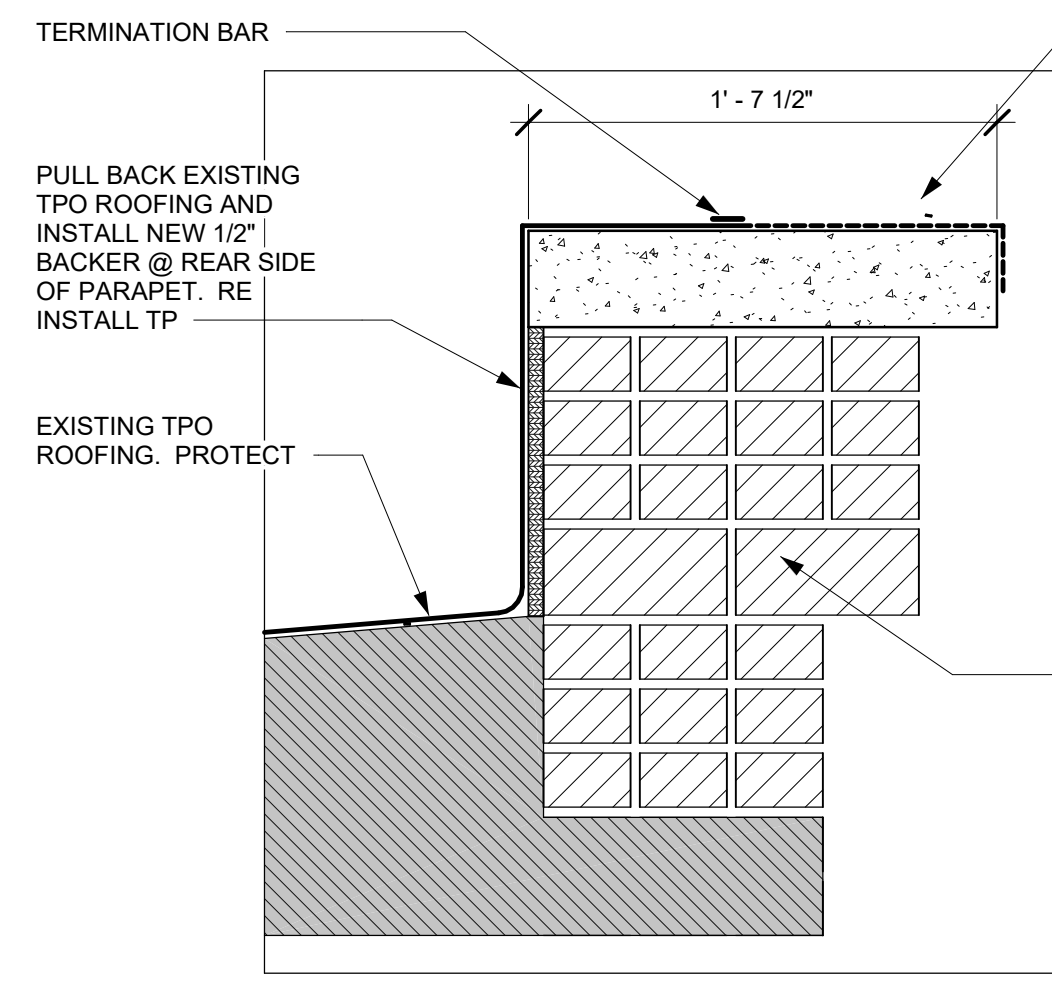
213 MAIN FACADE ELEVATION - EXISTING / DEMOLITION  
1/4" = 1'-0"



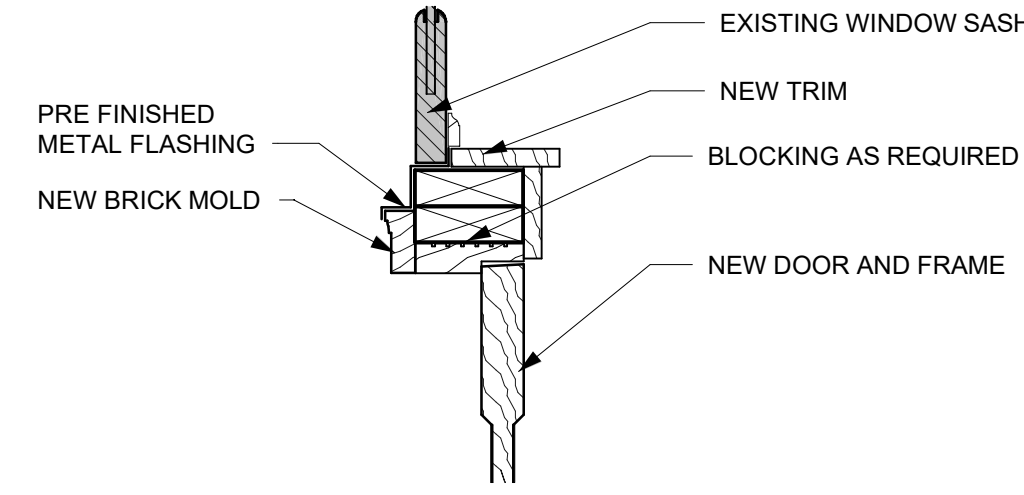
MAIN FLOOR REFLECTED CEILING DEMOLITION PLAN  
1/4" = 1'-0"



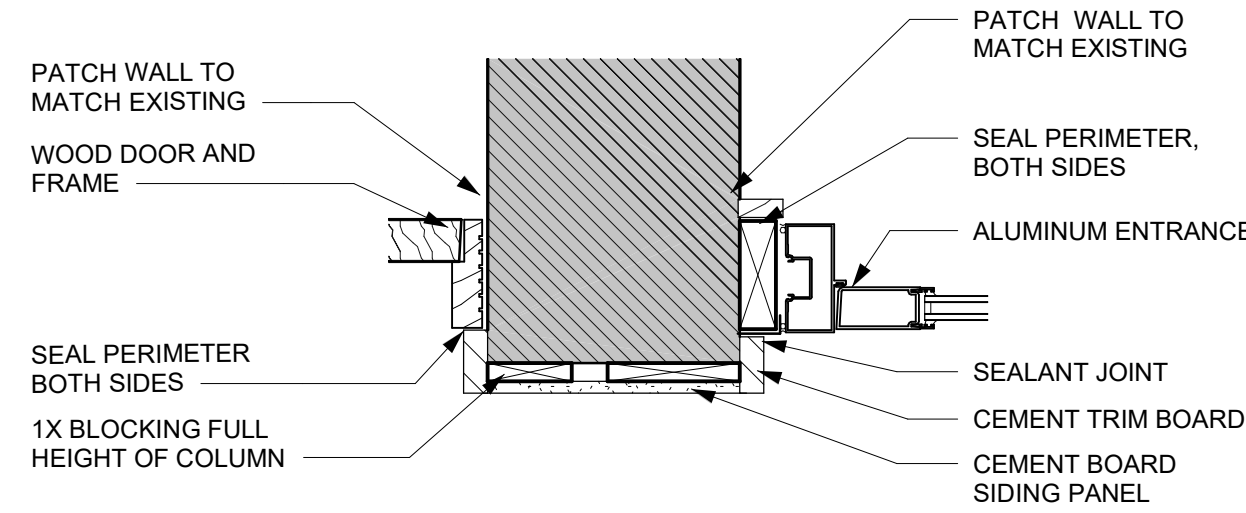
MAIN FLOOR PLAN - EXISTING / DEMOLITION PLAN  
1/4" = 1'-0"



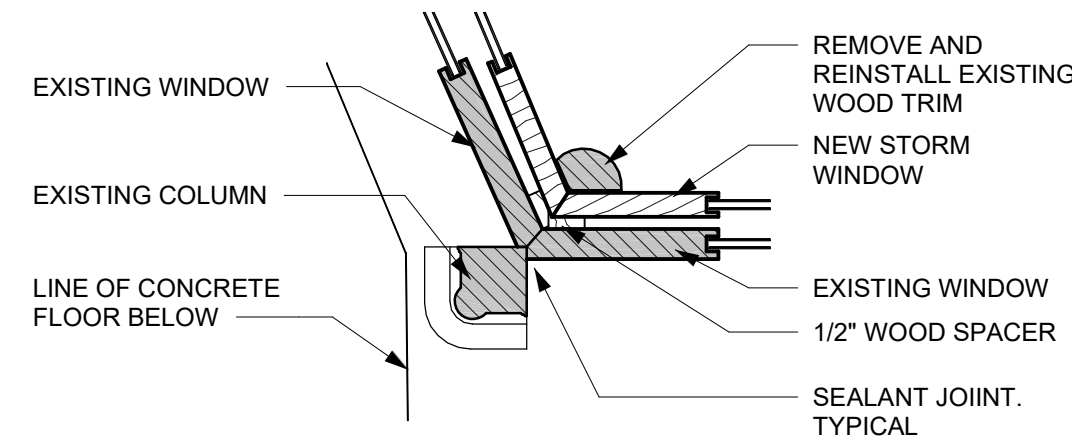
24 205W Parapet Detail  
A300 1 1/2" = 1'-0"



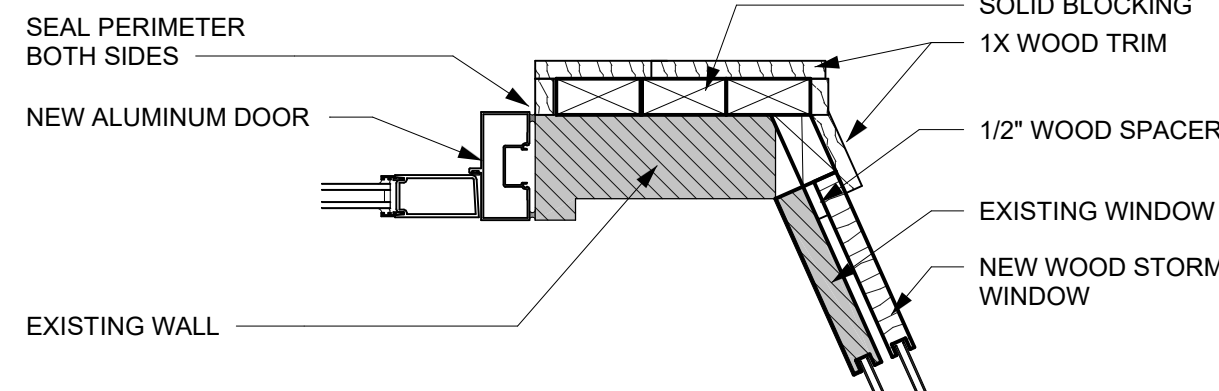
16 HEAD DETAIL  
A300 1 1/2" = 1'-0"



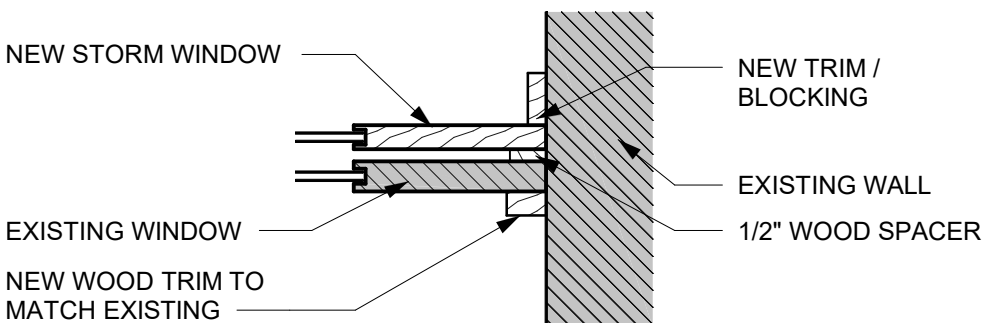
15 JAMB  
A300 1 1/2" = 1'-0"



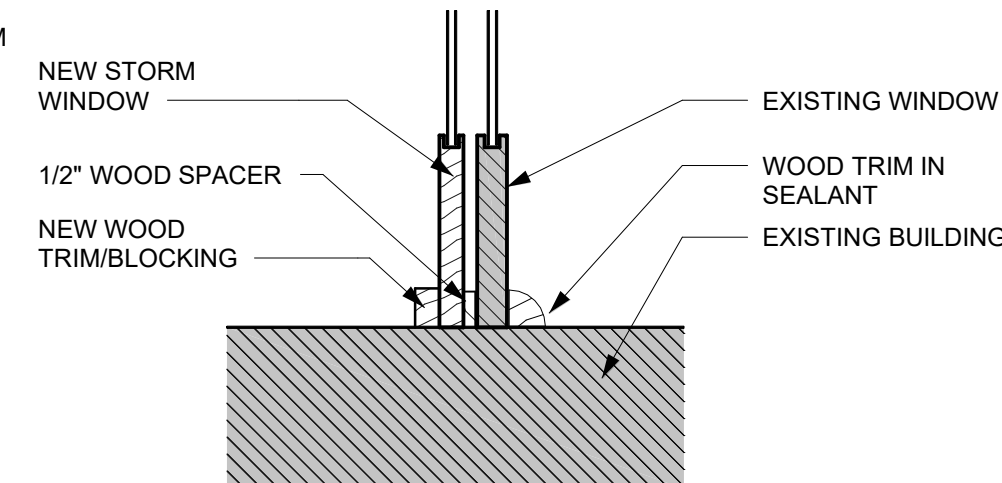
20 JAMB  
A300 1 1/2" = 1'-0"



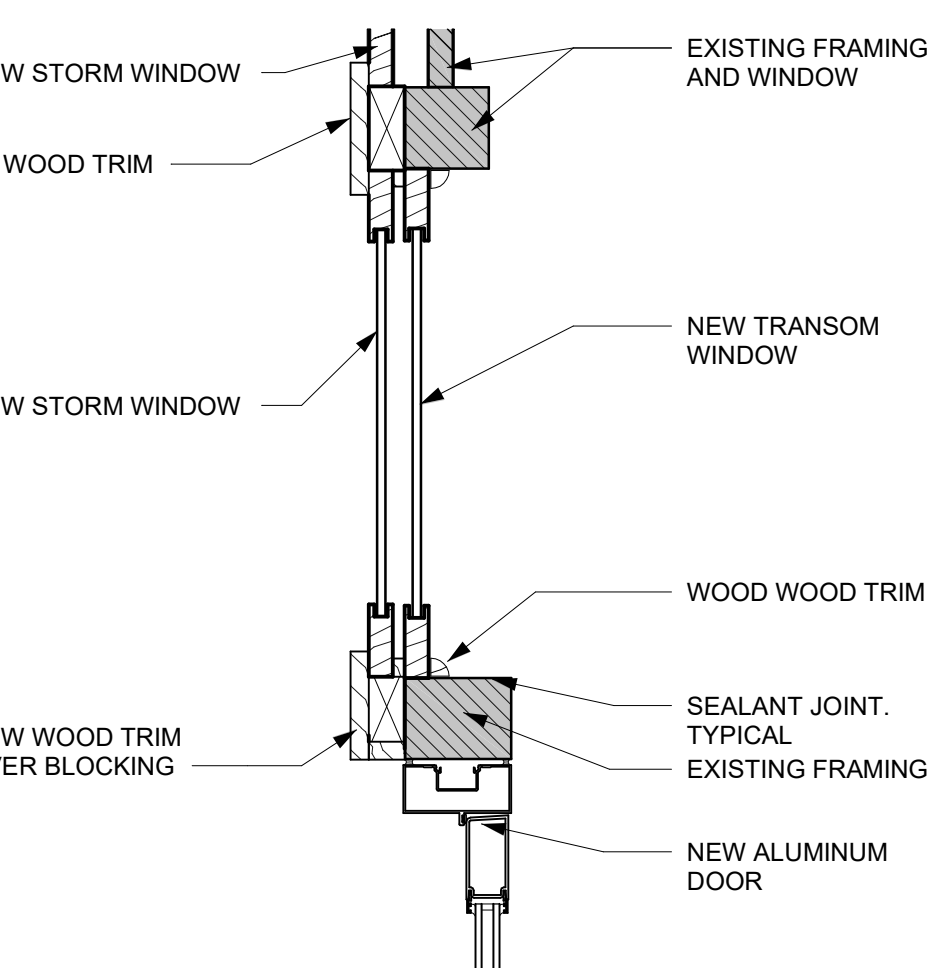
23 JAMB  
A300 1 1/2" = 1'-0"



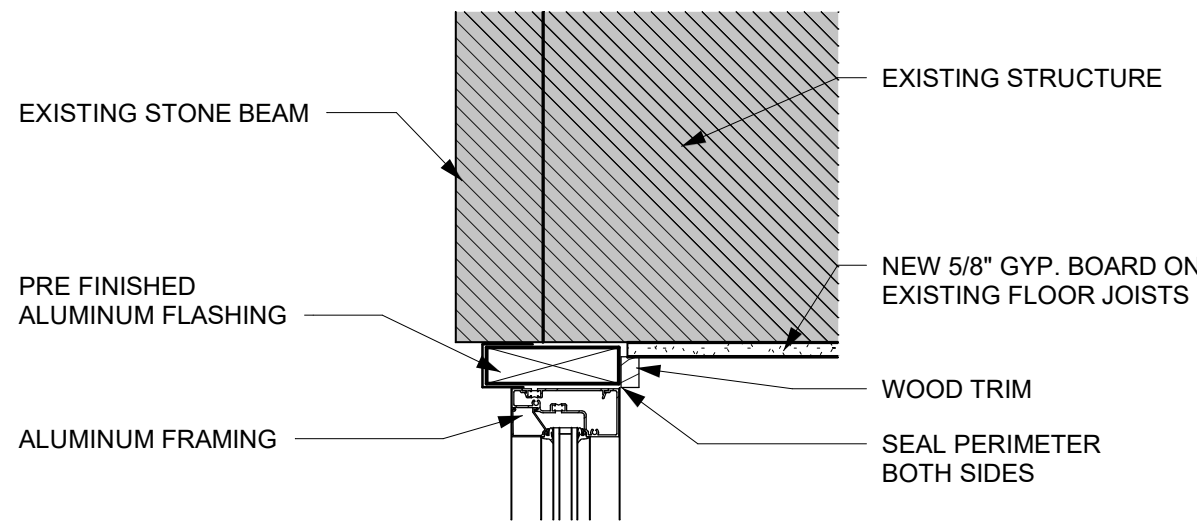
22 JAMB  
A300 1 1/2" = 1'-0"



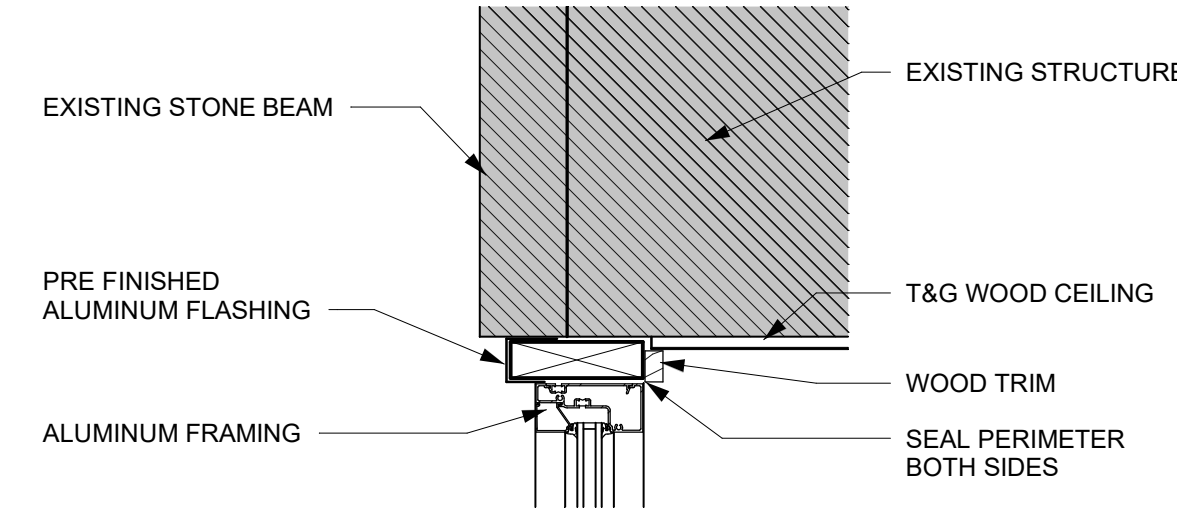
19 SILL  
A300 1 1/2" = 1'-0"



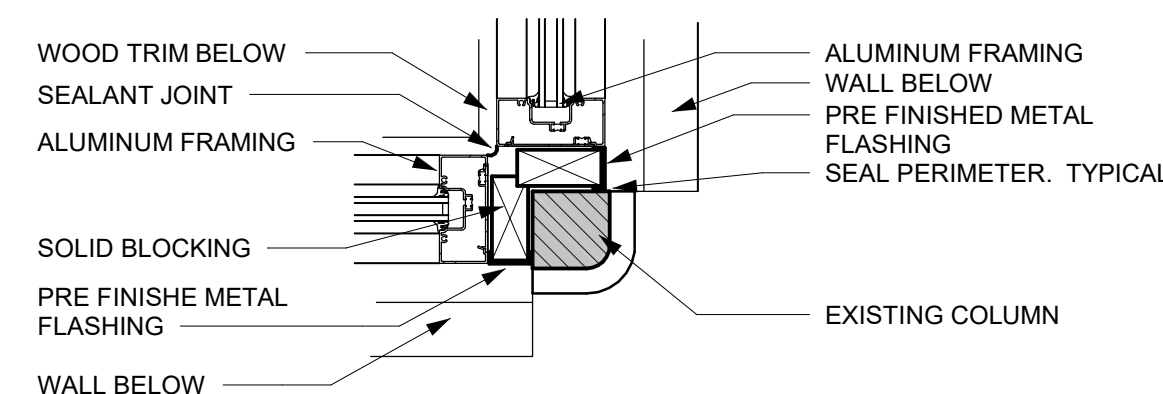
21 DETAIL  
A300 1 1/2" = 1'-0"



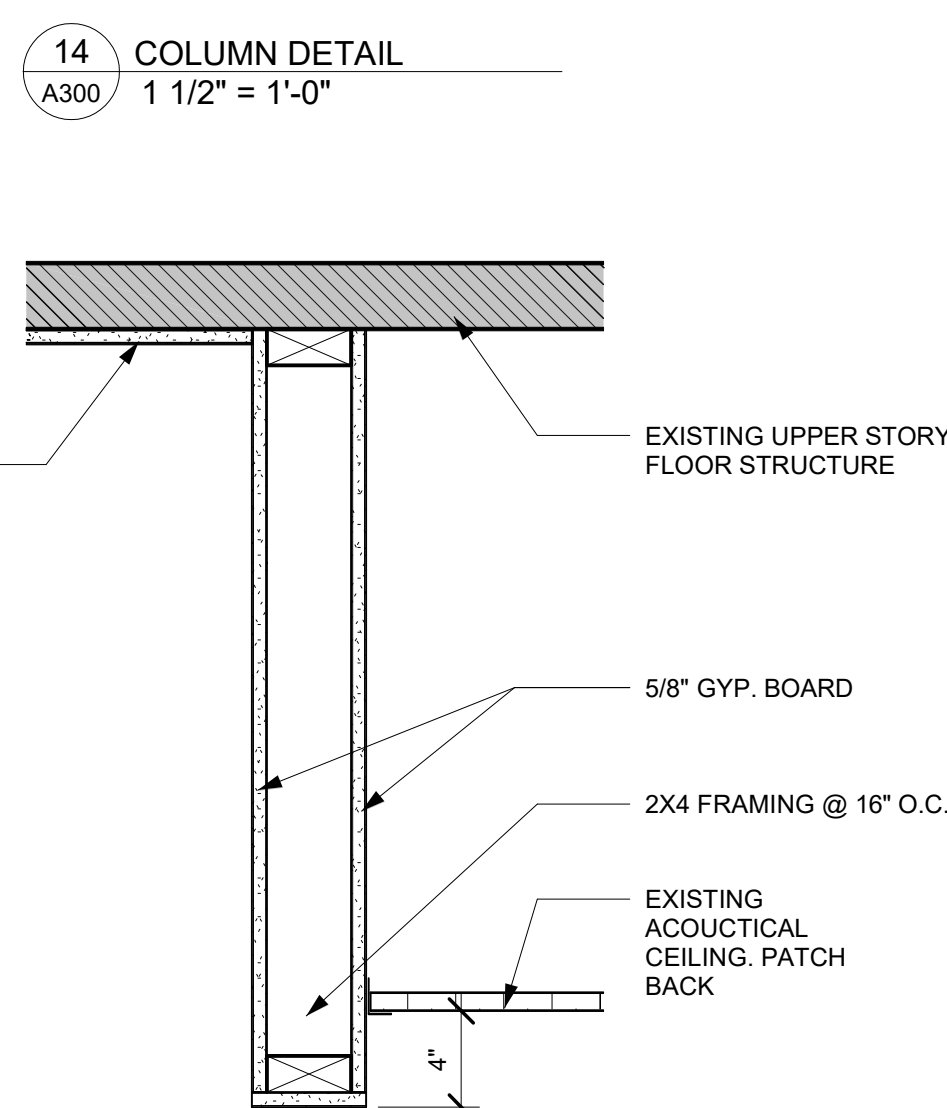
18 HEAD  
A300 1 1/2" = 1'-0"



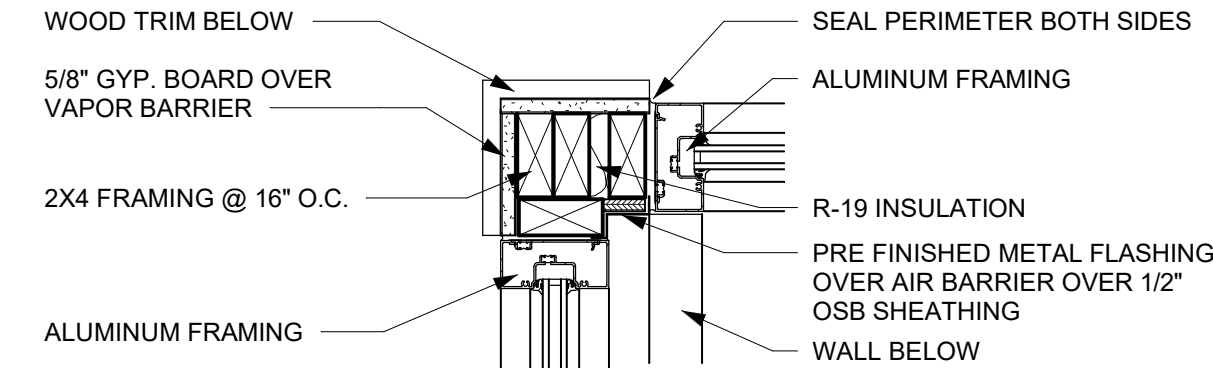
17 HEAD  
A300 1 1/2" = 1'-0"



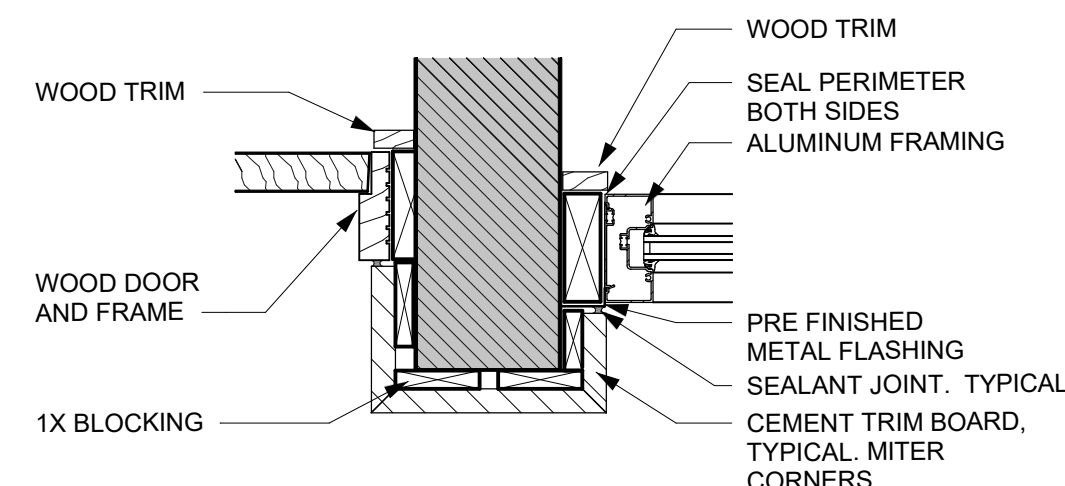
13 DETAIL  
A300 1 1/2" = 1'-0"



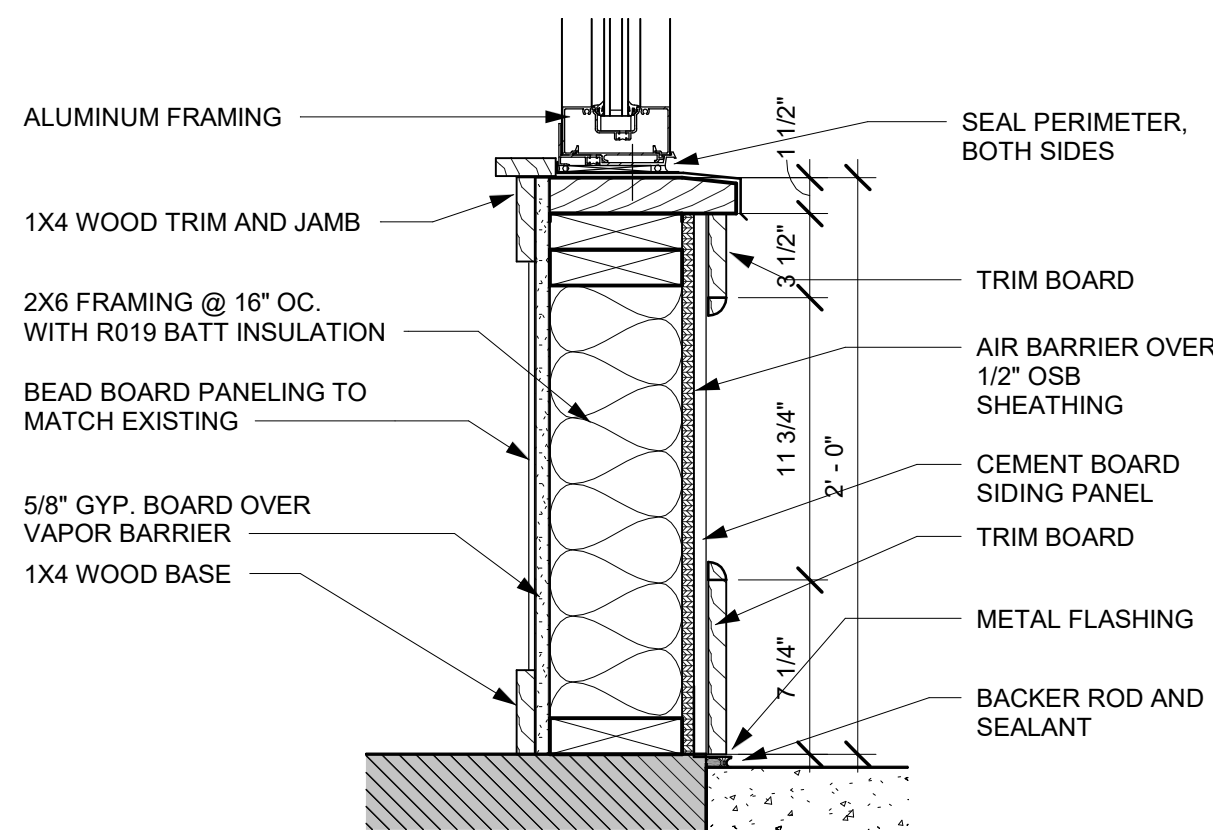
14 COLUMN DETAIL  
A300 1 1/2" = 1'-0"



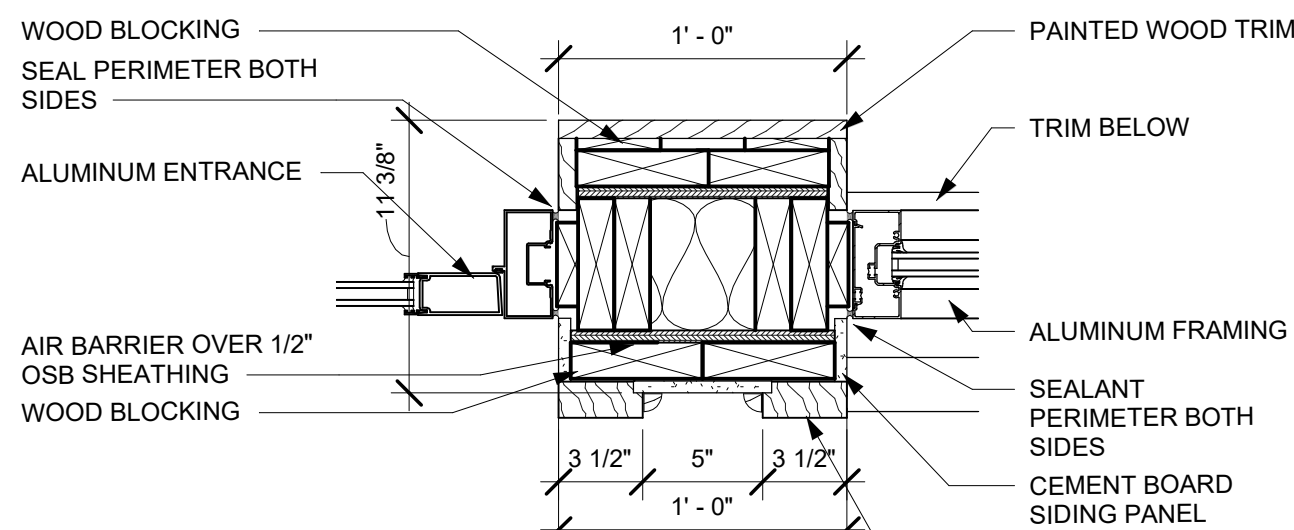
11 JAMB  
A300 1 1/2" = 1'-0"



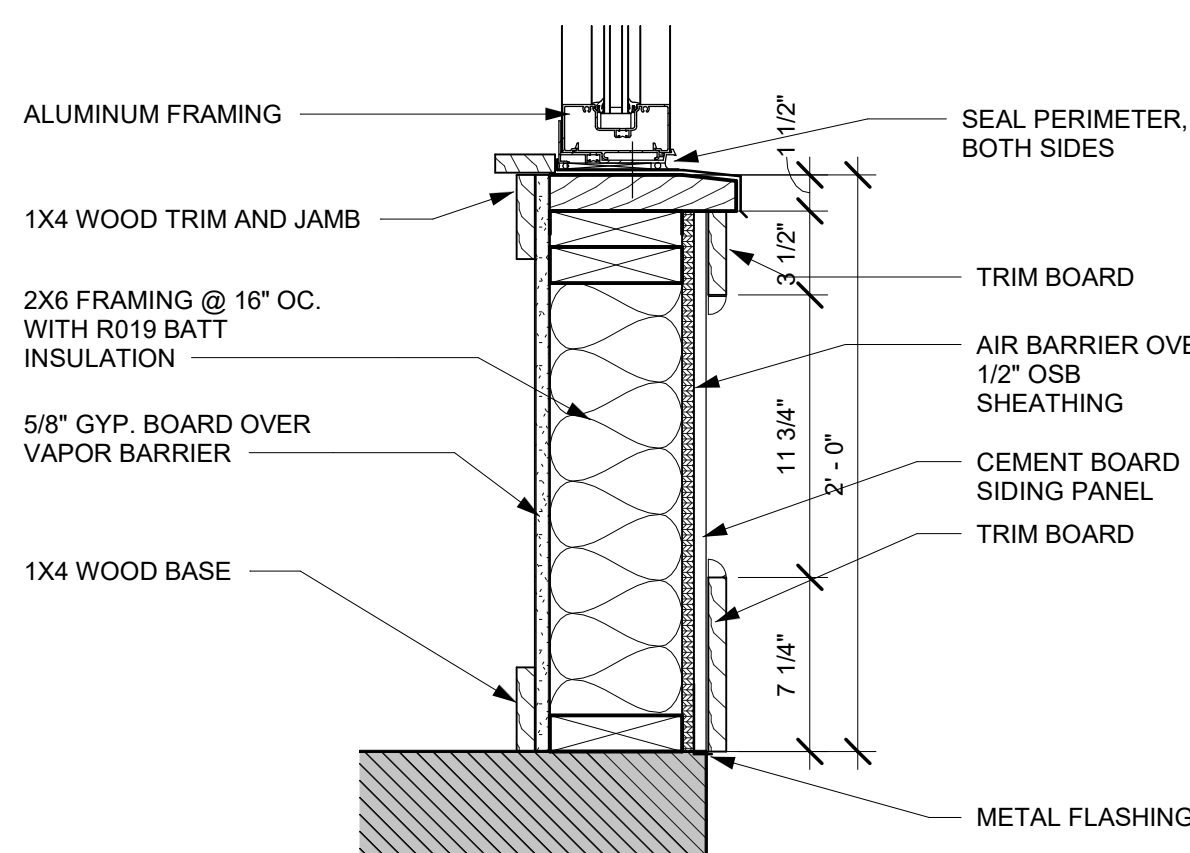
10 JAMB  
A300 1 1/2" = 1'-0"



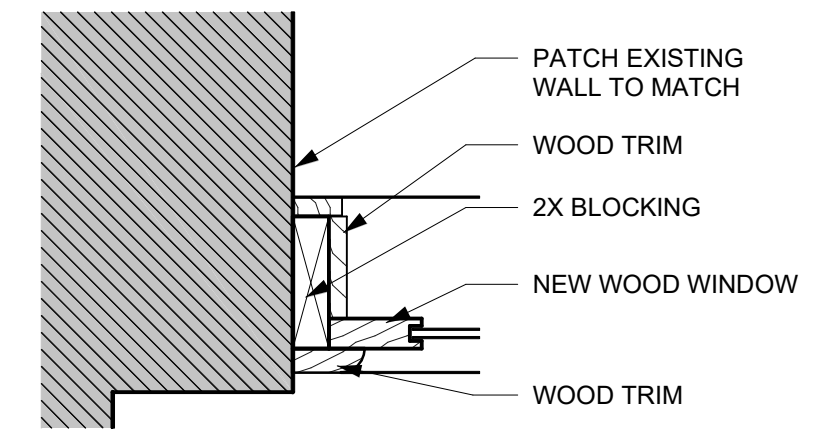
9 DETAIL  
A300 1 1/2" = 1'-0"



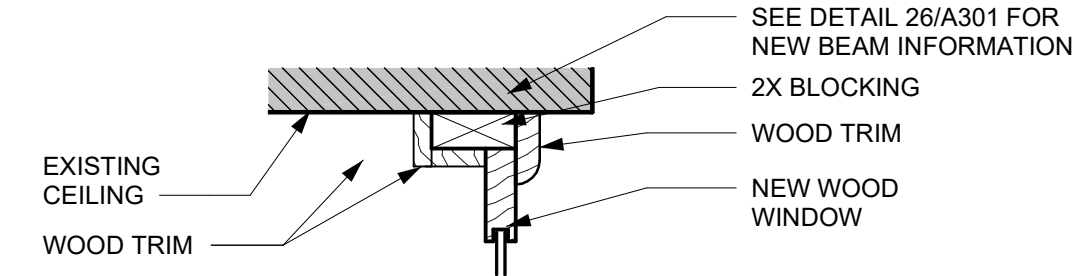
8 JAMB  
A300 1 1/2" = 1'-0"



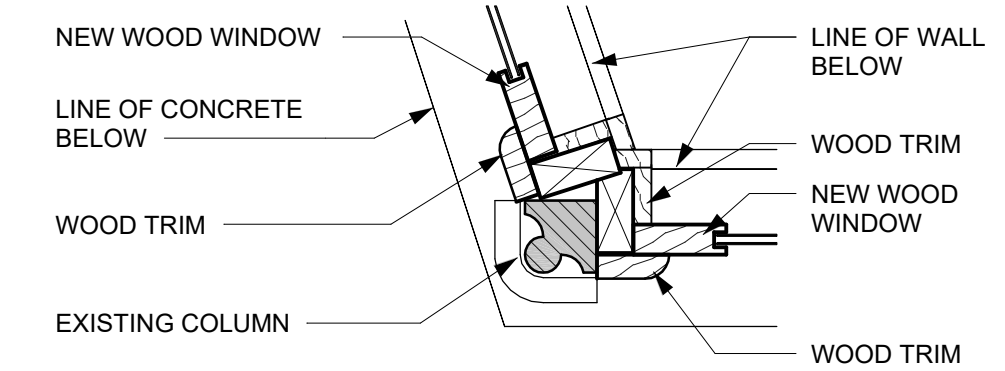
7 DETAIL  
A300 1 1/2" = 1'-0"



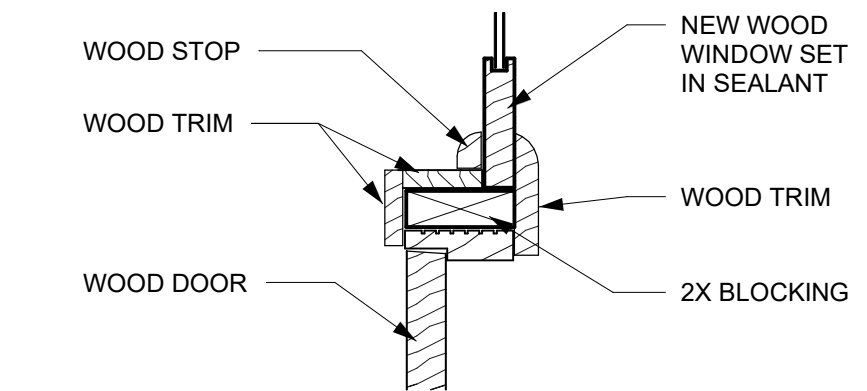
6 JAMB  
A300 1 1/2" = 1'-0"



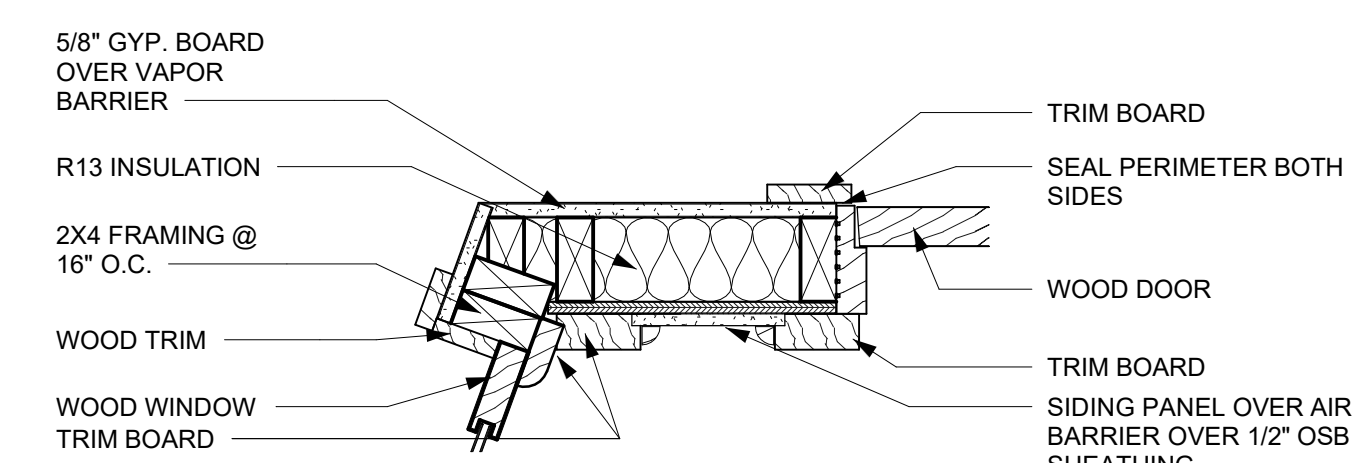
5 HEAD  
A300 1 1/2" = 1'-0"



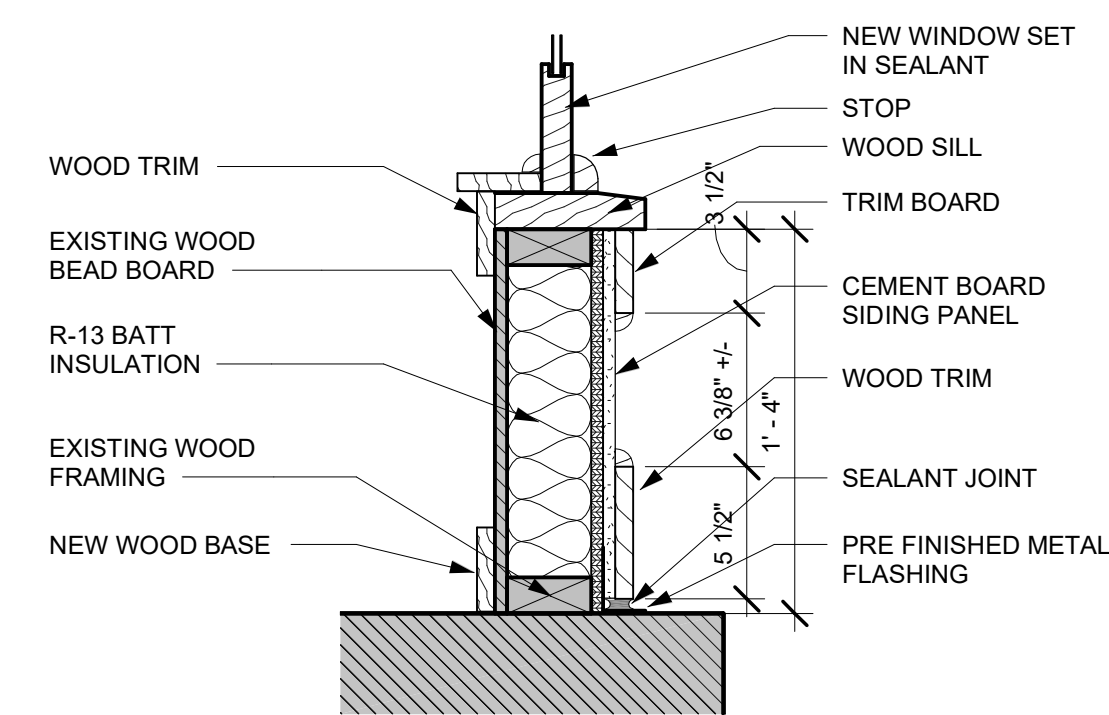
4 JAMB  
A300 1 1/2" = 1'-0"



3 HEAD  
A300 1 1/2" = 1'-0"



2 DETAIL  
A300 1 1/2" = 1'-0"



1 DETAIL  
A300 1 1/2" = 1'-0"

NOTE:  
CONTRACTOR AND CONTRACTOR'S  
ENGINEER SHALL DESIGN AND PROVIDE  
TEMPORARY SHORING SYSTEM AS  
REQUIRED FOR INSTALLATION OF NEW  
CONSTRUCTION.

EXISTING WALL TO BE REBUILT AS  
REQUIRED FOR NEW  
CONSTRUCTION

EXISTING FLOOR FRAMING. VERIFY  
FRAMING IN FIELD AND RECONNECT  
TO EXISTING WALL

PLACE NEW LINTEL NEAR CENTER OF  
EXISTING WALL. IF NECESSARY,  
OFFSET BEAM TO ENABLE  
CONNECTION TO EXISTING CAST IRON  
COLUMNS AND INSTALL NEW MASONRY

NEW WOOD TRIM/BLOCKING

1/2" WOOD SPACER

NEW STORM WINDOW

NEW LIMESTONE BAND TO MATCH  
EXISTING @ 103 EAST MAIN STREET.  
EXISTING STONE BAND TO BE REUSED @  
205 WEST MAIN STREET.

NEW GALVANIZED LADDER TIE TO CONNECT  
MULTI-WYTHE CONSTRUCTION

NEW MASONRY TO MATCH HEIGHT OF LINTEL

NEW LIMESTONE LINTEL TO MATCH EXISTING

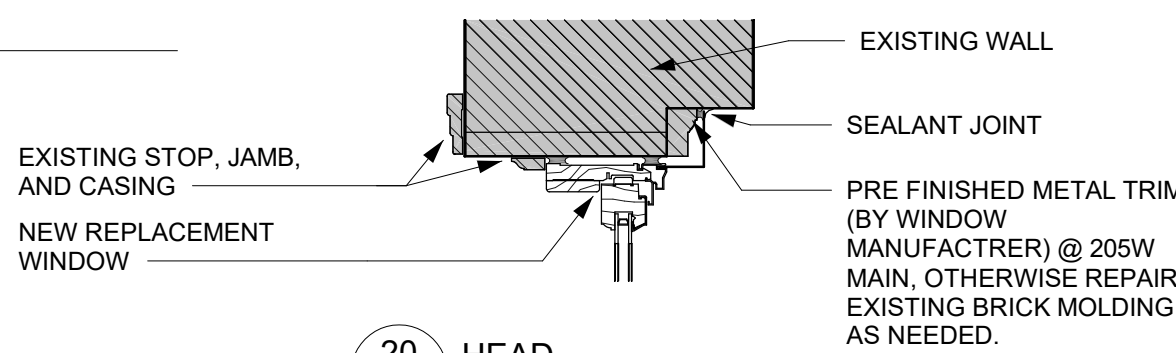
NEW W8x18 CONTINUOUS LINTEL WITH 1/4"  
BOTTOM PLATE STITCH WELDED TO BEAM  
(GALVANIZE ASSEMBLY) TO REPLACE  
EXISTING DAMAGED STONE LINTEL. PROVIDE  
8" OF BEARING EACH END ON SOLID  
GROUTED MASONRY, AND GROUT BEARING  
POCKET SOLID. CONNECT NEW LINTEL TO  
EXISTING CAST IRON POSTS WITHIN THE  
CURTAINWALL SYSTEM

CUSTOM NEW WOOD TRIM TO MATCH  
EXISTING, SEE ELEVATION

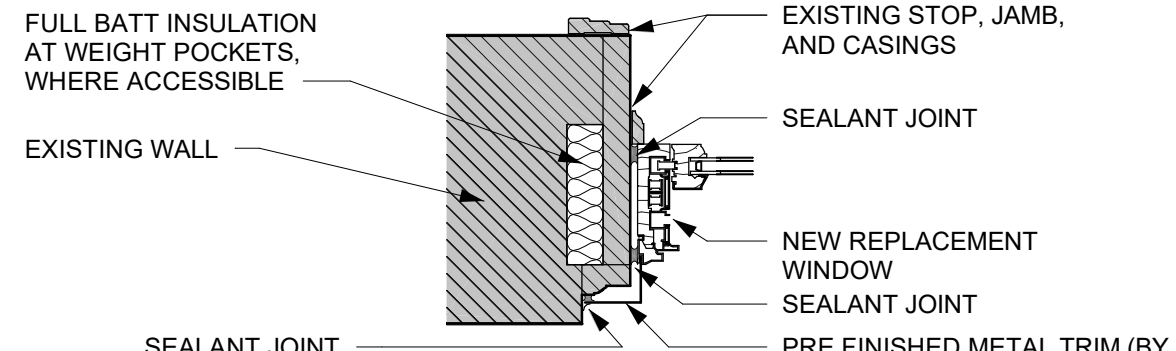
EXISTING WINDOW

NOTE: STOREFRONT WINDOW DETAILING SHOWN BELOW BEAM IS FOR 205 W MAIN. SEE DETAIL 6/A300 FOR 103 E MAIN.

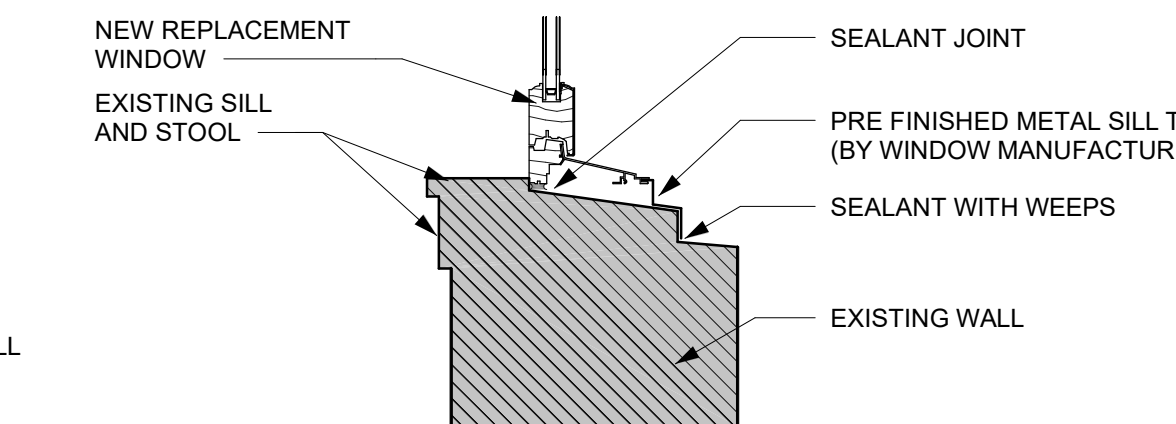
26 HEAD  
A301 1 1/2" = 1'-0"



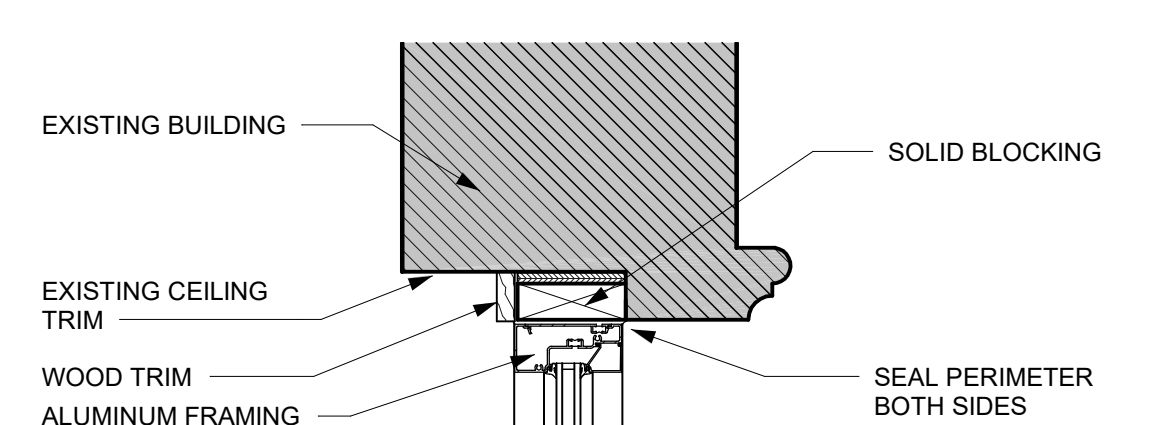
20 HEAD  
A301 1 1/2" = 1'-0"



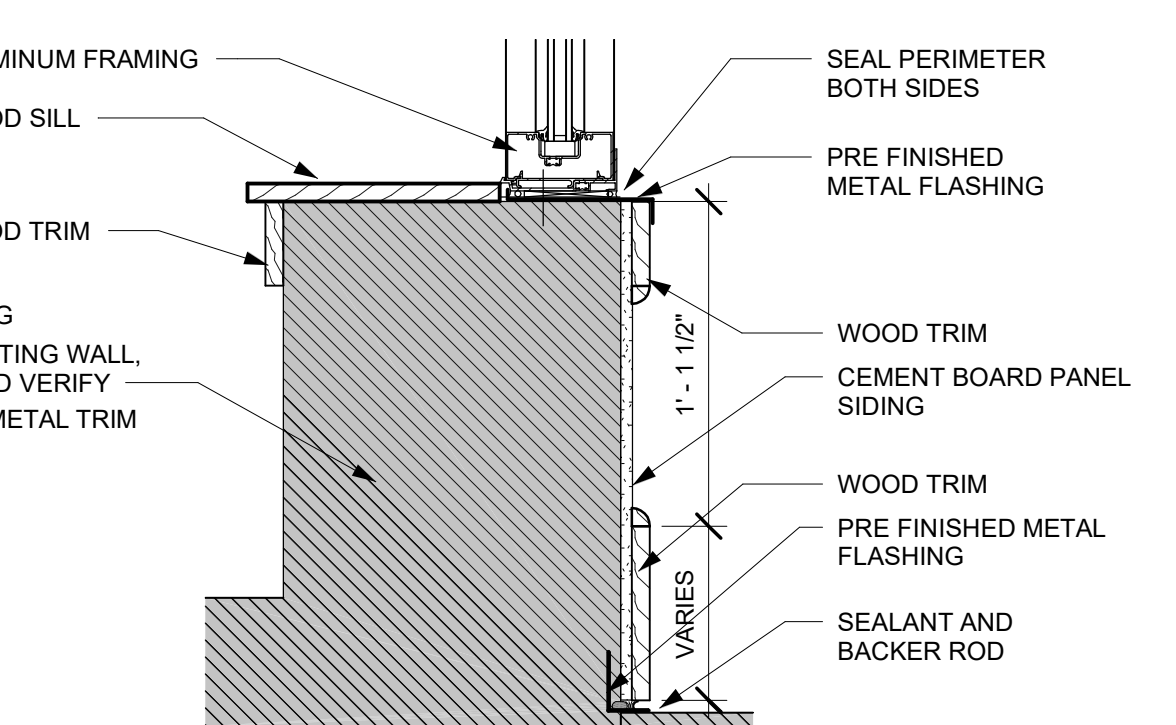
19 JAMB  
A301 1 1/2" = 1'-0"



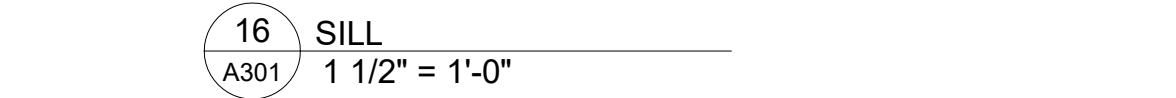
18 SILL  
A301 1 1/2" = 1'-0"



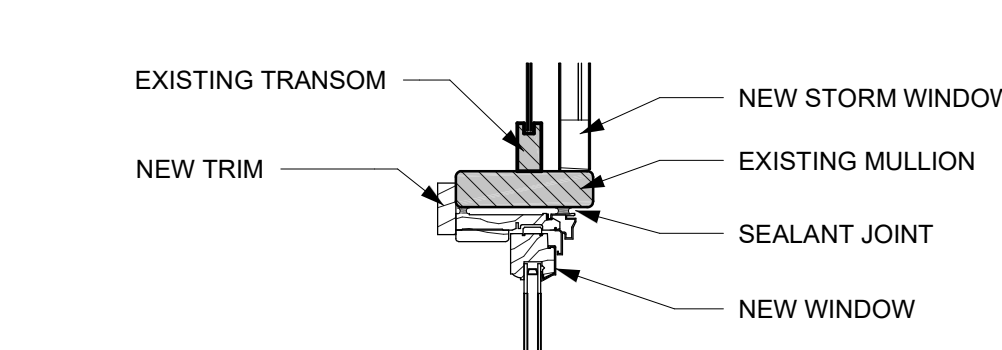
17 HEAD  
A301 1 1/2" = 1'-0"



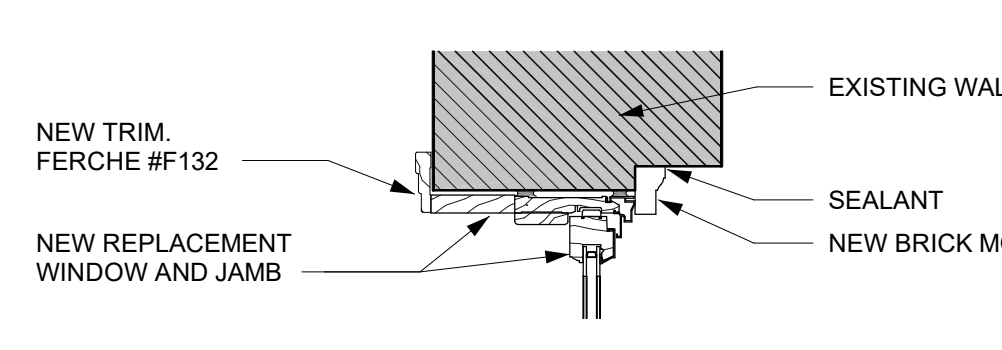
16 SILL  
A301 1 1/2" = 1'-0"



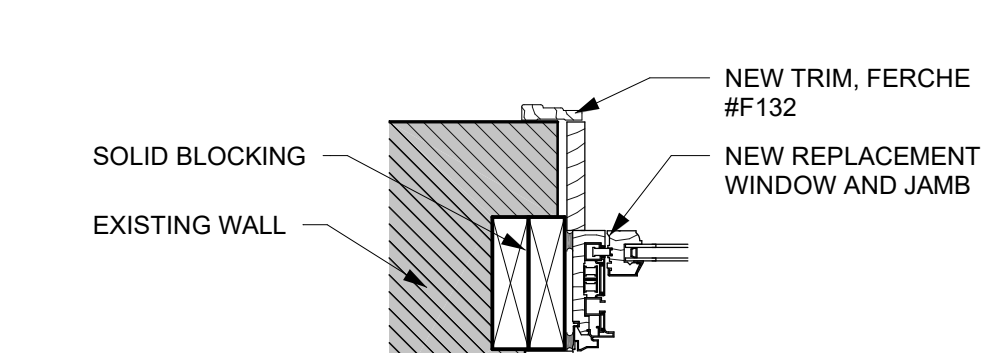
25 HEAD  
A301 1 1/2" = 1'-0"



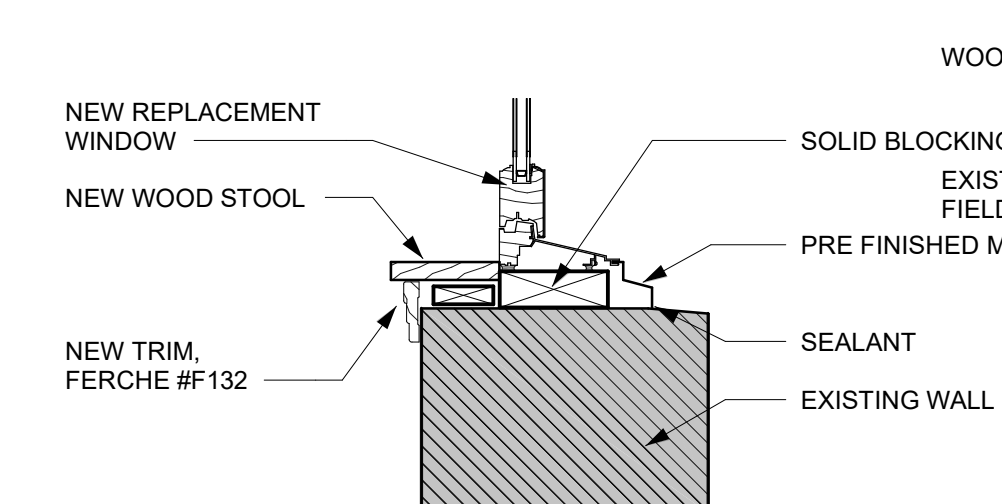
24 HEAD  
A301 1 1/2" = 1'-0"



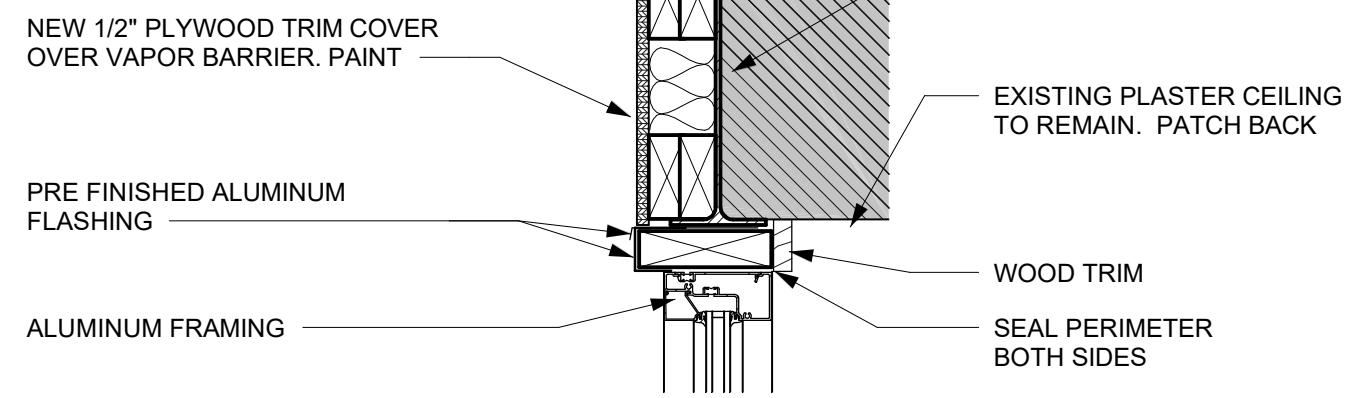
23 HEAD  
A301 1 1/2" = 1'-0"



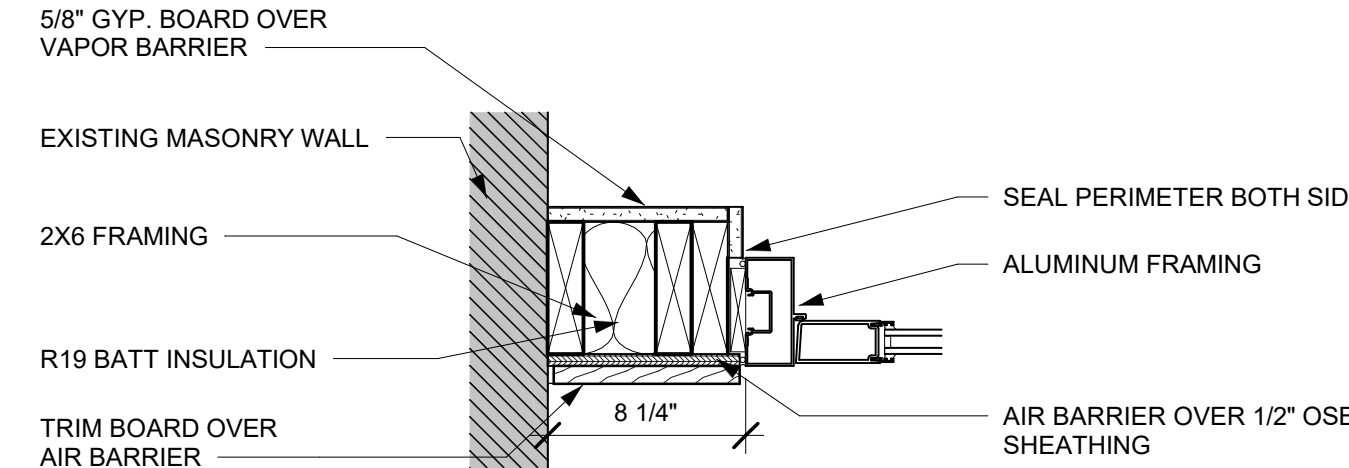
22 JAMB  
A301 1 1/2" = 1'-0"



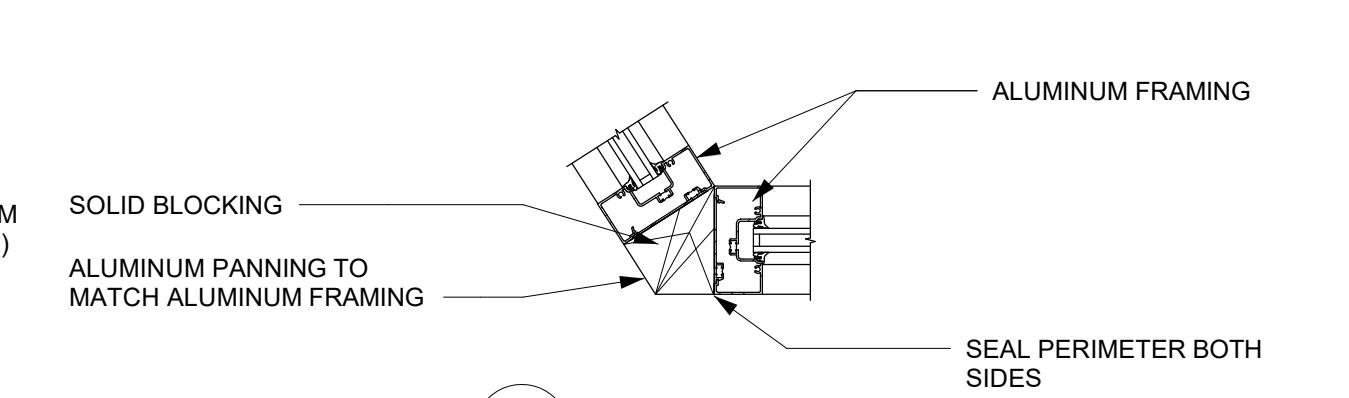
21 SILL  
A301 1 1/2" = 1'-0"



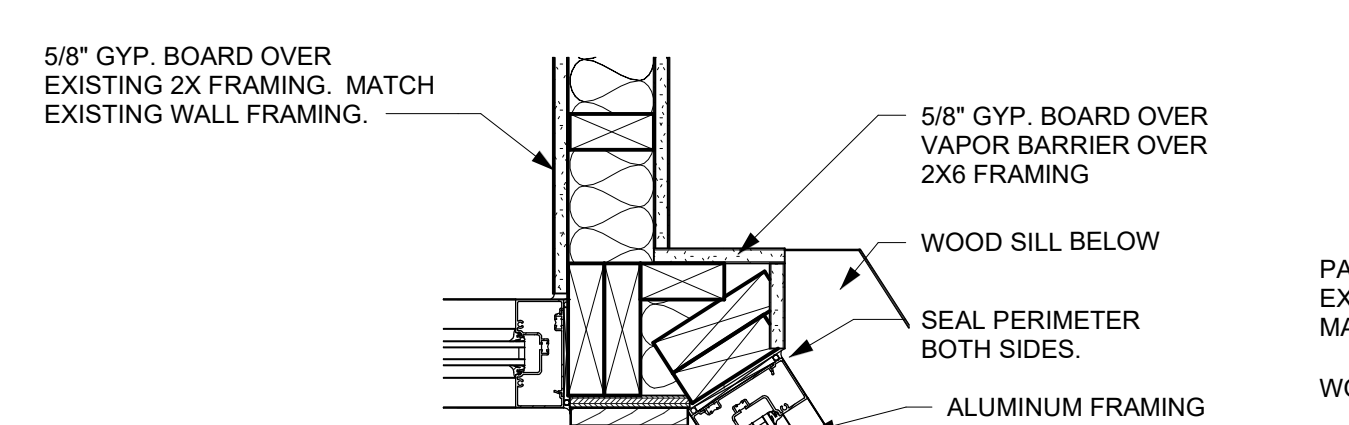
15 JAMB  
A301 1 1/2" = 1'-0"



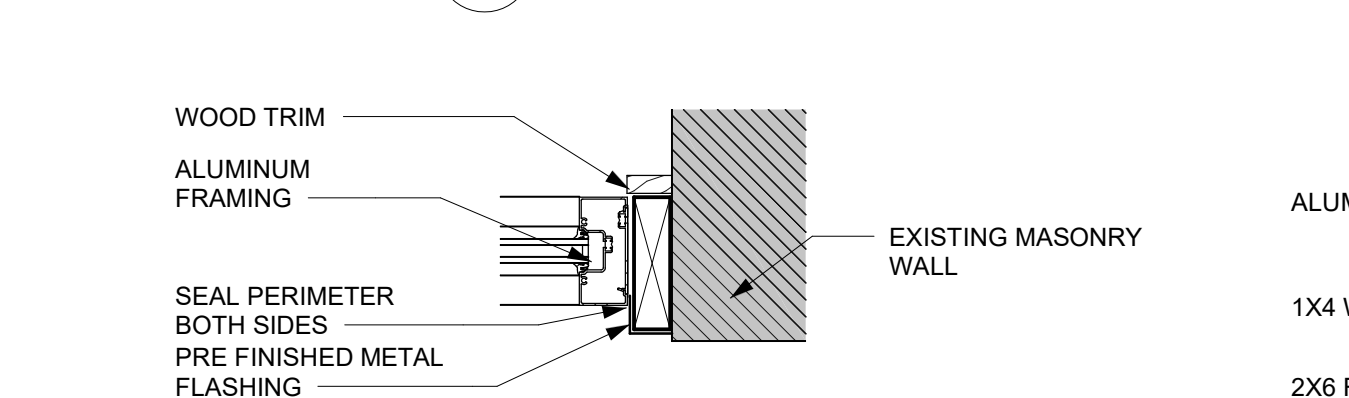
14 JAMB  
A301 1 1/2" = 1'-0"



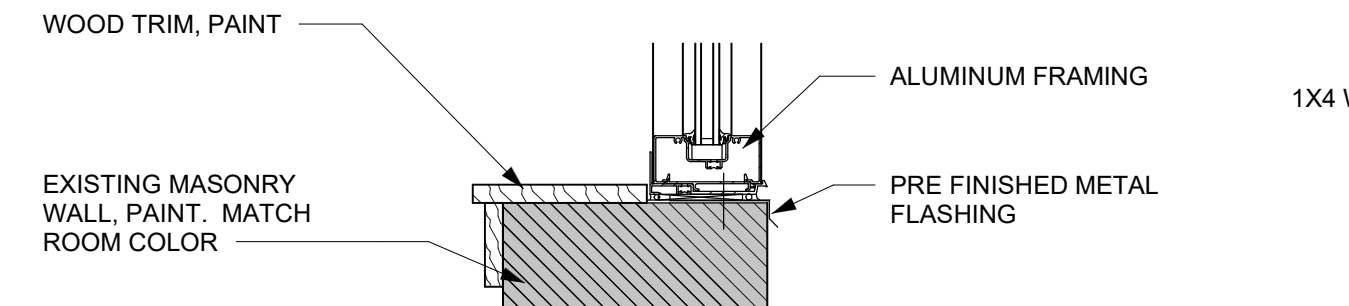
13 JAMB  
A301 1 1/2" = 1'-0"



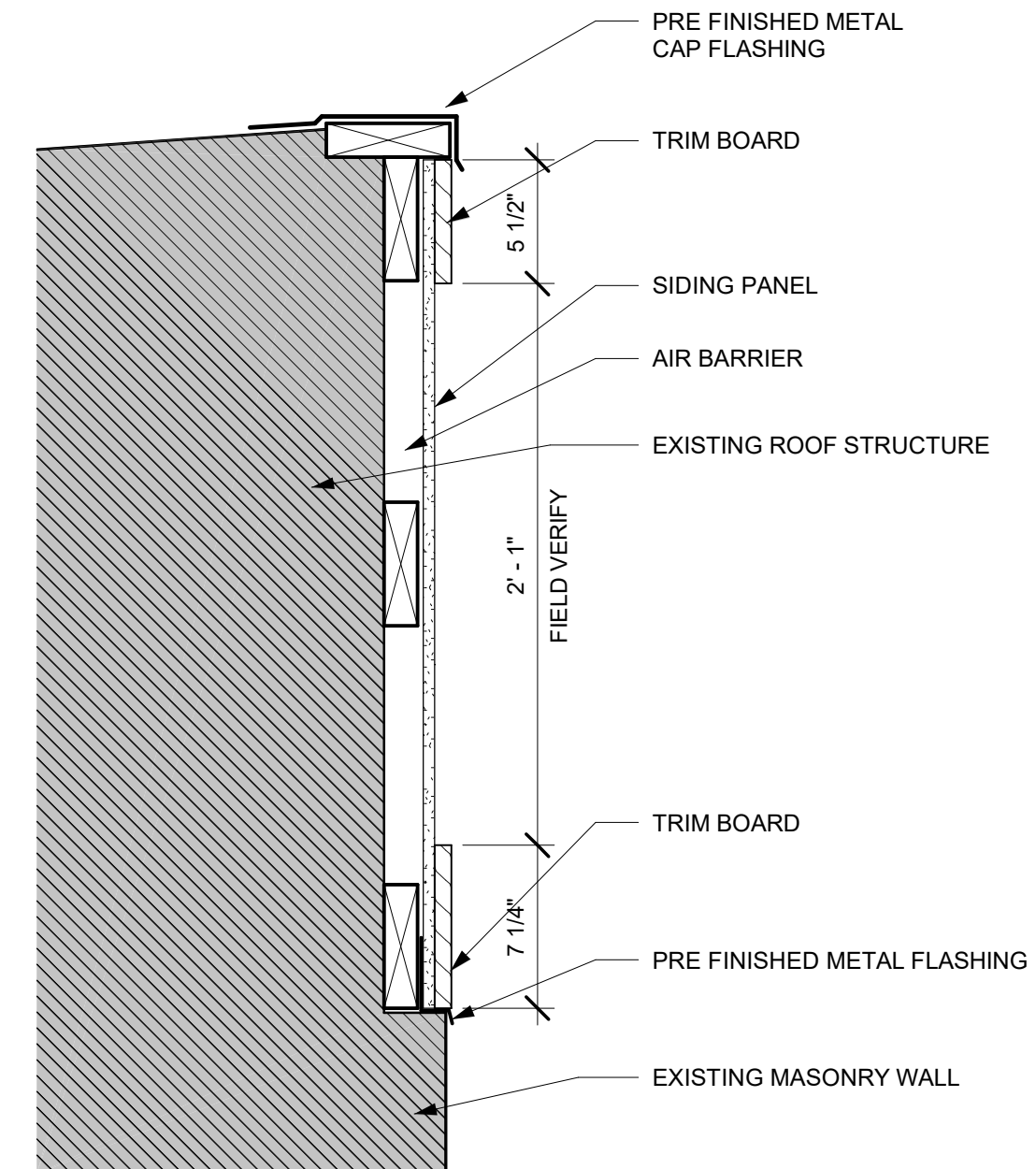
12 JAMB  
A301 1 1/2" = 1'-0"



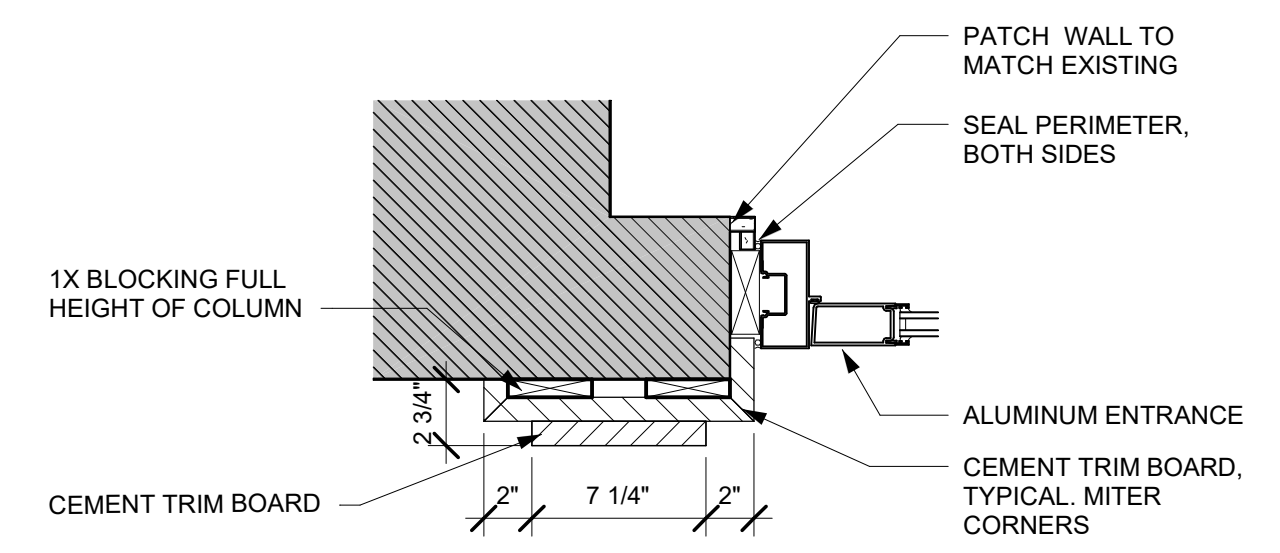
11 JAMB  
A301 1 1/2" = 1'-0"



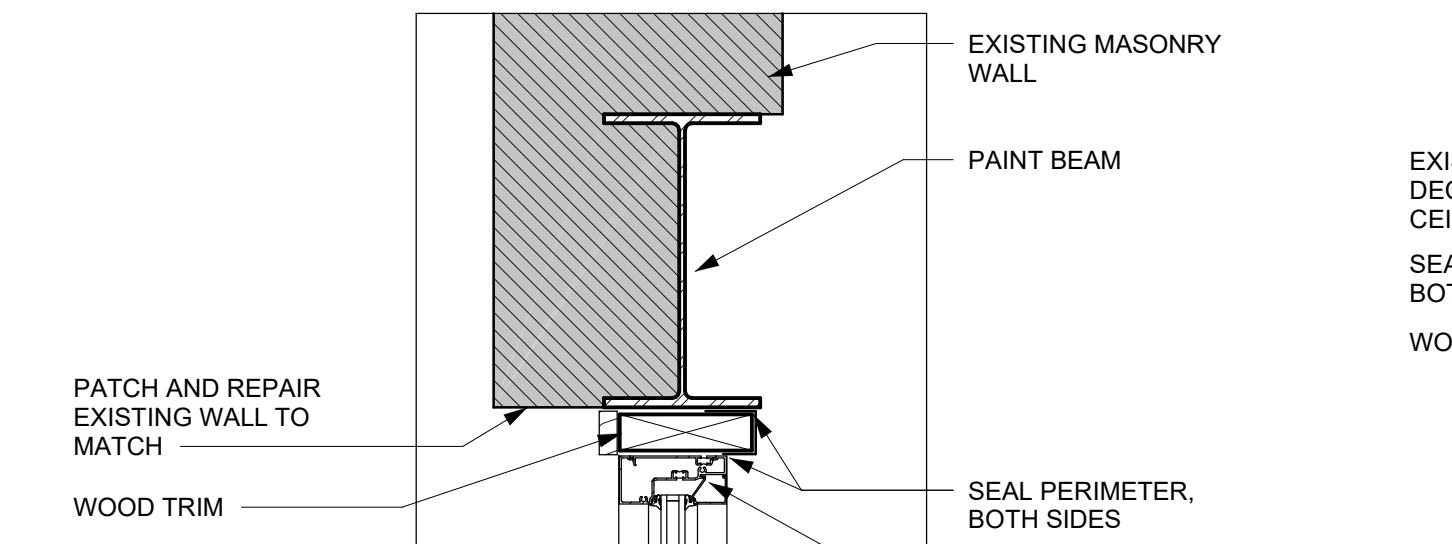
10 SILL  
A301 1 1/2" = 1'-0"



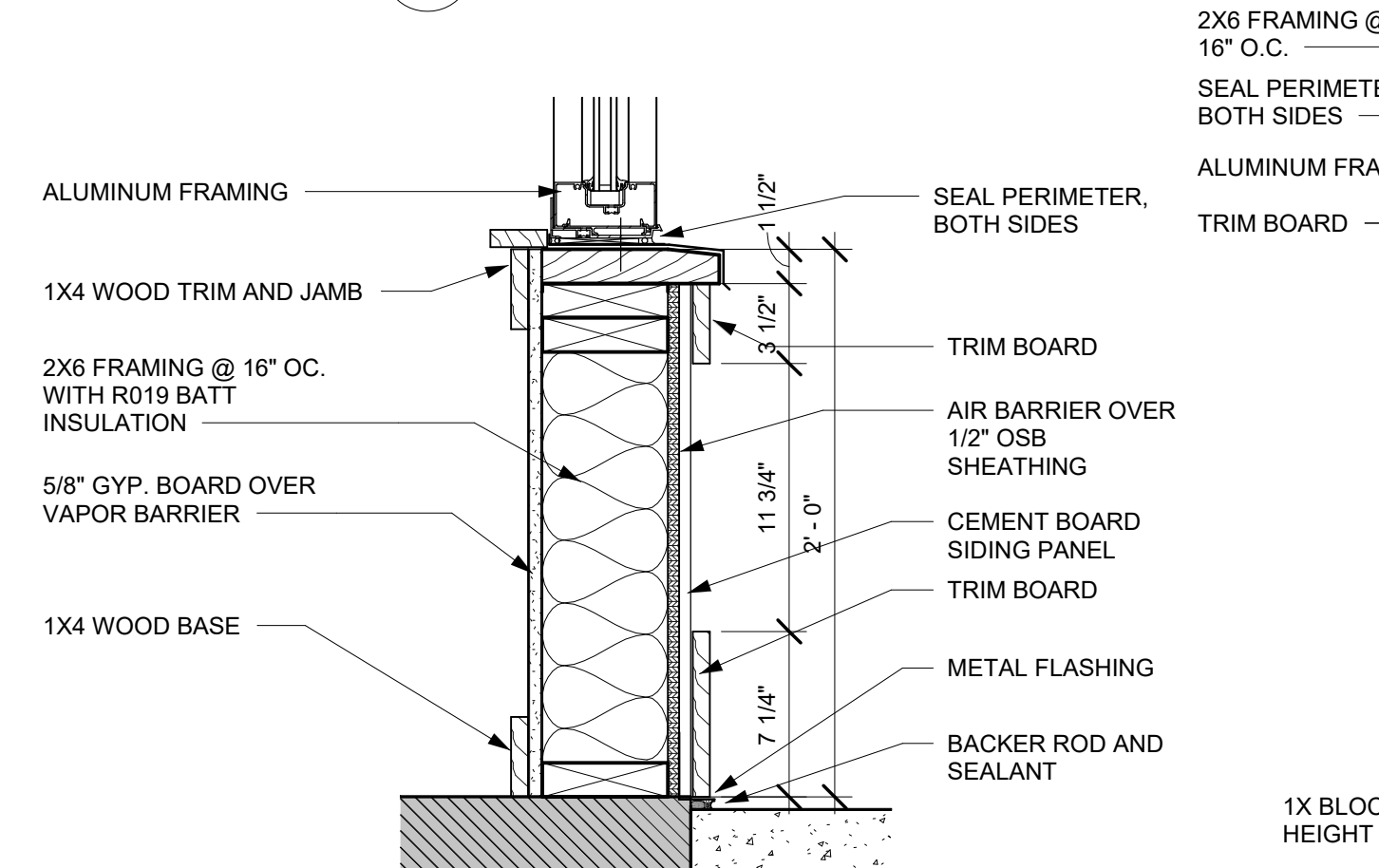
9 SECTION  
A301 1 1/2" = 1'-0"



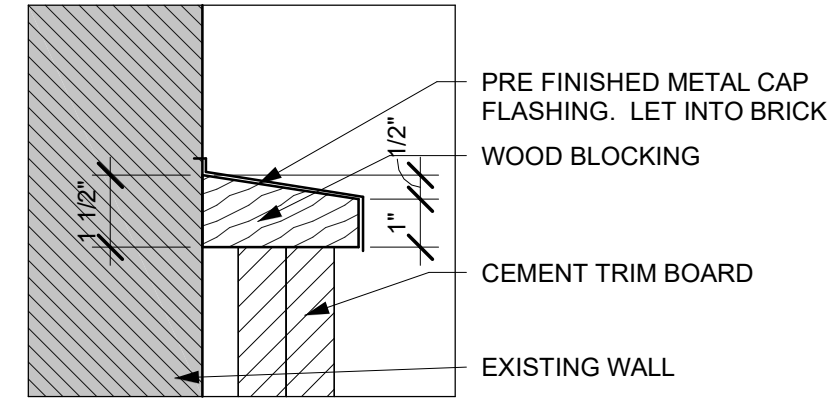
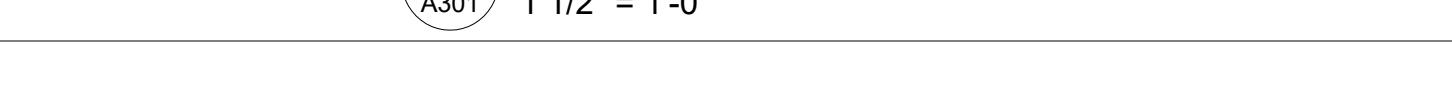
8 COLUMN DETAIL  
A301 1 1/2" = 1'-0"



7 HEAD  
A301 1 1/2" = 1'-0"



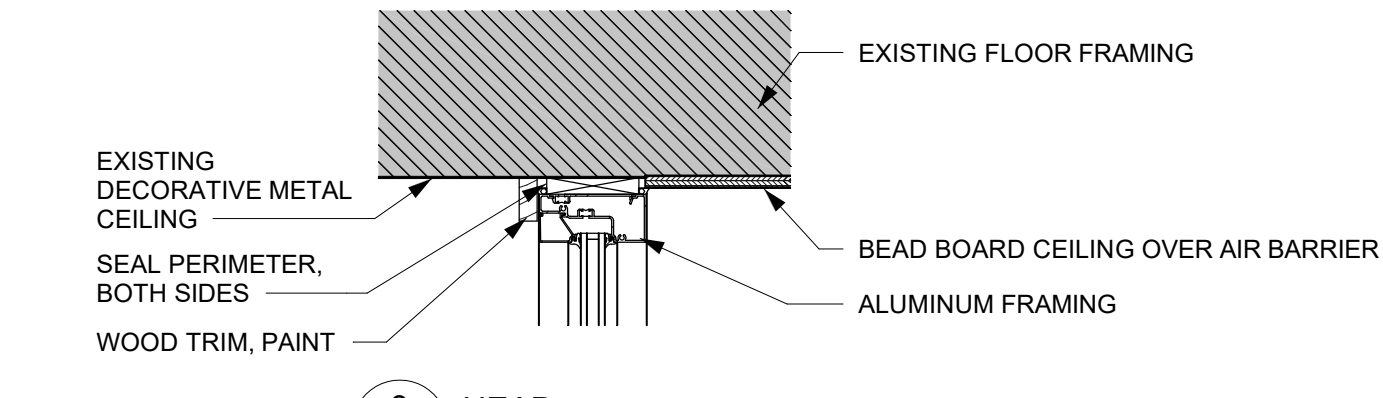
6 DETAIL  
A301 1 1/2" = 1'-0"



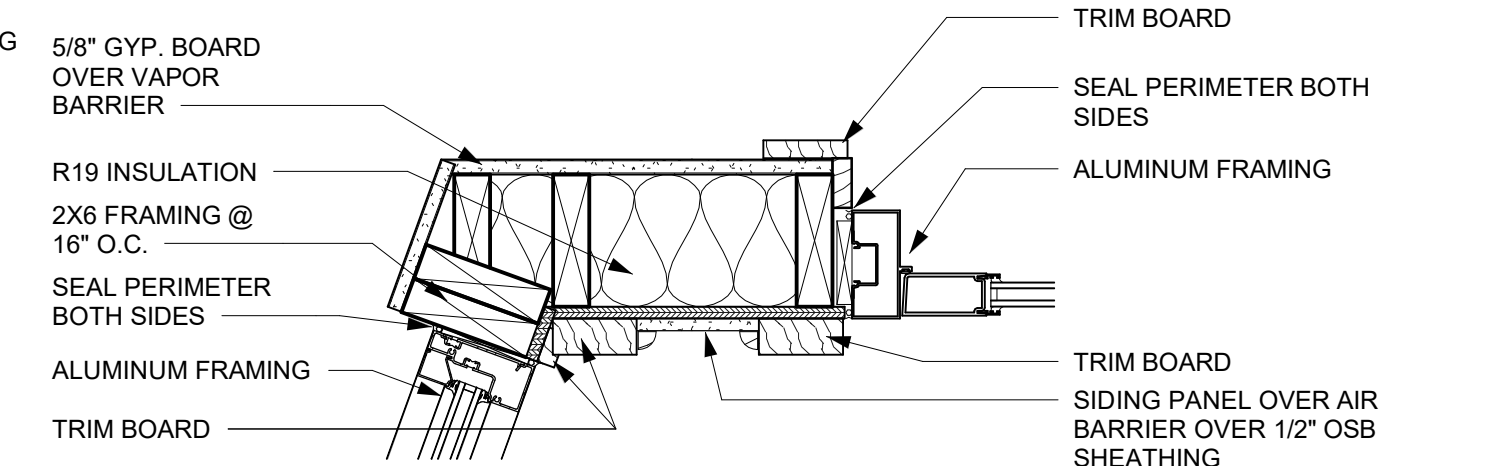
5 COLUMN DETAIL  
A301 3" = 1'-0"



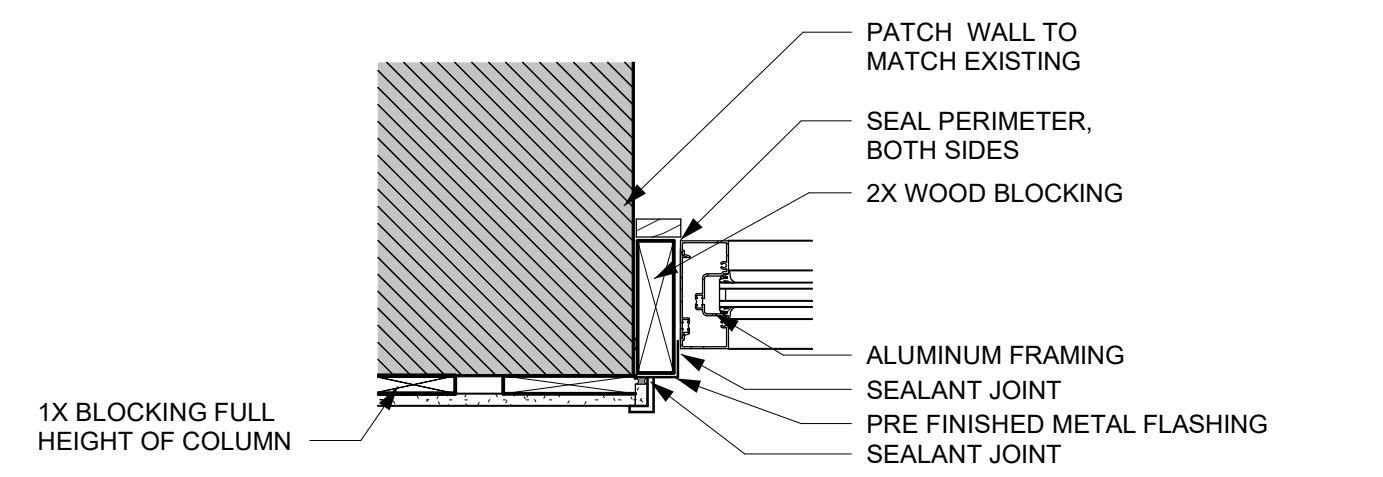
4 UPPER FLOOR INTERIOR WINDOW DETAIL  
A301 1 1/2" = 1'-0"



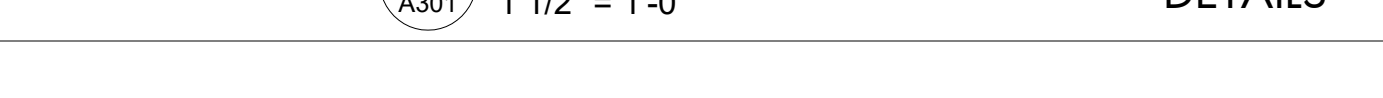
3 HEAD  
A301 1 1/2" = 1'-0"



2 DETAIL  
A301 1 1/2" = 1'-0"



1 JAMB  
A301 1 1/2" = 1'-0"



100% CDS: 1/20/21	REVISION	DATE:
	NUMBER:	

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT

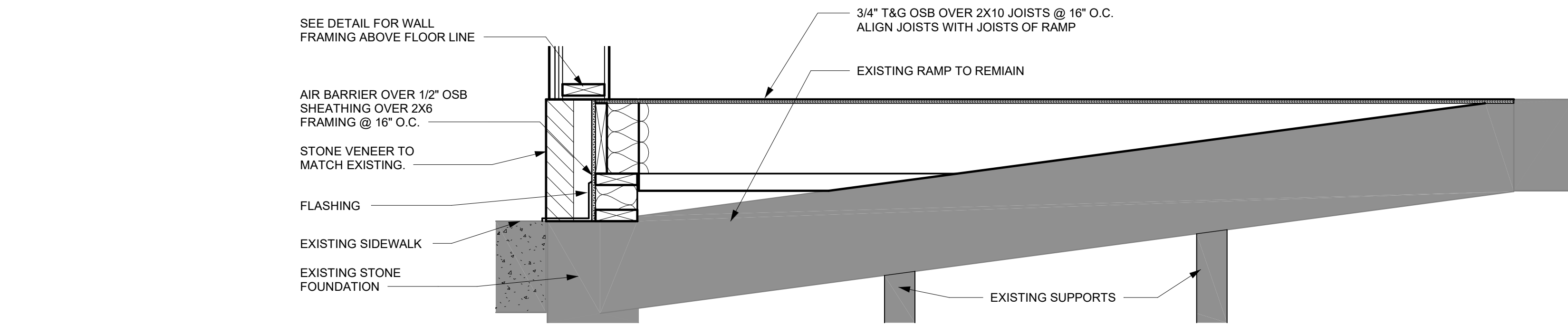


700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

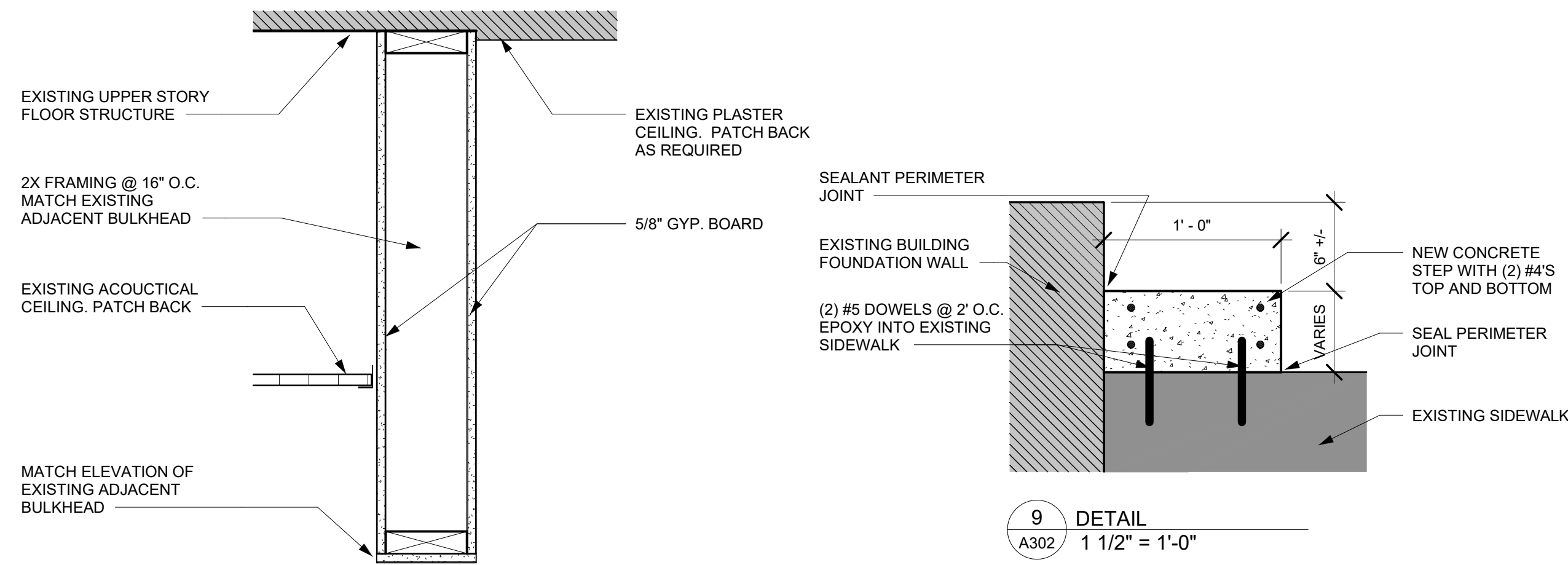
A301

11919.01

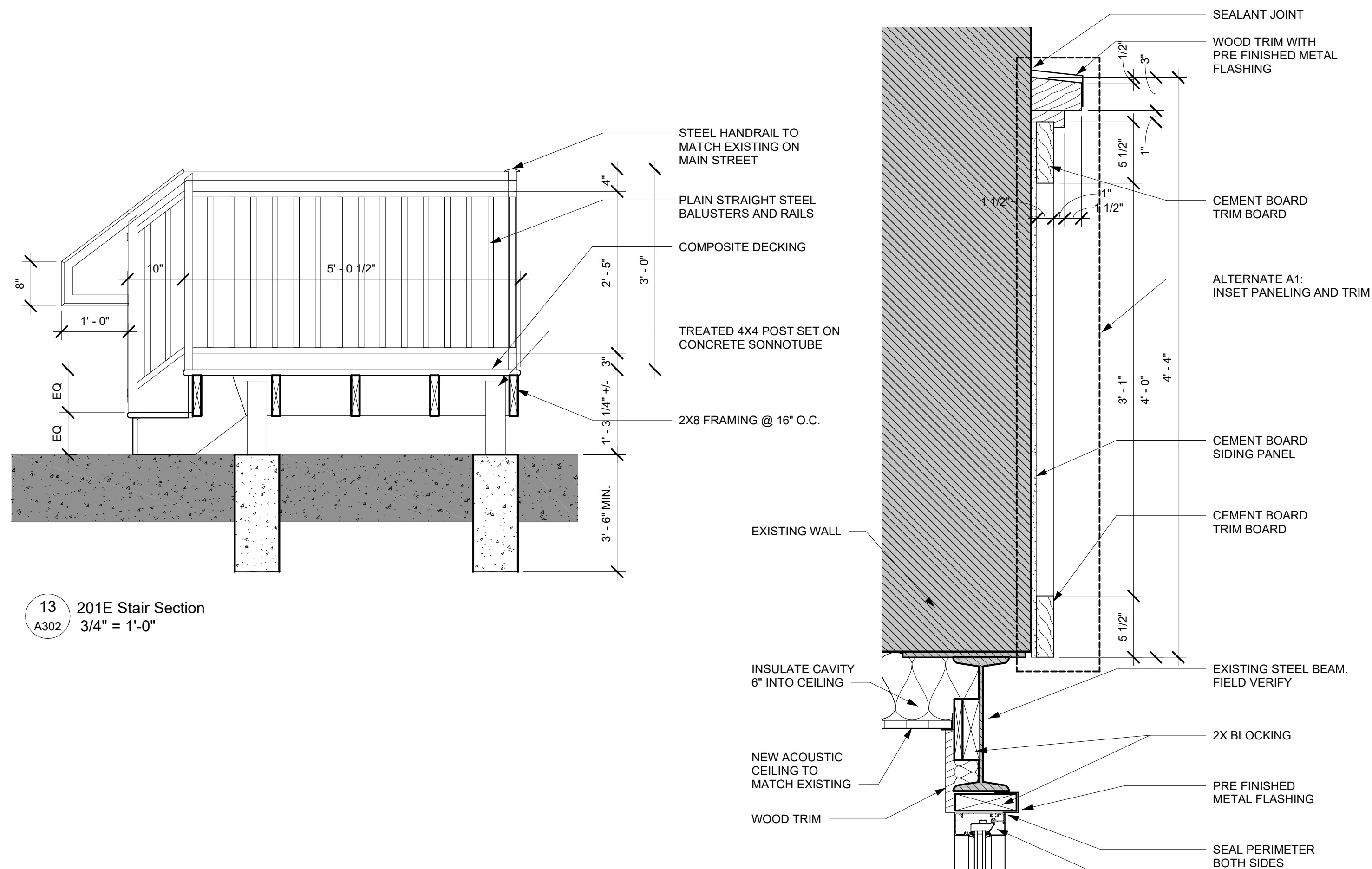
DETAILS



12 201E Ramp Detail  
A302 1" = 1'-0"

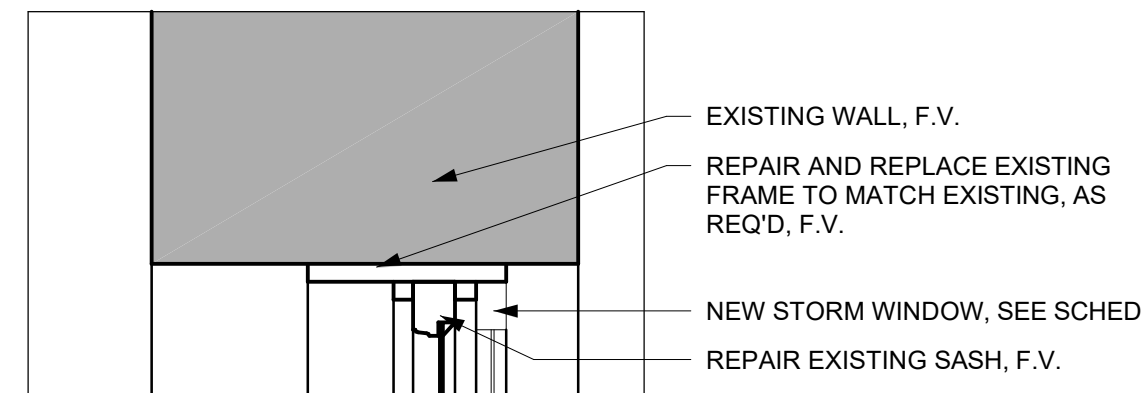


9 DETAIL  
A302 1 1/2" = 1'-0"

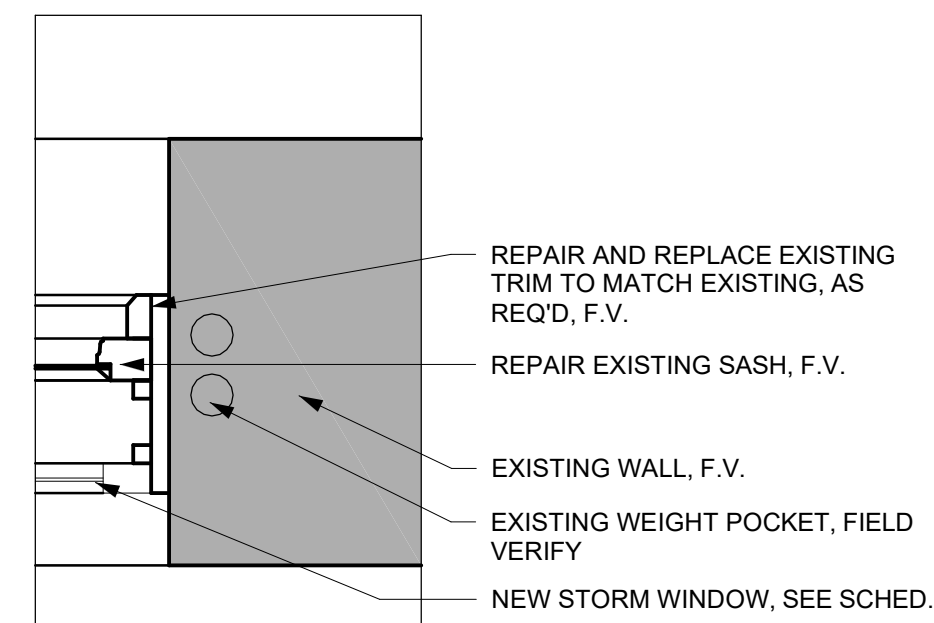


13 201E Stair Section  
A302 3/4" = 1'-0"

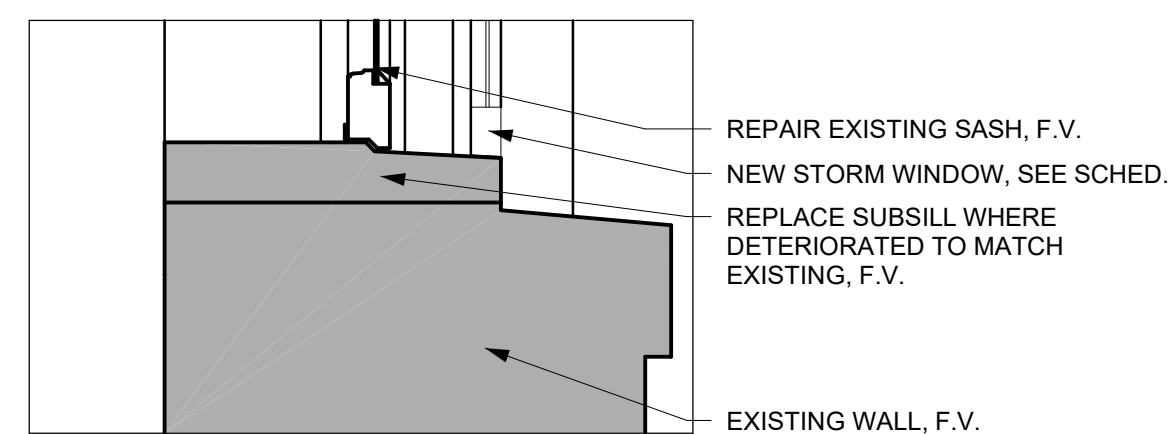
10 SECTION/HEAD  
A302 1 1/2" = 1'-0"



8 HEAD  
A302 1 1/2" = 1'-0"



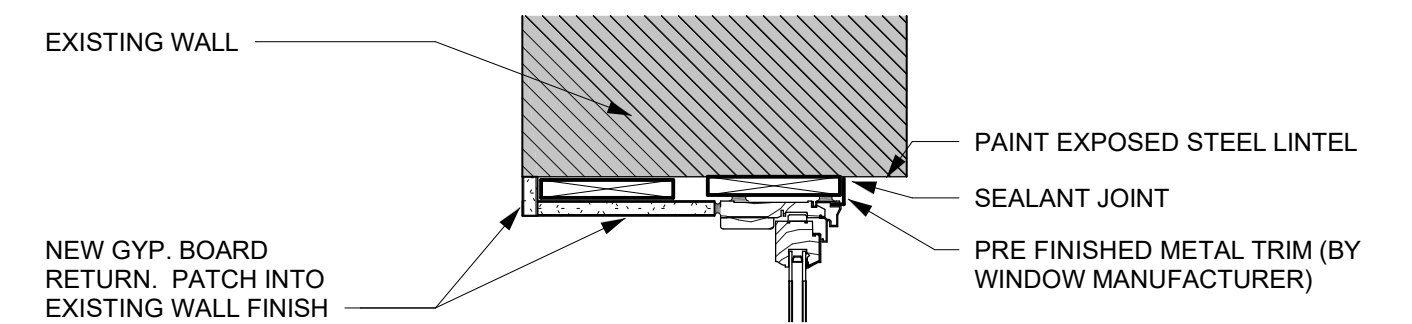
7 JAMB  
A302 1 1/2" = 1'-0"



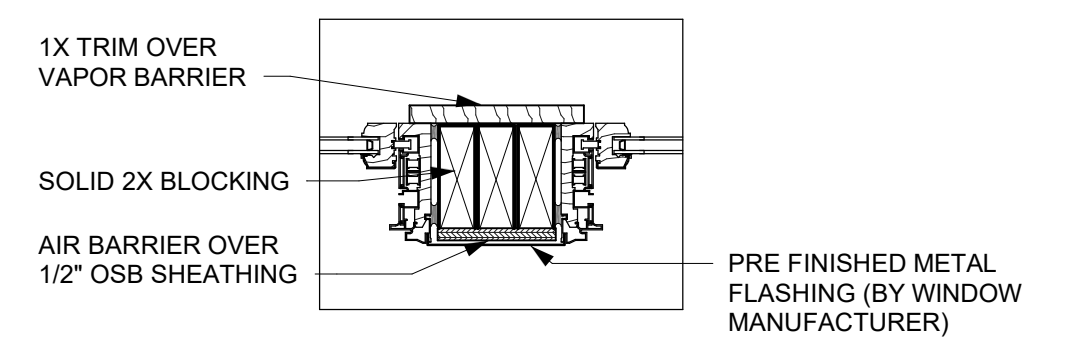
6 SILL  
A302 1 1/2" = 1'-0"



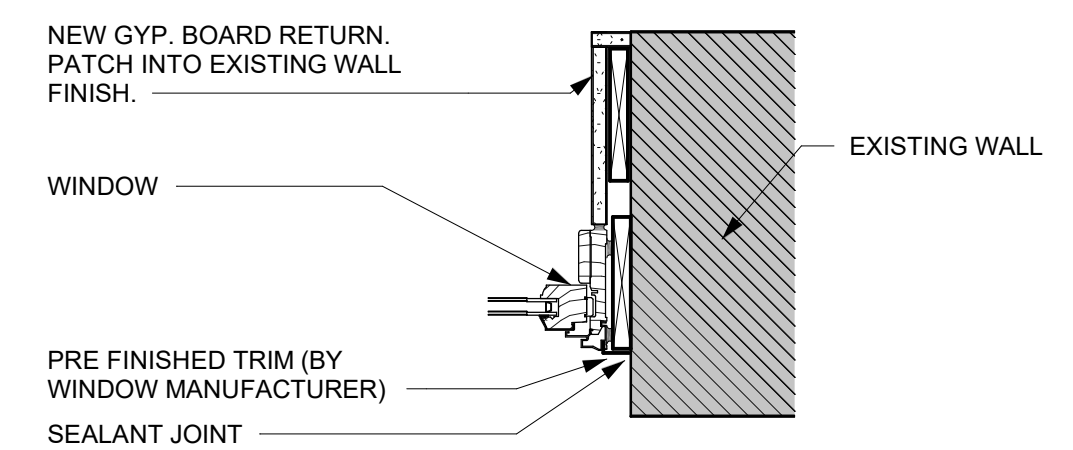
5 PARAPET PHOTO  
A302 1 1/2" = 1'-0"



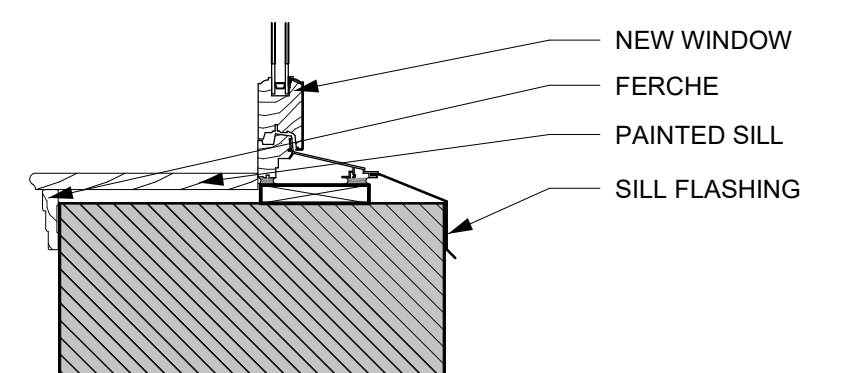
4 HEAD  
A302 1 1/2" = 1'-0"



3 JAMB  
A302 1 1/2" = 1'-0"



2 JAMB  
A302 1 1/2" = 1'-0"



1 SILL  
A302 1 1/2" = 1'-0"

100% CDS: 1/20/21	REVISION	DATE:
	NUMBER:	

CITY OF ANAMOSA  
DOWNTOWN REVITALIZATION FACADE  
IMPROVEMENT PROJECT



700 11TH ST  
SUITE 200  
MARION, IOWA  
52302  
(319) 377-7604  
WWW.MARTINGARDNERARCH.COM  
11502 390TH ST  
STRAWBERRY  
POINT, IOWA  
52076  
(563) 933-4712

A302

11919.01

## Memorandum

**To:** City of Anamosa

**Date:** January 20, 2021

**From:** Snyder & Associates

**RE:** Engineers' Report

---

### CITY PROJECTS

#### WWTP Flow Equalization Basin

On hold until additional information on existing easements and subsurface utility locations can be provided by Alliant & ITC on the property the City is working to purchase. The location of these could potentially affect the proposed flow equalization basin. Once the location of these items have been determined we can reconvene our design and schedule the additional geotechnical work.

#### 2nd Street Lift Station – Phase 2

The final plans, specifications, and engineer's opinion of probable costs for this project were filed with the City on September 25, 2017, and the project has been shelved ever since. In general, this was a follow-up project to the 2<sup>nd</sup> Street Lift Station which included upsizing of mains, as well as establishing a dedicated force main from the Rosemary Lift Station to the 2<sup>nd</sup> Street Lift Station.

At the request of the City, in order to bring this project back for construction, Snyder & Associates plans to revisit the following:

- Re-establish DNR project manager and discuss any needs they have for construction permit issuance.
- Discuss funding sources for construction and provide necessary accommodating resources
- Review project with current City staff to make sure goals being addressed
- Determine if any significant existing features have changed to impact project routes, etc.
- Update EOPC for current bid prices
- Establish new schedule for bid letting and construction

#### US 151 Grade Separation and Roundabout

On hold until further direction from the City is received.

#### Sycamore Street

On hold until further direction from the City is received.



## AMENDMENT TO THE OFFER AND ACCEPTANCE

1. Buyer and Seller agree to amend the Offer dated October 1<sup>st</sup>, 2020, and accepted October 26, 2020, for
2. The purchase and sale of real estate at Plat of Survey Parcel 1998-141 and Plat of Survey Parcel 2007-94, except Plat of Survey Parcel 2010-41, being a part of lot 8, Auditor's Plat 1 in Government lot 4 of the NE ¼ of section 10-84-4 Jones County, Iowa
3. \_\_\_\_\_ as follows:
4. ☐ Closing dated changed from Marcy 1, 2021, to April 1, 2021,
5. ☐ Other \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_
19. \_\_\_\_\_
20. ALL OTHER TERMS OF THE OFFER AND ACCEPTANCE AND ANY OTHER PRIOR AMENDMENTS REMAIN THE SAME.
21. This amendment is binding upon Seller and Buyer only if a copy of the accepted Amendment is
22. Delivered to the Party offering the Amendment on or before January 21, 2021 (Time is of the Essence).
23. The amendment was drafted by Mary Montgomery 1/18/2021  
Interstate Power and Light Company

\_\_\_\_\_  
Buyer's Signature  
**City of Anamosa**  
**By Rod Smith, Mayor**

\_\_\_\_\_  
Date

# Anamosa Area Ambulance Service Annual Funding Request

# Financial Situation, 2019-2017

	2019	2018	2017
Total Operating Revenue	\$628,650	\$611,449	\$643,195
Expenses			
Salaries, Wages, Benefits	\$816,270	\$832,306	\$737,616
Supplies	\$27,354	\$24,186	\$29,631
Purchased Services	\$45,730	\$42,368	\$23,193
Building & occupancy	\$28,723	\$26,419	\$27,520
Repairs/Maint	\$56,104	\$55,784	\$41,861
Other	\$17,644	\$12,505	\$75,690
Depreciation	\$66,544	\$60,278	\$44,734
Total Oper. Exp.	\$1,058,369	\$1,053,846	\$980,245
Income (Loss) from Oper.	(\$429,719)	(\$442,397)	(\$337,050)

# Ambulance Funding History

- In rural areas, typically started as a volunteer service
- Costs/training have increased, volunteer services started to bill
- Some communities lost their volunteers, turned to larger services
  - Backup coverage, expertise, “guaranteed” coverage
- Reimbursement has not kept up with expense for rural services
  - Must be larger to be profitable

# AAAS Annual losses

- Average loss of \$403,055 over last 3 years
- Smaller ambulance services need some type of support
  - Many counties/townships around us already support EMS (Delaware, Jackson, Iowa, Linn-counties, 6 townships in Jones Co, 7 in Delaware Co)
- Losses have occurred every year since JRMC took over AAAS from City of Anamosa for \$1
- We are asking for help with 911 call expense
  - 667-911 calls, 642 transfers, 1,309 total (51.0% of all calls are 911 calls)
- 51% of \$403,055=Average \$205,558 annually

# Calculations for support

- Use a formula similar to fire
  - Tested, trusted
  - Fair allocation of cost based on usage and population
- Only allocate expenses associated with 911 calls,
  - (51.0% of all calls are 911 calls)
- The calculation is as follows:
  - $(\text{population \% of total ambulance service area}-16,057) + (\text{\% of 911 calls})/2$
  - Multiply by average (over 3 years) annual loss

# Funding ask for City of Anamosa

- Population—5,533 (34.5% of 16,057 served)
- 911 calls—405 (60.7% of 667-911 calls)
- Annual loss, 3 year average--\$205,558
- So,
  - $(34.5\% + 60.7\%) / 2 = 47.6\%$
  - $47.6\% \times \$205,558 = \$97,824$

Questions?

# AIA<sup>®</sup> Document B101<sup>™</sup> – 2017

## Standard Form of Agreement Between Owner and Architect

**AGREEMENT** made as of the 12th day of January in the year 2021  
(In words, indicate day, month and year.)

**BETWEEN** the Architect's client identified as the Owner:  
(Name, legal status, address and other information)

Beth Brincks, City Clerk on behalf of the Anamosa City Council  
City of Anamosa, IA  
107 S. Ford Street  
Anamosa, IA 52205-1841

and the Architect:  
(Name, legal status, address and other information)

Shive-Hattery, Inc  
4125 Westown Parkway, Suite 100  
West Des Moines, IA 50266  
Telephone: 515-223-8104

for the following Project:  
(Name, location and detailed description)

### **Anamosa Fire Station Addition:**

This project is an addition of approximately 7,440 Sq. Ft. onto the existing fire department building located 701 E. Third Street, Anamosa, IA. The building addition will be added to the existing building and includes fire truck bays and storage along with office, restroom, and community gathering room. An alternate bid will be designed for the community room in the new addition to incorporate a BARA (Best Available Refuge Area) being proposed to create a hardened area within the facility. A portion of the existing building will be renovated to facilitate and connect the building addition.

S-H Project #4207090

The Owner and Architect agree as follows.

### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

## TABLE OF ARTICLES

- 1 INITIAL INFORMATION
- 2 ARCHITECT'S RESPONSIBILITIES
- 3 SCOPE OF ARCHITECT'S BASIC SERVICES
- 4 SUPPLEMENTAL AND ADDITIONAL SERVICES
- 5 OWNER'S RESPONSIBILITIES
- 6 COST OF THE WORK
- 7 COPYRIGHTS AND LICENSES
- 8 CLAIMS AND DISPUTES
- 9 TERMINATION OR SUSPENSION
- 10 MISCELLANEOUS PROVISIONS
- 11 COMPENSATION
- 12 SPECIAL TERMS AND CONDITIONS
- 13 SCOPE OF THE AGREEMENT

### ARTICLE 1 INITIAL INFORMATION

§ 1.1 This Agreement is based on the Initial Information set forth in this Section 1.1.

*(For each item in this section, insert the information or a statement such as "not applicable" or "unknown at time of execution.")*

§ 1.1.1 The Owner's program for the Project:

*(Insert the Owner's program, identify documentation that establishes the Owner's program, or state the manner in which the program will be developed.)*

In accordance with basic design industry standards the Design Professional will provide Architecture, Structural Engineering, Mechanical Engineering, Electrical Engineering, and Civil Engineering services utilizing the 2012 International Building Code requirements as follows:

Provide Schematic Design, Design Development, Construction Documents, and Construction Administration design phases for:

Anamosa Fire Station Addition: Pre-liminary drawings were submitted by the fire department that were completed in August 22, 2019 to include site plan, floor plan, and exterior elevations of the proposed building addition and are included as: Exhibit – A.

§ 1.1.2 The Project's physical characteristics:

*(Identify or describe pertinent information about the Project's physical characteristics, such as size; location; dimensions; geotechnical reports; site boundaries; topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site, etc.)*

Anamosa Fire Station Addition: The new fire station expansion will consist of adding approximately 7,440 Sq. Ft. onto the existing fire department building. The building addition will be constructed adjacent to the existing

Init.

concrete masonry building and consists of a pre-engineered metal building with concrete footings and foundations, fire trucks bays w/ overhead doors and storage along with office, restrooms, and community gathering room.

A portion of the existing building will be renovated to facilitate and connect to the new addition. As described in the project narrative, an alternate for a 'hardened shelter' will be evaluated as a part of this work. A storm shelter is a voluntary consideration of the 2012 International Building Code. If other versions of the IBC-Code are adopted by the City of Anamosa, shelter requirements will need to be reestablished if the change occurs prior to the technical development of the bid documents. (ICC-500 Storm Shelter Design not included.)

Modifications or upgrade improvements to the existing building mechanical and electrical systems are not anticipated in this scope of work. Site improvement associated with the addition will reconstruct paving and drainage issues as required and add driveway and paving access to the new truck bay overhead doors in the addition. Site work and utility routing associated with the new addition.

**§ 1.1.3** The Owner's budget for the Cost of the Work, as defined in Section 6.1:  
(Provide total and, if known, a line item breakdown.)

**For the Fire Station Facility.** Shive – Hattery's opinion of probable project cost includes the cost of construction estimated at \$790,000 including construction inflation for a bid in the spring of 2021. With the Owner's decision to fund the construction cost of the project at \$700,000, alternates will be utilized to address the difference on construction costs. The Project cost includes the cost of construction, project soft costs, design fee, Owner-provided furniture, fixtures, and equipment, third party testing, and reimbursable expenses as follows:  
Project Cost Range: \$895,000 - \$980,000.

**§ 1.1.4** The Owner's anticipated design and construction milestone dates:

.1 Design phase milestone dates, if any:

Schematic Design / Design Development Phase	4 Weeks
Construction Documents Phase	6-8 Weeks
Bidding and Negotiation:	4 Weeks
Construction Administration:	10 – 12 Month

.2 Construction commencement date:

To Be Determined. A 8-10-month construction duration is anticipated.

.3 Substantial Completion date or dates:

To Be Determined

.4 Other milestone dates:

NA

**§ 1.1.5** The Owner intends the following procurement and delivery method for the Project:  
(Identify method such as competitive bid or negotiated contract, as well as any requirements for accelerated or fast-track design and construction, multiple bid packages, or phased construction.)

One (1) combined Set of Technical Documents and Specifications will be prepared for issuance as the Construction Documents. We will include 2 alternates to be described verbally as add alternates but do not require additional

design scope. Multiple bid packages (by separating out the work with multiple bid issuance dates) or fast-track early bid packages are not anticipated, or a part of the basic services

**§ 1.1.6** The Owner's anticipated Sustainable Objective for the Project:  
*(Identify and describe the Owner's Sustainable Objective for the Project, if any.)*

Project will be designed to meet the applicable International Energy Construction Code.  
*(Paragraph Deleted)*

**§ 1.1.6.1** If the Owner identifies a Sustainable Objective, the Owner and Architect shall complete and incorporate AIA Document E204™-2017, Sustainable Projects Exhibit, into this Agreement to define the terms, conditions and services related to the Owner's Sustainable Objective. If E204-2017 is incorporated into this agreement, the Owner and Architect shall incorporate the completed E204-2017 into the agreements with the consultants and contractors performing services or Work in any way associated with the Sustainable Objective.

**§ 1.1.7** The Owner identifies the following representative in accordance with Section 5.3:  
*(List name, address, and other contact information.)*

Anamosa Fire Station Addition:  
Tim Shada, Fire Chief  
Anamosa Fire Department  
701 East 3<sup>rd</sup> Street  
Anamosa, IA 52205  
Telephone: 319.462.4995  
email: anamosafire53@mchsi.com

**§ 1.1.8** The persons or entities, in addition to the Owner's representative, who are required to review the Architect's submittals to the Owner are as follows:  
*(List name, address, and other contact information.)*

Mechanical and Electrical Commissioning Authority (if a third party is selected by the Owner.)

**§ 1.1.9** The Owner shall retain the following consultants and contractors:  
*(List name, legal status, address, and other contact information.)*

.1 Geotechnical Engineer:

By Owner

.2 Civil Engineer:

Shive-Hattery, Inc

.3 Other, if any:

*(List any other consultants and contractors retained by the Owner.)*

Topographical Survey:

The existing information for the site topography will be submitted by the owner and used during the design. If additional survey is required, it will be by Shive-Hattery, Inc. as Additional Service.

§ 1.1.10 The Architect identifies the following representative in accordance with Section 2.3:  
(List name, address, and other contact information.)

Michael S. Lewis, AIA, NCARB  
Shive-Hattery Inc.  
4125 Westown Parkway, Suite 100  
West Des Moines, IA 50266  
Telephone: 515.223.8104  
email: mlewis@shive-hattery.com

Ronald L. Hinds, PM  
Shive-Hattery Inc.  
4125 Westown Parkway, Suite 100  
West Des Moines, IA 50266  
Telephone: 515.223.8104  
email: rhinds@shive-hattery.com

§ 1.1.11 The Architect shall retain the consultants identified in Sections 1.1.11.1 and 1.1.11.2:  
(List name, legal status, address, and other contact information.)

§ 1.1.11.1 Consultants retained under Basic Services:

.1 Structural Engineer:

By Shive-Hattery, Inc  
Fire Station Addition: Does not include pre-engineered metal building design but will include the concrete footings and foundations for the PEMB building.

.2 Mechanical Engineer:

By Shive-Hattery Inc  
Including plumbing, HVAC, mechanical piping, fire protection, and controls

.3 Electrical Engineer:

By Shive-Hattery Inc  
Including power, lighting, fire alarm, and special systems.  
Includes infrastructure for AV/Data/Phones, (Equipment by owner).

.4 Civil Engineer:

Shive-Hattery, Inc.

New paved drive approach will be designed to accommodate the requirements for the added building square footage. Within the Property Boundaries, including Utilities Distribution (or extensions), Grading, Parking, Drives, and/or Site Lighting.

Additional Service: Partial Site Topographical Survey & SWPP: Provide topographic survey, contours at one-foot increments, locate drives and parking, locate 4" trees, locate utilities, and SWPP/NPDES

permitting.

§ 1.1.11.2 Consultants retained under Supplemental Services:

.1 NA

§ 1.1.12 Other Initial Information on which the Agreement is based:

§ 1.2 The Owner and Architect may rely on the Initial Information. Both parties, however, recognize that the Initial Information may materially change and, in that event, the Owner and the Architect shall appropriately adjust the Architect's services, schedule for the Architect's services, and the Architect's compensation. The Owner shall adjust the Owner's budget for the Cost of the Work and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.

§ 1.3 The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.3.1 Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

**ARTICLE 2 ARCHITECT'S RESPONSIBILITIES**

§ 2.1 The Architect shall provide professional services as set forth in this Agreement. The Architect represents that it is properly licensed in the jurisdiction where the Project is located to provide the services required by this Agreement, or shall cause such services to be performed by appropriately licensed design professionals.

§ 2.2 The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.

§ 2.2.1 Nothing in this Agreement is intended to create, nor it be construed to create, a fiduciary duty owed by either party to the other party.

§ 2.2.2 The Owner recognizes and expects that certain change orders may be required to be issued as the result in whole or part of imprecision, incompleteness, omissions, ambiguities, or inconsistencies in the Architect's drawings, specifications, and other design, bidding or construction documentation furnished by the Architect or in other

Init.

professional services performed or furnished by the Architect under this Agreement (herein after in this article 2.2.2 referred to as Architect Documentation). If a required item or component of the Project is omitted from the Architect's Documentation, the Owner is responsible for paying all costs required to add such item or component to the extent that such item or component would have been required and included in the original Architect Documentation. In no event will the Architect be responsible for costs or expense that provides betterment or upgrades or enhances the value of the Project.

**§ 2.3** The Architect shall identify a representative authorized to act on behalf of the Architect with respect to the Project.

**§ 2.4** Except with the Owner's knowledge and consent, the Architect shall not engage in any activity, or accept any employment, interest or contribution that would reasonably appear to compromise the Architect's professional judgment with respect to this Project.

**§ 2.5** The Architect shall maintain the following insurance until termination of this Agreement. If any of the requirements set forth below are in addition to the types and limits the Architect normally maintains, the Owner shall pay the Architect as set forth in Section 11.9.

**§ 2.5.1** Commercial General Liability with policy limits of not less than One million Dollars (\$ 1000000 ) for each occurrence and Two million Dollars (\$ 2000000 ) in the aggregate for bodily injury and property damage.

**§ 2.5.2** Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Architect with policy limits of not less than One million Dollars (\$ 1000000 ) per accident for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles, along with any other statutorily required automobile coverage.

**§ 2.5.3** The Architect may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella liability insurance policies result in the same or greater coverage as the coverages required under Sections 2.5.1 and 2.5.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

**§ 2.5.4** Workers' Compensation at statutory limits.

**§ 2.5.5** Employers' Liability with policy limits not less than One million Dollars (\$ 1000000 ) each accident, One million Dollars (\$ 1000000 ) each employee, and One million Dollars (\$ 1000000 ) policy limit.

**§ 2.5.6** Professional Liability covering negligent acts, errors and omissions in the performance of professional services with policy limits of not less than Five million Dollars (\$ 5000000 ) per claim and Ten million Dollars (\$ 10000000 ) in the aggregate.

**§ 2.5.7 Additional Insured Obligations.** To the fullest extent permitted by law, the Architect shall cause the primary and excess or umbrella policies for Commercial General Liability and Automobile Liability to include the Owner as an additional insured for claims caused in whole or in part by the Architect's negligent acts or omissions. The additional insured coverage shall be primary and non-contributory to any of the Owner's insurance policies and shall apply to both ongoing and completed operations.

**§ 2.5.8** The Architect shall provide certificates of insurance to the Owner that evidence compliance with the requirements in this Section 2.5.

### **ARTICLE 3 SCOPE OF ARCHITECT'S BASIC SERVICES**

**§ 3.1** The Architect's Basic Services consist of those described in this Article 3 and include usual and customary structural, mechanical, and electrical engineering services. Services not set forth in this Article 3 are Supplemental or Additional Services.

**§ 3.1.1** The Architect shall manage the Architect's services, research applicable design criteria, attend Project meetings, communicate with members of the Project team, and report progress to the Owner.

**§ 3.1.2** The Architect shall coordinate its services with those services provided by the Owner and the Owner's consultants. The Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of, services and information furnished by the Owner and the Owner's consultants. The Architect shall provide prompt written notice to the Owner if the Architect becomes aware of any error, omission, or inconsistency in such services or information.

**§ 3.1.3** As soon as practicable after the date of this Agreement, the Architect shall submit for the Owner's approval a schedule for the performance of the Architect's services. The schedule initially shall include anticipated dates for the commencement of construction and for Substantial Completion of the Work as set forth in the Initial Information. The schedule shall include allowances for periods of time required for the Owner's review, for the performance of the Owner's consultants, and for approval of submissions by authorities having jurisdiction over the Project. Once approved by the Owner, time limits established by the schedule shall not, except for reasonable cause, be exceeded by the Architect or Owner. With the Owner's approval, the Architect shall adjust the schedule, if necessary, as the Project proceeds until the commencement of construction.

**§ 3.1.4** The Architect shall not be responsible for an Owner's directive or substitution, or for the Owner's acceptance of non-conforming Work, made or given without the Architect's written approval.

**§ 3.1.5** The Architect shall contact governmental authorities required to approve the Construction Documents and entities providing utility services to the Project. The Architect shall respond to applicable design requirements imposed by those authorities and entities.

**§ 3.1.6** The Architect shall assist the Owner in connection with the Owner's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project.

### **§ 3.2 Schematic Design Phase Services**

**§ 3.2.1** The Architect shall review the program and other information furnished by the Owner, and shall review laws, codes, and regulations applicable to the Architect's services.

**§ 3.2.2** The Architect shall prepare a preliminary evaluation of the Owner's program, schedule, budget for the Cost of the Work, Project site, the proposed procurement and delivery method, and other Initial Information, each in terms of the other, to ascertain the requirements of the Project. The Architect shall notify the Owner of (1) any inconsistencies discovered in the information, and (2) other information or consulting services that may be reasonably needed for the Project.

**§ 3.2.3** The Architect shall present its preliminary evaluation to the Owner and shall discuss with the Owner alternative approaches to design and construction of the Project. The Architect shall reach an understanding with the Owner regarding the requirements of the Project.

**§ 3.2.4** Based on the Project requirements agreed upon with the Owner, the Architect shall prepare and present, for the Owner's approval, a preliminary design illustrating the scale and relationship of the Project components.

**§ 3.2.5** Based on the Owner's approval of the preliminary design, the Architect shall prepare Schematic Design Documents for the Owner's approval. The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, sections and elevations; and may include some combination of study models, perspective sketches, or digital representations. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.

**§ 3.2.5.1** The Architect shall consider sustainable design alternatives, such as material choices and building orientation, together with other considerations based on program and aesthetics, in developing a design that is consistent with the Owner's program, schedule and budget for the Cost of the Work. The Owner may obtain more advanced sustainable design services as a Supplemental Service under Section 4.1.1.

**§ 3.2.5.2** The Architect shall consider the value of alternative materials, building systems and equipment, together with other considerations based on program and aesthetics, in developing a design for the Project that is consistent with the Owner's program, schedule, and budget for the Cost of the Work.

**§ 3.2.6** The Architect shall submit to the Owner an estimate of the Cost of the Work prepared in accordance with Section 6.3.

**§ 3.2.7** The Architect shall submit the Schematic Design Documents to the Owner, and request the Owner's approval.

### **§ 3.3 Design Development Phase Services**

**§ 3.3.1** Based on the Owner's approval of the Schematic Design Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall prepare Design Development Documents for the Owner's approval. The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and shall consist of drawings and other documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building systems to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, and other appropriate elements. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish, in general, their quality levels.

**§ 3.3.2** The Architect shall update the estimate of the Cost of the Work prepared in accordance with Section 6.3.

**§ 3.3.3** The Architect shall submit the Design Development Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, and request the Owner's approval.

### **§ 3.4 Construction Documents Phase Services**

**§ 3.4.1** Based on the Owner's approval of the Design Development Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall prepare Construction Documents for the Owner's approval. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels and performance criteria of materials and systems and other requirements for the construction of the Work. The Owner and Architect acknowledge that, in order to perform the Work, the Contractor will provide additional information, including Shop Drawings, Product Data, Samples and other similar submittals, which the Architect shall review in accordance with Section 3.6.4.

**§ 3.4.2** The Architect shall incorporate the design requirements of governmental authorities having jurisdiction over the Project into the Construction Documents.

**§ 3.4.3** During the development of the Construction Documents, the Architect shall assist the Owner in the development and preparation of (1) procurement information that describes the time, place, and conditions of bidding, including bidding or proposal forms; (2) the form of agreement between the Owner and Contractor; and (3) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect shall also compile a project manual that includes the Conditions of the Contract for Construction and Specifications, and may include bidding requirements and sample forms.

**§ 3.4.4** The Architect shall update the estimate for the Cost of the Work prepared in accordance with Section 6.3.

**§ 3.4.5** The Architect shall submit the Construction Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, take any action required under Section 6.5, and request the Owner's approval.

### **§ 3.5 Procurement Phase Services**

#### **§ 3.5.1 General**

The Architect shall assist the Owner in establishing a list of prospective contractors. Following the Owner's approval of the Construction Documents, the Architect shall assist the Owner in (1) obtaining either competitive bids or negotiated proposals; (2) confirming responsiveness of bids or proposals; (3) determining the successful bid or proposal, if any; and, (4) awarding and preparing contracts for construction.

### **§ 3.5.2 Competitive Bidding**

**§ 3.5.2.1** Bidding Documents shall consist of bidding requirements and proposed Contract Documents.

**§ 3.5.2.2** The Architect shall assist the Owner in bidding the Project by:

- .1 facilitating the distribution of Bidding Documents to prospective bidders;
- .2 organizing and conducting a pre-bid conference for prospective bidders;
- .3 preparing responses to questions from prospective bidders and providing clarifications and interpretations of the Bidding Documents to the prospective bidders in the form of addenda; and,
- .4 organizing and conducting the opening of the bids, and subsequently documenting and distributing the bidding results, as directed by the Owner.

**§ 3.5.2.3** If the Bidding Documents permit substitutions, upon the Owner's written authorization, the Architect shall, as an Additional Service, consider requests for substitutions and prepare and distribute addenda identifying approved substitutions to all prospective bidders.

### **§ 3.5.3 Negotiated Proposals**

**§ 3.5.3.1** Proposal Documents shall consist of proposal requirements and proposed Contract Documents.

**§ 3.5.3.2** The Architect shall assist the Owner in obtaining proposals by:

- .1 facilitating the distribution of Proposal Documents for distribution to prospective contractors and requesting their return upon completion of the negotiation process;
- .2 organizing and participating in selection interviews with prospective contractors;
- .3 preparing responses to questions from prospective contractors and providing clarifications and interpretations of the Proposal Documents to the prospective contractors in the form of addenda; and,
- .4 participating in negotiations with prospective contractors, and subsequently preparing a summary report of the negotiation results, as directed by the Owner.

**§ 3.5.3.3** If the Proposal Documents permit substitutions, upon the Owner's written authorization, the Architect shall, as an Additional Service, consider requests for substitutions and prepare and distribute addenda identifying approved substitutions to all prospective contractors.

### **§ 3.6 Construction Phase Services**

#### **§ 3.6.1 General**

**§ 3.6.1.1** The Architect shall provide administration of the Contract between the Owner and the Contractor as set forth below and in AIA Document A201™–2017, General Conditions of the Contract for Construction. If the Owner and Contractor modify AIA Document A201–2017, those modifications shall not affect the Architect's services under this Agreement unless the Owner and the Architect amend this Agreement.

**§ 3.6.1.2** The Architect shall advise and consult with the Owner during the Construction Phase Services. The Architect shall have authority to act on behalf of the Owner only to the extent provided in this Agreement. The Architect shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, nor shall the Architect be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect shall be responsible for the Architect's negligent acts or omissions, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor or of any other persons or entities performing portions of the Work.

**§ 3.6.1.3** Subject to Section 4.2 and except as provided in Section 3.6.6.5, the Architect's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates on the date the Architect issues the final Certificate for Payment.

#### **§ 3.6.2 Evaluations of the Work**

**§ 3.6.2.1** The Architect shall visit the site at intervals appropriate to the stage of construction, or as otherwise required in Section 4.2.3, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine, in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect shall not

be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect shall keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work.

**§ 3.6.2.2** The Architect has the authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect shall have the authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

**§ 3.6.2.3** The Architect shall interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests shall be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

**§ 3.6.2.4** Interpretations and decisions of the Architect shall be consistent with the intent of, and reasonably inferable from, the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and decisions, the Architect shall endeavor to secure faithful performance by both Owner and Contractor, shall not show partiality to either, and shall not be liable for results of interpretations or decisions rendered in good faith. The Architect's decisions on matters relating to aesthetic effect shall be final if consistent with the intent expressed in the Contract Documents.

**§ 3.6.2.5** Unless the Owner and Contractor designate another person to serve as an Initial Decision Maker, as that term is defined in AIA Document A201–2017, the Architect shall render initial decisions on Claims between the Owner and Contractor as provided in the Contract Documents.

### **§ 3.6.3 Certificates for Payment to Contractor**

**§ 3.6.3.1** The Architect shall review and certify the amounts due the Contractor and shall issue certificates in such amounts. The Architect's certification for payment shall constitute a representation to the Owner, based on the Architect's evaluation of the Work as provided in Section 3.6.2 and on the data comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to (1) an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, (2) results of subsequent tests and inspections, (3) correction of minor deviations from the Contract Documents prior to completion, and (4) specific qualifications expressed by the Architect.

**§ 3.6.3.2** The issuance of a Certificate for Payment shall not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

**§ 3.6.3.3** The Architect shall maintain a record of the Applications and Certificates for Payment.

### **§ 3.6.4 Submittals**

**§ 3.6.4.1** The Architect shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval of the schedule. The Architect's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time, in the Architect's professional judgment, to permit adequate review.

**§ 3.6.4.2** The Architect shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance

with information given and the design concept expressed in the Contract Documents. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

**§ 3.6.4.3** If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment, the Architect shall specify the appropriate performance and design criteria that such services must satisfy. The Architect shall review and take appropriate action on Shop Drawings and other submittals related to the Work designed or certified by the Contractor's design professional, provided the submittals bear such professional's seal and signature when submitted to the Architect. The Architect's review shall be for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect shall be entitled to rely upon, and shall not be responsible for, the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals.

**§ 3.6.4.4** Subject to Section 4.2, the Architect shall review and respond to requests for information about the Contract Documents. The Architect shall set forth, in the Contract Documents, the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The Architect's response to such requests shall be made in writing within any time limits agreed upon, or otherwise with reasonable promptness. If appropriate, the Architect shall prepare and issue supplemental Drawings and Specifications in response to the requests for information.

**§ 3.6.4.5** The Architect shall maintain a record of submittals and copies of submittals supplied by the Contractor in accordance with the requirements of the Contract Documents.

### **§ 3.6.5 Changes in the Work**

**§ 3.6.5.1** The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Subject to Section 4.2, the Architect shall prepare Change Orders and Construction Change Directives for the Owner's approval and execution in accordance with the Contract Documents.

**§ 3.6.5.2** The Architect shall maintain records relative to changes in the Work.

### **§ 3.6.6 Project Completion**

**§ 3.6.6.1** The Architect shall:

- .1 conduct inspections to determine the date or dates of Substantial Completion and the date of final completion;
- .2 issue Certificates of Substantial Completion;
- .3 forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract Documents and received from the Contractor; and,
- .4 issue a final Certificate for Payment based upon a final inspection indicating that, to the best of the Architect's knowledge, information, and belief, the Work complies with the requirements of the Contract Documents.

**§ 3.6.6.2** The Architect's inspections shall be conducted with the Owner to check conformance of the Work with the requirements of the Contract Documents and to verify the accuracy and completeness of the list submitted by the Contractor of Work to be completed or corrected.

**§ 3.6.6.3** When Substantial Completion has been achieved, the Architect shall inform the Owner about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work.

**§ 3.6.6.4** The Architect shall forward to the Owner the following information received from the Contractor: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2)

affidavits, receipts, releases and waivers of liens, or bonds indemnifying the Owner against liens; and (3) any other documentation required of the Contractor under the Contract Documents.

**§ 3.6.6.5** Upon request of the Owner, and prior to the expiration of one year from the date of Substantial Completion, the Architect shall, without additional compensation, conduct a meeting with the Owner to review the facility operations and performance.

#### ARTICLE 4 SUPPLEMENTAL AND ADDITIONAL SERVICES

##### § 4.1 Supplemental Services

**§ 4.1.1** The services listed below are not included in Basic Services but may be required for the Project. The Architect shall provide the listed Supplemental Services only if specifically designated in the table below as the Architect's responsibility, and the Owner shall compensate the Architect as provided in Section 11.2. Unless otherwise specifically addressed in this Agreement, if neither the Owner nor the Architect is designated, the parties agree that the listed Supplemental Service is not being provided for the Project.

*(Designate the Architect's Supplemental Services and the Owner's Supplemental Services required for the Project by indicating whether the Architect or Owner shall be responsible for providing the identified Supplemental Service. Insert a description of the Supplemental Services in Section 4.1.2 below or attach the description of services as an exhibit to this Agreement.)*

*(Table Deleted)*

Services	Responsibility (Architect, Owner or Not Provided)	Service Description (Section 4.2 below or in an exhibit attached to this document and identified below)
<b>§ 4.1.1</b> Programming (B202™–2009)	Architect	Part of service, by prior agreement
<b>§ 4.1.2</b> Multiple preliminary designs	NP	
<b>§ 4.1.3</b> Measured drawings	NP	Provided as Additional Services
<b>§ 4.1.4</b> Existing facilities surveys	NP	Part of service, by prior agreement
<b>§ 4.1.5</b> Site evaluation and planning (B203™–2007)	Architect	Part of service, by prior agreement
<b>§ 4.1.6</b> Building information modeling (E202™–2008)	Architect	
<b>§ 4.1.7</b> Civil engineering	Architect	Topographical Survey Provided as Additional Services
<b>§ 4.1.8</b> Landscape design	NP	Provided as Additional Services
<b>§ 4.1.9</b> Architectural interior design (B252™–2007)	NP	Provided as Additional Services (if services are beyond selection of materials and finishes included as basic service).
<b>§ 4.1.10</b> Value analysis (B204™–2007)	NP	
<b>§ 4.1.11</b> Detailed cost estimating	NP	Provided as Additional Services
<b>§ 4.1.12</b> Additional Construction observation or On-site project representation (B207™–2008)	Architect	See Supplemental Services
<b>§ 4.1.13</b> Conformed construction documents	NP	Provided as Additional Services
<b>§ 4.1.14</b> As-designed record drawings	Architect	See Additional Services
<b>§ 4.1.15</b> As-constructed record drawings	NP	Requirement not anticipated
<b>§ 4.1.16</b> Post occupancy evaluation	NP	Requirement not anticipated
<b>§ 4.1.17</b> Facility support services (B210™–2007)	NP	Requirement not anticipated
<b>§ 4.1.18</b> Tenant-related services	NP	Requirement not anticipated
<b>§ 4.1.19</b> Coordination of Owner's consultants	NP	Provided as Additional Services
<b>§ 4.1.20</b> Telecommunications/data design	NP	Provided as Additional Services
<b>§ 4.1.21</b> Detention / Security Electronics (design)	Architect	
<b>§ 4.1.22</b> Mechanical Commissioning	NP	Provided as Additional Services

Init.

§ 4.1.23 Extensive environmentally responsible design	Architect	See Supplemental Services
§ 4.1.24 LEED® certification (B214™-2012)	NP	Requirement not anticipated
§ 4.1.25 Historic preservation (B205™-2007)	NP	Requirement not anticipated
§ 4.1.26 Furniture, furnishings, and equipment design (B253™-2007)	Owner	Owner or Architect By Additional Services
§4.1.27 Resilient Design including areas of resistance, reliability, and redundancy specifically as a voluntary hardened portion of the structure for BARA refuge area	Architect	If a change in code related to Resilient Design for ICC-500 (2014) structures occurs, can be designed as an Additional Service
§4.1.28 Supplemental Services preparing extensive alternate designs, fast track schedule or additional multiple bid packages (beyond proposed).	NP	
4.1.29 Life Cycle Cost Analysis	NP	Provided as Additional Service
4.1.30 Color renderings	NP	Provide as Additional Service

#### § 4.1.2 Description of Supplemental Services

§ 4.1.2.1 A description of each Supplemental Service identified in Section 4.1.1 as the Architect's responsibility is provided below.

*(Describe in detail the Architect's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit. The AIA publishes a number of Standard Form of Architect's Services documents that can be included as an exhibit to describe the Architect's Supplemental Services.)*

4.1.2.1.2: Additional Construction Observations or Onsite Site Project Representation as reference in 4.1.12: For a period of 10-12 months an estimated (10) ten additional construction observation trips can be provided on a per rip basis. If desired, this may also extend to attending bi-weekly progress meetings during the first year of Construction, beyond the basic service trips identified in Part 4.2.3.2.

4.1.2.1.3: Additional Civil Engineering: If the design solution requires re-zoning, traffic studies, extension of private utilities or roads to the property, boundary limits. The additional services can be provided based on an identified scope of work at the time

§ 4.1.2.4 A description of each Supplemental Service identified in Section 4.1.1 as the Owner's responsibility is provided below.

*(Describe in detail the Owner's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit.)*

Geotechnical investigation for site specific soil testing.

§ 4.1.3 If the Owner identified a Sustainable Objective in Article 1, the Architect shall provide, as a Supplemental Service, the Sustainability Services required in AIA Document E204™-2017, Sustainable Projects Exhibit, attached to this Agreement. The Owner shall compensate the Architect as provided in Section 11.2.

#### **§ 4.2 Architect's Additional Services**

The Architect may provide Additional Services after execution of this Agreement without invalidating the Agreement. Except for services required due to the fault of the Architect, any Additional Services provided in accordance with this Section 4.2 shall entitle the Architect to compensation pursuant to Section 11.3 and an appropriate adjustment in the Architect's schedule.

##### **4.2.1 Topographical Survey:**

Partial Site Topographical Survey & SWPP: Provide topographic survey, contours at one-foot increments, locate drives and parking, locate 4" trees, locate utilities, and SWPP/NPDES permitting

##### **4.2.2 As Designed Record Documents:**

**.1 Once the bidding and negotiation phase of the project has been completed and contract to construct the project has been awarded, we will incorporate the changes and clarifications made to the bidding documents via addendum into the plans and specifications and re-issue the documents in .electronic .PDF format for construction, if this additional service is authorized.**

##### **§ 4.2.3 Color Renderings:**

**.1 For renderings beyond the Architect's standard technical use to present the Work, we will provide interior or exterior 3-dimensional views of the building to create color renderings for the project. The initial rendering will be generated, and one edit of the rendering would be included to finalize the drawing. Multiple views will be considered as additional renderings.**

**§ 4.2.4 Upon recognizing the need to perform the following Additional Services, the Architect shall notify the Owner with reasonable promptness and explain the facts and circumstances giving rise to the need. The Architect shall not proceed to provide the following Additional Services until the Architect receives the Owner's written authorization:**

- .1 Services necessitated by a change in the Initial Information, previous instructions or approvals given by the Owner, or a material change in the Project including size, quality, complexity, the Owner's schedule or budget for Cost of the Work, or procurement or delivery method;**
- .2 Services necessitated by the enactment or revision of codes, laws, or regulations, including changing or editing previously prepared Instruments of Service;**
- .3 Changing or editing previously prepared Instruments of Service necessitated by official interpretations of applicable codes, laws or regulations that are either (a) contrary to specific interpretations by the applicable authorities having jurisdiction made prior to the issuance of the building permit, or (b) contrary to requirements of the Instruments of Service when those Instruments of Service were prepared in accordance with the applicable standard of care;**
- .4 Services necessitated by decisions of the Owner not rendered in a timely manner or any other failure of performance on the part of the Owner or the Owner's consultants or contractors;**
- .5 Preparing digital models or other design documentation for transmission to the Owner's consultants and contractors, or to other Owner-authorized recipients;**
- .6 Preparation of design and documentation for alternate bid or proposal requests proposed by the Owner;**
- .7 Preparation for, and attendance at, a public presentation, meeting or hearing;**
- .8 Preparation for, and attendance at, a dispute resolution proceeding or legal proceeding, except where the Architect is party thereto;**
- .9 Evaluation of the qualifications of entities providing bids or proposals;**
- .10 Consultation concerning replacement of Work resulting from fire or other cause during construction; or,**
- .11 Assistance to the Initial Decision Maker, if other than the Architect.**

**§ 4.2.2 To avoid delay in the Construction Phase, the Architect shall provide the following Additional Services, notify the Owner with reasonable promptness, and explain the facts and circumstances giving rise to the need. If, upon receipt of the Architect's notice, the Owner determines that all or parts of the services are not required, the Owner shall give prompt written notice to the Architect of the Owner's determination. The Owner shall compensate**

the Architect for the services provided prior to the Architect's receipt of the Owner's notice.

- .1 Reviewing a Contractor's submittal out of sequence from the submittal schedule approved by the Architect;
- .2 Responding to the Contractor's requests for information that are not prepared in accordance with the Contract Documents or where such information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation;
- .3 Preparing Change Orders and Construction Change Directives that require evaluation of Contractor's proposals and supporting data, or the preparation or revision of Instruments of Service;
- .4 Evaluating an extensive number of Claims as the Initial Decision Maker; or,
- .5 Evaluating substitutions proposed by the Owner or Contractor and making subsequent revisions to Instruments of Service resulting therefrom.

**§ 4.2.3** The Architect shall provide Construction Phase Services exceeding the limits set forth below as Additional Services. When the limits below are reached, the Architect shall notify the Owner:

- .1 Two ( 2 ) reviews of each Shop Drawing, Product Data item, sample and similar submittals of the Contractor
- .2 Up to Ten, ( 10 ) visits to the site, by the Architect during construction.
- .3 One ( 1 : Inspection for any portion of the Work to determine whether such portion of the Work is substantially complete in accordance with the requirements of the Contract Documents
- .4 One ( 1 : Inspection for any portion of the Work to determine final completion.

**§ 4.2.4** Except for services required under Section 3.6.6.5 and those services that do not exceed the limits set forth in Section 4.2.3, Construction Phase Services provided more than 60 days after (1) the date of Substantial Completion of the Work or (2) the initial date of Substantial Completion identified in the agreement between the Owner and Contractor, whichever is earlier, shall be compensated as Additional Services to the extent the Architect incurs additional cost in providing those Construction Phase Services.

**§ 4.2.5** If the services covered by this Agreement have not been completed within ( ) months of the date of this Agreement, through no fault of the Architect, extension of the Architect's services beyond that time shall be compensated as Additional Services.

**§ 4.2.6** If events or circumstances stemming in whole or part from the Excusable Events under Article 8, the Architect shall be entitled to Additional Services to equitably increase and extend the Architect's time for performance of its services, as well as equitably increase the Architect's compensation for its increased labor, expenses, and other costs to perform its services, due to the Excusable Event.

## **ARTICLE 5 OWNER'S RESPONSIBILITIES**

**§ 5.1** Unless otherwise provided for under this Agreement, the Owner shall provide information in a timely manner regarding requirements for and limitations on the Project, including a written program, which shall set forth the Owner's objectives; schedule; constraints and criteria, including space requirements and relationships; flexibility; expandability; special equipment; systems; and site requirements.

**§ 5.2** The Owner shall establish the Owner's budget for the Project, including (1) the budget for the Cost of the Work as defined in Section 6.1; (2) the Owner's other costs; and, (3) reasonable contingencies related to all of these costs. The Owner shall update the Owner's budget for the Project as necessary throughout the duration of the Project until final completion. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Architect. The Owner and the Architect shall thereafter agree to a corresponding change in the Project's scope and quality.

**§ 5.3** The Owner shall identify a representative authorized to act on the Owner's behalf with respect to the Project. The Owner shall render decisions and approve the Architect's submittals in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Architect's services.

**§ 5.4** The Owner shall furnish surveys to describe physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands;

adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions, and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.

**§ 5.5** The Owner shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.

**§ 5.6** The Owner shall provide the Supplemental Services designated as the Owner's responsibility in Section 4.1.1.

**§ 5.7** If the Owner identified a Sustainable Objective in Article 1, the Owner shall fulfill its responsibilities as required in AIA Document E204™–2017, Sustainable Projects Exhibit, attached to this Agreement.

**§ 5.8** The Owner shall coordinate the services of its own consultants with those services provided by the Architect. Upon the Architect's request, the Owner shall furnish copies of the scope of services in the contracts between the Owner and the Owner's consultants. The Owner shall furnish the services of consultants other than those designated as the responsibility of the Architect in this Agreement, or authorize the Architect to furnish them as an Additional Service, when the Architect requests such services and demonstrates that they are reasonably required by the scope of the Project. The Owner shall require that its consultants and contractors maintain insurance, including professional liability insurance, as appropriate to the services or work provided.

**§ 5.9** The Owner shall furnish tests, inspections and reports required by law or the Contract Documents, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.

**§ 5.10** The Owner shall furnish all legal, insurance and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests.

**§ 5.11** The Owner shall provide prompt written notice to the Architect if the Owner becomes aware of any fault or defect in the Project, including errors, omissions or inconsistencies in the Architect's Instruments of Service.

**§ 5.12** The Owner shall include the Architect in all communications with the Contractor that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect.

**§ 5.13** Before executing the Contract for Construction, the Owner shall coordinate the Architect's duties and responsibilities set forth in the Contract for Construction with the Architect's services set forth in this Agreement. The Owner shall provide the Architect a copy of the executed agreement between the Owner and Contractor, including the General Conditions of the Contract for Construction.

**§ 5.14** The Owner shall provide the Architect access to the Project site prior to commencement of the Work and shall obligate the Contractor to provide the Architect access to the Work wherever it is in preparation or progress.

**§ 5.15** Within 15 days after receipt of a written request from the Architect, the Owner shall furnish the requested information as necessary and relevant for the Architect to evaluate, give notice of, or enforce lien rights.

## **ARTICLE 6 COST OF THE WORK**

**§ 6.1** For purposes of this Agreement, the Cost of the Work shall be the total cost to the Owner to construct all elements of the Project designed or specified by the Architect and shall include contractors' general conditions costs, overhead and profit. The Cost of the Work also includes the reasonable value of labor, materials, and equipment, donated to, or otherwise furnished by, the Owner. The Cost of the Work does not include the compensation of the Architect; the costs of the land, rights-of-way, financing, or contingencies for changes in the Work; or other costs that are the responsibility of the Owner.

**§ 6.2** The Owner's budget for the Cost of the Work is provided in Initial Information, and shall be adjusted throughout the Project as required under Sections 5.2, 6.4 and 6.5. Evaluations of the Owner's budget for the Cost of the Work, and the preliminary estimate of the Cost of the Work and updated estimates of the Cost of the Work, prepared by the Architect, represent the Architect's judgment as a design professional. It is recognized, however, that neither the Architect nor the Owner has control over the cost of labor, materials, or equipment; the Contractor's methods of determining bid prices; or competitive bidding, market, or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from the Owner's budget for the Cost of the Work, or from any estimate of the Cost of the Work, or evaluation, prepared or agreed to by the Architect.

**§ 6.3** In preparing estimates of the Cost of Work, the Architect shall be permitted to include contingencies for design, bidding, and price escalation; to determine what materials, equipment, component systems, and types of construction are to be included in the Contract Documents; to recommend reasonable adjustments in the program and scope of the Project; and to include design alternates as may be necessary to adjust the estimated Cost of the Work to meet the Owner's budget. The Architect's estimate of the Cost of the Work shall be based on current area, volume or similar conceptual estimating techniques. If the Owner requires a detailed estimate of the Cost of the Work, the Architect shall provide such an estimate, if identified as the Architect's responsibility in Section 4.1.1, as a Supplemental Service.

**§ 6.4** If, through no fault of the Architect, the Procurement Phase has not commenced within 90 days after the Architect submits the Construction Documents to the Owner, the Owner's budget for the Cost of the Work shall be adjusted to reflect changes in the general level of prices in the applicable construction market.

**§ 6.5** If at any time the Architect's estimate of the Cost of the Work exceeds the Owner's budget for the Cost of the Work, the Architect shall make appropriate recommendations to the Owner to adjust the Project's size, quality, or budget for the Cost of the Work, and the Owner shall cooperate with the Architect in making such adjustments.

**§ 6.6** If the Owner's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services is exceeded by the lowest bona fide bid or negotiated proposal, the Owner shall

- .1 give written approval of an increase in the budget for the Cost of the Work;
- .2 authorize rebidding or renegotiating of the Project within a reasonable time;
- .3 terminate in accordance with Section 9.5;
- .4 in consultation with the Architect, revise the Project program, scope, or quality as required to reduce the Cost of the Work; or,
- .5 implement any other mutually acceptable alternative.

**§ 6.7** If the Owner chooses to proceed under Section 6.6.4, the Architect shall modify the Construction Documents as necessary to comply with the Owner's budget for the Cost of the Work at the conclusion of the Design Development or Construction Document Phased Services, or the budget as adjusted under Section 6.6.1. If the Owner requires the Architect to modify the Construction Documents because the lowest bona fide bid or negotiated proposal exceeds the Owner's budget for the Cost of the Work, the Owner shall compensate the Architect for the modifications as an Additional Service pursuant to Section 11.3. In any event, the Architect's modification of the Construction Documents shall be the limit of the Architect's responsibility under this Article 6.

## **ARTICLE 7 COPYRIGHTS AND LICENSES**

**§ 7.1** The Architect and the Owner warrant that in transmitting Instruments of Service, or any other information, the transmitting party is the copyright owner of such information or has permission from the copyright owner to transmit such information for its use on the Project.

**§ 7.2** The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and shall retain all common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights of the Architect and the Architect's consultants.

**§ 7.3** The Architect grants to the Owner a nonexclusive license to use the Architect's Instruments of Service solely and exclusively for purposes of constructing, using, maintaining, altering and adding to the Project, provided that the

Owner substantially performs its obligations under this Agreement, including prompt payment of all sums due pursuant to Article 9 and Article 11. The Architect shall obtain similar nonexclusive licenses from the Architect's consultants consistent with this Agreement. The license granted under this section permits the Owner to authorize the Contractor, Subcontractors, Sub-subcontractors, and suppliers, as well as the Owner's consultants and separate contractors, to reproduce applicable portions of the Instruments of Service, subject to any protocols established pursuant to Section 1.3, solely and exclusively for use in performing services or construction for the Project. If the Architect rightfully terminates this Agreement for cause as provided in Section 9.4, the license granted in this Section 7.3 shall terminate.

**§ 7.3.1** In the event the Owner uses the Instruments of Service without retaining the authors of the Instruments of Service, the Owner releases the Architect and Architect's consultant(s) from all claims and causes of action arising from such uses. The Owner, to the extent permitted by law, further agrees to indemnify and hold harmless the Architect and its consultants from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's use of the Instruments of Service under this Section 7.3.1. The terms of this Section 7.3.1 shall not apply if the Owner rightfully terminates this Agreement for cause under Section 9.4.

**§ 7.4** Except for the licenses granted in this Article 7, no other license or right shall be deemed granted or implied under this Agreement. The Owner shall not assign, delegate, sublicense, pledge or otherwise transfer any license granted herein to another party without the prior written agreement of the Architect. Any unauthorized use of the Instruments of Service shall be at the Owner's sole risk and without liability to the Architect and the Architect's consultants.

**§ 7.5** Except as otherwise stated in Section 7.3, the provisions of this Article 7 shall survive the termination of this Agreement.

## **ARTICLE 8 CLAIMS AND DISPUTES**

### **§ 8.1 General**

**§ 8.1.1** The Owner and Architect shall commence all claims and causes of action against the other and arising out of or related to this Agreement, whether in contract, tort, or otherwise, in accordance with the requirements of the binding dispute resolution method selected in this Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Architect waive all claims and causes of action not commenced in accordance with this Section 8.1.1.

**§ 8.1.2** To the extent damages are covered by property insurance, the Owner and Architect waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance as set forth in AIA Document A201-2017, General Conditions of the Contract for Construction. The Owner or the Architect, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.

**§ 8.1.3** The Architect and Owner waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement, except as specifically provided in Section 9.7.

**§ 8.1.4** In recognition of the relative risks and benefits of the Projects to both Owner and Architect, the risks have been allocated such that the Owner agrees, to the fullest extent of the law, to limit the liability of the Architect, including its officers, directors, shareholders, employees, agents, its subconsultants, affiliated companies, and any of them, to the Owner and any person or entity claiming by or through the Owner, for any and all claims, damages, liabilities, losses or costs including reasonable attorneys' fees and defense costs, or cost of any nature whatsoever, or claims expenses resulting in any way related to the Project or Agreement from any cause or causes shall not exceed the compensation received by the Architect under the agreement or fifty thousand dollars (\$50,000), whichever is greater. It is intended that this limitation of liability apply to any and all liability or cause of action, claim, theory of recovery, or remedy however alleged or arising, including negligence for professional acts, errors or omissions, strict liability, breach of contract, expressed or implied warranty, expressed indemnity, implied contractual indemnity, equitable indemnity and all other claims, unless otherwise prohibited by law. Excepting for the limitation

of liability above, the Owner waives any claim or cause of action against Architect and above included parties arising from or in connection with the performance of services for the Project or this Agreement.

§ 8.1.5 Subject to the limitation in Section 8.1.4, the Architect agrees to the fullest extent permitted by law, to indemnify and hold harmless the Owner including its officers, director, shareholders, employees, contractors, subcontractors and consultants against all claims, damages, liabilities, losses or costs, including reasonable attorneys' fees and defense costs, or costs of any nature whatsoever to the extent caused by the Architect's negligent performance of service under this Agreement and that of its officers, directors, shareholders, employees, agents, subconsultants, affiliated companies or anyone for whom the Architect is legally liable.

§ 8.1.6 The Owner agrees to the fullest extent permitted by law, to indemnify and hold harmless the Architect including its officers, director, shareholders, employees, and consultants, subconsultants and affiliated companies against all damages, liabilities, losses, and costs including reasonable attorneys' fees and defense costs, or costs of any nature whatsoever to the extent caused by the Owner's negligent acts in connection with this Project and the acts of its contractors, subcontractors, consultants or anyone for whom the Owner is legally liable.

§ 8.1.7 If the document General Conditions AIA A201- 2017 is not used in conjunction with this Agreement, the Architect and Owner hereby understand and agree that Architect has not created nor contributed to the creation or existence of any or all types of hazardous or toxic wastes, materials, chemical compounds, polychlorinated biphenyl, asbestos, petroleum contaminants, bacteria, fungi, mold or substance, or any other environmental hazard or pollution, whether latent or patent, at the Owner's Project location, or in connection with or related to this Project under this Agreement. The compensation to be paid to the Architect for services is not commensurate with, and has not been calculated with reference to, the potential risk of injury or loss which may be caused by the exposure of persons or property to such substances or conditions. Therefore to the fullest extent permitted by law, Owner agrees to indemnify, defend and hold harmless Architect including its officers, director, shareholders, employees, agents, its consultants and affiliated companies from any and all claims, damages, liabilities, losses, and costs including reasonable attorneys' fees and defense costs, or costs of any nature whatsoever, arising out of, or resulting from the discharge, escape, release, or saturation of smoke, vapors, soot, fumes, acid, alkalis, toxic chemicals, liquids, gases, polychlorinated biphenyl, petroleum contaminants, spores, biological toxins, or any other materials, irritants, contaminants, or pollutants, in or into the atmosphere, or on, onto, in or into the surface or subsurface of soil, water, or watercourses, objects, or any tangible or intangible matter, whether sudden or not.

§ 8.1.8 The Architect shall not be responsible or liable to the Owner or Owner's contractors, consultants, or other agents for any of the following events or circumstances, or the resulting delay in the Architect's services, additional costs and expenses in the Architect's performance of its services, or other effects in the Architect's services, stemming in whole or part from such events and circumstances (collectively, "Excusable Events" or, singularly, an "Excusable Event"): a change in law, building code or applicable standards; actions or inactions by a governmental authority; the presence or encounter of hazardous or toxic materials on the Project; war (declared or undeclared) or other armed conflict; terrorism; sabotage; vandalism; riot or other civil disturbance; blockade or embargos; explosion; abnormal weather; unanticipated or unknown site conditions; epidemic or pandemic (including but not limited to COVID-19), delays or other effects arising from government-mandated or government-recommended quarantines, closure of business, access, or travel; strike or labor dispute, lockout, work slowdown or stoppage; accident; act of God; failure of any governmental or other regulatory authority to act in a timely manner; acts or omissions by the Owner or by any Owner's contractors, consultants or agents of any level on the project (including, without limitation, failure of the Owner to furnish timely information or approve or disapprove of the Architect's services or work product promptly, delays in the work caused by the Owner, Owner's suspension, breach or default of this Agreement, or delays caused by faulty performance by the Owner or Owner's contractors, consultants, or agents of any level); or any delays or events outside the reasonable control of the Architect. When an Excusable Event occurs, the Owner agrees the Architect is not responsible for any actual or claimed damages incurred by Owner or Owner's contractors, consultants, or agents, the Architect shall not be deemed to be in default of this Agreement.

## § 8.2 Mediation

§ 8.2.1 Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to binding dispute resolution. If such matter relates to or is the subject of a lien arising out of the Architect's services, the Architect may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the matter by mediation or by binding dispute resolution.

**§ 8.2.2** The Owner and Architect shall endeavor to resolve claims, disputes and other matters in question between them by mediation, which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of this Agreement. A request for mediation shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of a complaint or other appropriate demand for binding dispute resolution but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration proceeding is stayed pursuant to this section, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

**§ 8.2.3** The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

**§ 8.2.4** If the parties do not resolve a dispute through mediation pursuant to this Section 8.2, the method of binding dispute resolution shall be the following:  
(Check the appropriate box.)

- ☐ Arbitration pursuant to Section 8.3 of this Agreement
- ☒ Litigation in a court of competent jurisdiction
- ☐ Other: (Specify)

If the Owner and Architect do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, the dispute will be resolved in a court of competent jurisdiction.

### **§ 8.3 Arbitration**

**§ 8.3.1** If the parties have selected arbitration as the method for binding dispute resolution in this Agreement, any claim, dispute or other matter in question arising out of or related to this Agreement subject to, but not resolved by, mediation shall be subject to arbitration, which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of this Agreement. A demand for arbitration shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the arbitration.

**§ 8.3.1.1** A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the claim, dispute or other matter in question would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the claim, dispute or other matter in question.

**§ 8.3.2** The foregoing agreement to arbitrate, and other agreements to arbitrate with an additional person or entity duly consented to by parties to this Agreement, shall be specifically enforceable in accordance with applicable law in any court having jurisdiction thereof.

**§ 8.3.3** The award rendered by the arbitrator(s) shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

### **§ 8.3.4 Consolidation or Joinder**

**§ 8.3.4.1** Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration

permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

**§ 8.3.4.2** Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

**§ 8.3.4.3** The Owner and Architect grant to any person or entity made a party to an arbitration conducted under this Section 8.3, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Architect under this Agreement.

**§ 8.4** The provisions of this Article 8 shall survive the termination of this Agreement.

## **ARTICLE 9 TERMINATION OR SUSPENSION**

**§ 9.1** If the Owner fails to make payments to the Architect in accordance with this Agreement, such failure shall be considered substantial nonperformance and cause for termination or, at the Architect's option, cause for suspension of performance of services under this Agreement. If the Architect elects to suspend services, the Architect shall give seven days' written notice to the Owner before suspending services. In the event of a suspension of services, the Architect shall have no liability to the Owner for delay or damage caused the Owner because of such suspension of services. Before resuming services, the Owner shall pay the Architect all sums due prior to suspension and any expenses incurred in the interruption and resumption of the Architect's services. The Architect's fees for the remaining services and the time schedules shall be equitably adjusted.

**§ 9.1.1** If the Architect becomes aware of hazardous materials or toxic substances in any form at the Project site or adjacent areas that may affect the performance of the Architect's services, the Architect shall promptly send a written communication to the Owner describing the hazardous materials or toxic substances. The Architect may, at its sole option, and without liability for damages or delays, immediately suspend performance of services until the Project site or adjacent areas have been remediated and in compliance with applicable laws and regulations. The Owner is responsible for analysis and remediation of the Project site.

**§ 9.2** If the Owner suspends the Project, the Architect shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Architect shall be compensated for expenses incurred in the interruption and resumption of the Architect's services. The Architect's fees for the remaining services and the time schedules shall be equitably adjusted.

**§ 9.3** If the Owner suspends the Project for more than 90 cumulative days for reasons other than the fault of the Architect, the Architect may terminate this Agreement by giving not less than seven days' written notice.

**§ 9.4** Either party may terminate this Agreement upon not less than seven days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

**§ 9.5** The Owner may terminate this Agreement upon not less than seven days' written notice to the Architect for the Owner's convenience and without cause.

**§ 9.6** If the Owner terminates this Agreement for its convenience pursuant to Section 9.5, or the Architect terminates this Agreement pursuant to Section 9.3, the Owner shall compensate the Architect for services performed prior to termination, Reimbursable Expenses incurred, and costs attributable to termination, including the costs attributable to the Architect's termination of consultant agreements.

**§ 9.7** In addition to any amounts paid under Section 9.6, if the Owner terminates this Agreement for its convenience pursuant to Section 9.5, or the Architect terminates this Agreement pursuant to Section 9.3, the Owner shall pay to the Architect the following fees:

*(Set forth below the amount of any termination or licensing fee, or the method for determining any termination or licensing fee.)*

**.1 Termination Fee:**

Services rendered and all expenses reasonably incurred by the Architect in connection with the Termination, including but not limited to demobilization, reassignment of personnel, associated overhead costs and all other expenses directly resulting in termination. In addition, the Owner shall pay the Architect 15% of the fee on any remaining unperformed services for lost overhead and profit.

**.2 Licensing Fee if the Owner intends to continue using the Architect's Instruments of Service:**

Fifteen percent (15%) of the Compensation from Section 11.1

**§ 9.8** Except as otherwise expressly provided herein, this Agreement shall terminate one year from the date of Substantial Completion.

**§ 9.9** The Owner's rights to use the Architect's Instruments of Service in the event of a termination of this Agreement are set forth in Article 7 and Section 9.7.

**ARTICLE 10 MISCELLANEOUS PROVISIONS**

**§ 10.1** This Agreement shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 8.3.

**§ 10.2** Terms in this Agreement shall have the same meaning as those in AIA Document A201-2017, General Conditions of the Contract for Construction.

**§ 10.3** The Owner and Architect, respectively, bind themselves, their agents, successors, assigns, and legal representatives to this Agreement. Neither the Owner nor the Architect shall assign this Agreement without the written consent of the other, except that the Owner may assign this Agreement to a lender providing financing for the Project if the lender agrees to assume the Owner's rights and obligations under this Agreement, including any payments due to the Architect by the Owner prior to the assignment.

**§ 10.4** If the Owner requests the Architect to execute certificates, the proposed language of such certificates shall be submitted to the Architect for review at least 14 days prior to the requested dates of execution. If the Owner requests the Architect to execute consents reasonably required to facilitate assignment to a lender, the Architect shall execute all such consents that are consistent with this Agreement, provided the proposed consent is submitted to the Architect for review at least 14 days prior to execution. The Architect shall not be required to execute certificates or consents that would require knowledge, services, or responsibilities beyond the scope of this Agreement.

**§ 10.5** Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Owner or Architect.

**§ 10.6** Unless otherwise required in this Agreement, the Architect shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, hazardous materials or toxic substances in any form at the Project site.

**§ 10.7** The Architect shall have the right to include photographic or artistic representations of the design of the Project among the Architect's promotional and professional materials. The Architect shall be given reasonable access to the completed Project to make such representations. However, the Architect's materials shall not include the Owner's confidential or proprietary information if the Owner has previously advised the Architect in writing of the specific information considered by the Owner to be confidential or proprietary. The Owner shall provide professional credit for the Architect in the Owner's promotional materials for the Project. This Section 10.7 shall survive the termination of this Agreement unless the Owner terminates this Agreement for cause pursuant to Section 9.4.

§ 10.8 If the Architect or Owner receives information specifically designated as “confidential” or “business proprietary,” the receiving party shall keep such information strictly confidential and shall not disclose it to any other person except as set forth in Section 10.8.1. This Section 10.8 shall survive the termination of this Agreement.

§ 10.8.1 The receiving party may disclose “confidential” or “business proprietary” information after 7 days’ notice to the other party, when required by law, arbitrator’s order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the receiving party to defend itself in any dispute. The receiving party may also disclose such information to its employees, consultants, or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of such information as set forth in this Section 10.8.

§ 10.9 The invalidity of any provision of the Agreement shall not invalidate the Agreement or its remaining provisions. If it is determined that any provision of the Agreement violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Agreement shall be construed, to the fullest extent permitted by law, to give effect to the parties’ intentions and purposes in executing the Agreement.

## ARTICLE 11 COMPENSATION

§ 11.1 For the Architect’s Basic Services described under Article 3, including the addition of three budgetary alternates, the Owner shall compensate the Architect as follows:

.1 **Anamosa Fire Station Addition: Basic Services, Stipulated Sum**

**Lump Sum Fee: Ninety-Nine Thousand Five Hundred Dollars and no cents, (\$99,500.00)**

.2 Expenses:

Included – Reimbursable expenses have been included in the Compensation Fee amounts estimate totals.

*(Paragraph Deleted)*

**Anamosa Fire Station Addition and Renovation:** Expenses are estimated to be: \$10,000, this number excludes bid document printing. Bid document printing is included in the overall Owner’s Project Budget

§ 11.2 For Additional Services designated in Section 4.1, the Owner shall compensate the Architect as follows:  
(Insert

*amount of, or basis for, compensation. If necessary, list specific services to which particular methods of compensation apply.)*

Additional Onsite Site Observations:	\$1,500 per visit
Additional Civil Engineering:	Hourly Fee

§ 11.3 For Additional Services that may arise during the course of the Project, including those under Section 4.3, the Owner shall compensate the Architect as follows:  
*(Insert amount of, or basis for, compensation.)*

<b>As Designed Record Documents:</b>	<b>\$ 7,900.00</b>
--------------------------------------	--------------------

Color Renderings:	\$2,000 per rendering
-------------------	-----------------------

Changes to Scope of Work:	Hourly Fee
---------------------------	------------

*(Paragraph Deleted)*

Init.

**§ 11.2** For the Architect's Supplemental Services designated in Section 4.1.1 and for any Sustainability Services required pursuant to Section 4.1.3, the Owner shall compensate the Architect as follows:

*(Insert amount of, or basis for, compensation. If necessary, list specific services to which particular methods of compensation apply.)*

**§ 11.3** For Additional Services that may arise during the course of the Project, including those under Section 4.2, the Owner shall compensate the Architect as follows:

*(Insert amount of, or basis for, compensation.)*

Exhibit-B: Architect's Standard Hourly Fee Schedule in effect at the time that the services are performed.

**§ 11.4** Compensation for Supplemental and Additional Services of the Architect's consultants when not included in Section 11.2 or 11.3, shall be the amount invoiced to the Architect plus Ten percent ( 10%), or as follows:

*(Insert amount of, or basis for computing, Architect's consultants' compensation for Supplemental or Additional Services.)*

**§ 11.5** When compensation for Basic Services is based on a stipulated sum or a percentage basis, the proportion of compensation for each phase of services shall be as follows:

Schematic Design Phase	Twenty	percent (	20	%)
Design Development Phase	Twenty	percent (	20	%)
Construction Documents Phase	Thirty Five	percent (	35	%)
Procurement Phase	Five	percent (	5	%)
Construction Phase	Twenty	percent (	20	%)
Total Basic Compensation	one hundred	percent (	100	%)

**§ 11.6** When compensation identified in Section 11.1 is on a percentage basis, progress payments for each phase of Basic Services shall be calculated by multiplying the percentages identified in this Article by the Owner's most recent budget for the Cost of the Work. Compensation paid in previous progress payments shall not be adjusted based on subsequent updates to the Owner's budget for the Cost of the Work.

**§ 11.6.1** When compensation is on a percentage basis and any portions of the Project are deleted or otherwise not constructed, compensation for those portions of the Project shall be payable to the extent services are performed on those portions. The Architect shall be entitled to compensation in accordance with this Agreement for all services performed whether or not the Construction Phase is commenced.

**§ 11.7** The hourly billing rates for services of the Architect and the Architect's consultants are set forth below. The rates shall be adjusted in accordance with the Architect's and Architect's consultants' normal review practices.

*(If applicable, attach an exhibit of hourly billing rates or insert them below.)*

Architect's Standard Hourly Fee Schedule in effect at the time that the services are performed.

Init.

§ 11.10.2.2 The Owner shall not withhold amounts from the Architect's compensation to impose a penalty or liquidated damages on the Architect, or to offset sums requested by or paid to contractors for the cost of changes in the Work, unless the Architect agrees or has been found liable for the amounts in a binding dispute resolution proceeding.

§ 11.10.2.3 Records of Reimbursable Expenses, expenses pertaining to Supplemental and Additional Services, and services performed on the basis of hourly rates shall be available to the Owner at mutually convenient times.

## ARTICLE 12 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Agreement are as follows:

*(Include other terms and conditions applicable to this Agreement.)*

Architect is an equal employment opportunity employer and will not discriminate against any employee or applicant for employment because of race, creed, color, religion, sex, marital status, national origin, age 18 or older, ancestry, gender identity, sexual orientation, veteran, status, physical or mental handicap, unless related to performance of the job with or without accommodation.

## ARTICLE 13 SCOPE OF THE AGREEMENT

§ 13.1 This Agreement represents the entire and integrated agreement between the Owner and the Architect and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the Owner and Architect.

§ 13.2 This Agreement is comprised of the following documents identified below:

- .1 AIA Document B101™-2017, Standard Form Agreement Between Owner and Architect
- .2 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

*(Insert the date of the E203-2013 incorporated into this agreement.)*

- .3 Exhibits:

*(Check the appropriate box for any exhibits incorporated into this Agreement.)*

☐ AIA Document E204™-2017, Sustainable Projects Exhibit, dated as indicated below:

*(Insert the date of the E204-2017 incorporated into this agreement.)*

☐ Other Exhibits incorporated into this Agreement:

*(Clearly identify any other exhibits incorporated into this Agreement, including any exhibits and scopes of services identified as exhibits in Section 4.1.2.)*

- .4 Other documents:

*(List other documents, if any, forming part of the Agreement.)*

This Agreement entered into as of the day and year first written above.

OWNER (Signature)

*(Printed name and title)*

ARCHITECT (Signature)

*Ronald L. Hinds - Project Manager*  
*(Printed name, title, and license number, if required)*

Init.

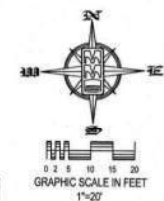
<u>PROPOSAL</u>			
APPLICANT PLANS TO DEVELOP A 1.79 ACRES C-2 DISTRICT CONSISTING OF 1 COMMERCIAL BUILDING.			
<u>DEVELOPMENT SCHEDULE</u>			
APPLICANT PLANS TO BEGIN CONSTRUCTION IN FALL 2019, LASTING THRU FALL 2020			
*SEE ARCHITECTURAL PLANS FOR COVENANTS			
<u>DEVELOPMENT CHARACTERISTICS</u>			
CURRENT ZONING: C-2 (ARTERIAL COMMERCIAL DISTRICT)			
<u>SETBACK REQUIREMENTS</u>		<u>LOT CHARACTERISTICS</u>	
<u>BUILDING SETBACKS:</u>		REQUIRED	LOT AREA
FRONT YARD	30 FEET		77,821 SF (100%)
SIDE YARD	8 FEET		7,440 SF (9.56%)
REAR YARD	30 FEET		5,507 SF (7.08%)
			PROPOSED PAVING AREA
			1,894 SF (2.43%)
			2,336 SF (3.00%)
			60,644 SF (77.93%)
<u>PARKING SETBACKS:</u>		REQUIRED	
FRONT YARD	NONE		
SIDE YARD	5 FEET		
REAR YARD	NONE		
		<u>LIGHTING</u>	
		-	FREE STANDING LIGHT POLES NOT TO EXCEED 25 FEET.
		-	PARKING LIGHTS TO BE NON-ADJUSTABLE DOWNLIGHTS.
		-	WALL MOUNTED LIGHTS NOT TO BE FORWARD THROWING.
		-	MAXIMUM WATTAGE = 250 WATTS.
		-	LIGHT SPREAD SHALL NOT IMPACT BEYOND PROPERTY LIMITS.
<u>BUILDING CHARACTERISTICS</u>			
(1) COMMERCIAL BUILDING	7,440 SF		

# SITE PLAN

## ANAMOSA FIRE STATION ADDITION

### ANAMOSA, JONES COUNTY, IOWA

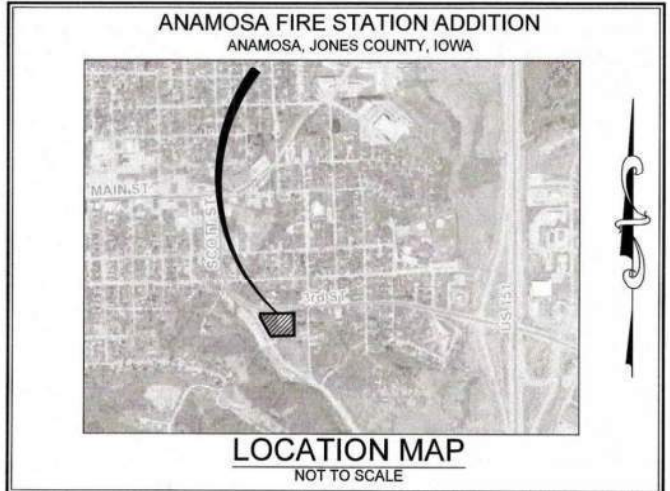
## EXHIBIT-A



PAVING LEGEND	
	7" PCC (210 SY)
*THESE QUANTITIES INCLUDE ALL SITE IMPROVEMENTS*	

PAVING CONSTRUCTION NOTES	
1)	I.D.O.T. CLASS C-3 CONCRETE SHALL BE USED, UNLESS NOTED OTHERWISE.
2)	CITY OF ANAMOSA DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES SHALL PREVAIL.
3)	PAVEMENT JOINTS SHALL BE TYPE CO AS SPECIFIED IN SUDAS FIGURE 7010.101.
4)	THE CONCRETE AGGREGATE SHALL BE CLASS 38 DURABILITY AS SPECIFIED IN SECTION 4113.04.B3 OF THE I.D.O.T. STANDARD SPECIFICATIONS.
5)	PAVEMENT JOINTING SHALL CONFORM TO SUDAS FIGURE 7010.9001

SHEET INDEX	
1	SITE LAYOUT, DEMOLITION & UTILITY PLAN
2	GRADING & EROSION CONTROL PLAN AND SWPPP
3	GENERAL NOTES AND DETAILS



STANDARD LEGEND AND NOTES	
	PROPERTY &/or BOUNDARY LINES
	CONGRESSIONAL SECTION LINES
	RIGHT-OF-WAY LINES
	CENTER LINES
	EXISTING CENTER LINES
	LOT LINES, INTERNAL
	LOT LINES, PLATTED OR BY DEED
	PROPOSED EASEMENT LINES
	EXISTING EASEMENT LINES
	BENCHMARK
	RECORDED DIMENSIONS
	CURVE SEGMENT NUMBER
	POWER POLE
	POWER POLE W/DROP
	POWER POLE W/TRANS
	POWER POLE W/LIGHT
	LIGHT POLE
	SANITARY MANHOLE
	FIRE HYDRANT
	WATER VALVE
	DRAINAGE MANHOLE
	CURB INLET
	FENCE LINE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	WATER LINES
	ELECTRICAL LINES
	TELEPHONE LINES
	GAS LINES
	CONTOUR LINES (1' INTERVAL)
	PROPOSED GROUND
	EXISTING TREE LINE
	EXISTING DECIDUOUS TREE & SHRUB
	EXISTING EVERGREEN TREES & SHRUBS

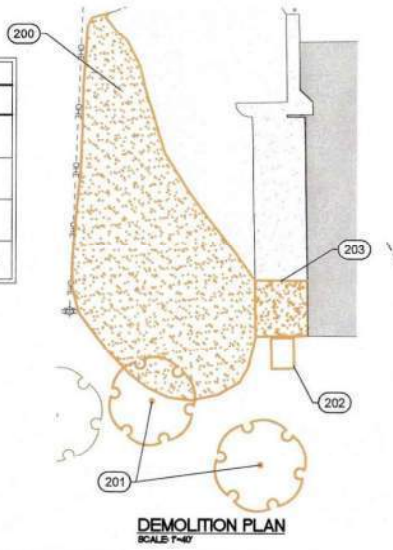
THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

PROPOSED KEYNOTES	
NUMBER	KEYNOTE
100	INSTALL 7" PCC PARKING.
101	EDGE CONCRETE WITHOUT CURB
102	REPLACE GRAVEL
103	MOVE EXISTING SHED TO NEW LOCATION
104	INSTALL RETAINING WALL
105	PROTECT EXISTING POWER POLE AND OVERHEAD ELECTRIC LINE
106	PROTECT EXISTING TREES AND SHRUBS
107	PROTECT EXISTING WATER MAIN AND SHUTOFF
108	PROTECT EXISTING SANITARY MANHOLE AND CLEAN OUT
109	PROTECT EXISTING STORM INTAKE

### PAVING REMOVAL LEGEND

	REMOVE EXISTING GRAVEL SURFACE
--	--------------------------------

DEMOLITION KEYNOTES	
NUMBER	KEYNOTE
200	REMOVE EXISTING GRAVEL
201	REMOVE EXISTING TREES
202	RELOCATED EXISTING SHED
203	SAW CUT AND REMOVE EXISTING CONCRETE DRIVE



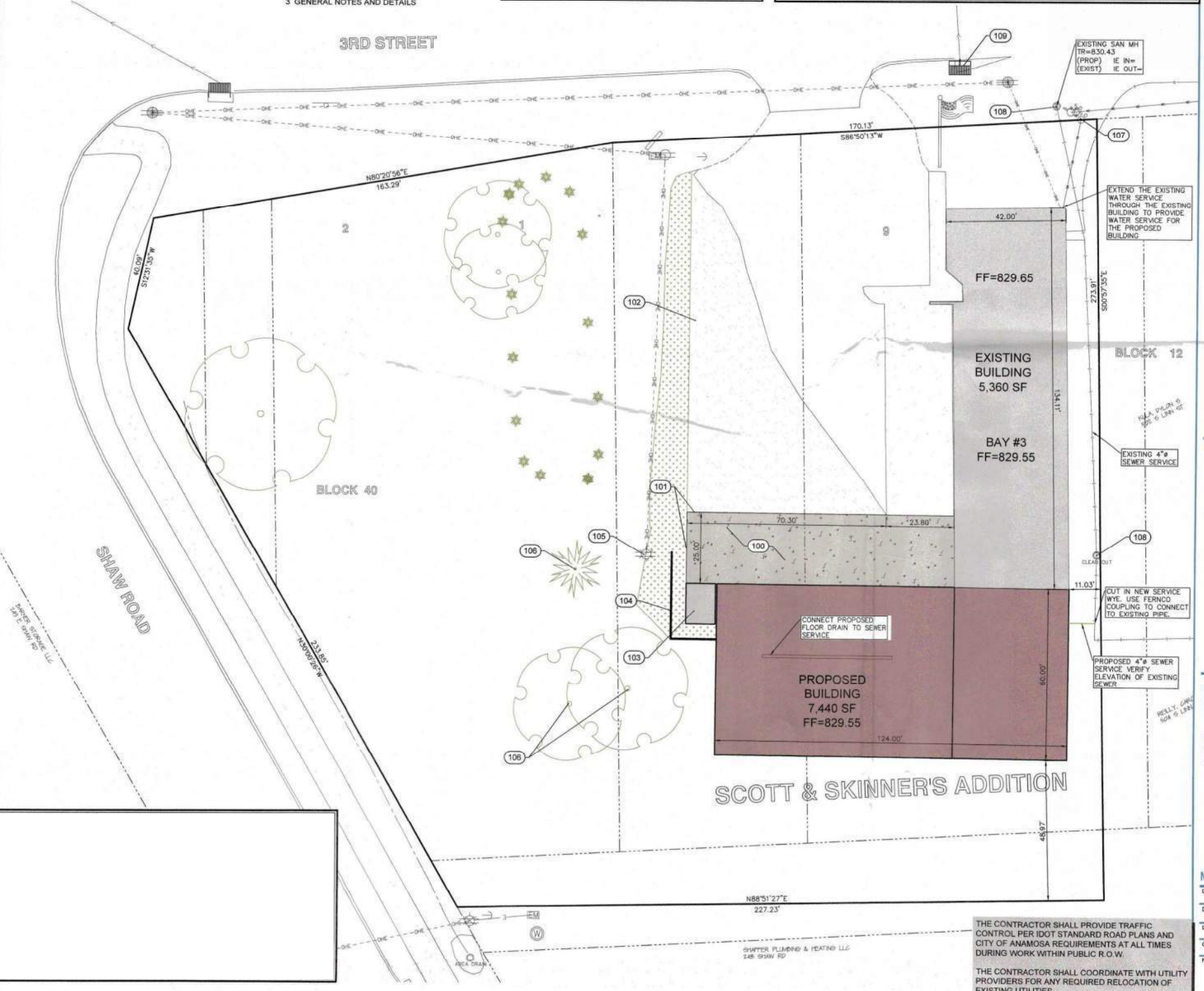
DEMOLITION NOTES:	
1)	COORDINATE ALL DEMOLITION ACTIVITIES WITH OWNER BEFORE COMMENCING ANY DEMOLITION WORK.
2)	THE CONTRACTOR SHALL CONTACT ALL UTILITIES AND ARRANGE FOR THEIR LOCATION OF FACILITIES BEFORE BEGINNING DEMOLITION. THE CONTRACTOR SHALL COORDINATE WITH ALL PUBLIC UTILITIES FOR DISCONNECTION AND REMOVAL OF THEIR FACILITIES SERVING STRUCTURE BEING DEMOLISHED.
3)	CLEARING AND REMOVAL OF TREES, BUSHES AND BRUSH SHALL INCLUDE REMOVAL FROM THE SITE OF ALL TRUNKS, BRANCHES, STUMPS AND ROOTS. THE CONTRACTOR SHALL REMOVE ALL STUMPS AND ROOTS.
4)	WHERE WORK CAUSES REMOVAL OF PAVEMENT WITHIN EXISTING RIGHTS-OF-WAY, PAVEMENT SHALL BE REPLACED AS SOON AS PRACTICAL.
5)	ADJACENT STREETS ARE TO BE MAINTAINED CLEAN AS PER CITY OF ANAMOSA REQUIREMENTS.
6)	WHEN PEDESTRIAN TRAFFIC FLOW IS INTERRUPTED, CONTRACTOR SHALL INSTALL PROPER SIGNAGE ("SIDEWALK CLOSED AHEAD USE OTHER SIDE").
7)	THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, CONFORMING TO THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" WHEN WORK EXTENDS INTO THE STREET.

**UTILITIES**

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8888 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY LOCATIONS ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES, UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERE TO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

**IOWA ONE CALL**



### SITE LAYOUT, DEMOLITION & UTILITY PLAN

### ANAMOSA FIRE STATION ADDITION

ANAMOSA  
JONES COUNTY  
IOWA

MMS CONSULTANTS, INC.	
Date:	08/22/19
Designed by:	Field Book No.
Drawn by:	Scale:
Checked by:	Sheet No.
Project No.	1
of:	3

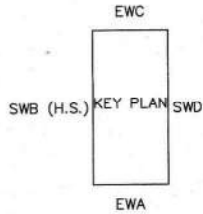
THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PER IDOT STANDARD ROAD PLANS AND CITY OF ANAMOSA REQUIREMENTS AT ALL TIMES DURING WORK WITHIN PUBLIC R.O.W.

THE CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR ANY REQUIRED RELOCATION OF EXISTING UTILITIES

Anchor Rod Drawings

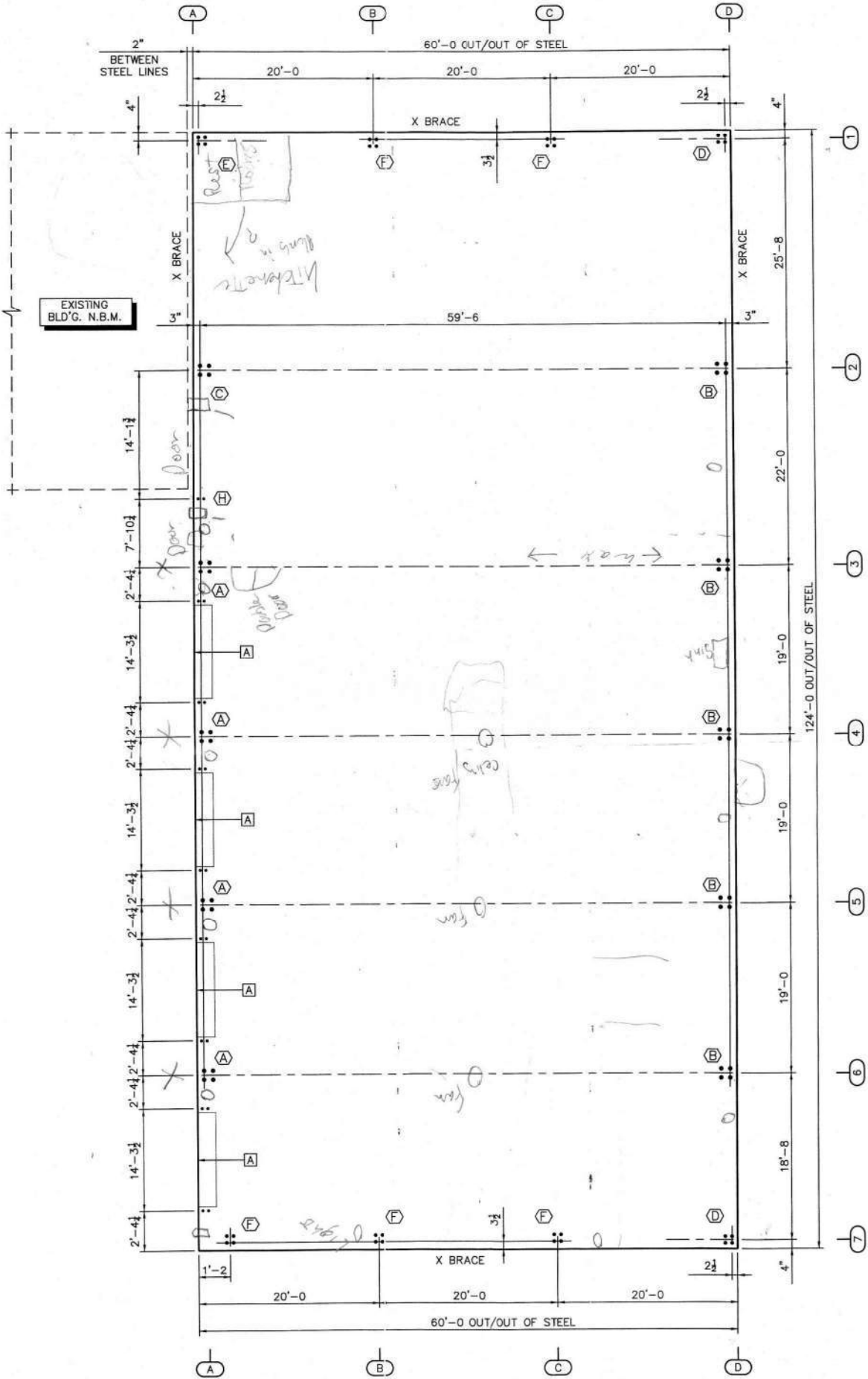
- 1) This drawing is for anchor rod placement only and is not foundation design.  
2) Foundation must be square and level with all anchor rods true in size, location, and projection.  
3) Projection shown must be held to keep threads clear of finished concrete.  
4) This structural design data includes magnitude and location of design loads and support conditions, material properties, and type and size of major structural members necessary to show compliance with the Order Documents at the time of this issue. Any change to building loads or dimensions may change structural member sizes and locations shown. This structural design data will be superseded and voided by any future mailing.  
5) Anchor rod size is determined by shear and tension at the bottom of the base plate. The length of the anchor rod and method of load transfer to the foundation are to be determined by the foundation engineer, and are not provided by the manufacturer.  
6) Anchor rods are ASTM F1554 Gr. 36 material unless noted otherwise.  
7) 3000 psi concrete compressive strength (f'c) is assumed for the purpose of column base plate design unless otherwise noted.

FINISH FLOOR AT ELEVATION 100'-0"



ACCESSORY SCHEDULE			
MARK	DESCRIPTION	DETAIL	QUAN.
A	14'-0" X 14'-0" FRAMED OPENINGS	G	4

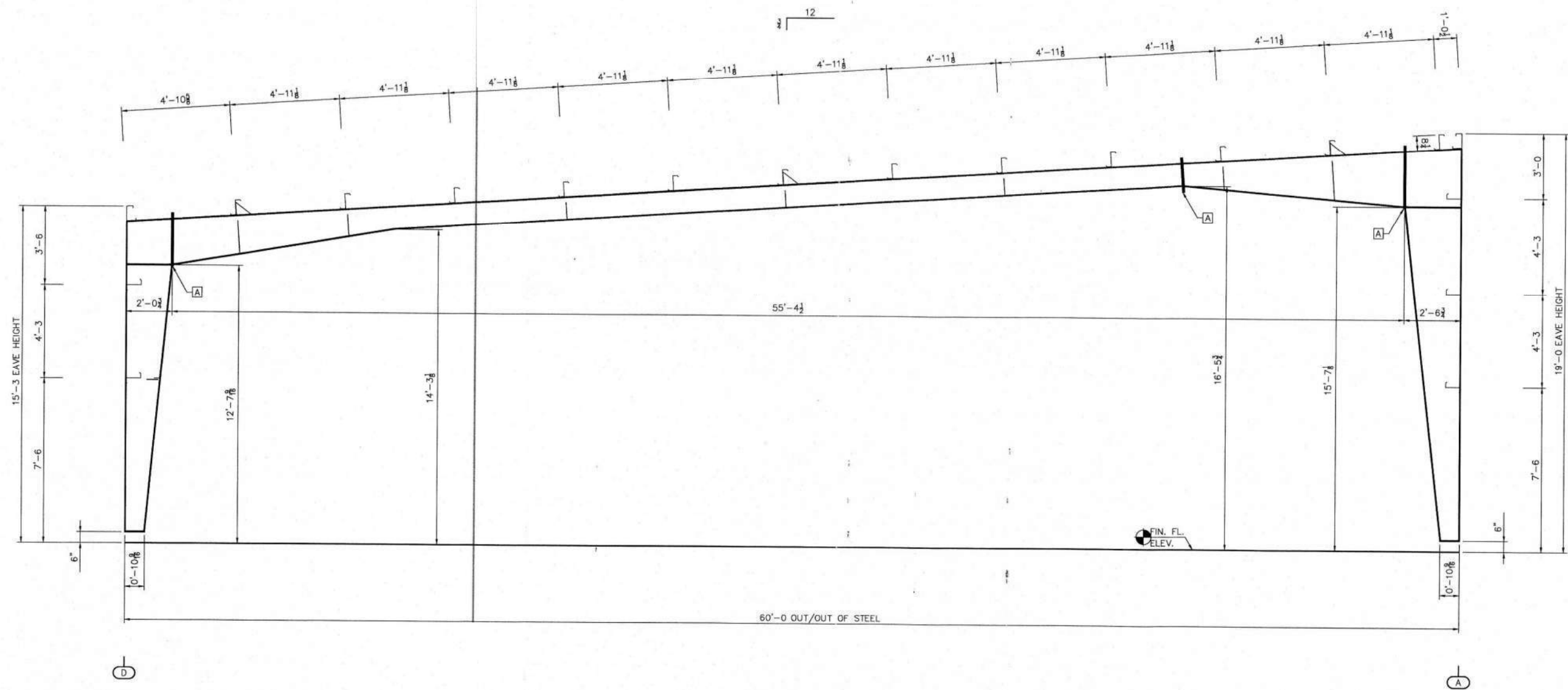
ANCHOR ROD DESCRIPTION		QUANTITY
1/2" #8 DIAMETER X		50
1/2" #8 DIAMETER X		40



ANCHOR ROD SETTING PLAN

By		Description	Date	Revision	Project Name & Location: CITY OF ANAMOSA ANAMOSA, IA	Customer:	Drawing Status: <input type="checkbox"/> Preliminary <input type="checkbox"/> Not For Construction <input type="checkbox"/> For Approval <input type="checkbox"/> Not For Construction	For Construction Permit <input type="checkbox"/>
Ck'd								
Scale: NOT TO SCALE								
Drawn by: 1/7/20								
Checked by: 1/7/20								
Project Engineer:								
Job Number: 17-B-47512								
Sheet Number: F1 of 3								



[illegible]

Scale:	NOT TO SCALE
Drawn by:	1/7/20
Checked by:	1/7/20
Project Engineer:	
Job Number:	
Sheet Number:	E9 of 9

# STANDARD HOURLY FEE SCHEDULE

## Effective January 1, 2021 to December 31, 2021

### PROFESSIONAL STAFF:

Grade 1	\$ 92.00
Grade 2	\$111.00
Grade 3	\$124.00
Grade 4	\$138.00
Grade 5	\$153.00
Grade 6	\$166.00
Grade 7	\$180.00
Grade 8	\$198.00
Grade 9	\$215.00

### TECHNICAL STAFF:

Grade 1	\$ 64.00
Grade 2	\$ 80.00
Grade 3	\$ 90.00
Grade 4	\$ 97.00
Grade 5	\$110.00
Grade 6	\$125.00
Grade 7	\$141.00

**ADMIN STAFF:** \$ 63.00

### SURVEY STAFF:

One Person	\$140.00
Two Person	\$218.00
One Person with ATV	\$165.00
Two Person with ATV	\$243.00
Drone Surveyor (Video or Photogrammetry)	\$175.00
Drone Surveyor (Thermography)	\$325.00
Drone Processing	\$130.00
Hydrographic Survey Crew (Two Person)	\$284.00
Scanning Surveyor	\$180.00
Surveyor with Two Scanners	\$257.00

### REIMBURSABLE EXPENSES:

#### TRAVEL

Mileage- Car/Truck	\$0.57/ Mile
Mileage- Survey Trucks	\$0.67/ Mile
Lodging, Meals	Cost + 10%
Airfare	Cost + 10%
Car Rental	Cost + 10%

#### IN-HOUSE SERVICES

##### Prints/Plots:

Bond	\$ .30/Sq. Ft.
Mylar	\$ .75/Sq. Ft.
Photogloss	\$ .90/Sq. Ft.
Color Bond	\$ .60/Sq. Ft.
Foam Core Mounting	\$ 13.00

#### OUTSIDE SERVICES

Aerial Photogrammetry	Cost + 10%
Professional Services	Cost + 10%
Prints/Plots/Photos	Cost + 10%
Deliveries	Cost + 10%

##### Color Prints:

Letter Size	\$ 1.00
Legal Size	\$ 2.00

# STANDARD HOURLY FEE SCHEDULE

## Effective January 1, 2021 to December 31, 2021

### PROFESSIONAL STAFF:

Grade 1	\$ 92.00
Grade 2	\$111.00
Grade 3	\$124.00
Grade 4	\$138.00
Grade 5	\$153.00
Grade 6	\$166.00
Grade 7	\$180.00
Grade 8	\$198.00
Grade 9	\$215.00

### TECHNICAL STAFF:

Grade 1	\$ 64.00
Grade 2	\$ 80.00
Grade 3	\$ 90.00
Grade 4	\$ 97.00
Grade 5	\$110.00
Grade 6	\$125.00
Grade 7	\$141.00

**ADMIN STAFF:** \$ 63.00

### SURVEY STAFF:

One Person	\$140.00
Two Person	\$218.00
One Person with ATV	\$165.00
Two Person with ATV	\$243.00
Drone Surveyor (Video or Photogrammetry)	\$175.00
Drone Surveyor (Thermography)	\$325.00
Drone Processing	\$130.00
Hydrographic Survey Crew (Two Person)	\$284.00
Scanning Surveyor	\$180.00
Surveyor with Two Scanners	\$257.00

### REIMBURSABLE EXPENSES:

#### TRAVEL

Mileage- Car/Truck	\$0.57/ Mile
Mileage- Survey Trucks	\$0.67/ Mile
Lodging, Meals	Cost + 10%
Airfare	Cost + 10%
Car Rental	Cost + 10%

#### IN-HOUSE SERVICES

##### Prints/Plots:

Bond	\$ .30/Sq. Ft.
Mylar	\$ .75/Sq. Ft.
Photogloss	\$ .90/Sq. Ft.
Color Bond	\$ .60/Sq. Ft.
Foam Core Mounting	\$ 13.00

#### OUTSIDE SERVICES

Aerial Photogrammetry	Cost + 10%
Professional Services	Cost + 10%
Prints/Plots/Photos	Cost + 10%
Deliveries	Cost + 10%

##### Color Prints:

Letter Size	\$ 1.00
Legal Size	\$ 2.00



## City of Anamosa

CONTRACT OPERATION AND LABORATORY SERVICES PROPOSAL

Dear Ms. Brincks,

I would like to thank the City of Anamosa for the opportunity to speak with you and offer our services to the city. I feel confident that we can provide a valuable service at a reasonable cost.

One advantage of working with Ion is that we have the ability to be flexible. If the options listed below do not meet your needs or if you would like to make some small changes or adjustments, I am more than willing to have those discussions and to try to put together options that best suit the city's needs.

One of the constant struggles for small towns is finding and keeping properly certified operators. The city is required to have a Grade III Wastewater Operator. Currently, Ion employs three operators with a Grade III or higher wastewater certification. Operating small to medium sized towns is the main aspect of our business and is our specialty. Unlike individual operators, we would have no reason to leave for a bigger town or bigger salary. If our business grows, we hire more people while continuing to provide the same stable operations and service to our existing clients. Ultimately, The City of Anamosa would have no worries about maintaining a state certified operator if Ion is contracted.

Having worked with several systems over our combined 100 plus years of experience, we have made many contacts in the industry. From pump suppliers to automation companies to chemical vendors to engineers and beyond, Ion has an extensive network from which to pull. This allows us the ability to partner our clients with a large number of vendors for whatever needs may arise.

I look forward to further discussions with the City of Anamosa. I believe that Ion can be a great asset for the city moving forward. Below is our proposal. Please look it over and let me know if you have any questions. Thank you for your time and consideration.

Sincerely,

Chad McCleary  
Ion Environmental Solutions  
4500 25<sup>th</sup> St. S  
Muscatine, IA  
563-299-2214  
cmccleary@ionenvironmental.com

# Proposal

## Operations:

Ion will provide a State of Iowa Grade III Wastewater Operator for the wastewater treatment facilities and lift stations.

Ion will sign and submit all required Iowa DNR paperwork and reports. We will provide copies of these reports to the city along with a monthly report highlighting the work we performed during that time.

After speaking with Amber Sauser at Iowa DNR Field Office #1, she would like Ion to be onsite at least 3 days per week. With that said, this proposal is for 3 days per week for a minimum of 2 hours and a maximum of 4 hours per visit. Hours will be at our discretion based on what is required from day to day. Any site visits beyond the normal, 3-times per week for 2-4 hours will be billed at \$65 per hour.

The city employed wastewater operators will continue to perform their normal duties. Ion will provide direction and support to the city workers with regards to the operation of the wastewater facilities.

While we will be happy to assist the city when it comes to wastewater collection system issues, this area would remain under the purview of the city.

**Monthly Operation Cost: \$3,620**

## Laboratory Services:

Ion owns and operates a state certified laboratory. If we are contracted to be the operators for the city, we would require the use of our laboratory. Below is a chart that reflects the costs based on the city's current permit. I have also included a second chart that shows the costs for the prison separately.

City of Anamosa	Price	Quantity	Total
BOD/CBOD	\$19.00	16	\$304.00
TSS	\$14.00	8	\$112.00
Ammonia	\$18.00	8	\$144.00
TKN	\$40.00	8	\$320.00
Nitrate+Nitrite	\$20.00	8	\$160.00
Total Phosphorous	\$20.00	8	\$160.00
Total Mercury	\$21.00	4	\$84.00
Oil and Grease	\$53.00	1	\$53.00
Monthly Total:			<b>\$1,337.00</b>

<b>Anamosa State Prison</b>	<b>Price</b>	<b>Quantity</b>	<b>Total</b>
BOD/CBOD	\$19.00	1	\$19.00
TSS	\$14.00	1	\$14.00
TKN	\$40.00	1	\$40.00
Oil and Grease	\$53.00	1	\$53.00
Cyanide	\$40.00	24	\$960.00
Cadmium	\$20.50	24	\$492.00
Copper	\$10.00	24	\$240.00
Lead	\$10.00	24	\$240.00
Silver	\$10.00	24	\$240.00
Nickel	\$10.00	8	\$80.00
Chromium	\$10.00	2	\$20.00
Zinc	\$10.00	2	\$20.00
*Total Toxic Organics	\$1,211.50	1	\$1,211.50
<b>Monthly Total:</b>			<b>\$3,629.50</b>

\*TTO is listed as a monthly sample on the permit, however, it is not required to be sampled monthly unless there is reason to believe that TTOs have been released into the wastewater system.



**HR GREEN, INC.**  
**PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 1**

THIS AMENDMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between, CITY OF ANAMOSA the CLIENT, and HR GREEN, INC. (hereafter "COMPANY"), for professional services concerning:

New Jordan Well No. 6

hereby amends the original Professional Services Agreement dated July 27, 2020 as follows:

The CLIENT and COMPANY agree to amend the Scope of Services of the original Professional Services Agreement and previous amendments as follows:

Subsequent to the authorization of the Preliminary Design contract, a final well site was selected at the City-owned Remley Woods Park. With this selected well site, the scope of the project is updated as follows:

- Addition of an above-grade wellhouse building approximately 20' x 30' in size to house electrical gear, communications, provisions for a mobile generator connection, metering/pressure control of the new well, and plumbing and HVAC for the building. The new wellhouse building is anticipated to consist of an interior CMU block wall, exterior brick to match the Water Treatment Plant building, and a pitched roof with metal shingles.
- Tree cutting, clearing, and regrading of an area for initial well drilling and construction activities.
- Tree and landscaping plan to replace portions of the area cleared for the new facilities.

HR Green will provide Final Design, Permitting, and Bidding-phase services for the project, including the additional items identified above, including the following:

Task 2000: DWSRF Loan and Permitting Coordination

1. Develop a Preliminary Engineering Report (PER) Amendment to submit to the Iowa DNR. The 2015 PER previously developed was submitted to DNR as part of the IUP application. DNR required an updated PER Amendment to confirm project overview, confirm capacity needs, and provide updated costs. The PER Amendment will include the Jordan Well Siting study completed for the City in 2018 as a basis for the project.

Task Phase 4000: Final Design Services

2. Develop and coordinate a scope for a geotechnical subsurface investigation at the wellhouse location. The geotechnical engineering firm will be direct-contracted with the CLIENT. The subsurface investigation will provide soil classification, identify bearing capacities, determine in-situ groundwater and soil condition information. The geotechnical results and recommendations will be used in the design of the wellhouse building foundation, grading and earthwork requirements, and overall construction methods related to subsurface stability.

3. Prepare construction drawings for the (2) construction bid packages, anticipated as 32 total sheets as follows:

**Bid Package 1: Well Drilling**

G.00	Cover Sheet, Vicinity Map
G.01	Sheet Index and Legend
G.02	Abbreviations
G.03	Site Map, Notes, and Control
C.01	Site Layout, Grading and Erosion Control Plan
C.02	Well Section and Details
C.03	Well Boring Log
C.04	Standard Details

**Bid Package 2: Well Equipment, Building, and Pipeline**

G.00	Cover Sheet, Vicinity Map
G.01	Sheet Index and Legend
G.02	Abbreviations
G.03	Site Maps, Notes, and Control
C.01	Site Plan
C.02	Raw Water Main Plan & Profile
C.03	Raw Water Main Plan & Profile
C.04	Raw Water Main Plan & Profile
C.05	Landscaping Plan and Schedules
C.06	Landscaping Details
C.07	Standard Details
C.08	Standard Details
A.01	Architectural Floor and Roof Plan
A.02	Building Elevations
A.03	Wall and Roof Details, Schedules
S.01	Foundation and Floor Plan and Details
S.02	Building Sections and Details
S.03	Standard Details
P.01	Process Plan, Sections, and Details
M.01	Plumbing and HVAC Plan, Schedules, and Details
E.01	Electrical Site Plan
E.02	Partial Site Plan
E.03	One-Line Diagram, Details, and Schedules
E.04	Power, Lighting, & Details

4. Prepare construction specifications and contract documents for the (2) bid packages. HR Green standard front-end and technical specifications are anticipated. COMPANY shall incorporate SRF Front-End documents in conjunction with the Iowa DNR Water Supply permitting process as part of the Iowa DWSRF program requirements.
5. Conduct one (1) project status meeting between CLIENT and COMPANY staff to review the completed work and documents, discuss the scope and schedule of remaining work, and received comments from CLIENT to be incorporated. Project status meetings will be conducted at the 90% completion milestone. Project status meetings will be used to discuss the (2) bid packages concurrently.

6. Perform internal QA/QC review of the drawings, specifications, and contract documents at the 90% completion milestone.
7. Prepare final drawings, specifications, contract documents, and opinion of probable construction cost. Contract documents will be signed by certified Engineers and Architects licensed in the State of Iowa. Submit up to five (5) copies of all final documents to CLIENT.
8. Prepare construction permit application documents to the Iowa DNR Water Supply Engineering Section and submit with two (2) copies of all final documents for approval of a construction permit. CLIENT will be responsible to pay for all construction permit application fees.
9. Develop a final project schedule for advertisement, bidding, and construction completion.

Task Phase 5000: Bidding Services

10. Advertise for bids for the construction of the project by mailing an informal Notice of Project to prospective bidders and suppliers. CLIENT shall publish the legal Notice of Hearing and Letting for the project in a local newspaper.
11. Distribute the bidding documents to prospective bidders and other interested parties. CLIENT will pay the direct cost of reproduction for the number of bidding documents requested as Contractors may not pay for bidding documents per Iowa law.
12. Maintain a record of parties to whom bidding documents have been issued.
13. Correspond with prospective bidders, suppliers, and other interested parties with questions and comments during the bid period.
14. Issue addenda as appropriate to interpret, clarify, or expand bidding documents.
15. Coordinate a prebid meeting with prospective Bidders. The prebid meeting will be held to discuss unique aspects of a project and allow the Contractors to get familiar with and ask questions about the project. A joint prebid meeting will be held for the (2) bid packages.
16. Attend the bid opening. Two separate bid lettings are anticipated.
17. Prepare bid tabulation sheets and distribute to Owner and all plan holders.
18. Assist Owner in evaluating bids and awarding a construction contract.
19. Prepare construction contract documents and submit to contractor for completion. Review and submit the executed contract documents to Owner for approval.



Deliverables and Schedule included in this Amendment

The following schedule was developed assuming a Notice to Proceed issued by CLIENT at its December 28, 2020 Council Meeting:

Notice to Proceed.....	December 29, 2020
Geotechnical Investigation.....	February 2021
Preliminary (90% Complete) Documents to CLIENT.....	April 2, 2021
Preliminary (90%) Review Meeting with CLIENT .....	Week of April 5, 2021
Final Documents to CLIENT and Permit Agencies.....	April 16, 2021
Anticipated SRF Environmental Review Completion.....	May 2021
Bid Advertising .....	May 2021
Bid Opening.....	June 2021
Award Project.....	July 2021

This schedule was prepared to include reasonable allowances for review and approval times required by the CLIENT and public authorities having jurisdiction over the project. This schedule shall be equitably adjusted as the project progresses, allowing for changes in the scope of the project requested by the CLIENT or for delays or other causes beyond the control of COMPANY.

COMPANY Project Number: 190261

The CLIENT and COMPANY agree to amend other provisions of the original Professional Services Agreement and previous amendments as follows:

None.

In consideration for these services, the CLIENT AGREES to adjust the payment for services performed by COMPANY on the following basis:

☐ Lump Sum to be increased by \_\_\_\_\_.

THIS AMENDMENT is subject to all provisions of the original Professional Services Agreement.

THIS AMENDMENT, together with the original Professional Services Agreement and all previous amendments represents the entire and integrated AGREEMENT between the CLIENT and COMPANY.

THIS AMENDMENT executed the day and year written above.

CITY OF ANAMOSA

HR GREEN, INC.

By: Rod Smith, Mayor

By: Andrew Marsh, Vice President

J:\2019\190261\Admin\Contract\Client\Amendment\amend-20201214-Anamosa\_Jordan\_Well\_Final\_Design\_&\_Bidding.docx

**MEETING MINUTES PLANNING & ZONING COMMISSION**

Thursday, January 14, 2021 – 1:00 p.m. – City Hall Council Chambers

Members present: Kari Dearborn, Joyce Duncan, Mike Shaffer, and Doug Edel. Members absent: Tim Hollett and Dave Phelps. Visitor present: Brooke Bohlken from Boomerrang. Staff present: City Administrator Beth Brincks and Deputy Clerk Ginger Thomas.

The meeting was called to order by Chairperson Edel at 1:00 p.m. Roll Call was taken with a quorum present. Motion by Dearborn to approve the minutes of 12/01/2020 meeting, seconded by Duncan. All ayes. Motion carried.

Edel opened for discussion the review of the Buffalo Commercial Park. Bohlken shared there are buildings onsite and there has been interest shown in purchasing them, hence the platting of individual lots. Motion by Dearborn, seconded by Shaffer to recommend waiving the platting requirements to City Council. All aye. Motion carried.

Motion by Shaffer, seconded by Duncan to adjourn at 1:14 PM. All aye, carried.

---

Doug Edel, Vice Chairperson

---

Ginger Thomas, Zoning Secretary



Date of Sale: Monday, February 8, 2021 (*Alternate Bid Methods*)  
Between 10:30 and 11:00 A.M., C.S.T. (*Closed SpeerAuction*)  
Before 11:00 A.M., C.S.T. (*Sealed Bids*)

### Official Statement

*In the opinion of Dorsey & Whitney LLP, Bond Counsel, according to present laws, rulings and decisions and assuming compliance with certain covenants, the interest on the Bonds will be excluded from gross income for federal income tax purposes. Interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax under the Internal Revenue Code of 1986 (the "Code"). In the opinion of Bond Counsel, the Bonds are "qualified tax-exempt obligations" within the meaning of Section 265(b)(3) of the Code. See "TAX EXEMPTION AND RELATED TAX MATTERS" herein.*

**\$1,750,000\***

**CITY OF ANAMOSA**

**Jones County, Iowa**

**General Obligation Corporate Purpose Bonds, Series 2021**

**Dated Date of Delivery                      Book-Entry                      Bank Qualified                      Due Serially June 1, 2022 - 2033**

The \$1,750,000\* General Obligation Corporate Purpose Bonds, Series 2021 (the "Bonds") are being issued by the City of Anamosa, Jones County, Iowa (the "City"). Interest is payable semiannually on June 1 and December 1 of each year, commencing December 1, 2021. Interest is calculated based on a 360-day year of twelve 30-day months. The Bonds will be issued using a book-entry system. The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Bonds. The ownership of one fully registered Bond for each maturity will be registered in the name of Cede & Co., as nominee for DTC and no physical delivery of Bonds will be made to purchasers. The Bonds will mature on June 1 in the following years and amounts.

### AMOUNTS\*, MATURITIES, INTEREST RATES, PRICES OR YIELDS AND CUSIP NUMBERS

Principal Amount*	Due June 1	Interest Rate	Price or Yield	CUSIP Number(1)	Principal Amount*	Due June 1	Interest Rate	Price or Yield	CUSIP Number(1)
\$120,000 .....	2022	_____ %	_____ %	_____	\$150,000 .....	2028	_____ %	_____ %	_____
135,000 .....	2023	_____ %	_____ %	_____	150,000 .....	2029	_____ %	_____ %	_____
135,000 .....	2024	_____ %	_____ %	_____	155,000 .....	2030	_____ %	_____ %	_____
140,000 .....	2025	_____ %	_____ %	_____	155,000 .....	2031	_____ %	_____ %	_____
140,000 .....	2026	_____ %	_____ %	_____	160,000 .....	2032	_____ %	_____ %	_____
145,000 .....	2027	_____ %	_____ %	_____	165,000 .....	2033	_____ %	_____ %	_____

*Any consecutive maturities may be aggregated into term bonds at the option of the bidder, in which case the mandatory redemption provisions shall be on the same schedule as above.*

### OPTIONAL REDEMPTION

Bonds due June 1, 2022 - 2028, inclusive, are not subject to optional redemption. Bonds due June 1, 2029 - 2033, inclusive, are callable in whole or in part on any date on or after June 1, 2028, at a price of par and accrued interest. If less than all the Bonds are called, they shall be redeemed in such principal amounts and from such maturities as determined by the City and within any maturity by lot. See "OPTIONAL REDEMPTION" herein.

### PURPOSE, LEGALITY AND SECURITY

The proceeds of the Bonds are expected to be used to: (i) pay the costs of funding economic development grants for downtown property improvements; (ii) pay the costs of constructing, furnishing and equipping municipal police facilities; (iii) pay the costs of constructing, furnishing and equipping municipal fire protection facilities; (iv) pay the costs of planning, designing and constructing street and highway improvements; and (v) pay the costs of issuing the Bonds.

In the opinion of Dorsey & Whitney LLP, Des Moines, Iowa, the Bonds are valid and binding general obligations of the City, and all taxable property within the boundaries of the City is subject to the levy of taxes to pay the principal of and interest on the Bonds without constitutional or statutory limitation as to rate or amount. The City will furnish the written approving opinion of Bond Counsel, Dorsey & Whitney LLP, Des Moines, Iowa, evidencing legality of the Bonds and that the interest thereon is exempt from federal income taxes as and to the extent discussed under the heading "TAX EXEMPTION AND RELATED TAX MATTERS" herein.

The City intends to designate the Bonds as "qualified tax-exempt obligations" pursuant to the small issuer exception provided by Section 265(b)(3) of the Internal Revenue Code of 1986.

This Official Statement is dated January \_\_, 2021, and has been prepared under the authority of the City. An electronic copy of this Official Statement is available from the [www.speerfinancial.com](http://www.speerfinancial.com) web site under "Official Statement Sales Calendar". Additional copies may be obtained from Beth Brincks, City Administrator/City Clerk, City of Anamosa, 107 S. Ford Street, Anamosa, Iowa, 52205, or from the Registered Municipal Advisors to the City.

 **Speer Financial, Inc.**  
INDEPENDENT MUNICIPAL ADVISORS • ESTABLISHED 1954  
230 WEST MONROE STREET, SUITE 2630 • CHICAGO, ILLINOIS 60606  
Telephone: (312) 346-3700 • Facsimile: (312) 346-8833  
531 COMMERCIAL STREET, SUITE 608 • WATERLOO, IOWA 50701  
Telephone: (319) 291-2077 • Facsimile: (319) 291-8628

\*Subject to principal adjustment in accordance with the Official Terms of Offering.

(1) CUSIP numbers appearing in this Official Statement have been provided by the CUSIP Service Bureau, which is managed on behalf of the American Bankers Association by S&P Capital IQ, a part of McGraw Hill Financial Inc. The City is not responsible for the selection of CUSIP numbers and makes no representation as to their correctness on the Bonds or as set forth on the cover of this Official Statement.

For purposes of compliance with Rule 15c2-12 of the Securities and Exchange Commission, this document, as the same may be supplemented or corrected by the City from time to time (collectively, the “Official Statement”), may be treated as an Official Statement with respect to the Bonds described herein that is deemed near final as of the date hereof (or the date of any such supplement or correction) by the City.

The Official Statement, when further supplemented by an addendum or addenda specifying the maturity dates, principal amounts and interest rates of the Bonds, together with any other information required by law or deemed appropriate by the City, shall constitute a “Final Official Statement” of the City with respect to the Bonds, as that term is defined in Rule 15c2-12. Any such addendum or addenda shall, on and after the date thereof, be fully incorporated herein and made a part hereof by reference. Alternatively, such final terms of the Bonds and other information may be included in a separate document entitled “Final Official Statement” rather than through supplementing the Official Statement by an addendum or addenda.

No dealer, broker, salesman or other person has been authorized by the City to give any information or to make any representations with respect to the Bonds other than as contained in the Official Statement or the Final Official Statement and, if given or made, such other information or representations must not be relied upon as having been authorized by the City. Certain information contained in the Official Statement and the Final Official Statement may have been obtained from sources other than records of the City and, while believed to be reliable, is not guaranteed as to completeness. THE INFORMATION AND EXPRESSIONS OF OPINION IN THE OFFICIAL STATEMENT AND THE FINAL OFFICIAL STATEMENT ARE SUBJECT TO CHANGE, AND NEITHER THE DELIVERY OF THE OFFICIAL STATEMENT OR THE FINAL OFFICIAL STATEMENT NOR ANY SALE MADE UNDER EITHER SUCH DOCUMENT SHALL CREATE ANY IMPLICATION THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF THE CITY SINCE THE RESPECTIVE DATES THEREOF.

References herein to laws, rules, regulations, ordinances, resolutions, agreements, reports and other documents do not purport to be comprehensive or definitive. All references to such documents are qualified in their entirety by reference to the particular document, the full text of which may contain qualifications of and exceptions to statements made herein. Where full texts have not been included as appendices to the Official Statement or the Final Official Statement, they will be furnished on request. This Official Statement does not constitute an offer to sell, or solicitation of an offer to buy, any securities to any person in any jurisdiction where such offer or solicitation of such offer would be unlawful.

## TABLE OF CONTENTS

	<u>Page</u>
BOND ISSUE SUMMARY.....	1
SECURITY AND SOURCE OF PAYMENT .....	2
BONDHOLDERS' RISKS .....	3
COVID-19.....	3
Changes in Property Taxation.....	3
Matters Relating to Enforceability of Agreements .....	3
Secondary Market.....	4
Forward-Looking Statements.....	4
Tax Matters, Bank Qualification and Loss of Tax Exemption .....	4
DTC-Beneficial Owners .....	5
Continuing Disclosure .....	5
Cybersecurity .....	6
Suitability of Investment.....	6
Bankruptcy and Insolvency.....	6
Legislation.....	7
Tax Levy Procedures .....	7
Federal Funds Orders and State Funds Legislation.....	7
Other Factors.....	7
THE CITY .....	8
City Organization and Services.....	8
Community Life.....	8
Education .....	8
Transportation.....	8
SOCIOECONOMIC INFORMATION .....	9
Population .....	9
Employment.....	9
Building Permits .....	11
Housing.....	11
Income.....	12
Agriculture .....	12
Local Option Sales Tax.....	13
Retail Sales.....	14
THE PROJECT .....	14
DEFAULT RECORD .....	14
SHORT-TERM BORROWING .....	14
DEBT INFORMATION .....	15
Debt Limitation.....	15
PROPERTY ASSESSMENT AND TAX INFORMATION .....	16
Property Tax Assessment.....	16
Property Tax Collection.....	17
Levy Limits.....	19
Tax Levy Procedures .....	19
Utility Property Tax Replacement .....	20
Tax Increment Financing .....	20
Legislation.....	20
FINANCIAL INFORMATION .....	22
Financial Reports .....	22
No Consent or Updated Information Requested of the Auditor.....	22
Summary Financial Information .....	22
EMPLOYEE RETIREMENT AND OTHER POST EMPLOYMENT BENEFIT OBLIGATIONS.....	24
Pension.....	24
Other Post-Employment Benefits (OPEB).....	25
REGISTRATION, TRANSFER AND EXCHANGE.....	26

TAX EXEMPTION AND RELATED TAX MATTERS.....	27
Federal Income Tax Exemption.....	27
Proposed Changes in Federal and State Tax Law.....	28
Qualified Tax-Exempt Obligations.....	28
Original Issue Premium .....	28
Original Issue Discount.....	28
Opinions.....	29
CONTINUING DISCLOSURE.....	29
OPTIONAL REDEMPTION.....	30
LITIGATION.....	30
LEGAL MATTERS.....	30
OFFICIAL STATEMENT AUTHORIZATION .....	31
UNDERWRITING .....	31
MUNICIPAL ADVISOR.....	31
CERTIFICATION .....	31

APPENDIX A -FISCAL YEAR 2019 AUDITED FINANCIAL STATEMENTS  
APPENDIX B -DESCRIBING BOOK-ENTRY-ONLY ISSUANCE  
APPENDIX C -DRAFT FORM OF BOND COUNSEL OPINION  
APPENDIX D -DRAFT FORM OF CONTINUING DISCLOSURE CERTIFICATE

OFFICIAL BID FORM  
OFFICIAL TERMS OF OFFERING  
Exhibit A – Example Issue Price Certificate

## BOND ISSUE SUMMARY

This Bond Issue Summary is expressly qualified by the entire Official Statement, including the Official Terms of Offering and the Official Bid Form, which are provided for the convenience of potential investors and should be reviewed in their entirety by potential investors.

<b>Issuer:</b>	City of Anamosa, Jones County, Iowa.
<b>Issue:</b>	\$1,750,000* General Obligation Corporate Purpose Bonds, Series 2021.
<b>Dated Date:</b>	Date of delivery (expected to be on or about March 9, 2021).
<b>Interest Due:</b>	Each June 1 and December 1, commencing December 1, 2021.
<b>Principal Due:</b>	Serially each June 1, commencing June 1, 2022 through 2033, as detailed on the cover page of this Official Statement.
<b>Optional Redemption:</b>	Bonds maturing on or after June 1, 2029, are callable at the option of the City on any date on or after June 1, 2028, at a price of par plus accrued interest. See <b>“OPTIONAL REDEMPTION”</b> herein.
<b>Authorization:</b>	The Bonds are being issued pursuant to authority established in Code of Iowa, 2019 as amended, Chapter 384 (the “Act”), and all laws amendatory thereof and supplementary thereto, and in conformity with a resolution (the “Resolution” or the “Bond Resolution”) of the City duly passed and approved.
<b>Security:</b>	The Bonds are valid and binding general obligations of the City, and all taxable property within the boundaries of the City is subject to the levy of taxes to pay the principal of and interest on the Bonds without constitutional or statutory limitation as to rate or amount.
<b>No Investment Rating:</b>	The City does not intend to apply for an investment rating on the Bonds.
<b>Purpose:</b>	The proceeds of the Bonds will be used to: (i) pay the costs of funding economic development grants for downtown property improvements; (ii) pay the costs of constructing, furnishing and equipping municipal police facilities; (iii) pay the costs of constructing, furnishing and equipping municipal fire protection facilities; (iv) pay the costs of planning, designing and constructing street and highway improvements; and (v) pay the costs of issuing the Bonds.
<b>Tax Exemption:</b>	Dorsey & Whitney LLP, Des Moines, Iowa, will provide an opinion as to the tax exemption of the Bonds as discussed under <b>“TAX EXEMPTION AND RELATED TAX MATTERS”</b> in this Official Statement.
<b>Bank Qualified:</b>	The City intends to designate the Bonds as “qualified tax-exempt obligations”.
<b>Bond Registrar/Paying Agent:</b>	UMB Bank, n.a., West Des Moines, Iowa (the “Registrar”).
<b>Delivery:</b>	The Bonds are expected to be delivered on or about March 9, 2021.
<b>Book-Entry Form:</b>	The Bonds will be registered in the name of Cede & Co. as nominee for The Depository Trust Company (“DTC”), New York, New York. DTC will act as securities depository of the Bonds. See <b>APPENDIX B</b> herein.
<b>Denomination:</b>	\$5,000 or integral multiples thereof.
<b>Municipal Advisor:</b>	Speer Financial, Inc., Waterloo, Iowa and Chicago, Illinois.

*\*Subject to change.*

**CITY OF ANAMOSA**  
**Jones County, Iowa**

Rod Smith  
*Mayor*

**Council Members**

Galen Capron

Rich Crump

John Machart

Kay Smith

Jeff Stout

Alan Zumbach

---

**Officials**

Beth Brincks  
*City Administrator/Clerk*

Ginger Thomas  
*Deputy City Clerk*

Adrian Knuth, Esq.  
*City Attorney*

---

**SECURITY AND SOURCE OF PAYMENT**

Pursuant to the Resolution and the Act, the Bonds and the interest thereon are general obligations of the City, and all taxable property within the corporate boundaries of the City is subject to the levy of taxes to pay the principal of and interest on the Bonds without constitutional or statutory limitation as to rate or amount.

Section 76.2 of the Act provides that when an Iowa political subdivision issues general obligation bonds, the governing authority of such political subdivision shall, by resolution adopted before issuing the bonds, provide for the assessment of an annual levy upon all the taxable property in the political subdivision sufficient to pay the interest and principal of the bonds. A certified copy of this resolution shall be filed with the County Auditor in which the City is located, giving rise to a duty of the County Auditor to annually enter this levy for collection from the taxable property within the boundaries of the City, until funds are realized to pay the bonds in full.

For the purpose of providing for the levy and collection of a direct annual tax sufficient to pay the principal of and interest on the Bonds as the same become due, the Resolution provides for the levy of a tax sufficient for that purpose on all the taxable property in the City in each of the years while the Bonds are outstanding. The City shall file a certified copy of the Resolution with the County Auditor, pursuant to which the County Auditor is instructed to enter for collection and assess the tax authorized. When annually entering such taxes for collection, the County Auditor shall include the same as a part of the tax levy for Debt Service Fund purposes of the City and when collected, the proceeds of the taxes shall be converted into the Debt Service Fund of the City and set aside therein as a special account to be used solely and only for the payment of the principal of and interest on the Bonds and for no other purpose whatsoever.

Pursuant to the provisions of Section 76.4 of the Code of Iowa, each year while the Bonds remain outstanding and unpaid, any funds of the City which may lawfully be applied for such purpose, may be appropriated, budgeted and, if received, used for the payment of the principal of and interest on the Bonds as the same become due, and if so appropriated, the taxes for any given fiscal year as provided for in the Resolution, shall be reduced by the amount of such alternate funds as have been appropriated for said purpose and evidenced in the City's budget.

## **BONDHOLDERS' RISKS**

An investment in the Bonds involves an element of risk. In order to identify risk factors and make an informed investment decision, potential investors should be thoroughly familiar with this entire Official Statement (including the appendices hereto) in order to make a judgement as to whether the Bonds are an appropriate investment.

### **COVID-19**

The City is monitoring developments and directives of federal, state and local officials to determine what precautions and procedures the City may need to implement or revise in light of the spread of COVID-19. Some procedures and precautions resulting from the spread of COVID-19 with respect to operations, personnel and services may be mandated by federal and/or state entities. Because of the unprecedented nature of COVID-19, the behavior of businesses and people is being altered in a manner that cannot fully be determined or predicted but has had negative effects on economic activity, and therefore could adversely affect the financial condition of the City, either directly or indirectly. The continued spread of COVID-19 in the future may: (i) limit the ability of the City to conduct its operations in an historically normal manner, (ii) increase the cost of operations of the City, (iii) impact the ability of the City to provide personnel to carry out the services routinely provided by the City, (iv) impact certain revenues received by the City, as further described below, (v) affect the secondary market with respect to the Bonds, and (vi) affect liquidity sources of the City.

The City is monitoring both expenses and revenues of the City that might be impacted by COVID-19, including the road use tax fund receipts (statewide gas tax) and local option sales tax receipts. The City does not currently expect to amend its fiscal year 2021 budget due to material COVID-19-related financial impacts, however, it is too soon to fully predict the extent and duration any COVID-19-related financial impacts may have on the City. The City received approximately \$131,600 in financial support from federal or state COVID-19 related expenses.

This information is based on current information available to the City that may be incomplete and unknown. This information is forward-looking and subject to change.

### **Changes in Property Taxation**

From time to time the Iowa General Assembly has altered the method of property taxation and could do so again. Any alteration in property taxation structure could affect property tax revenues available to pay the Bonds.

Historically, the Iowa General Assembly has applied changes in property taxation structure on a prospective basis; however, there is no assurance that future changes in property taxation structure by the Iowa General Assembly will not be retroactive. It is impossible to predict the outcome of future property tax changes by the Iowa General Assembly or their potential impact on the Bonds and the security for the Bonds.

### **Matters Relating to Enforceability of Agreements**

Bondholders shall have and possess all the rights of action and remedies afforded by the common law, the Constitution and statutes of the State of Iowa and of the United States of America for the enforcement of payment of the Bonds, including, but not limited to, the right to a proceeding in law or in equity by suit, action or mandamus to enforce and compel performance of the duties required by Iowa law and the Resolution.

The practical realization of any rights upon any default will depend upon the exercise of various remedies specified in the Resolution or the Loan Agreement. The remedies available to the Bondholders upon an event of default under the Resolution or the Loan Agreement, in certain respects, may require judicial action, which is often subject to discretion and delay. Under existing law, including specifically the federal bankruptcy code, certain of the remedies specified in the Loan Agreement or the Resolution may not be readily available or may be limited. A court may decide not to order the specific performance of the covenants contained in these documents. The legal opinions to be delivered concurrently with the delivery of the Bonds will be qualified as to the enforceability of the various legal instruments by limitations imposed by general principles of equity and public policy and by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors generally.

No representation is made, and no assurance is given, that the enforcement of any remedies will result in sufficient funds to pay all amounts due under the Resolution or the Loan Agreement, including principal of and interest on the Bonds.

## **Secondary Market**

There can be no guarantee that there will be a secondary market for the Bonds or, if a secondary market exists, that such Bonds can be sold for any particular price. Occasionally, because of general market conditions or because of adverse history of economic prospects connected with a particular issue, secondary marketing practices in connection with a particular bond or note issue are suspended or terminated. Additionally, prices of bond or note issues for which a market is being made will depend upon then prevailing circumstances. Such prices could be substantially different from the original purchase price of the Bonds.

EACH PROSPECTIVE PURCHASER IS RESPONSIBLE FOR ASSESSING THE MERITS AND RISKS OF AN INVESTMENT IN THE BONDS AND MUST BE ABLE TO BEAR THE ECONOMIC RISK OF SUCH INVESTMENT. THE SECONDARY MARKET FOR THE BONDS, IF ANY, COULD BE LIMITED.

## **Forward-Looking Statements**

This Official Statement contains statements relating to future results that are “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. When used in this Official Statement, the words “estimate,” “forecast,” “intend,” “expect” and similar expressions identify forward-looking statements. Any forward-looking statement is subject to uncertainty. Accordingly, such statements are subject to risks that could cause actual results to differ, possibly materially, from those contemplated in such forward-looking statements. Inevitably, some assumptions used to develop forward-looking statements will not be realized or unanticipated events and circumstances may occur. Therefore, investors should be aware that there are likely to be differences between forward-looking statements and the actual results. These differences could be material and could impact the availability of funds of the City to pay debt service when due on the Bonds.

## **Tax Matters, Bank Qualification and Loss of Tax Exemption**

As discussed under the heading “**TAX EXEMPTION AND RELATED TAX MATTERS**” herein, the interest on the Bonds could become includable in gross income for purposes of federal income taxation retroactive to the date of delivery of the Bonds, as a result of acts or omissions of the City in violation of its covenants in the Resolution. Should such an event of taxability occur, the Bonds would not be subject to a special prepayment and would remain outstanding until maturity or until prepaid under the prepayment provisions contained in the Bonds, and there is no provision for an adjustment of the interest rate on the Bonds.

The City intends to designate the Bonds as “qualified tax-exempt obligations” under the exception provided in Section 265(b)(3) of the Internal Revenue Code of 1986, as amended (the “Code”). The City has further covenanted to comply with certain other requirements, which affords banks and certain other financial institutions more favorable treatment of their deduction for interest expense than would otherwise be allowed under Section 265(b)(2) of the Code. Actions, or inactions, by the City in violation of its covenants could affect the designation, which could also affect the pricing and marketability of the Bonds.

It is possible that legislation will be proposed or introduced that could result in changes in the way that tax exemption is calculated, or whether interest on certain securities are exempt from taxation at all. Prospective purchasers should consult with their own tax advisors regarding any pending or proposed federal income tax legislation. The likelihood of any pending or future legislation being enacted or whether the currently proposed terms of any pending legislation will be altered or removed during the legislative process cannot be reliably predicted.

It is also possible that actions of the City after the closing of the Bonds will alter the tax status of the Bonds, and, in the extreme, remove the tax exempt status from the Bonds. In that instance, the Bonds are not subject to mandatory prepayment, and the interest rate on the Bonds does not increase or otherwise reset. A determination of taxability on the Bonds, after closing of the Bonds, could materially adversely affect the value and marketability of the Bonds.

### **DTC-Beneficial Owners**

Beneficial Owners of the Bonds may experience some delay in the receipt of distributions of principal of and interest on the Bonds since such distributions will be forwarded by the Paying Agent to DTC and DTC will credit such distributions to the accounts of the Participants which will thereafter credit them to the accounts of the Beneficial Owner either directly or indirectly through indirect Participants. Neither the City nor the Paying Agent will have any responsibility or obligation to assure that any such notice or payment is forwarded by DTC to any Participants or by any Participant to any Beneficial Owner.

In addition, since transactions in the Bonds can be effected only through DTC Participants, indirect participants and certain banks, the ability of a Beneficial Owner to pledge the Bonds to persons or entities that do not participate in the DTC system, or otherwise to take actions in respect of such Bonds, may be limited due to lack of a physical certificate. Beneficial Owners will be permitted to exercise the rights of registered Owners only indirectly through DTC and the Participants. See **APPENDIX B – Describing Book-Entry Only Issuance.**

### **Continuing Disclosure**

A failure by the City to comply with continuing disclosure obligations (see **“CONTINUING DISCLOSURE”** herein) will not constitute an event of default on the Bonds. Any such failure must be disclosed in accordance with Rule 15c2-12 (the “Rule”) adopted by the Securities and Exchange Commission (the “Commission”) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and may adversely affect the transferability and liquidity of the Bonds and their market price.

The City will covenant in a Continuing Disclosure Certificate for the benefit of the Owners and Beneficial Owners of the Bonds to provide annually certain financial information and operating data relating to the City (the “Annual Report”), and to provide notices of the occurrence of certain enumerated events. The Annual Report is to be filed by the City no later than June 30, commencing with the fiscal year ending June 30, 2020, with the Municipal Securities Rulemaking Board, at its internet repository named “Electronic Municipal Market Access” (“EMMA”). The notices of events, if any, are also to be filed with EMMA. See **“APPENDIX D – FORM OF CONTINUING DISCLOSURE CERTIFICATE.”** The specific nature of the information to be contained in the Annual Report or the notices of events, and the manner in which such materials are to be filed, are summarized in **“APPENDIX D – FORM OF CONTINUING DISCLOSURE CERTIFICATE.”** These covenants have been made in order to assist the Underwriter in complying with SEC Rule 15c2-12(b)(5) (the “Rule”).

## **Cybersecurity**

The City, like many other public and private entities, relies on a large and complex technology environment to conduct its operations. As such, it may face multiple cybersecurity threats including but not limited to, hacking, viruses, malware and other attacks on computer or other sensitive digital systems and networks. There can be no assurances that any security and operational control measures implemented by the City will be completely successful to guard against and prevent cyber threats and attacks. Failure to properly maintain functionality, control, security, and integrity of the City's information systems could impact business operations and/or digital networks and systems and the costs of remedying any such damage could be significant. Along with significant liability claims or regulatory penalties, any security breach could have a material adverse impact on the City's operations and financial condition. The City has a \$50,000 Cyber-Liability Policy. The City cannot predict whether this policy will be sufficient in the event of a cyberattack. However, the Bonds are secured by an unlimited ad valorem property tax as described herein.

## **Suitability of Investment**

The interest rate borne by the Bonds is intended to compensate the investor for assuming the risk of investing in the Bonds. Each prospective investor should carefully examine this Official Statement and its own financial condition to make a judgment as to its ability to bear the economic risk of such an investment, and whether or not the Bonds are an appropriate investment for such investor.

## **Bankruptcy and Insolvency**

The rights and remedies provided in the Resolution may be limited by and are subject to the provisions of federal bankruptcy laws, to other laws or equitable principles that may affect the enforcement of creditor's rights, to the exercise of judicial discretion in appropriate cases and to limitations on legal remedies against municipal corporations in the State of Iowa. The various opinions of counsel to be delivered with respect to the Bonds, the Loan Agreement and the Resolution, including the opinion of Bond Counsel, will be similarly qualified. If the City were to file a petition under chapter nine of the federal bankruptcy code, the owners of the Bonds could be prohibited from taking any steps to enforce their rights under the Resolution. In the event the City fails to comply with its covenants under the Resolution or fails to make payments on the Bonds, there can be no assurance of the availability of remedies adequate to protect the interests of the holders of the Bonds.

Under sections 76.16 and 76.16A of the Act, a city, county, or other political subdivision may become a debtor under chapter nine of the federal bankruptcy code, if it is rendered insolvent, as defined in 11 U.S.C. §101(32)(c), as a result of a debt involuntarily incurred. As used therein, "debt" means an obligation to pay money, other than pursuant to a valid and binding collective bargaining agreement or previously authorized bond issue, as to which the governing body of the city, county, or other political subdivision has made a specific finding set forth in a duly adopted resolution of each of the following: (1) that all or a portion of such obligation will not be paid from available insurance proceeds and must be paid from an increase in general tax levy; (2) that such increase in the general tax levy will result in a severe, adverse impact on the ability of the city, county, or political subdivision to exercise the powers granted to it under applicable law, including without limitation providing necessary services and promoting economic development; (3) that as a result of such obligation, the city, county, or other political subdivision is unable to pay its debts as they become due; and (4) that the debt is not an obligation to pay money to a city, county, entity organized pursuant to chapter 28E of the Code of Iowa, or other political subdivision.

## Legislation

From time to time, there are proposals pending in Congress and in the Iowa Legislature that could, if enacted, alter or amend one or more of the matters described herein in certain respects or would adversely affect the market value of the Bonds, or otherwise prevent holders of the Bonds from realizing the full benefit of the tax exemption of interest on the Bonds. Further such proposals may impact the marketability or market value of the Bonds simply by being proposed. It cannot be predicted whether or in what forms any of such proposals, either pending or that may be introduced, may be enacted and there can be no assurance that such proposals will not apply to the Bonds. In addition regulatory actions are from time to time announced or proposed, and litigation threatened or commenced, which if implemented or concluded in a particular manner, could adversely affect the market value, marketability or tax status of the Bonds. It cannot be predicted whether any such regulatory action will be implemented, how any particular litigation or judicial action will be resolved, or whether the Bonds would be impacted thereby.

During the 2019 legislative session, the Iowa General Assembly passed Senate File 634 which was later signed into law by the Governor. This bill modifies the process for hearing and approval of the total maximum property tax dollars under certain levies in the City budget, including levies for the General Fund, the Emergency Fund, Trust and Agency Funds for pensions, insurance, transit, civic centers, certain bridges, sanitary disposal, and emergency management. The bill also includes a provision that requires the affirmative vote of 2/3 of the City Council when the maximum property tax dollars under these levies exceed an amount determined under a prescribed formula. The bill does not change the process for hearing and approval of the Debt Service Levy pledged for repayment of the Bonds. It is too early to evaluate the effect this legislation will have on the overall financial position of the City or its ability to fund essential services.

## Tax Levy Procedures

The Bonds are general obligations of the City, payable from and secured by a continuing ad valorem tax levied against all of the taxable property valuation within the City. See **“PROPERTY ASSESSMENT AND TAX INFORMATION”** herein for more details. As part of the budgetary process each fiscal year, the City will have an obligation to request a debt service levy to be applied against all of the taxable property within the City. A failure on the part of the City to make a timely levy request or a levy request by the City that is inaccurate or is insufficient to make full payments of the debt service of the Bonds for a particular fiscal year may cause Bondholders to experience delay in the receipt of distributions of principal of and/or interest on the Bonds. In the event of a default in the payment of principal of or interest on the Bonds, there is no provision for acceleration of maturity of the principal of the Bonds. Consequently, the remedies of the owners of the Bonds (consisting primarily of an action in the nature of mandamus requiring the City and certain other public officials to perform the terms of the Resolution for the Bonds) may have to be enforced from year to year.

## Federal Funds Orders and State Funds Legislation

Various federal executive orders, and Iowa Code Chapter 825 (collectively “ICE Enforcement Initiatives”), impose requirements intended to ensure compliance with the federal immigration detention processes. The ICE Enforcement Initiatives impose various penalties for non-compliance, including the loss of state and/or federal funding under certain circumstances. The loss of state and/or federal funds in any significant amount could negatively impact the City’s overall financial position and may affect its rating.

## Other Factors

An investment in the Bonds involves an element of risk. The foregoing is intended only as a summary of certain risk factors attendant to an investment in the Bonds. In order for potential investors to identify risk factors and make an informed investment decision, potential investors should become thoroughly familiar with this entire Official Statement and the Appendices hereto.

## **THE CITY**

The City is situated on the Wapsipinicon River in east central Iowa. The City was incorporated in 1872 and operates under the City Home Rule provisions of the Constitution of Iowa. The City is approximately 2.53 square miles with a 2010 Census population of 5,533. The City is the county seat of Jones County (the “County”).

### **City Organization and Services**

The City operates under a Mayor-Council form of government. The Mayor and Council Members are elected on a non-partisan basis. The City provides numerous services to citizens including, public safety, public works, culture and recreation, community and economic development, and general government services. It also operates and provides water, sewer utilities for its citizens.

The City has 27 people employed on a full-time basis. In addition, there are 45 part-time and seasonal employees. The City is served by a volunteer Fire Department. Approximately 31 volunteers operate out of a centrally located fire station.

### **Community Life**

The City’s parks, totaling nearly five acres, offer various recreational activities. The Wapsipinicon River state park and five community parks provide walking, skating and biking, fishing, camping and picnic areas. The Grant Wood Art Festival and Pumpkinfest are annual attractions. Residents enjoy the Anamosa aquatic center, and two golf courses. Other recreational and leisure opportunities are located within 30 minutes of the City. Cultural facilities in the area include numerous museums and theaters, along with the Cedar Rapids Symphony Orchestra. The University of Iowa Hawkeyes in Iowa City, offers spectator sports opportunities in the Big Ten college conference. Riverboat and casino gambling is offered in such cities as Dubuque, Clinton, Waterloo, Riverside and the Quad Cities, all within a 75 mile radius of the City.

### **Education**

The residents of the City are served by the Anamosa Community School District (the “District”) with an enrollment of approximately 1,300. The District serves a 134 square mile area in the County and eastern Linn County. The District maintains three schools: an elementary school, grades pre-kindergarten through five; a middle school, grades six through eight; and a high school, grades nine through twelve.

Post-secondary educational opportunities are readily available. Kirkwood Community College, Hamilton College, Mount Mercy College and Coe College are located within Cedar Rapids, only 20 minutes from the City. The University of Iowa is located in Iowa City, which is 45 miles south of the City.

### **Transportation**

The City is located in east central Iowa approximately 22 miles east of the Cedar Rapids metropolitan area. State Highway No. 151 connects the City to Interstate 380 which is part of the “Avenue of the Saints” a direct connection through the heartland from St. Louis to St. Paul. Via the Interstate system the City is approximately: 2 ½ hours from Des Moines; 4 hours from Chicago; and 4 1/2 hours from Minneapolis or Omaha. The City is located within 40 miles of the Eastern Iowa Airport. The airport is served by a number of national and regional air carriers.

## SOCIOECONOMIC INFORMATION

The following demographic information is for the City. Additional comparisons are made with the County and the State of Iowa (the "State").

### Population

The following table reflects population trends for the City, the County and the State.

#### Population Comparison(1)

<u>Year</u>	<u>The City</u>	<u>Percent Change</u>	<u>The County</u>	<u>Percent Change</u>	<u>The State</u>	<u>Percent Change</u>
1970 .....	4,389	n/a	19,868	n/a	2,824,376	n/a
1980 .....	4,958	12.96%	20,401	2.68%	2,913,808	3.17%
1990 .....	5,100	2.86%	19,444	(4.69%)	2,776,755	(4.70%)
2000 .....	5,494	7.73%	20,221	4.00%	2,926,324	5.39%
2010 .....	5,533	0.71%	20,638	(2.06%)	3,046,355	4.10%

Note: (1) Source: U.S. Bureau of the Census.

### Employment

Following are lists of large employers located in the City and in the surrounding area.

#### Major City Employers(1)

<u>Name</u>	<u>Product/Service</u>	<u>Approximate Employment(2)</u>
Iowa State Men's Reformatory.....	Prison .....	500
Jones Regional Medical Center.....	Healthcare .....	300
Walmart.....	Retail Store.....	200
Boomerang Corporation .....	Excavation.....	200
Anamosa Community School District.....	Public Education.....	200
Fareway Stores.....	Grocer .....	150
City of Anamosa .....	Municipality.....	70
Iowa Prison Industries .....	Manufacturing.....	50
Affordable Plumbing & Heating.....	Plumbing Services.....	50
Weber Stone Co.....	Stone Cutting.....	40

Notes: (1) Source: Area Chamber of Commerce, selected telephone surveys and the 2020 Iowa Manufacturers Database.  
(2) May include part-time/seasonal employees.

#### Major Area Employers(1)

<u>Location</u>	<u>Name</u>	<u>Product/Service</u>	<u>Approximate Employment(2)</u>
Iowa City .....	University of Iowa.....	Higher Education .....	18,650
Iowa City .....	University of Iowa Hospitals & Clinics.....	Healthcare .....	8,700
Cedar Rapids/Coralville .....	Collins Aerospace .....	Electronic Equipment Design .....	8,700
Cedar Rapids .....	Transamerica .....	Insurance .....	4,000
Cedar Rapids .....	Unity Point Health .....	Healthcare .....	2,980
Cedar Rapids .....	Cedar Rapids CSD.....	Education .....	2,880
Amana.....	Whirlpool Corporation .....	Manufacturing .....	2,500
Cedar Rapids .....	Nordstrom Direct.....	Logistics/Distribution .....	2,150
Iowa City .....	Veterans Affairs Healthcare System.....	Healthcare .....	2,150
Cedar Rapids .....	Mercy Medical Center .....	Healthcare .....	2,140

Notes: (1) Source: Area Chamber of Commerce, selected telephone surveys and the 2020 Iowa Manufacturers Database.  
(2) May include part-time/seasonal employees.

The following tables show employment by industry and by occupation for the City, the County and the State as reported by the U.S. Census Bureau 2015 - 2019 American Community Survey 5-year estimated values.

### Employment By Industry(1)

Classification	The City		The County		The State	
	Number	Percent	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting, and mining.....	59	2.8%	605	6.1%	60,131	3.7%
Construction.....	96	4.5%	666	6.8%	103,928	6.4%
Manufacturing.....	395	18.5%	1,685	17.1%	240,510	14.9%
Wholesale trade .....	29	1.4%	357	3.6%	45,805	2.8%
Retail trade.....	330	15.5%	1,090	11.1%	186,537	11.6%
Transportation and warehousing, and utilities.....	78	3.7%	476	4.8%	78,935	4.9%
Information .....	112	5.3%	232	2.4%	25,498	1.6%
Finance and insurance, and real estate and rental and leasing.....	53	2.5%	629	6.4%	123,750	7.7%
Professional, scientific, and management, and administrative and waste management services .....	80	3.8%	693	7.0%	118,156	7.3%
Educational services, and health care and social assistance.....	428	20.1%	2,038	20.7%	393,873	24.4%
Arts, entertainment, and recreation, and accommodation and food services .....	251	11.8%	603	6.1%	119,270	7.4%
Other services, except public administration.....	142	6.7%	450	4.6%	68,012	4.2%
Public administration .....	78	3.7%	326	3.3%	49,497	3.1%
Total .....	2,131	100.0%	9,850	100.0%	1,613,902	100.0%

Note: (1) Source: U. S. Bureau of the Census, American Community Survey 5-Year Estimates from 2015 - 2019.

### Employment By Occupation(1)

Classification	The City		The County		The State	
	Number	Percent	Number	Percent	Number	Percent
Management, business, science, and arts occupations .....	551	25.9%	3,096	31.4%	585,013	36.2%
Service occupations .....	516	24.2%	1,607	16.3%	262,868	16.3%
Sales and office occupations .....	401	18.8%	2,003	20.3%	333,318	20.7%
Natural resources, construction, and maintenance occupations.....	151	7.1%	984	10.0%	153,908	9.5%
Production, transportation, and material moving occupations .....	512	24.0%	2,160	21.9%	278,795	17.3%
Total .....	2,131	100.0%	9,850	100.0%	1,613,902	100.0%

Note: (1) Source: U. S. Bureau of the Census, American Community Survey 5-Year Estimates from 2015 - 2019.

The annual average unemployment rates for the City are not available. Following shows the annual average unemployment rates for the County, the State and the United States.

### Annual Average Unemployment Rates(1)(2)

Calendar Year	The County	The State	United States
2011 .....	5.8%	5.5%	8.9%
2012 .....	5.3%	5.0%	8.1%
2013 .....	5.3%	4.7%	7.4%
2014 .....	4.9%	4.2%	6.2%
2015 .....	4.2%	3.8%	5.3%
2016 .....	4.3%	3.6%	4.9%
2017 .....	3.7%	3.1%	4.4%
2018 .....	3.1%	2.5%	3.9%
2019 .....	3.2%	2.7%	3.7%
2020(3)(4).....	3.1%	3.6%	6.7%

- Notes: (1) Source: Iowa Workforce Development and U.S. Bureau of Labor Statistics.  
(2) Not seasonally adjusted.  
(3) Preliminary rates for the month of November 2020.  
(4) The increase in unemployment rates may be attributable to the COVID-19 pandemic. See "BONDHOLDERS RISKS – COVID-19" herein.

## Building Permits

Building permits have averaged \$3,303,864 annually over the last five calendar years in the City, excluding the value of land.

### City Building Permits(1) (Excludes the Value of Land)

Calendar Year	Number of Permits	Total Value
2016.....	31	\$4,529,557
2017.....	53	2,282,914
2018.....	40	3,621,925
2019.....	49	2,514,278
2020.....	50	3,570,646
2021(2) .....	1	2,000

Notes: (1) Source: the City. Includes new construction and remodeling.  
 (2) Through January 15, 2021.

## Housing

The U.S. Census Bureau 5-year estimated values reported that the median value of the City's owner-occupied homes was \$103,400. This compares to \$138,400 for the County and \$147,800 for the State. The following table represents the five year average market value of specified owner-occupied units for the City, the County and the State at the time of the 2015 - 2019 American Community Survey.

### Home Values(1)

Value	The City		The County		The State	
	Number	Percent	Number	Percent	Number	Percent
Less than \$50,000 .....	322	22.0%	620	9.7%	79,312	8.8%
\$50,000 to \$99,999.....	389	26.6%	1,515	23.8%	187,081	20.8%
\$100,000 to \$149,999.....	382	26.1%	1,332	20.9%	191,070	21.2%
\$150,000 to \$199,999.....	237	16.2%	1,026	16.1%	156,091	17.4%
\$200,000 to \$299,999.....	106	7.2%	974	15.3%	164,192	18.3%
\$300,000 to \$499,999.....	29	2.0%	641	10.1%	92,482	10.3%
\$500,000 to \$999,999.....	0	0.0%	149	2.3%	23,930	2.7%
\$1,000,000 or more .....	0	0.0%	110	1.7%	5,065	0.5%
Total .....	1,465	100.0%	6,367	100.0%	899,223	100.0%

Note: (1) Source: U.S. Bureau of the Census, American Community Survey 5-year estimates 2015 - 2019.

### Mortgage Status(1)

Mortgage Status	The City		The County		The State	
	Number	Percent	Number	Percent	Number	Percent
Housing units with a mortgage.....	798	54.5%	3,426	53.8%	544,728	60.6%
Housing units without a mortgage.....	667	45.5%	2,941	46.2%	354,495	39.4%
Total .....	1,465	100.0%	6,367	100.0%	899,223	100.0%

Note: (1) Source: U.S. Bureau of the Census, American Community Survey 5-year estimates 2015 - 2019.

## Income

The U.S. Census Bureau 5-year estimated values reported that the City had a median family income of \$60,144. This compares to \$74,988 for the County and \$77,099 for the State. The following table represents the distribution of family incomes for the City, the County and the State at the time of the 2015 - 2019 American Community Survey.

### Family Income(1)

Income	The City		The County		The State	
	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000 .....	66	6.0%	135	2.5%	22,636	2.8%
\$10,000 to \$14,999 .....	8	0.7%	65	1.2%	14,901	1.9%
\$15,000 to \$24,999 .....	40	3.6%	215	4.0%	41,343	5.1%
\$25,000 to \$34,999 .....	130	11.9%	420	7.9%	54,569	6.8%
\$35,000 to \$49,999 .....	201	18.3%	748	14.0%	93,819	11.7%
\$50,000 to \$74,999 .....	217	19.8%	1,089	20.4%	160,975	20.1%
\$75,000 to \$99,999 .....	217	19.8%	1,091	20.4%	139,580	17.4%
\$100,000 to \$149,999 .....	180	16.4%	1,072	20.1%	164,129	20.4%
\$150,000 to \$199,999 .....	38	3.5%	205	3.8%	59,624	7.4%
\$200,000 or more .....	0	0.0%	303	5.7%	51,250	6.4%
Total .....	1,097	100.0%	5,343	100.0%	802,826	100.0%

Note: (1) Source: U.S. Bureau of the Census, American Community Survey 5-year estimates 2015 to 2019.

The U.S. Census Bureau 5-year estimated values reported that the City had a median household income of \$41,603. This compares to \$57,549 for the County and \$60,523 for the State. The following table represents the distribution of household incomes for the City, the County and the State at the time of the 2015 - 2019 American Community Survey.

### Household Income(1)

Income	The City		The County		The State	
	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000 .....	121	5.7%	280	3.4%	66,420	5.3%
\$10,000 to \$14,999 .....	119	5.6%	333	4.1%	52,441	4.1%
\$15,000 to \$24,999 .....	295	13.9%	700	8.6%	115,414	9.1%
\$25,000 to \$34,999 .....	294	13.9%	889	10.9%	119,165	9.4%
\$35,000 to \$49,999 .....	421	19.9%	1,304	16.0%	168,905	13.4%
\$50,000 to \$74,999 .....	360	17.0%	1,511	18.6%	243,004	19.2%
\$75,000 to \$99,999 .....	270	12.8%	1,349	16.6%	181,100	14.3%
\$100,000 to \$149,999 .....	199	9.4%	1,192	14.7%	194,116	15.3%
\$150,000 to \$199,999 .....	38	1.8%	233	2.9%	66,951	5.3%
\$200,000 or more .....	0	0.0%	339	4.2%	57,957	4.6%
Total .....	2,117	100.0%	8,130	100.0%	1,265,473	100.0%

Note: (1) Source: U.S. Bureau of the Census, American Community Survey 5-year estimates 2015 - 2019.

## Agriculture

Shown below is information on the agricultural value of the County and the statewide average.

### Average Value Per Acre(1)

	2016	2017	2018	2019	2020
Average Value Per Acre:					
The County .....	\$7,296	\$7,485	\$7,431	\$7,518	\$7,802
State of Iowa .....	7,183	7,326	7,264	7,432	7,559

Note: (1) Source: Cooperative Extension Service - Iowa State University.

## Local Option Sales Tax

The City approved a 1% local option sales and service tax (“Local Option Tax”) at a special referendum. The City’s Local Option Tax referendum question stated that proceeds of such tax would be designated 65% for downtown commercial and business district improvements or any other public improvements, facilities and equipment as selected by the Council and 35% for infrastructure needs of the City.

Once approved, a Local Option Tax can only be repealed through a public referendum at which a majority voting approve the repeal or tax rate change, or, in certain circumstances, upon adoption of a motion by the governing body of the incorporated city requesting the repeal. If a Local Option Tax is not imposed county-wide, then the question of repeal is voted upon only by voters in such areas of a county where the tax has been imposed. A Local Option Tax may not be repealed within one year of the effective date.

The State of Iowa Department of Revenue (the “Department”) administers collection and disbursement of all local option sales and services taxes in conjunction with administration of the State-wide sales, services and use tax presently assessed at 6%. The Department is required by statute to remit at least 95% of the estimated tax receipts to a county board of supervisors (for taxes imposed in unincorporated areas) and to each incorporated city. Such remittances are on a monthly basis. Once a year the Department reconciles its monthly estimated payments and makes an adjustment payment or debit at the November 10 payment date. Remittance of collections within a county are based upon the following statutory formula for county-wide collections:

- 75 percent: Based on a pro rata share of population (the most recent certified federal census) of those incorporated or unincorporated areas in a county which have approved a Local Option Tax.
- 25 percent: Based on a pro rata share of total property tax dollars levied during the three year period beginning July 1, 1982, through June 30, 1985, for those incorporated or unincorporated areas of a county which have approved a Local Option Tax.

Local Option Taxes are based on the same sales currently taxed by the state-wide 6% sales and services tax, with the present statutory exceptions of (i) certain sales of motor fuel or special fuel as defined in Chapter 452A, (ii) the sale of natural gas or electric energy in a city or county where the gross receipts are subject to a franchise fee or user fee during the period the franchise or user fee is imposed, (iii) the sales price from a pay television service consisting of a direct-to-home satellite service, or (iv) the sale of equipment by the State Department of Transportation.

The following table shows the trend of City Local Option tax receipts.

### Local Option Tax Receipts(1)

Fiscal Year Ending June 30	Local Option Sales Tax Receipts(2)	Percent Change +(-)
2012.....	\$393,586	n/a
2013.....	388,870	(1.20%)
2014.....	404,788	4.09%
2015.....	410,798	1.48%
2016.....	396,688	(3.43%)
2017.....	394,370	(0.58%)
2018.....	400,901	1.66%
2019.....	445,781	11.19%
2020.....	518,422	16.30%
2021.....	490,314(3)	(5.42%)

- Notes: (1) Source: Iowa Department of Revenue.  
(2) Includes a reconciliation payment in November attributable to the previous fiscal year.  
(3) Collections received or expected to be received, not including any allowance for the reconciliation payment.

## Retail Sales

The Department of Revenue of the State of Iowa provides retail sales figures based on sales tax reports for years ending June 30. The Department of Revenue figures provide recent data to confirm trends in retail sales activity in the City. The following amounts exclude the City's Local Option Tax.

### Retail Taxable Sales(1)

<u>Fiscal Year</u> <u>Ending June 30</u>	<u>Taxable</u> <u>Sales</u>	<u>Annual Percent</u> <u>Change + (-)</u>
2010.....	\$ 76,575,045	n/a
2011.....	64,359,112	(15.95%)
2012.....	68,968,287	7.16%
2013.....	70,348,639	2.00%
2014.....	72,066,059	2.44%
2015.....	75,004,705	4.08%
2016.....	74,946,617	(0.08%)
2017.....	75,586,494	0.85%
2018.....	91,680,951	21.29%
2019.....	103,101,514	12.46%
Growth from 2010 to 2019.....		34.64%

Note: (1) Source: the Iowa Department of Revenue.

## THE PROJECT

Bond proceeds will be used to: (i) pay the costs of funding economic development grants for downtown property improvements; (ii) pay the costs of constructing, furnishing and equipping municipal police facilities; (iii) pay the costs of constructing, furnishing and equipping municipal fire protection facilities; (iv) pay the costs of planning, designing and constructing street and highway improvements; and (v) pay the costs of issuing the Bonds.

## DEFAULT RECORD

The City has no record of default and has met its debt repayment obligations promptly.

## SHORT-TERM BORROWING

The City has not issued tax anticipation warrants or revenue anticipation notes during the last five years to meet its short-term current year cash flow requirements.

*The remainder of this page was left blank intentionally.*

## DEBT INFORMATION

After issuance of the Bonds, the City will have outstanding \$2,531,400\* principal amount of general obligation debt. In addition, the City has outstanding approximately \$832,000 and \$3,895,000 principal amount of water and sewer debt respectively.

### Debt Limitation

The constitutional general obligation debt limit of a political subdivision of the state of Iowa is equal to five percent (5%) of the actual value of taxable property within its borders. According to and based upon the January 1, 2019 property valuations, for taxes payable in September 2020 and March 2021 the general obligation debt limit of the City for the period which began July 1, 2020 and ends June 30, 2021 is:

2019 100% Actual Valuation of Property .....	\$257,612,335
Constitutional Debt Limit .....	\$ 12,880,617
Outstanding Bonds/Notes Applicable to Debt Limit:	
Total G.O. Debt Subject to Debt Limit.....	\$ 2,531,400*
Other Legal Indebtedness (TIF Rebates) .....	<u>12,847</u>
Total Applicable Debt .....	<u>\$ 2,544,247*</u>
Remaining Debt Capacity.....	\$ 10,336,370*

The City does not expect to issue any additional general obligation debt in calendar year 2021.

### Summary of Outstanding General Obligation Bonded Debt(1) (Principal Only)

Series 2011.....	\$ 140,000
Series 2012A .....	540,000
Series 2017.....	101,400
The Bonds(2) .....	<u>1,750,000</u>
Total(2) .....	\$2,531,400

Notes: (1) Source: the City.  
(2) Subject to change.

### General Obligation Debt(1) (Principal Only)

Fiscal Year Ending June 30	Series 2011	Series 2012A	Series 2017	Total Outstanding GO Debt	The Bonds(2)	Total General Obligation Debt(2)	Cumulative Retirement(2)	
							Amount	Percent
2021 .....	\$ 70,000	\$265,000	\$ 24,200	\$359,200	\$ 0	\$ 359,200	\$ 359,200	14.19%
2022 .....	70,000	275,000	25,000	370,000	120,000	490,000	849,200	33.55%
2023 .....	0	0	25,700	25,700	135,000	160,700	1,009,900	39.89%
2024 .....	0	0	26,500	26,500	135,000	161,500	1,171,400	46.27%
2025 .....	0	0	0	0	140,000	140,000	1,311,400	51.81%
2026 .....	0	0	0	0	140,000	140,000	1,451,400	57.34%
2027 .....	0	0	0	0	145,000	145,000	1,596,400	63.06%
2028 .....	0	0	0	0	150,000	150,000	1,745,400	68.99%
2029 .....	0	0	0	0	150,000	150,000	1,896,400	74.92%
2030 .....	0	0	0	0	155,000	155,000	2,051,400	81.04%
2031 .....	0	0	0	0	155,000	155,000	2,206,400	87.16%
2032 .....	0	0	0	0	160,000	160,000	2,366,400	93.48%
2033 .....	0	0	0	0	165,000	165,000	2,531,400	100.00%
Total .....	\$140,000	\$540,000	\$101,400	\$781,400	\$1,750,000	\$2,531,400		

Notes: (1) Source: the City. For term bonds, mandatory redemption amounts are shown.  
(2) Subject to change.

\*Subject to change.

### Statement of Bonded Indebtedness(1)(2)

City Actual Value, January 1, 2019..... \$257,612,335  
City Taxable Value, January 1, 2019..... \$148,083,521

	Total	Applicable Percent	Amount	Ratio to City Actual Value	Ratio to City Taxable Value	Per Capita (2010 Pop. 5,533 )
Direct Bonded Debt(3).....	\$ 2,531,400	100.00%	\$2,531,400	0.98%	1.71%	\$ 457.51
Overlapping Debt:						
Anamosa School District.....	\$12,170,000	35.02%	\$4,261,934	1.65%	2.88%	\$ 770.28
Kirkwood Community College(4) .....	87,860,584	0.52%	456,875	0.18%	0.31%	82.57
The County.....	0	12.60%	0	0.00%	0.00%	0.00
Total Applicable Overlapping Bonded Debt .....			\$4,718,809	1.83%	3.19%	\$ 852.85
Total Direct and Overlapping Bonded Debt(3) .....			\$7,250,209	2.81%	4.90%	\$1,310.36
Per Capita Actual Value .....						\$46,559.25
Per Capita Taxable Value.....						\$26,763.69

- Notes: (1) Source: the City, Audited Financial Statements and EMMA for the County, School District and Community College.  
(2) As of the date of issuance for the Direct Bonded Debt and January 7, 2021 for Overlapping Debt.  
(3) Subject to change.  
(4) Excludes \$30,005,000 in Industrial New Jobs Training Certificates, which are expected to be paid by proceeds from anticipated job credits from withholding taxes.

### PROPERTY ASSESSMENT AND TAX INFORMATION

#### Property Tax Assessment

In compliance with Section 441.21 of the Code of Iowa, as amended, the State Director of Revenue annually directs all county auditors to apply prescribed statutory percentages to the assessments of certain categories of real property. The final values, called Actual Valuation, are then adjusted by the County Auditor. Taxable Valuation subject to tax levy is then determined by the application of State determined rollback percentages, principally to residential property.

Beginning in 1978, the State required a reduction in Actual Valuation to reduce the impact of inflation on its residents. The resulting value is defined as the Taxable Valuation. Such rollback percentages may be changed in future years. Certain historical rollback percentages for residential, multi-residential, agricultural and commercial valuations are as follows:

#### Percentages for Taxable Valuation After Rollbacks(1)

Fiscal Year	Residential	Multi- Residential(2)	Ag Land & Buildings	Commercial & Industrial
2012/13.....	50.7518%	N/A	57.5411%	100.0000%
2013/14.....	52.8166%	N/A	59.9334%	100.0000%
2014/15.....	54.4002%	N/A	43.3997%	95.0000%
2015/16.....	55.7335%	N/A	44.7021%	90.0000%
2016/17.....	55.6259%	86.2500%	46.1068%	90.0000%
2017/18.....	56.9391%	82.5000%	47.4996%	90.0000%
2018/19.....	55.6209%	78.7500%	54.4480%	90.0000%
2019/20.....	56.9180%	75.0000%	56.1324%	90.0000%
2020/21.....	55.0743%	71.2500%	81.4832%	90.0000%
2021/22.....	56.4094%	67.5000%	84.0305%	90.0000%

- Notes: (1) Source: the Iowa Department of Revenue.  
(2) New category beginning with fiscal year 2017.

Property is assessed on a calendar year basis. The assessments finalized as of January 1 of each year are applied to the following tax year. For example, the assessments finalized on January 1, 2019, are used to calculate tax liability for the tax year starting July 1, 2020 through June 30, 2021.

## Property Tax Collection

Each county is required by State law to collect all tax levies within its jurisdiction and remit, before the fifteenth of each month, the amount collected through the last day of the preceding month to underlying units of government, including the City. Property tax payments are made at the office of each county treasurer in full or one-half by September 30 and March 31, pursuant to the Code of Iowa, Sections 445.36 and 445.37. Where the first half of any property tax has not been paid by October 1, such installment becomes delinquent. If the second installment is not paid, it becomes delinquent on April 1. Delinquent taxes and special assessments are subject to a penalty at the rate of one and one-half percent per month, to a maximum of eighteen percent per annum.

If taxes are not paid when due, the property may be offered at the regular tax sale on the third Tuesday of June following the delinquency date. Purchasers at the tax sale must pay an amount equal to the taxes, special assessments, interest and penalties due on the property, and funds so received are applied to the payment of taxes. A property owner may redeem from the regular tax sale, but failing redemption within two years, the tax sale purchaser is entitled to a deed which in general conveys the title free and clear of all liens except future installments of taxes.

### Actual (100%) Valuations for the City(1)(2)

Property Class	Fiscal Year: Levy Year:	2017/18 2016	2018/19 2017	2019/20 2018	2020/21 2019	Preliminary 2021/22 2020
Residential .....		\$165,797,510	\$167,440,360	\$169,029,070	\$190,165,890	\$192,215,450
Agricultural .....		260,080	224,840	224,840	261,850	251,530
Commercial .....		33,699,346	33,691,880	34,277,914	33,387,029	34,067,627
Industrial .....		2,835,520	2,835,520	2,835,520	2,835,520	2,835,520
Multi-residential .....		10,335,324	10,305,410	10,235,946	10,278,892	10,243,168
Utilities without Gas and Electric(3) .....		420,856	403,182	416,492	327,962	422,065
Gas and Electric Utility(3) .....		10,253,846	15,397,145	20,423,515	20,784,856	24,609,242
Less: Military Exemption .....		(420,856)	(431,516)	(438,924)	(429,664)	(409,292)
Total .....		\$223,181,626	\$229,866,821	\$237,004,373	\$257,612,335	\$264,235,310
Percent Change +(-) .....		0.77%(4)	3.00%	3.11%	8.70%	2.57%

- Notes: (1) Source: Iowa Department of Management.  
(2) Includes tax increment finance (TIF) valuations used in the following amounts:

January 1:	2016	2017	2018	2019	2020
TIF Valuation .....	\$ 5,868,911	\$ 7,366,322	\$ 8,949,259	\$ 9,031,121	\$15,495,611

- (3) See "PROPERTY TAX INFORMATION - Utility Property Tax Replacement" herein.  
(4) Based on 2015 Actual Valuation of \$221,480,196.

*The remainder of this page was left blank intentionally.*

For the January 1, 2020 levy year, the City's Taxable Valuation was comprised of approximately 71% residential, 20% commercial, 5% multi-residential, 3% utilities, 2% industrial and less than 1% agriculture and military exemption.

### Taxable ("Rollback") Valuations for the City(1)(2)

Property Class	Fiscal Year: Levy Year:	2017/18 2016	2018/19 2017	2019/20 2018	2020/21 2019	Preliminary 2021/22 2020
Residential .....		\$ 94,403,634	\$ 93,131,851	\$ 96,207,956	\$104,732,573	\$108,427,575
Agricultural .....		123,537	122,421	126,208	213,364	211,364
Commercial .....		30,329,417	30,322,699	30,850,128	30,048,333	30,660,872
Industrial .....		2,551,968	2,551,968	2,551,968	2,551,968	2,551,968
Multi-residential .....		8,526,646	8,115,517	7,676,985	7,323,717	6,914,141
Utilities without Gas and Electric(3) .....		420,856	403,182	416,492	327,962	415,940
Gas and Electric Utility(3) .....		2,687,223	3,368,949	3,170,555	3,315,268	3,748,487
Less: Military Exemption .....		(438,924)	(431,516)	(438,924)	(429,664)	(409,292)
Total .....		\$138,604,357	\$137,585,071	\$140,561,368	\$148,083,521	\$152,521,055
Percent Change +(-) .....		1.52%(4)	(0.74%)	2.16%	5.35%	3.00%

- Notes: (1) Source: Iowa Department of Management.  
(2) Includes tax increment finance (TIF) valuations used in the following amounts:

January 1: TIF Valuation .....	2016	2017	2018	2019	2020
	\$ 5,868,911	\$ 7,366,322	\$ 8,949,259	\$ 9,031,121	\$15,495,611

- (3) See "PROPERTY TAX INFORMATION - Utility Property Tax Replacement" herein.  
(4) Based on 2015 Taxable Valuation of \$136,528,091.

The following shows the trend in the City's tax extensions and collections.

### Tax Extensions and Collections(1)

Levy Year	Fiscal Year	Amount Levied	Amount Collected(2)	Percent Collected
2013.....	2014-15.....	\$1,806,077	\$1,657,935	91.80%
2014.....	2015-16.....	1,725,659	1,582,700	91.72%
2015.....	2016-17.....	1,904,077	1,703,003	89.44%
2016.....	2017-18.....	1,927,421	1,664,535	86.36%
2017.....	2018-19.....	1,884,997	1,635,694	86.77%
2018.....	2019-20.....	1,875,103	1,825,576	97.36%
2019.....	2020-21.....	1,974,112	- In Collection - -	

- Notes: (1) Source: the State of Iowa Department of Management and the City. Does not include Levies or Collections for Utility Replacement. Does not include levies and collections for the City's tax increment finance district.  
(2) Includes delinquent taxes.

### Principal Taxpayers(1)

Taxpayer Name	Business/Service	Levy Year 2019 Taxable Valuation(2)
Walmart.....	Retail Store.....	\$ 4,275,873
Interstate Power & Light Co. ....	Utility .....	3,016,275
BSR Land Co. LLC .....	Excavation .....	1,950,710
By Design LLC .....	Metal Fabrication .....	1,933,398
Anamosa Nursing Home Company.....	Nursing Home.....	1,771,489
Individual .....	Real Estate.....	1,373,466
PKS Hospitality Group Inc. ....	Hotel.....	1,350,000
Fawn Creek Court & Sales LTD.....	Real Estate.....	1,313,069
Individual .....	Real Estate.....	1,113,108
J Parham Rentals LLC.....	Real Estate.....	1,081,602
Total .....		\$19,178,990
Ten Largest Taxpayers as Percent of City's 2019 Taxable Valuation (\$148,083,521) .....		12.95%

- Notes: (1) Source: the County.  
(2) Every effort has been made to seek out and report the largest taxpayers. However, many of the taxpayers listed contain multiple parcels and it is possible that some parcels and their valuations have been overlooked.

## Levy Limits

Normal municipal operations and maintenance costs are generally funded through the corporate property tax levy. Iowa State Code does not allow the municipal general fund to be taxed above \$8.10 per thousand dollars of taxable value in any one year. In addition to the General Fund, there are several other tax funds that the City can create and use for specific purposes.

The property tax rates for the City from levy year 2015 through levy year 2019 are shown below:

### Property Tax Rates: Levy Years 2015 - 2019(1)(2) (Per \$1,000 Actual Valuation)

	Fiscal Year: Levy Year:	2016/17 2015	2017/18 2016	2018/19 2017	2019/20 2018	2020/21 2019
City:						
General Fund .....	\$	8.10000	\$ 8.10000	\$ 8.10000	\$ 8.10000	\$ 8.10000
Emergency Levy .....		0.27000	0.27000	0.27000	0.27000	0.27000
Debt Service Fund .....		0.82932	0.58990	0.58001	0.55228	0.50842
Employee Benefits .....		4.15896	3.86856	3.84255	3.79102	3.82910
Capital Improvement .....		0.00000	0.00000	0.00000	0.00000	0.00000
Other .....		1.61783	1.97980	2.04525	1.85848	1.82040
Total City .....	\$	14.97611	\$14.80826	\$14.83781	\$14.57178	\$14.52792
Jones County .....	\$	6.26137	\$ 6.19253	\$ 5.93291	\$ 5.93291	\$ 5.96867
Anamosa Community School District .....		14.66586	14.50811	14.98045	15.87298	15.78226
Kirkwood Community College .....		1.08048	1.13174	1.20354	1.21331	1.25730
Other .....		0.73768	0.77879	0.75804	0.66839	0.56503
Total Tax Rate .....	\$	37.72150	\$37.41943	\$37.71275	\$38.25937	\$38.10118

Notes: (1) Source: Iowa Department of Management.  
(2) Does not include the tax rate for agriculture.

## Tax Levy Procedures

The Bonds are general obligations of the City, payable from and secured by a continuing ad valorem tax levied against all of the property valuation within the City. As part of the budgetary process each fiscal year, the City will have an obligation to request a debt service levy to be applied against all of the taxable property within the City. A failure on the part of the City to make a timely levy request or a levy request by the City that is inaccurate or is insufficient to make full payments of the debt service of the Bonds for a particular fiscal year may cause Bond holders to experience delay in the receipt of distributions of principal of and/or interest on the Bonds. In the event of a default in the payment of principal of or interest on the Bonds, there is no provision for acceleration of maturity of the principal of the Bonds. Consequently, the remedies of the owners of the Bonds (consisting primarily of an action in the nature of mandamus requiring the City and certain other public officials to perform the terms of the resolution for the Bonds) may have to be enforced from year to year.

Notwithstanding the foregoing, Iowa Code section 76.2 provides when an Iowa political subdivision issues general obligation bonds, “the governing authority of these political subdivisions before issuing bonds shall, by resolution, provide for the assessment of an annual levy upon all the taxable property in the political subdivision sufficient to pay the interest and principal of the bonds within a period named not exceeding twenty years. A certified copy of this resolution shall be filed with the county auditor or auditors of the counties in which the political subdivision is located; and the filing shall make it a duty of the auditor(s) to enter annually this levy for collection from the taxable property within the boundaries of the political subdivision until funds are realized to pay the bonds in full.”

## **Utility Property Tax Replacement**

Property owned by entities involved primarily in the production, delivery, service and sale of electricity and natural gas (“Utilities”) pay a replacement tax based upon the delivery of energy by Utilities in lieu of property taxes. All replacement taxes are allocated among local taxing bodies by the State Department of Revenue and the Department of Management. This allocation is made in accordance with a general allocation formula developed by the Department of Management on the basis of general property tax equivalents. Utility properties paying the replacement tax are exempt from the levy of property tax by political subdivisions. In addition to the replacement tax, Utility property will continue to be valued by a special method as provided in the statute and taxed at the rate of three cents per one thousand dollars for the general fund of the State.

By statute, the replacement tax collected by the State and allocated among local taxing bodies (including the City) shall be treated as property tax when received and shall be disposed of by the county treasurer as taxes on real estate. It is possible that the general obligation debt capacity of the City could be adjudicated to be proportionately reduced in future years if Utility property were determined to be other than “taxable property” for purposes of computing the City’s debt limit under Article XI of the Constitution of the State of Iowa. There can be no assurance that future legislation will not (i) operate to reduce the amount of debt the City can issue or (ii) adversely affect the City’s ability to levy taxes in the future for the payment of the principal of and interest on its outstanding debt obligations, including the Bonds. Approximately 3% of the City’s levy year 2020 taxable valuation currently is utility property.

## **Tax Increment Financing**

The Code of Iowa currently authorizes the use of two types of tax increment financing by local taxing districts in the State of Iowa. The first type allows local governments to establish TIF districts for the purposes of financing designated urban renewal projects which contribute to the urban redevelopment and economic development of the immediate area. The taxable valuation used for this type of TIF district in the City for levy year 2020 is \$15,495,611.

The second type of tax increment financing was authorized by state legislative action in the mid-1980’s. The area community colleges can establish TIF districts by contract with specific local businesses and industries to provide jobs training programming for new employees of existing expanding businesses or employees of new businesses. The revenues from these job training TIF districts then retire the debt incurred from the issuance of jobs training certificates which finance the cost of jobs training programming over a maximum of ten years. Upon payment of all jobs training certificates, the district dissolves and the incremental value from the new or expanded business reverts to the general tax base. There is no current valuation for this second type of TIF district.

## **Legislation**

From time to time, legislative proposals are pending in Congress and the Iowa General Assembly that would, if enacted, alter or amend one or more of the property tax matters described herein. It cannot be predicted whether or in what forms any of such proposals, either pending or that may be introduced, may be enacted, and there can be no assurance that such proposals will not apply to valuation, assessment or levy procedures for taxes levied by the City or have an adverse impact on the future tax collections of the City. Purchasers of the Bonds should consult their tax advisors regarding any pending or proposed federal or state tax legislation. The opinions expressed by Bond Counsel are based upon existing legislation as of the date of issuance and delivery of the Bonds and Bond Counsel has expressed no opinion as of any date subsequent thereto or with respect to any pending federal or state tax legislation.

During the 2019 legislative session, the Iowa General Assembly enacted Senate File 634 (the “2019 Act”). This bill modifies the process for hearing and approval of the total maximum property tax dollars under certain levies in the county budget. The bill also includes a provision that will require the affirmative vote of 2/3 of the City Council when the maximum property tax dollars under these levies exceed an amount determined under a prescribed formula.

The 2019 Act does not change the process for hearing and approval of the Debt Service Levy pledged for repayment of the Bonds. It is too early to evaluate the affect the 2019 Act will have on the overall financial position of the City or its ability to fund essential services.

During the 2013 legislative session, the Iowa General Assembly enacted Senate File 295 (the “2013 Act”). Among other things, the Act (i) reduced the maximum annual taxable value growth percent, due to revaluation of existing residential and agricultural property to 3%, (ii) assigned a “rollback” (the percentage of a property’s value that is subject to tax) to commercial, industrial and railroad property of 90%, (iii) created a new property tax classification for multi-residential properties (apartments, nursing homes, assisted living facilities and certain other rental property) and assigned a declining rollback percentage to such properties for each year until the residential rollback percentage is reached in the 2022 assessment year, after which the rollback percentage for such properties will be equal to the residential rollback percentage each assessment year, and (iv) exempted a specified portion of the assessed value of telecommunication properties.

The Act includes a standing appropriation to replace some of the tax revenues lost by local governments, including tax increment districts, resulting from the new rollback for commercial and industrial property. Beginning in fiscal year 2018 the standing appropriation cannot exceed the actual 2017 appropriation amount. The appropriation does not replace losses to local governments resulting from the Act’s provisions that reduce the annual revaluation growth limit for residential and agricultural properties to 3%, the gradual transition for multi-residential properties from the residential rollback percentage (currently 53% of market value), or the reduction in the percentage of telecommunications property that is subject to taxation.

Given the wide scope of the statutory changes, and the State’s discretion in establishing the annual replacement amount that is appropriated each year commencing in fiscal 2018, the impact of the 2013 Act on the City’s future property tax collections is uncertain and the City has not attempted to quantify the financial impact of the 2013 Act’s provisions on the City’s future operations.

Notwithstanding any decrease in property tax revenues that may result from the 2013 Act, the Bonds are secured by an unlimited ad valorem property tax as described more fully in the **“SECURITY AND SOURCE OF PAYMENT”** herein.

From time to time, other legislative proposals may be considered by the Iowa General Assembly that would, if enacted, alter or amend one or more of the property tax matters described in this Official Statement. It cannot be predicted whether or in what forms any of such proposals may be enacted, and there can be no assurance that such proposals will not apply to valuation, assessment or levy procedures for the levy of taxes by the City.

*The remainder of this page was left blank intentionally.*

## **FINANCIAL INFORMATION**

### **Financial Reports**

The City's financial statements are audited annually by certified public accountants. The City maintains its financial records on the basis of cash receipts and disbursements and the financial statements of the City are prepared on that basis. The cash basis of accounting does not give effect to accounts receivable, accounts payable and accrued items. Accordingly, the financial statements do not present financial position and results of operations of the funds in accordance with U.S. generally accepted accounting principles. See **APPENDIX A** for more detail.

### **No Consent or Updated Information Requested of the Auditor**

The tables and excerpts (collectively, the "Excerpted Financial Information") contained in this "**FINANCIAL INFORMATION**" section are from the audited financial statements of the City, including the audited financial statements for the fiscal year ended June 30, 2019 (the "2019 Audit"). The 2019 Audit has been prepared by CliftonLarsonAllen LLP, Certified Public Accountants, Cedar Rapids, Iowa, (the "Auditor"), and received by the City Council. The City has not requested the Auditor to update information contained in the Excerpted Financial Information and the 2019 Audit; nor has the City requested that the Auditor consent to the use of the Excerpted Financial Information and the 2019 Audit in this Official Statement. The inclusion of the Excerpted Financial Information and the 2019 Audit in this Official Statement in and of itself is not intended to demonstrate the fiscal condition of the City since the date of the 2019 Audit. Questions or inquiries relating to financial information of the City since the date of the 2019 Audit should be directed to the City.

### **Summary Financial Information**

The following tables are summaries and do not purport to be the complete audits, copies of which are available upon request. See **APPENDIX A** for the City's 2019 Audit. The City's General Fund balance for the fiscal year ending June 30, 2020 had a slight increase compared to June 30, 2019. The City has approved a budget for fiscal year 2021 with an anticipated decrease to the General Fund balance of approximately \$13,000. To date, revenues and expenditures are generally within budgeted amounts.

*The remainder of this page was left blank intentionally.*

## Cash Basis Statement of Activities and Net Position Governmental Activities(1)

	Audited Fiscal Year Ended June 30				
	2015	2016	2017	2018	2019
<b>FUNCTIONS/PROGRAMS:</b>					
Governmental Activities:					
Public Safety .....	\$ (957,271)	\$ (550,468)	\$ (958,104)	\$(1,194,596)	\$ (924,553)
Public Works .....	(58,202)	(55,436)	82,816	(226,830)	(276,870)
Culture and Recreation.....	(548,572)	(462,404)	(652,900)	(542,377)	(674,981)
Community and Economic Development .....	(70,078)	(66,510)	(73,654)	(73,684)	(15,842)
General Government.....	(412,714)	(462,609)	(485,400)	(332,372)	(520,325)
Debt Service.....	(750,484)	(1,129,050)	(388,292)	(288,427)	(323,331)
Capital Projects .....	(353,824)	(229,805)	(365,236)	(3,428,158)	(364,838)
Total Governmental Activities .....	<u>\$(3,151,145)</u>	<u>\$(2,956,282)</u>	<u>\$(2,840,770)</u>	<u>\$(6,086,444)</u>	<u>\$(3,100,740)</u>
<b>GENERAL RECEIPTS AND TRANSFERS:</b>					
Property Taxes Levied for:					
General Purposes.....	\$ 942,762	\$ 868,306	\$ 1,025,605	\$ 1,045,547	\$ 1,030,132
Employee Benefits.....	477,332	503,948	566,069	539,112	527,538
Debt Service.....	237,841	210,446	111,329	79,876	78,024
Tax Increment Financing .....	389,230	876,784	224,143	189,723	239,728
Commercial/Industrial Tax Replacement .....	0	33,681	48,865	45,472	42,175
Other City Tax .....	332,327	417,964	469,426	518,594	538,017
Local Option Sales Tax .....	426,392	410,275	413,956	390,284	413,088
Unrestricted Interest on Investments .....	8,698	23,687	13,975	28,542	29,361
Rent .....	0	0	16,401	15,079	14,974
Miscellaneous.....	96,963	95,999	105,861	103,490	130,784
Long-Term Debt Issued .....	458,404	120,490	5,000	1,119,474	0
Library Donations .....	0	590,971	0	0	0
Transfers.....	114,044	0	2,875,000	0	12,963
Sale of Capital Assets .....	17,619	1,569	27,505	10,514	4,615
Total General Receipts and Transfers .....	<u>\$ 3,501,612</u>	<u>\$ 4,154,120</u>	<u>\$ 5,903,135</u>	<u>\$ 4,085,707</u>	<u>\$ 3,061,399</u>
<b>CHANGE IN CASH BASIS NET POSITION .....</b>	<b>\$ 350,467</b>	<b>\$ 1,197,838</b>	<b>\$ 3,062,365</b>	<b>\$(2,000,737)</b>	<b>\$ (39,341)</b>
<b>Cash Basis Net Position - Beginning of Year .....</b>	<b><u>\$ 3,426,852</u></b>	<b><u>\$ 3,777,319</u></b>	<b><u>\$ 4,975,157</u></b>	<b><u>\$ 8,037,522</u></b>	<b><u>\$ 6,036,785</u></b>
<b>Cash Basis Net Position - End of Year .....</b>	<b><u>\$ 3,777,319</u></b>	<b><u>\$ 4,975,157</u></b>	<b><u>\$ 8,037,522</u></b>	<b><u>\$ 6,036,785</u></b>	<b><u>\$ 5,997,444</u></b>
<b>CASH BASIS NET POSITION:</b>					
Restricted:					
Nonexpendable:					
Cemetery Perpetual Care .....	\$ 98,928	\$ 99,753	\$ 91,103	\$ 92,903	\$ 93,653
Expendable:					
Urban Renewal Purposes.....	153,383	156,317	142,206	206,228	246,724
Debt Service.....	422,224	400,212	364,046	241,494	215,506
Streets.....	574,344	804,048	1,095,718	1,048,299	1,200,495
Library .....	0	592,560	594,797	587,713	592,274
Other Purposes .....	515,959	476,480	3,008,427	1,167,680	1,066,179
Unrestricted.....	<u>2,012,481</u>	<u>2,445,787</u>	<u>2,741,225</u>	<u>2,692,468</u>	<u>2,582,613</u>
Total Cash Basis Net Position .....	<u>\$ 3,777,319</u>	<u>\$ 4,975,157</u>	<u>\$ 8,037,522</u>	<u>\$ 6,036,785</u>	<u>\$ 5,997,444</u>

Note: (1) Source: Audited financial statements of the City for the fiscal years ended June 30, 2015 - 2019.

*The remainder of this page was left blank intentionally.*

## Statement of Cash Receipts, Disbursements, and Changes in Cash Balances General Fund(1)

	Audited Fiscal Year Ended June 30				
	2015	2016	2017	2018	2019
<b>RECEIPTS:</b>					
Property Tax.....	\$ 942,762	\$ 868,306	\$ 1,025,605	\$ 1,045,547	\$1,030,132
Other City Tax.....	313,776	399,346	452,800	503,415	520,375
Licenses and Permits.....	8,427	7,749	44,071	44,733	13,199
Use of Money and Property.....	27,987	41,208	25,076	37,372	33,761
Intergovernmental.....	155,320	360,774	51,275	140,255	182,861
Charges for Services.....	391,787	453,083	417,898	238,574	215,196
Miscellaneous.....	111,530	195,064	117,842	107,213	127,103
Total Receipts.....	<u>\$ 1,951,589</u>	<u>\$ 2,325,530</u>	<u>\$ 2,134,567</u>	<u>\$ 2,117,109</u>	<u>\$2,152,627</u>
<b>DISBURSEMENTS:</b>					
Current:					
Public Safety.....	\$ 1,088,723	\$ 905,577	\$ 974,927	\$ 1,252,290	\$1,084,619
Public Works.....	326,395	415,235	411,729	427,375	450,116
Culture and Recreation.....	732,381	704,906	746,850	732,115	750,218
General Government.....	434,343	468,196	476,122	352,652	526,269
Capital Projects.....	0	0	0	0	95,903
Total Disbursements.....	<u>\$ 2,581,842</u>	<u>\$ 2,493,914</u>	<u>\$ 2,609,628</u>	<u>\$ 2,764,432</u>	<u>\$2,907,125</u>
Excess (Deficiency) of Receipts Over Disbursements.....	<u>\$ (630,253)</u>	<u>\$ (168,384)</u>	<u>\$ (475,061)</u>	<u>\$ (647,323)</u>	<u>\$ (754,498)</u>
Other Financing Sources (Uses):					
Sale of Capital Assets.....	\$ 17,619	\$ 1,569	\$ 27,505	\$ 10,514	\$ 4,615
Long-Term Debt Issued.....	0	0	0	171,400	0
Transfers In.....	669,824	709,169	794,010	791,573	777,581
Transfers Out.....	0	0	(15,000)	(42,384)	(27,384)
Net Other Financing Sources (Uses).....	<u>\$ 687,443</u>	<u>\$ 710,738</u>	<u>\$ 806,515</u>	<u>\$ 931,103</u>	<u>\$ 754,812</u>
<b>NET CHANGE IN CASH BALANCES.....</b>	<b>\$ 57,190</b>	<b>\$ 542,354</b>	<b>\$ 331,454</b>	<b>\$ 283,780</b>	<b>\$ 314</b>
Cash Balance - Beginning of Year.....	<u>\$ 2,060,409</u>	<u>\$ 2,117,599</u>	<u>\$ 2,659,953</u>	<u>\$ 2,991,407</u>	<u>\$3,275,187</u>
Cash Balance - End of Year.....	<u>\$ 2,117,599</u>	<u>\$ 2,659,953</u>	<u>\$ 2,991,407</u>	<u>\$ 3,275,187</u>	<u>\$3,275,501</u>
<b>CASH BASIS FUND BALANCES:</b>					
Unassigned.....	<u>\$ 2,117,599</u>	<u>\$ 2,659,953</u>	<u>\$ 2,991,407</u>	<u>\$ 3,275,187</u>	<u>\$ 3,275,501</u>
Total Cash Basis Fund Balances.....	<u>\$ 2,117,599</u>	<u>\$ 2,659,953</u>	<u>\$ 2,991,407</u>	<u>\$ 3,275,187</u>	<u>\$ 3,275,501</u>

Note: (1) Source: The City's audited financial statements for fiscal years ending June 30, 2015 – 2019.

## EMPLOYEE RETIREMENT AND OTHER POST EMPLOYMENT BENEFIT OBLIGATIONS

### Pension

The City participates in the Iowa Public Employee's Retirement System (IPERS). Summary descriptions of the IPERS Plan follows, for more detailed information see **APPENDIX A – Note 5**.

In fiscal year 2019, pursuant to the IPERS' required rate, the City's Regular employees (members) contributed 6.29% of covered payroll and the City contributed 9.44% of covered payroll, for a total rate of 15.73%. Protection occupation members contributed 6.81% of covered payroll and the City contributed 10.21% for a total rate of 17.02%. The City's contributions to IPERS for the year ended June 30, 2019 were \$133,679. The City's share of the contributions, payable from the applicable funds of the City, is provided by a statutorily authorized annual levy of taxes without limit or restriction as to rate or amount. The City has always made its full required contributions to IPERS.

At June 30, 2019, the City was allocated a liability of \$773,199 for its proportionate share of the IPERS net pension liability. The net pension liability was measured as of June 30, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The discount rate used to measure the total pension liability was 7%. The City's proportion of the net pension liability was based on the City's share of contributions to the pension plan relative to the contributions of all IPERS participating employers.

## Other Post-Employment Benefits (OPEB)

The City administers a single-employer health benefit plan which provides medical/prescription drug benefits for employees, retirees and their spouses. Group insurance benefits are established under Iowa Code Chapter 509A.13. The City currently finances the benefit plan on a pay-as-you-go basis. Retired employees are responsible for 100% of the premium for health insurance. At June 30, 2019, no assets have been accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

See **APPENDIX A – Notes (5) and (6)** herein for further discussion of the City’s employee retirement benefit obligations.

## Defined Benefit Pension Plan – Iowa Public Employee’s Retirement System

The City also contributes to the Iowa Public Employees’ Retirement System (“IPERS”). The City’s employees are provided with pensions through a cost-sharing multiple employer defined pension plan administered by IPERS. IPERS benefits are established under Iowa Code, Chapter 97B and the administrative rules thereunder. The City’s employee who completed seven years of covered service or has reached the age of 65 while in IPERS covered employment becomes vested. If the City’s employee retires before normal retirement age, the employee’s monthly retirement benefit will be permanently reduced by an early retirement reduction. IPERS provides pension benefits as well as disability benefits to City employees and benefits to the employees’ beneficiaries upon the death of the eligible employee. Additionally, copies of IPERS annual financial report may be obtained from [www.ipers.org](http://www.ipers.org). However, the information presented in such financial reports or on such websites is not incorporated into this Official Statement by any reference.

Effective July 1, 2012, as a result of a 2010 law change, IPERS contribution rates for the City and its employees are established by IPERS following the annual actuarial valuation (which applies IPERS’ Contribution Rate Funding Policy and Actuarial Amortization method.) State statute, however, limits the amount rates can increase or decrease each year to one (1) percentage point. Therefore, any difference between the actuarial contribution rates and the contributions paid is due entirely to statutorily set contributions that may differ from the actual contribution rates. As a result, while the contribution rate in the fiscal year ended June 30, 2017 equaled the actuarially required rate, there is no guarantee, due to this statutory limitation on rate increases, that the contribution rate will meet or exceed the actuarially required rate in the future.

The following table sets forth the contributions made by the City and employees to IPERS for the period indicated.

<u>Fiscal Year</u>	<u>% of Payroll Paid by the City</u>	<u>% of Payroll Paid by Employee</u>
2017 .....	8.93%	5.95%
2018 .....	8.93%	5.95%
2019 .....	9.44%	6.29%
2020 .....	9.44%	6.29%
2021 .....	9.44%	6.29%

The City cannot predict the levels of funding that will be required in the future as any IPERS unfunded pension benefit obligation could be reflected in future years in higher contribution rates. The investment of moneys, assumptions underlying the same and the administration of IPERS is not subject to the direction of the City. Thus, it is not possible to predict, control or prepare for future unfunded accrued actuarial liabilities of IPERS (“UAALs”). The UAAL is the difference between total actuarially accrued liabilities and actuarially calculated assets available for the payment of such benefits. The UAAL is based on assumptions as to retirement age, mortality, projected salary increases attributed to inflation, across-the-board raises and merit raises, adjustments, cost-of-living adjustments, valuation of current assets, investment return and other matters. Such UAAL could be substantial in the future, requiring significantly increased contributions from the City which could affect other budgetary matters.

The following table sets forth certain information about the funding status of IPERS that has been extracted from the comprehensive annual financial reports of IPERS for fiscal years ended June 30, 2016 through, and including, 2020 (collectively, the “IPERS CAFRs (2016-2020)”), and the actuarial valuation reports provided to IPERS by Cavanaugh Macdonald Consulting, LLC (collectively, the “IPERS Actuarial Reports (2016-2020)”). Additional information regarding IPERS and its latest actuarial valuations can be obtained by contacting IPERS administrative staff.

Valuation Date	Actuarial Value of Assets [a]	Market Value of Assets [b]	Actuarial Accrued Liability [c]	Unfunded Actuarial Accrued Liability (Actuarial Value) [c]-[a]	Funded Ratio (Actuarial Value) [a]/[c]	Unfunded Actuarial Accrued Liability (Market Value) [c]-[b]	Funded Ratio (Market Value) [b]/[c]	Covered Payroll [d]	UAAAL as a Percentage of Covered (Actuarial Value) {[c-a]/[d]}
2016 .....	\$29,033,696,587	\$28,326,433,656	\$34,619,749,147	\$5,586,052,560	83.86%	\$6,293,315,491	81.82%	\$7,556,515,720	73.92%
2017 .....	30,472,423,914	30,779,116,326	37,440,382,029	6,967,958,115	81.39%	6,661,265,703	82.21%	7,863,160,443	88.62%
2018 .....	31,827,755,864	32,314,588,595	38,642,833,653	6,815,077,789	82.36%	6,328,245,058	83.62%	7,983,219,527	85.37%
2019 .....	33,324,327,606	34,010,680,731	39,801,338,797	6,477,011,191	83.73%	5,790,658,066	85.45%	8,151,043,468	79.46%
2020 .....	34,485,656,745	34,047,692,112	41,072,427,540	6,586,770,795	83.96%	7,024,735,428	82.90%	8,391,856,350	78.49%

Source: IPERS Actuarial Reports.

According to IPERS, the market value investment return on program assets is as follows:

Fiscal Year Ended June 30	Investment Return %
2016 .....	2.15%
2017 .....	11.70%
2018 .....	7.97%
2019 .....	8.35%
2020 .....	3.39%

Source: IPERS Reports

Detailed information about the pension plan’s fiduciary net position is available in the separately issued IPERS financial report which is available on IPERS’ website at [www.ipers.org](http://www.ipers.org).

Bond Counsel, the City and the Municipal Advisor undertake no responsibility for and make no representations as to the accuracy or completeness of the information available from IPERS discussed above or included on the IPERS website, including, but not limited to, updates of such information on the Auditor of State’s website or links to other website site or links to other websites through the IPERS website.

## REGISTRATION, TRANSFER AND EXCHANGE

See also **APPENDIX B - BOOK-ENTRY SYSTEM** for information on registration, transfer and exchange of book-entry bonds. The Bonds will be initially issued as book-entry bonds.

The City shall cause books (the “Bond Register”) for the registration and for the transfer of the Bonds to be kept at the principal office maintained for the purpose by the Bond Registrar in West Des Moines, Iowa. The City will authorize to be prepared, and the Bond Registrar shall keep custody of, multiple bond blanks executed by the City for use in the transfer and exchange of Bonds.

Any Bond may be transferred or exchanged, but only in the manner, subject to the limitations, and upon payment of the charges as set forth in the Bond Resolution. Upon surrender for transfer or exchange of any Bond at the principal office maintained for the purpose by the Bond Registrar, duly endorsed by, or accompanied by a written instrument or instruments of transfer in form satisfactory to the Bond Registrar and duly executed by the registered owner or such owner’s attorney duly authorized in writing, the City shall execute and the Bond Registrar shall authenticate, date and deliver in the name of the registered owner, transferee or transferees (as the case may be) a new fully registered Bond or Bonds of the same maturity and interest rate of authorized denominations, for a like aggregate principal amount.

The execution by the City of any fully registered Bond shall constitute full and due authorization of such Bond, and the Bond Registrar shall thereby be authorized to authenticate, date and deliver such Bond, provided, however, the principal amount of outstanding Bonds of each maturity authenticated by the Bond Registrar shall not exceed the authorized principal amount of Bonds for such maturity less Bonds previously paid.

The Bond Registrar shall not be required to transfer or exchange any Bond following the close of business on the fifteenth day of the month next preceding an interest payment date on such bond (known as the record date), nor to transfer or exchange any Bond after notice calling such Bond for redemption has been mailed, nor during a period of fifteen days next preceding mailing of a notice of redemption of any Bonds.

The person in whose name any Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of the principal of or interest on any Bonds shall be made only to or upon the order of the registered owner thereof or such owner's legal representative. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid.

No service charge shall be made for any transfer or exchange of Bonds, but the City or the Bond Registrar may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any transfer or exchange of Bonds except in the case of the issuance of a Bond or Bonds for the unredeemed portion of a bond surrendered for redemption.

## **TAX EXEMPTION AND RELATED TAX MATTERS**

### **Federal Income Tax Exemption**

The opinion of Bond Counsel will state that under present laws and rulings, interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed under the Code.

The opinions set forth in the preceding sentence will be subject to the condition that the City comply with all requirements of the Code that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, or continue to be, excluded from gross income for federal income tax purposes. Failure to comply with certain of such requirements may cause the inclusion of interest on the Bonds in gross income for federal income tax purposes to be retroactive to the date of issuance of the Bonds. In the Resolution authorizing the issuance of the Bonds, the City will covenant to comply with all such requirements.

There may be certain other federal tax consequences to the ownership of the Bonds by certain taxpayers, including without limitation, corporations subject to the branch profit tax, financial institutions, certain insurance companies, certain S corporations, individual recipients of Social Security and Railroad Retirement benefits and taxpayers who may be deemed to have incurred (or continued) indebtedness to purchase or carry tax-exempt obligations. Bond Counsel will express no opinion with respect to other federal tax consequences to owners of the Bonds. Prospective purchasers of the Bonds should consult with their tax advisors as to such matters.

## **Proposed Changes in Federal and State Tax Law**

From time to time, there are Presidential proposals, proposals of various federal committees, and legislative proposals in the Congress and in the states that, if enacted, could alter or amend the federal and state tax matters referred to herein or adversely affect the marketability or market value of the Bonds or otherwise prevent holders of the Bonds from realizing the full benefit of the tax exemption of interest on the Bonds. Further, such proposals may impact the marketability or market value of the Bonds simply by being proposed. No prediction is made whether such provisions will be enacted as proposed or concerning other future legislation affecting the tax treatment of interest on the Bonds. In addition, regulatory actions are from time to time announced or proposed and litigation is threatened or commenced which, if implemented or concluded in a particular manner, could adversely affect the market value, marketability or tax exempt status of the Bonds. It cannot be predicted whether any such regulatory action will be implemented, how any particular litigation or judicial action will be resolved, or whether the Bonds would be impacted thereby.

Purchasers of the Bonds should consult their tax advisors regarding any pending or proposed legislation, regulatory initiatives or litigation. The opinions expressed by Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of issuance and delivery of the Bonds, and Bond Counsel has expressed no opinion as of any date subsequent thereto or with respect to any proposed or pending legislation, regulatory initiatives or litigation.

## **Qualified Tax-Exempt Obligations**

In the Resolution authorizing the issuance of the Bonds, the City will designate the Bonds as “qualified tax exempt obligations” within the meaning of Section 265(b)(3) of the Code relating to the ability of financial institutions to deduct from income for federal income tax purposes a portion of the interest expense that is allocable to tax-exempt obligations. In the opinion of Bond Counsel, the Bonds are “qualified tax-exempt obligations” within the meaning of Section 265(b)(3) of the Code.

## **Original Issue Premium**

The Bonds maturing in the years \_\_\_\_\_ are being issued at a premium to the principal amount payable at maturity. Except in the case of dealers, which are subject to special rules, Bondholders who acquire the Bonds at a premium must, from time to time, reduce their federal tax bases for the Bonds for purposes of determining gain or loss on the sale or payment of such Bonds. Premium generally is amortized for federal income tax purposes on the basis of a bondholder’s constant yield to maturity or to certain call dates with semiannual compounding. Bondholders who acquire any Bonds at a premium might recognize taxable gain upon sale of the Bonds, even if such Bonds are sold for an amount equal to or less than their original cost. Amortized premium is not deductible for federal income tax purposes. Bondholders who acquire any Bonds at a premium should consult their tax advisors concerning the calculation of bond premium and the timing and rate of premium amortization, as well as the state and local tax consequences of owning and selling the Bonds acquired at a premium.

## **Original Issue Discount**

The Bonds maturing in the years \_\_\_\_\_ (collectively, the “Discount Bonds”) are being sold at a discount from the principal amount payable on such Discount Bonds at maturity. The difference between the price at which a substantial amount of the Discount Bonds of a given maturity is first sold to the public (the “Issue Price”) and the principal amount payable at maturity constitutes “original issue discount” under the Internal Revenue Code. The amount of original issue discount that accrues to a holder of a Discount Bond under section 1288 of the Internal Revenue Code is excluded from federal gross income to the same extent that stated interest on such Discount Bond would be so excluded. The amount of the original issue discount that accrues with respect to a Discount Bond under section 1288 is added to the owner’s federal tax basis in determining gain or loss upon disposition of such Discount Bond (whether by sale, exchange, redemption or payment at maturity).

Interest in the form of original issue discount accrues under section 1288 pursuant to a constant yield method that reflects semiannual compounding on dates that are determined by reference to the maturity date of the Discount Bond. The amount of original issue discount that accrues for any particular semiannual accrual period generally is equal to the excess of (1) the product of (a) one-half of the yield on such Discount Bonds (adjusted as necessary for an initial short period) and (b) the adjusted issue price of such Discount Bonds, over (2) the amount of stated interest actually payable. For purposes of the preceding sentence, the adjusted issue price is determined by adding to the Issue Price for such Discount Bonds the original issue discount that is treated as having accrued during all prior semiannual accrual periods. If a Discount Bond is sold or otherwise disposed of between semiannual compounding dates, then the original issue discount that would have accrued for that semiannual accrual period for federal income tax purposes is allocated ratably to the days in such accrual period.

An owner of a Discount Bond who disposes of such Discount Bond prior to maturity should consult owner's tax advisor as to the amount of original issue discount accrued over the period held and the amount of taxable gain or loss upon the sale or other disposition of such Discount Bond prior to maturity.

Owners who purchase Discount Bonds in the initial public offering but at a price different than the Issue Price should consult their own tax advisors with respect to the tax consequences of the ownership Discount Bonds.

The Internal Revenue Code contains provisions relating to the accrual of original issue discount in the case of subsequent purchasers of bonds such as the Discount Bonds. Owners who do not purchase Discount Bonds in the initial offering should consult their own tax advisors with respect to the tax consequences of the ownership of the Discount Bonds.

Original issue discount that accrues in each year to an owner of a Discount Bond may result in collateral federal income tax consequences to certain taxpayers. No opinion is expressed as to state and local income tax treatment of original issue discount. All owners of Discount Bonds should consult their own tax advisors with respect to the federal, state, local and foreign tax consequences associated with the purchase, ownership, redemption, sale or other disposition of Discount Bonds.

## Opinions

Bond Counsel's opinion is not a guarantee of a result, or of the transaction on which the opinion is rendered, or of the future performance of parties to the transaction, but represents its legal judgment based upon its review of existing statutes, regulations, published rulings and court decisions and the representations and covenants of the City described in this section. No ruling has been sought from the Service with respect to the matters addressed in the opinion of Bond Counsel and Bond Counsel's opinion is not binding on the Service. Bond Counsel assumes no obligation to update its opinion after the issue date to reflect any further action, fact or circumstance, or change in law or interpretation, or otherwise. See **"APPENDIX C"** for form of Bond Counsel opinion for the Bonds.

## CONTINUING DISCLOSURE

For the purpose of complying with Rule 15c2-12 of the Securities Exchange Commission, as amended and interpreted from time to time (the "Rule"), the City will covenant and agree, for the benefit of the registered holders or beneficial owners from time to time of the outstanding Bonds to provide reports of specified information and notice of the occurrence of certain events, as hereinafter described (the "Disclosure Covenants"). The information to be provided on an annual basis, and the events as to which notice is to be given, is set forth in **"APPENDIX D – Form of Continuing Disclosure Certificate"**. This covenant is being made by the City to assist the Underwriter(s) in complying with the Rule.

Breach of the Disclosure Covenants will not constitute a default or an "Event of Default" under the Bonds or Resolution, respectively. A broker or dealer is to consider a known breach of the Disclosure Covenants, however, before recommending the purchase or sale of the Bonds in the secondary market. Thus, a failure on the part of the City to observe the Disclosure Covenants may adversely affect the transferability and liquidity of the Bonds and their market price.

Pursuant to the Rule, in the last five years, the City believes it has complied in all material respects with regard to its prior Disclosure Covenants.

Bond Counsel expresses no opinion as to whether the Undertaking complies with the requirements of Section (b)(5) of the Rule.

## OPTIONAL REDEMPTION

Bonds due June 1, 2022 - 2028 inclusive, are not subject to optional redemption. Bonds due June 1, 2029 - 2033, inclusive, are callable in whole or in part on any date on or after June 1, 2028, at a price of par and accrued interest. If selection by lot within a maturity is required, the Registrar shall designate the Bonds to be redeemed by random selection of the names of the registered owners of the entire annual maturity until the total amount of Bonds to be called has been reached.

If less than all of the maturity is called for redemption, the City will notify DTC of the particular amount of such maturity to be redeemed prior to maturity. DTC will determine by lot the amount of each Participant's interest in such maturity to be redeemed and each participant will then select by lot the beneficial ownership interests in such maturity to be redeemed.

Thirty days' written notice of redemption shall be given to the registered owner of the Bond. Failure to give written notice to any registered owner of the Bonds or any defect therein shall not affect the validity of any proceedings for the redemption of the Bonds. All Bonds or portions thereof called for redemption will cease to bear interest after the specified redemption date, provided funds for their redemption are on deposit at the place of payment. Written notice will be deemed completed upon transmission to the owner of record.

## LITIGATION

There is no litigation of any nature now pending or threatened restraining or enjoining the issuance, sale, execution or delivery of the Bonds, or in any way contesting or affecting the validity of the Bonds or any proceedings of the City taken with respect to the issuance or sale thereof. There is no litigation now pending, or to the knowledge of the City, threatened against the City that is expected to materially impact the financial condition of the City.

## LEGAL MATTERS

Legal matters incident to the authorization, issuance and sale of the Bonds and with regard to the tax-exempt status of the interest thereon (see **"TAX EXEMPTION AND RELATED TAX MATTERS"** herein) are subject to the approving legal opinion of Dorsey & Whitney LLP, Des Moines, Iowa, Bond Counsel, a form of which is attached hereto as **APPENDIX C**. Signed copies of the opinion, dated and premised on law in effect as of the date of original delivery of the Bonds, will be delivered to the Underwriter at the time of such original delivery. The Bonds are offered subject to prior sale and to the approval of legality of the Bonds by Bond Counsel.

The legal opinion to be delivered will express the professional judgment of Bond Counsel and by rendering a legal opinion, Bond Counsel does not become an insurer or guarantor of the result indicated by that expression of professional judgment or of the transaction or the future performance of the parties to the transaction.

Bond Counsel has not been engaged, nor has it undertaken, to prepare or to independently verify the accuracy of the Official Statement, including but not limited to financial or statistical information of the City and risks associated with the purchase of the Bonds, except Bond Counsel has reviewed the information and statements contained in the Official Statement under, **"TAX EXEMPTION AND RELATED TAX MATTERS"** and **"LEGAL MATTERS"**, insofar as such statements contained under such captions purport to summarize certain provisions of the Internal Revenue Code of 1986, the Bonds and any opinions rendered by Bond Counsel. Bond Counsel has prepared the documents contained in **APPENDIX C** and **APPENDIX D**.

## OFFICIAL STATEMENT AUTHORIZATION

This Official Statement has been authorized for distribution to prospective purchasers of the Bonds. All statements, information, and statistics herein are believed to be correct but are not guaranteed by the consultants or by the City, and all expressions of opinion, whether or not so stated, are intended only as such.

This Official Statement is not to be construed as a contract or agreement amongst the City, the Underwriter, or the holders of any of the Bonds. Any statements made in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended merely as opinions and not as representations of fact. The information and expressions of opinions contained herein are subject to change without notice and neither the delivery of this Official Statement or the sale of the Bonds made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City since the date hereof. The information contained in this Official Statement is not guaranteed.

## UNDERWRITING

The Bonds were offered for sale by the City at a public, competitive sale on February 8, 2021. The best bid submitted at the sale was submitted by \_\_\_\_\_ (the “Underwriter”). The City awarded the contract for sale of the Bonds to the Underwriter at a price of \$\_\_\_\_\_ (reflecting the par amount of \$\_\_\_\_\_, plus a reoffering premium of \$\_\_\_\_\_, and less an Underwriter’s discount of \$\_\_\_\_\_). The Underwriter has represented to the City that the Bonds have been subsequently re-offered to the public initially at the yields or prices set forth in the Final Official Statement.

## MUNICIPAL ADVISOR

The City has engaged Speer Financial, Inc. as municipal advisor (the “Municipal Advisor”) in connection with the issuance and sale of the Bonds. The Municipal Advisor is a Registered Municipal Advisor in accordance with the rules of the MSRB. The Municipal Advisor will not participate in the underwriting of the Bonds. The financial information included in the Official Statement has been compiled by the Municipal Advisor. Such information does not purport to be a review, audit or certified forecast of future events and may not conform with accounting principles applicable to compilations of financial information. The Municipal Advisor is not a firm of certified public accountants and does not serve in that capacity or provide accounting services in connection with the Bonds. The Municipal Advisor is not obligated to undertake any independent verification of or to assume any responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement, nor is the Municipal Advisor obligated by the City’s continuing disclosure undertaking.

## CERTIFICATION

We have examined this Official Statement dated January \_\_, 2021, for the \$1,750,000\* General Obligation Corporate Purpose Bonds, Series 2021, believe it to be true and correct and will provide to the purchaser of the Bonds at the time of delivery a certificate confirming to the purchaser that to the best of our knowledge, information and belief, information in the Official Statement was at the time of acceptance of the bid for the Bonds and, including any addenda thereto, was at the time of delivery of the Bonds true and correct in all material respects and does not include any untrue statement of a material fact, nor does it omit the statement of any material fact required to be stated therein, or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

/s/ **BETH BRINCKS**  
*City Administrator/Clerk*  
CITY OF ANAMOSA  
Jones County, Iowa

/s/ **ROD SMITH**  
*Mayor*  
CITY OF ANAMOSA  
Jones County, Iowa

\*Subject to change.

**APPENDIX A**

**CITY OF ANAMOSA  
JONES COUNTY, IOWA**

**FISCAL YEAR 2019 AUDITED FINANCIAL STATEMENTS**

**CITY OF ANAMOSA, IOWA**

**INDEPENDENT AUDITORS' REPORTS**  
**BASIC FINANCIAL STATEMENTS**  
**SUPPLEMENTARY AND OTHER INFORMATION**  
**SCHEDULE OF FINDINGS AND RESPONSES**

**JUNE 30, 2019**



[CLAconnect.com](http://CLAconnect.com)

WEALTH ADVISORY  
OUTSOURCING  
AUDIT, TAX, AND  
CONSULTING

**CITY OF ANAMOSA, IOWA  
TABLE OF CONTENTS  
JUNE 30, 2019**

<b>OFFICIALS</b>		3
<b>INDEPENDENT AUDITORS' REPORT</b>		4-6
<b>BASIC FINANCIAL STATEMENTS:</b>		
	<b><u>Exhibit</u></b>	
Government-wide Financial Statement:		
Cash Basis Statement of Activities and Net Position	A	8-9
Governmental Funds Financial Statement:		
Statement of Cash Receipts, Disbursements and Changes in Cash Balances	B	10-11
Proprietary Funds Financial Statement:		
Statement of Cash Receipts, Disbursements and Changes in Cash Balances	C	12
Notes to Financial Statements		13-26
<b>OTHER INFORMATION:</b>		
Budgetary Comparison Schedule of Receipts, Disbursements and Changes in Balances - Budget and Actual (Cash Basis) - All Governmental Funds and Proprietary Funds		27
Notes to Other Information - Budgetary Reporting		28
Schedule of City's Proportionate Share of Net Pension Liability		29
Schedule of City Contributions		30
Notes to Other Information - Pension Liability		31
<b>SUPPLEMENTARY INFORMATION:</b>		
	<b><u>Schedule</u></b>	
Schedule of Cash Receipts, Disbursements, and Changes in Cash Balances - Nonmajor Governmental Funds	1	32-33
Schedule of Indebtedness	2	34
Bond and Note Maturities	3	35
Schedule of Receipts by Source and Disbursements by Function - All Governmental Funds	4	36
<b>INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS</b>		37-38
<b>SCHEDULE OF FINDINGS AND RESPONSES</b>		39-42

**City of Anamosa, Iowa**

***Officials***

<b><u>Name</u></b>	<b><u>Title</u></b>	<b><u>Term Expires</u></b>
Dale Barnes	Mayor	January 2020
Betty Weimer	Council Member	January 2020
Cody Shaffer	Council Member	January 2020
Kay Smith	Council Member	January 2022
Rod Smith	Council Member	January 2022
Richard Crump	Council Member	January 2020
John Machart	Council Member	January 2022
Jacob Sheridan	City Administrator	Indefinite
Beth Brincks	City Clerk	Indefinite
Penny Lode	Deputy City Clerk	Indefinite
Adrian Knuth	City Attorney	Indefinite



## INDEPENDENT AUDITORS' REPORT

Honorable Mayor and  
Members of the City Council  
City of Anamosa  
Anamosa, Iowa

### **Report on the Financial Statements**

We have audited the accompanying cash basis financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Anamosa, Iowa, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the cash basis of accounting described in Note 1. This includes determining the cash basis of accounting is an acceptable basis for the preparation of the financial statements in the circumstances. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditors' Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the City's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Honorable Mayor and  
Members of the City Council  
City of Anamosa, Iowa

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective cash basis financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Anamosa, Iowa, as of June 30, 2019, and the respective changes in cash basis financial position for the year then ended in accordance with the basis of accounting described in Note 1.

### ***Basis of Accounting***

As described in Note 1, these financial statements were prepared on the cash basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. Our opinions are not modified with respect to this matter.

### ***Other Matters***

#### ***Supplementary and Other Information***

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the City of Anamosa, Iowa's basic financial statements. The supplementary information included in Schedules 1 through 4 is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with U.S. generally accepted auditing standards. In our opinion, the supplementary information is fairly stated in all material respects in relation to the basic financial statements as a whole.

We also have previously audited, in accordance with auditing standards generally accepted in the United States of America, the City of Anamosa, Iowa's financial statements for the nine years ended June 30, 2018, which are not presented with the accompanying financial statements and we expressed unmodified opinions on the respective financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information. Those audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the City of Anamosa, Iowa's basic financial statements as a whole. The supplementary information included in Schedule 4 for the nine years ending June 30, 2018 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements for those nine years ending June 30, 2018. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the nine years ending June 30, 2018 presented in Schedule 4 is fairly stated, in all material respects, in relation to the basic financial statements from which they have been derived.

Honorable Mayor and  
Members of the City Council  
City of Anamosa, Iowa

The other information, which consists of the Budgetary Comparison Information, the Schedule of the City's Proportionate Share of the Net Pension Liability and the Schedule of City Contributions, as listed in the table of contents, has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated January 22, 2020 on our consideration of the City of Anamosa, Iowa's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the result of that testing, and not to provide an opinion on internal control on the effectiveness of the City's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Anamosa, Iowa's internal control over financial reporting and compliance.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

**CliftonLarsonAllen LLP**

Cedar Rapids, Iowa  
January 22, 2020

## **BASIC FINANCIAL STATEMENTS**

**CITY OF ANAMOSA, IOWA**  
**CASH BASIS STATEMENT OF ACTIVITIES AND NET POSITION**  
**JUNE 30, 2019**

**EXHIBIT A**

	Program Receipts			Net (Disbursements) Receipts and Changes in Cash Basis Net Position			
	Disbursements	Charges for Services	Operating Grants, Contributions, and Restricted Interest	Capital Grants, Contributions and Restricted Interest	Governmental Activities	Business Type Activities	Total
<b>FUNCTIONS/PROGRAMS:</b>							
Governmental Activities:							
Public Safety	\$ 1,133,363	\$ 74,190	\$ 134,620	\$ -	\$ (924,553)	\$ -	\$ (924,553)
Public Works	1,044,099	52,444	-	714,785	(276,870)	-	(276,870)
Culture and Recreation	789,281	88,562	25,738	-	(674,981)	-	(674,981)
Community and Economic Development	15,842	-	-	-	(15,842)	-	(15,842)
General Government	563,524	43,199	-	-	(520,325)	-	(520,325)
Debt Service	323,331	-	-	-	(323,331)	-	(323,331)
Capital Projects	679,289	-	-	314,451	(364,838)	-	(364,838)
Total Governmental Activities	4,548,729	258,395	160,358	1,029,236	(3,100,740)	-	(3,100,740)
Business Type Activities:							
Water	1,062,847	755,119	-	2,333	-	(305,395)	(305,395)
Sewer	1,173,438	1,653,524	-	2,067	-	482,153	482,153
Total Business Type Activities	2,236,285	2,408,643	-	4,400	-	176,758	176,758
Total	\$ 6,785,014	\$ 2,667,038	\$ 160,358	\$ 1,033,636	(3,100,740)	176,758	(2,923,982)
<b>GENERAL RECEIPTS AND TRANSFERS:</b>							
Property Taxes Levied for:							
General Purposes					1,030,132	-	1,030,132
Employee Benefits					527,538	-	527,538
Debt Service					78,024	-	78,024
Tax Increment Financing					239,728	-	239,728
Commercial/Industrial Tax Replacement					42,175	-	42,175
Other City Tax					538,017	-	538,017
Local Option Sales Tax					413,088	-	413,088
Unrestricted Interest on Investments					29,361	38,688	68,049
Rent					14,974	-	14,974
Miscellaneous					130,784	102,571	233,355
Transfers					12,963	(12,963)	-
Sale of Capital Assets					4,615	-	4,615
Total General Receipts and Transfers					3,061,399	128,296	3,189,695

See accompanying Notes to Financial Statements.

**CITY OF ANAMOSA, IOWA**  
**CASH BASIS STATEMENT OF ACTIVITIES AND NET POSITION (CONTINUED)**  
**JUNE 30, 2019**

**EXHIBIT A**

	Program Receipts			Net (Disbursements) Receipts and Changes in Cash Basis Net Position			
	Disbursements	Charges for Services	Operating Grants, Contributions, and Restricted Interest	Capital Grants, Contributions and Restricted Interest	Governmental Activities	Business Type Activities	Total
<b>CHANGE IN CASH BASIS NET POSITION</b>							
Cash Basis Net Position - Beginning of Year					\$ (39,341)	\$ 305,054	\$ 265,713
Cash Basis Net Position - End of Year					6,036,785	4,338,737	10,375,522
					<u>\$ 5,997,444</u>	<u>\$ 4,643,791</u>	<u>\$ 10,641,235</u>
<b>CASH BASIS NET POSITION:</b>							
Restricted:							
Nonexpendable:							
Cemetery Perpetual Care					\$ 93,653	\$ -	\$ 93,653
Expendable:							
Urban Renewal Purposes					246,724	-	246,724
Debt Service					215,506	377,176	592,682
Streets					1,200,495	-	1,200,495
Library					592,274	-	592,274
Other Purposes					1,066,179	188,230	1,254,409
Unrestricted					2,582,613	4,078,385	6,660,998
					<u>\$ 5,997,444</u>	<u>\$ 4,643,791</u>	<u>\$ 10,641,235</u>
Total Cash Basis Net Position							

See accompanying Notes to Financial Statements.

**CITY OF ANAMOSA, IOWA**  
**STATEMENT OF CASH RECEIPTS, DISBURSEMENTS, AND CHANGES IN**  
**CASH BALANCES – GOVERNMENTAL FUNDS**  
**YEAR ENDED JUNE 30, 2019**

**EXHIBIT B**

	General	Special Revenue			Capital Projects Sewer Projects	Nonmajor Governmental Funds	Totals
		Road Use Tax	Employee Benefits				
<b>RECEIPTS</b>							
Property Tax	\$ 1,030,132	\$ -	\$ 527,538	\$ -	-	\$ 78,024	\$ 1,635,694
Tax Increment Financing	-	-	-	-	-	239,728	239,728
Other City Tax	520,375	-	14,884	-	-	415,846	951,105
Licenses and Permits	43,199	-	-	-	-	-	43,199
Use of Money and Property	33,761	-	966	-	-	9,608	44,335
Intergovernmental	182,861	714,785	13,558	-	-	316,363	1,227,567
Charges for Services	215,196	-	-	-	-	-	215,196
Miscellaneous	127,103	-	-	-	-	7,883	134,986
Total Receipts	2,152,627	714,785	556,946	-	-	1,067,452	4,491,810
<b>DISBURSEMENTS</b>							
Current:							
Public Safety	1,084,619	-	-	-	-	48,744	1,133,363
Public Works	450,116	375,047	-	-	-	218,936	1,044,099
Culture and Recreation	750,218	-	-	-	-	39,063	789,281
Community and Economic Development	-	-	-	-	-	15,842	15,842
General Government	526,269	-	-	-	-	37,255	563,524
Debt Service	-	-	-	-	-	323,331	323,331
Capital Projects	95,903	-	-	-	190,348	393,038	679,289
Total Disbursements	2,907,125	375,047	-	-	190,348	1,076,209	4,548,729
Excess (Deficiency) of Receipts over Disbursements	(754,498)	339,738	556,946	-	(190,348)	(8,757)	(56,919)
<b>OTHER FINANCING SOURCES (USES):</b>							
Sale of Capital Assets	4,615	-	-	-	-	-	4,615
Transfers in	777,581	-	-	-	12,963	243,137	1,033,681
Transfers out	(27,384)	(203,819)	(550,050)	-	-	(239,465)	(1,020,718)
Net Other Financing Sources (Uses)	754,812	(203,819)	(550,050)	-	12,963	3,672	17,578

See accompanying Notes to Financial Statements.

**CITY OF ANAMOSA, IOWA**  
**STATEMENT OF CASH RECEIPTS, DISBURSEMENTS, AND CHANGES IN**  
**CASH BALANCES – GOVERNMENTAL FUNDS (CONTINUED)**  
**YEAR ENDED JUNE 30, 2019**

**EXHIBIT B**

	General	Special Revenue			Capital Projects		Nonmajor Governmental Funds	Totals
		Road Use Tax	Employee Benefits		Sewer Projects			
<b>NET CHANGE IN CASH BALANCES</b>								
Cash Balances - Beginning of Year	\$ 314	\$ 135,919	\$ 6,896	\$	\$ (177,385)	\$	\$ (5,085)	\$ (39,341)
	3,275,187	914,162	117,803		781,207		948,426	6,036,785
Cash Balances - End of Year	<u>\$ 3,275,501</u>	<u>\$ 1,050,081</u>	<u>\$ 124,699</u>	<u>\$</u>	<u>603,822</u>	<u>\$</u>	<u>\$ 943,341</u>	<u>\$ 5,997,444</u>
<b>CASH BASIS FUND BALANCES:</b>								
Nonspendable - Cemetery Perpetual Care	\$ -	\$ -	\$ -	\$	-	\$	\$ 93,653	\$ 93,653
Restricted for:								
Urban Renewal Purposes	-	-	-	-	-	-	246,724	246,724
Debt Service	-	-	-	-	-	-	215,506	215,506
Streets	-	1,050,081	-	-	-	-	150,414	1,200,495
Library	-	-	-	-	-	-	592,274	592,274
Other Purposes	-	-	124,699	-	603,822	-	298,943	1,027,464
Assigned for:								
Park Projects	-	-	-	-	-	-	35,235	35,235
Street Projects	-	-	-	-	-	-	38,715	38,715
Unassigned	<u>3,275,501</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(728,123)</u>	<u>2,547,378</u>
Total Cash Basis Fund Balances	<u>\$ 3,275,501</u>	<u>\$ 1,050,081</u>	<u>\$ 124,699</u>	<u>\$</u>	<u>603,822</u>	<u>\$</u>	<u>\$ 943,341</u>	<u>\$ 5,997,444</u>

See accompanying Notes to Financial Statements.

**CITY OF ANAMOSA, IOWA**  
**STATEMENT OF CASH RECEIPTS, DISBURSEMENTS, AND CHANGES IN**  
**CASH BALANCES – PROPRIETARY FUNDS**  
**YEAR ENDED JUNE 30, 2019**

**EXHIBIT C**

	Enterprise		
	Water	Sewer	Total
<b>OPERATING RECEIPTS</b>			
Use of Money and Property	\$ 10,987	\$ 27,701	\$ 38,688
Charges for Services	755,119	1,653,524	2,408,643
Miscellaneous	77,129	29,842	106,971
Total Operating Receipts	843,235	1,711,067	2,554,302
<b>OPERATING DISBURSEMENTS</b>			
Business Type Activities:			
Water	844,735	-	844,735
Sewer	-	1,051,698	1,051,698
Total Operating Disbursements	844,735	1,051,698	1,896,433
Excess (Deficiency) of Operating Receipts Over (Under)			
Operating Disbursements	(1,500)	659,369	657,869
<b>NONOPERATING RECEIPTS (DISBURSEMENTS)</b>			
Debt Service	(218,112)	(121,740)	(339,852)
<b>OTHER FINANCING SOURCES (USES)</b>			
Transfers out	-	(12,963)	(12,963)
<b>NET CHANGE IN CASH BALANCES</b>	(219,612)	524,666	305,054
Cash Balances - Beginning of Year	1,181,954	3,156,783	4,338,737
Cash Balances - End of Year	<u>\$ 962,342</u>	<u>\$ 3,681,449</u>	<u>\$ 4,643,791</u>
<b>CASH BASIS FUND BALANCES</b>			
Restricted:			
Debt Service	\$ 4,016	\$ 373,160	\$ 377,176
Other Purposes	99,762	88,468	188,230
Unrestricted	858,564	3,219,821	4,078,385
Total Cash Basis Fund Balances	<u>\$ 962,342</u>	<u>\$ 3,681,449</u>	<u>\$ 4,643,791</u>

See accompanying Notes to Financial Statements.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The City of Anamosa, Iowa (the City) is a political subdivision of the State of Iowa located in Jones County. It was first incorporated in 1872 and operates under the Home Rule provisions of the Constitution of Iowa. The City operates under the Mayor-Council form of government with the Mayor and Council Members elected on a nonpartisan basis. The City provides numerous services to citizens including public safety, public works, culture and recreation, community and economic development, and general government services. The City also provides water and sewer utilities for its citizens.

**Reporting Entity**

For financial reporting purposes, the City of Anamosa, Iowa has included all funds, organizations, agencies, boards, commissions, and authorities. The City has also considered all potential component units for which it is financially accountable and other organizations for which the nature and significance of their relationship with the City are such that exclusion would cause the City's financial statements to be misleading or incomplete. The Governmental Accounting Standards Board has set forth criteria to be considered in determining financial accountability. These criteria include appointing a voting majority of an organization's governing body and (1) the ability of the City to impose its will on that organization or (2) the potential for the organization to provide specific benefits to or impose specific financial burdens on the City. The City has no component units which meet the Governmental Accounting Standards Board criteria.

**Jointly Governed Organizations**

The City participates in several jointly governed organizations that provide goods or services to the citizenry of the City but do not meet the criteria of a joint venture since there is no ongoing financial interest or responsibility by the participating governments. City officials are members of the following boards and commissions: Jones County Assessor's Conference Board, Jones County 911 Service Board, and Jones County Solid Waste Commission.

**Basis of Presentation**

*Government-wide Financial Statement* – The Cash Basis Statement of Activities and Net Position reports information on all of the nonfiduciary activities of the City. For the most part, the effect of interfund activity has been removed from this statement. Governmental activities, which are supported by tax and intergovernmental receipts, are reported separately from business type activities, which rely to a significant extent on fees and charges for service.

The Cash Basis Statement of Activities and Net Position presents the City's nonfiduciary net position. Net position is reported in the following categories/components:

Nonexpendable restricted net position is subject to externally imposed stipulations which require them to be maintained permanently by the City, including the City's permanent fund.

Expendable restricted net position results when constraints placed on the use of cash balances are either externally imposed or imposed by law through constitutional provisions or enabling legislation.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Basis of Presentation (Continued)**

*Government-wide Financial Statement (Continued)*

Unrestricted net position consists of cash balances not meeting the definition of the preceding categories. Unrestricted net position is often subject to constraints imposed by management which can be removed or modified.

The Cash Basis Statement of Activities and Net Position demonstrates the degree to which the direct disbursements of a given function are offset by program receipts. Direct disbursements are those clearly identifiable with a specific function. Program receipts include 1) charges to customers or applicants who purchase, use or directly benefit from goods, services or privileges provided by a given function and 2) grants, contributions and interest on investments restricted to meeting the operational or capital requirements of a particular function. Property tax and other items not properly included among program receipts are reported instead as general receipts.

Fund Financial Statements – Separate financial statements are provided for governmental funds and proprietary funds. Major individual governmental funds and major individual enterprise funds are reported as separate columns in the fund financial statements. All remaining governmental funds and enterprise funds are aggregated and reported as nonmajor governmental or nonmajor enterprise funds.

The City reports the following major governmental funds:

The General Fund is the general operating fund of the City. All general tax receipts from general and emergency levies and other receipts not allocated by law or contractual agreement to some other fund are accounted for in this fund. From the fund are paid the general operating disbursements, the fixed charges, and the capital improvement costs that are not paid from other funds.

**Special Revenue:**

Road Use Tax Fund is used to account for the road use tax allocation from the State of Iowa to be used for road construction and maintenance.

Employee Benefit Fund is used to account for the collection and disbursement of amounts levied for employee benefits.

**Capital Projects:**

Sewer Projects Fund is utilized to account for capital projects in the sewer fund.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Basis of Presentation (Continued)**

The City reports the following major proprietary funds:

The Enterprise, Water Fund accounts for the operation and maintenance of the City's water system.

The Enterprise, Sewer Fund accounts for the operation and maintenance of the City's wastewater treatment and sanitary sewer system.

**Measurement Focus and Basis of Accounting**

The City maintains its financial records on the basis of cash receipts and disbursements and the financial statements of the City are prepared on that basis. The cash basis of accounting does not give effect to accounts receivable, accounts payable and accrued items. Accordingly, the financial statements do not present financial position and results of operations of the funds in accordance with U.S. generally accepted accounting principles.

Under the terms of grant agreements, the City funds certain programs by a combination of specific cost-reimbursement grants, categorical block grants, and general receipts. Thus, when program disbursements are paid, there are both restricted and unrestricted cash basis net position available to finance the program. It is the City's policy to first apply cost-reimbursement grant resources to such programs, followed by categorical block grants and then by general receipts.

When a disbursement in governmental funds can be paid using either restricted or unrestricted resources, the City's policy is generally to first apply the disbursement toward restricted fund balance and then to less-restrictive classifications - committed, assigned, and then unassigned fund balances.

Proprietary funds distinguish operating receipts and disbursements from nonoperating items. Operating receipts and disbursements generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. All receipts and disbursements not meeting this definition are reported as nonoperating receipts and disbursements.

**Governmental Cash Basis Fund Balances**

In the governmental fund financial statements, cash basis fund balances are classified as follows:

Nonspendable - Amounts which cannot be spent because they are legally or contractually required to be maintained intact.

Restricted - Amounts restricted to specific purposes when constraints placed on the use of the resources are either externally imposed by creditors, grantors, or state or federal laws or imposed by law through constitutional provisions or enabling legislation.

**CITY OF ANAMOSA, IOWA  
NOTES TO FINANCIAL STATEMENTS  
JUNE 30, 2019**

**NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Governmental Cash Basis Fund Balances (Continued)**

Assigned - Amounts the City Council intends to use for specific purposes.

Unassigned - All amounts not included in the preceding classifications.

**Budgets and Budgetary Accounting**

The budgetary comparison and related disclosures are reported as Other Information.

**Property Tax Calendar**

The City's property tax rates were extended against the assessed valuation of the City as of January 1, 2017 to compute the amounts which became liens on property on July 1, 2018. These taxes were due and payable in two installments on September 30, 2018 and March 31, 2019, at the Jones County Treasurer's Office. These taxes are recognized as income to the City when they are received from the County.

**NOTE 2 CASH**

The City's deposits in banks at June 30, 2019 were entirely covered by federal depository insurance or by the State Sinking Fund in accordance with Chapter 12C of the Code of Iowa. This chapter provides for additional assessments against the depositories to ensure there will be no loss of public funds.

The City is authorized by statute to invest public funds in obligations of the United States government, its agencies and instrumentalities; certificates of deposit or other evidences of deposit at federally insured depository institutions approved by the City Council; prime eligible bankers acceptances; certain high rated commercial paper; perfected repurchase agreements; certain registered open-ended management investment companies; certain joint investment trusts; and warrants or improvement certificates of a drainage district.

The City had no investments meeting the disclosure requirements of Governmental Accounting Standards Board Statement No. 72.

At June 30, 2019, the City's deposits consisted of cash and certificates of deposit as follows:

	Bank Value	Carrying Value
Checking Account	\$ 9,566,621	\$ 9,394,214
Payroll Account	45,559	45,559
Certificates of Deposit	1,201,462	1,201,462
Total	<u>\$ 10,813,642</u>	<u>\$ 10,641,235</u>

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 2 CASH (CONTINUED)**

Interest rate risk – The City's investment policy limits the investment of operating funds (funds expected to be expended in the current budget year or within 15 months of receipt) to instruments that mature within 397 days. Funds not identified as operating funds may be invested in investments with maturities longer than 397 days, but the maturities shall be consistent with the needs and use of the City.

**NOTE 3 BONDS AND NOTES PAYABLE**

Annual debt service requirements to maturity of general obligation bonds and notes, special revenue bonds and notes and revenue notes are as follows for the year ended June 30, 2019:

	General Obligation Bonds and Notes		Revenue Bonds and Notes		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2020	\$ 348,500	\$ 28,348	\$ 275,000	\$ 78,192	\$ 623,500	\$ 106,540
2021	359,200	20,128	281,000	71,392	640,200	91,520
2022	370,000	11,280	288,000	64,422	658,000	75,702
2023	25,700	1,645	295,000	57,274	320,700	58,919
2024	26,500	835	303,000	49,937	329,500	50,772
2025-2029	-	-	1,355,000	137,045	1,355,000	137,045
2030-2033	-	-	527,579	25,032	527,579	25,032
Total	<u>\$ 1,129,900</u>	<u>\$ 62,236</u>	<u>\$ 3,324,579</u>	<u>\$ 483,294</u>	<u>\$ 4,454,479</u>	<u>\$ 545,530</u>

Changes during the fiscal year and current maturities are as follows:

	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
General Obligation Bonds	<u>\$ 1,417,600</u>	<u>\$ -</u>	<u>\$ 287,700</u>	<u>\$ 1,129,900</u>	<u>\$ 348,500</u>
Revenue Bonds	<u>\$ 3,592,579</u>	<u>\$ -</u>	<u>\$ 268,000</u>	<u>\$ 3,324,579</u>	<u>\$ 275,000</u>

Revenue Notes

The City has pledged future sewer customer receipts, net of specified operating disbursements, to repay \$2,320,000 of sewer revenue notes issued in February 2008. Proceeds from the notes provided financing for the construction of improvements to the sewer treatment plant. The notes are payable solely from sewer customer net receipts and are payable through 2027. The total principal and interest remaining to be paid on the notes is \$1,078,025. For the current year, principal and interest paid and total customer net receipts were \$121,740 and \$659,369 respectively.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 3 BONDS AND NOTES PAYABLE (CONTINUED)**

The resolutions providing for the issuance of the revenue notes include the following provisions:

- (a) The City shall generate net receipts from sewer operations of at least 110% of the average annual principal and interest payments.
- (b) An amount equal to 1/12<sup>th</sup> of the next principal payment due and 1/6<sup>th</sup> of the next interest payment due shall be set aside in a sewer sinking fund.
- (c) A reserve fund is to be established with a required balance of \$13,737.

The City has pledged future water customer receipts, net of specified operating disbursements, to repay \$2,020,000 of water revenue notes issued in September 2013. Proceeds from the notes provided financing for the construction of improvements and extensions to the Utility. The notes are payable solely from water customer net receipts and are payable through 2033. The total principal and interest remaining to be paid on the notes is \$1,745,140. For the current year, principal and interest paid and total customer net receipts were \$125,040 and \$-1,500 respectively.

The resolutions providing for the issuance of the revenue notes include the following provisions:

- (a) The City shall generate net receipts from water operations of at least 110% of the average annual principal and interest payments.
- (b) An amount equal to 1/12<sup>th</sup> of the next principal payment due and 1/6<sup>th</sup> of the next interest payment shall be set aside in a water sinking fund.
- (c) A reserve fund is to be established with a required balance of \$12,947.

The City has pledged future water customer receipts, net of specified operating disbursements, to repay \$953,579 of water revenue notes issued in December 2017. Proceeds from the notes provided financing for the construction of improvements and extensions to the Utility. The notes are payable solely from water customer net receipts and are payable through 2030. The total principal and interest remaining to be paid on the notes is \$984,706. For the current year, interest paid and total customer net receipts were \$93,072 and \$-1,500 respectively.

The resolutions providing for the issuance of the revenue notes include the following provisions:

- (a) The City shall generate net receipts from water operations of at least 110% of the average annual principal and interest payments.
- (b) An amount equal to 1/12<sup>th</sup> of the next principal payment due and 1/6<sup>th</sup> of the next interest payment shall be set aside in a water sinking fund.
- (c) A reserve fund is to be established with a required balance of \$9,265.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 3 BONDS AND NOTES PAYABLE (CONTINUED)**

The City is in compliance with the sewer provisions, but not the water provisions. There was not enough funds set aside in the Sinking Fund or enough net receipts to cover 110% of the annual principal and interest payments.

Pursuant to the Code of Iowa, the City's general obligation debt is limited to 5% of assessed value as follows:

Assessed Value	<u>\$ 229,866,821</u>
Debt Limit - 5% of Assessed Value	<u>\$ 11,493,341</u>
Debt Outstanding	<u>1,129,900</u>
Debt Margin	<u><u>\$ 10,363,441</u></u>

**NOTE 4 CONDUIT DEBT**

The City has issued gross revenue bonds for the purpose of providing capital financing to a private enterprise. Even though the debt bears the City's name, the City is not responsible for the payment of the original debt. The debt is secured by the payments agreed to be paid by the private enterprise under the terms of the agreement between the City and the enterprise. The general description of the transaction and the outstanding balance at June 30, 2019 is as follows:

<u>Enterprise</u>	<u>Purpose</u>	<u>Balance at June 30, 2019</u>
Jones County Hospital	Construction of Facility	\$ 3,320,179

**NOTE 5 PENSION PLAN**

**Plan Description**

IPERS membership is mandatory for employees of the City, except for those covered by another retirement system. Employees of the City are provided with pensions through a cost-sharing multiple employer defined benefit pension plan administered by the Iowa Public Employees' Retirement System (IPERS). IPERS issues a stand-alone financial report which is available to the public by mail at PO Box 9117, Des Moines, IA 50306-9117 or at [www.ipers.org](http://www.ipers.org).

IPERS benefits are established under Iowa Code chapter 97B and the administrative rules thereunder. Chapter 97B and the administrative rules are the official plan documents. The following brief description is provided for general informational purposes only. Refer to the plan documents for more information.

**CITY OF ANAMOSA, IOWA  
NOTES TO FINANCIAL STATEMENTS  
JUNE 30, 2019**

**NOTE 5 PENSION PLAN (CONTINUED)**

**Pension Benefits**

A regular member may retire at normal retirement age and receive monthly benefits without an early-retirement reduction. Normal retirement age is age 65, any time after reaching age 62 with 20 or more years of covered employment, or when the member's years of service plus the member's age at the last birthday equals or exceeds 88, whichever comes first. These qualifications must be met on the member's first month of entitlement to benefits. Members cannot begin receiving retirement benefits before age 55. The formula used to calculate a Regular member's monthly IPERS benefit includes:

- A multiplier based on years of service.
- The member's highest five-year average salary, except members with service before June 30, 2012 will use the highest three-year average salary as of that date if it is greater than the highest five-year salary.

Protection occupation members may retire at normal age, which is generally age 55. The formula used to calculate a protection occupation member's monthly IPERS benefit includes:

- 60% of average salary after completion of 22 years of service, plus an additional 1.5% of average salary for more than 22 years of service but not more than 30 years.
- The member's highest three-year average salary.

If a member retires before normal retirement age, the member's monthly retirement benefit will be permanently reduced by an early-retirement reduction. The early-retirement reduction is calculated differently for service earned before and after July 1, 2012. For service earned before July 1, 2012, the reduction is 0.25% for each month that the member receives benefits before the member's earliest normal retirement age. For service earned on or after July 1, 2012, the reduction is 0.50% for each month that the member receives benefits before age 65.

Generally, once a member selects a benefit option, a monthly benefit is calculated and remains the same for the rest of the member's lifetime. However, to combat the effects of inflation, retirees who began receiving benefits prior to July 1990 receive a guaranteed dividend with their regular November benefit payments.

**Disability and Death Benefits**

A vested member who is awarded federal Social Security disability or Railroad Retirement disability benefits is eligible to claim IPERS benefits regardless of age. Disability benefits are not reduced for early retirement. If a member dies before retirement, the member's beneficiary will receive a lifetime annuity or a lump-sum payment equal to the present actuarial value of the member's accrued benefit or calculated with a set formula, whichever is greater. When a member dies after retirement, death benefits depend on the benefit option the member selected at retirement.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 5 PENSION PLAN (CONTINUED)**

**Contributions**

Contribution rates are established by IPERS following an annual actuarial valuation, which applies IPERS' Contribution Rate Funding Policy and Actuarial Amortization Method. State statute limits the amount rates can increase or decrease each year to 1 percentage point. IPERS Contribution Rate Funding Policy requires the actuarial contribution rate be determined using the "entry age normal" actuarial cost method and the actuarial assumptions and the methods approved by the IPERS Investment Board. The actuarial contribution rate covers normal cost plus the unfunded actuarial liability payment based on a 30-year amortization period. The payment to amortize the unfunded actuarial liability is determined as a level percentage of payroll based on the Actuarial Amortization Method adopted by the Investment Board.

In fiscal year 2019, pursuant to the required rate, Regular members contributed 6.29% of covered payroll and the City contributed 9.44% of covered payroll, for a total rate of 15.73%.

Protection occupation members contributed 6.81% of covered payroll and the City contributed 10.21% of covered payroll, for a total rate of 17.02%.

The City's contributions to IPERS for the year ended June 30, 2019 totaled \$133,679.

**Net Pension Liability, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

At June 30, 2019, the City was allocated a liability for its proportionate share of the net pension liability totaled \$773,199. The net pension liability was measured as of June 30, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The City's proportion of the net pension liability was based on the City's share of contributions to IPERS relative to the contributions of all IPERS participating employers. At June 30, 2018, the City's proportion was 0.012255% for Regular employees and 0.115762% for Protection Occupation employees, which was a decrease of 0.001192% for Regular employees and a decrease of 0.000060% for Protection Occupation employees from its proportion measured as of June 30, 2017.

For the year ended June 30, 2019, the City collective pension expense, collective deferred outflows of resources, and collective deferred inflows of resources totaled \$142,350, \$291,978, and \$190,505, respectively.

There were no nonemployer contributing entities to IPERS.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 5 PENSION PLAN (CONTINUED)**

**Actuarial Assumptions**

The total pension liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Rate of Inflation (Effective June 30, 2017)	2.60% per annum
Rates of Salary Increases (Effective June 30, 2017)	3.25 to 16.25%, average, including inflation. Rates vary by membership group.
Long-Term Investment Rate of Return (Effective June 30, 2017)	7.00%, compounded annually, net of investment expense, including inflation
Wage Growth (Effective June 30, 2017)	3.25% per annum, based on 2.60% inflation and 0.65% real wage inflation

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an economic assumption study dated March 24, 2017 and a demographic assumption study dated June 28, 2018.

Mortality rates used in the 2018 valuation were based on the RP-2014 Employee and Healthy Annuitant Tables with MP-2017 generational adjustments.

The long-term expected rate of return on IPERS' investments was determined using a building-block method in which best-estimate ranges of expected future real rates (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity	22.0 %	6.01 %
International Equity	15.0	6.48
Global smart beta equity	3.0	6.23
Core plus fixed income	27.0	1.97
Public credit	3.5	3.93
Public real assets	7.0	2.91
Cash	1.0	(0.25)
Private equity	11.0	10.81
Private real assets	7.5	4.14
Private credit	3.0	3.11
Total	<u>100 %</u>	

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 5 PENSION PLAN (CONTINUED)**

**Discount Rate**

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the contractually required rate and contributions from the City will be made at contractually required rates, actuarially determined. Based on those assumptions, IPERS' fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on IPERS' investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the City's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate**

The following presents the City's proportionate share of the net pension liability calculated using the discount rate of 7.00%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% lower (6.00%) or 1% higher (8.00%) than the current rate.

	1% Decrease 6.0%	Discount Rate 7.0%	1% Increase 8.0%
City's Proportionate Share of the Net Pension Liability	\$ 1,561,036	\$ 773,199	\$ 112,692

**Pension Plan Fiduciary Net Position** - Detailed information about the pension plan's fiduciary net position is available in the separately issued IPERS financial report which is available on IPERS' website [www.ipers.org](http://www.ipers.org).

**NOTE 6 OTHER POSTEMPLOYMENT BENEFITS (OPEB)**

**Plan Description**

The City operates a single-employer health benefit plan which provides medical/prescription drug benefits for employees, retirees, and their spouses. Group insurance benefits are established under Iowa Code 509A.13. The City currently finances the benefit plan on a pay-as-you-go basis. The most recent active member monthly premiums for the City and the plan members range from \$351 for single coverage to \$2,253 for family coverage. The City contributed \$0 to the plan for inactive employees. At June 30, 2019, no assets have been accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

**OPEB Benefits**

Individuals who are employed by City of Anamosa and are eligible to participate in the group health plan are eligible to continue healthcare benefits upon retirement. Retirees under age 65 pay the same premium for the medical/prescription drug benefits as active employees, which results in an implicit rate subsidy.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 6 OTHER POSTEMPLOYMENT BENEFITS (OPEB) (CONTINUED)**

At June 30, 2019, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	1
Active employees	23
Total	<u>24</u>

**NOTE 7 INTERFUND TRANSFERS**

The detail of interfund transfers for the year ended June 30, 2019 is as follows:

		Amount
Transfer in:	Transfer out:	
General	Road Use Tax	\$ 203,819
	Employee Benefits	550,050
	Nonmajor Local Option Sales Tax	<u>23,712</u>
		777,581
Nonmajor Debt Service	General	27,384
	Nonmajor Tax Increment Financing	183,390
	Nonmajor Special Assessment	<u>32,363</u>
		243,137
Sewer Projects	Sewer	<u>12,963</u>
Total		<u><u>\$ 1,033,681</u></u>

Transfers generally move resources from the fund statutorily required to collect the resources to the fund statutorily required to expend the resources.

There were also \$657,642 of transfers within the same funds to different departments.

**NOTE 8 COMPENSATED ABSENCES**

City employees accumulate a limited amount of earned but unused vacation, sick leave, and compensated time based on the length of employment for subsequent use or for payment upon termination, retirement, or death. Sick leave is payable when used and may be accumulated to a maximum of 1,440 hours. Vacation is payable when used and is cumulative to a maximum of 240 hours. These accumulations are not recognized as disbursements by the City until used or paid. Vacation and compensation time is a fully vested benefit. Sick leave is a partially vested benefit only after employment exceeds 15 years, in which they receive one-eighth of the accumulated hours, or 25 years, in which they receive one-fourth of the accumulated hours, up to 180 total hours.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 8 COMPENSATED ABSENCES (CONTINUED)**

The City's approximate liability for total compensated absences payable to employees at June 30, 2019, primarily relating to the General Fund, is \$106,810.

This liability has been computed based on pay rates in effect at June 30, 2019.

**NOTE 9 RELATED-PARTY TRANSACTIONS**

The City had business transactions between the City and a business owned by a Council member's family totaling \$38,170 during the year ended June 30, 2019.

**NOTE 10 RISK MANAGEMENT AND CONTINGENCIES**

The City is exposed to various risks of loss related to torts; theft, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. These risks are covered by the purchase of commercial insurance. The City assumes liability for any deductibles and claims in excess of coverage limitations. The City had settled claims during the year ended June 30, 2018 which exceeded commercial insurance coverage. The City did not have settled claims which exceeded coverage the for the years ended June 30, 2019 and 2017.

**NOTE 11 COMMITMENTS**

As of June 30, 2019, the City has various outstanding construction contracts totaling \$671,567. A Wastewater Treatment Plant Upgrade of \$445,000 will be paid with utility revenue.

Amounts received or receivable from federal and state agencies are subject to agency audit and adjustment. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable fund. The amount, if any, of funds which may be disallowed by the agencies cannot be determined at this time although the City expects such amount, if any, to be immaterial.

**NOTE 12 DEFICIT BALANCES**

The Capital Projects, Water Projects Fund had a deficit balance of \$(728,123) at June 30, 2019. The deficit balance was a result of project costs incurred prior to availability of funds on the water treatment plant expansion. The deficit's elimination is anticipated by management through receiving CDBG grant and State Revolving Loan funds for the water plant expansion.

**CITY OF ANAMOSA, IOWA**  
**NOTES TO FINANCIAL STATEMENTS**  
**JUNE 30, 2019**

**NOTE 13 DEVELOPMENT AGREEMENT**

The City has entered into a development agreement with Anamosa Care Center, Anamosa Lodge & Suites, and Fareway Stores, Inc. (developers) for the construction of a care facility, motel facility, and commercial grocery store respectively. The City agreed to pay the developer an amount not to exceed \$250,000, \$750,000, and \$250,000 respectively, subject to annual appropriation by the City Council. The agreements require two annual payments, provided the developer is in compliance with the terms of the agreement. During the year ended June 30, 2019, the City rebated \$21,498 of incremental property tax to the developers. At June 30, 2019, the remaining balance to be paid on the Anamosa Care Center agreement is \$134,925, the remaining balance to be paid on the Anamosa Lodge & Suites agreement is \$309,516, and the remaining balance to be paid on the Fareway Stores, Inc. agreement is \$250,000.

**NOTE 14 TAX ABATEMENTS**

Governmental Accounting Standards Board Statement No. 77 defines tax abatements as a reduction in tax revenues that results from an agreement between one or more governments and an individual or entity in which (a) one or more governments promise to forgo tax revenues to which they are otherwise entitled and (b) the individual or entity promises to take a specific action after the agreement has been entered into that contributes to economic development or otherwise benefits the governments or the citizens of those governments.

The City provides tax abatements for urban renewal and economic development projects with tax increment financing as provided for in Chapters 15A and 403 of the Code of Iowa. For these types of projects, the City enters into agreements with developers which require the City, after developers meet the terms of the agreements, to rebate a portion of the property tax paid by the developers, to pay the developers an economic development grant or to pay the developers a predetermined dollar amount. No other commitments were made by the City as part of these agreements.

For the year ended June 30, 2019, the City abated \$21,498 of property tax under the urban renewal and economic development agreements.

Tax Abatements of Other Entities

There were no tax abatements of other entities for the year ended June 30, 2019.

## OTHER INFORMATION

**CITY OF ANAMOSA, IOWA**  
**BUDGETARY COMPARISON SCHEDULE OF RECEIPTS, DISBURSEMENTS, AND**  
**CHANGES IN BALANCES – BUDGET AND ACTUAL (CASH BASIS) – ALL**  
**GOVERNMENTAL FUNDS AND PROPRIETARY FUNDS**  
**YEAR ENDED JUNE 30, 2019**

	Governmental Funds Actual	Proprietary Funds Actual	Total	Budgeted Amounts		Final to Total Variance
				Original	Final	
<b>RECEIPTS</b>						
Property Tax	\$ 1,635,694	\$ -	\$ 1,635,694	\$ 1,884,997	\$ 1,884,997	\$ (249,303)
Tax Increment Financing	239,728	-	239,728	237,265	237,265	2,463
Other City Tax	951,105	-	951,105	667,037	667,037	284,068
Licenses and Permits	43,199	-	43,199	8,100	8,100	35,099
Use of Money and Property	44,335	38,688	83,023	61,565	61,565	21,458
Intergovernmental	1,227,567	-	1,227,567	836,446	966,485	261,082
Charges for Services	215,196	2,408,643	2,623,839	2,722,355	2,722,355	(98,516)
Miscellaneous	134,986	106,971	241,957	315,616	315,616	(73,659)
Total Receipts	4,491,810	2,554,302	7,046,112	6,733,381	6,863,420	182,692
<b>DISBURSEMENTS</b>						
Public Safety	1,133,363	-	1,133,363	983,723	1,112,862	(20,501)
Public Works	1,044,099	-	1,044,099	1,103,377	1,103,377	59,278
Culture and Recreation	789,281	-	789,281	810,620	840,620	51,339
Community and Economic Development	15,842	-	15,842	27,155	137,155	121,313
General Government	563,524	-	563,524	555,205	604,505	40,981
Debt Service	323,331	-	323,331	323,367	323,367	36
Capital Projects	679,289	-	679,289	1,365,000	1,365,000	685,711
Business Type Activities	-	2,236,285	2,236,285	2,493,444	2,613,444	377,159
Total Disbursements	4,548,729	2,236,285	6,785,014	7,661,891	8,100,330	1,315,316
Excess (Deficiency) of Receipts over Disbursements	(56,919)	318,017	261,098	(928,510)	(1,236,910)	1,498,008
<b>OTHER FINANCING SOURCES, NET</b>						
Excess (Deficiency) of Receipts and Other Financing Sources over Disbursements and Other Financing Uses	17,578	(12,963)	4,615	-	-	4,615
Balance - Beginning of Year	(39,341)	305,054	265,713	(928,510)	(1,236,910)	1,502,623
	6,036,785	4,338,737	10,375,522	9,855,142	9,855,142	520,380
<b>BALANCE - END OF YEAR</b>	<u>\$ 5,997,444</u>	<u>\$ 4,643,791</u>	<u>\$ 10,641,235</u>	<u>\$ 8,926,632</u>	<u>\$ 8,618,232</u>	<u>\$ 2,023,003</u>

**CITY OF ANAMOSA, IOWA**  
**NOTES TO OTHER INFORMATION – BUDGETARY REPORTING**  
**JUNE 30, 2019**

The budgetary comparison is presented in accordance with Governmental Accounting Standards Board Statement No. 41 for governments with significant budgetary perspective differences resulting from not being able to present budgetary comparisons for the General Fund and each major Special Revenue Fund.

In accordance with the Code of Iowa, the City Council annually adopts a budget on the cash basis following required public notice and hearing for all funds. The annual budget may be amended during the year utilizing similar statutorily prescribed procedures.

Formal and legal budgetary control is based upon nine major classes of disbursements known as functions, not by fund. These nine functions are: public safety, public works, health and social services, culture and recreation, community and economic development, general government, debt service, capital projects, and business type activities. Function disbursements required to be budgeted include disbursements for the General Fund, the Special Revenue Funds, the Debt Service Fund, the Capital Projects Funds, the Permanent Fund, and the Enterprise Funds. Although the budget document presents functional disbursements by fund, the legal level of control is at the aggregated function level, not by fund. During the year, one budget amendment increased budgeted disbursements by \$438,439. The budget amendment is reflected in the final budgeted amounts.

During the year ended June 30, 2019, disbursement exceeded amounts budgeted in the public safety function.

**CITY OF ANAMOSA, IOWA**  
**SCHEDULE OF CITY'S PROPORTIONATE SHARE OF NET PENSION LIABILITY**  
**FOR THE LAST FIVE YEARS\***

**Iowa Public Employees' Retirement System**  
(Dollars In Thousands)

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
City's proportion of the net pension liability:					
Regular	0.012255%	0.013447%	0.013513%	0.012719%	0.012551%
Police	0.115762%	0.121716%	0.121861%	0.008657%	0.108852%
City's total proportionate share of the net pension liability	\$ 773	\$ 910	\$ 868	\$ 629	\$ 423
City's covered payroll	\$ 1,325	\$ 1,436	\$ 1,370	\$ 1,233	\$ 1,186
City's proportionate share of the net pension liability as a percentage of its covered payroll	58.34%	63.37%	63.36%	51.01%	35.67%
Plan fiduciary net position as a percentage of the total pension liability	83.62 %	82.21 %	81.82 %	85.19 %	87.61 %

\* In accordance with GASB No. 68, the amounts presented for each fiscal year were determined as of June 30 of the preceding fiscal year

**CITY OF ANAMOSA, IOWA  
SCHEDULE OF CITY CONTRIBUTIONS  
IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
FOR THE LAST TEN YEARS  
JUNE 30, 2019  
(DOLLARS IN THOUSANDS)**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Statutorily required contribution	\$ 133	\$ 122	\$ 132	\$ 127	\$ 114	\$ 108	\$ 94	\$ 88	\$ 85	\$ 71
Contributions in relation to the statutorily required contribution	(133)	(122)	(132)	(127)	(114)	(108)	(94)	(88)	(85)	(71)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
City's covered payroll (regular)	\$ 945	\$ 919	\$ 1,009	\$ 962	\$ 877	\$ 838	\$ 760	\$ 836	\$ 862	\$ 801
City's covered payroll (police)	\$ 430	\$ 406	\$ 427	\$ 408	\$ 356	\$ 348	\$ 331	\$ 304	\$ 301	\$ 235
Contributions as a percentage of covered payroll (regular)	9.44%	8.93%	8.93%	8.93%	8.93%	8.67%	8.07%	6.95%	6.65%	6.35%
Contributions as a percentage of covered payroll (police)	10.21%	9.84%	9.84%	10.14%	10.14%	10.27%	9.97%	9.95%	9.20%	8.45%

**CITY OF ANAMOSA, IOWA**  
**NOTES TO OTHER INFORMATION – PENSION LIABILITY**  
**JUNE 30, 2019**

**Changes in Benefit Terms**

Legislation enacted in 2010 modified benefit terms for Regular members. The definition of final average salary changed from the highest three to the highest five years of covered wages. The vesting requirement changed from four years of service to seven years. The early retirement reduction increased from 3% per year measured from the member's first unreduced retirement age to a 6% reduction for each year of retirement before age 65.

**Changes of Assumptions**

The 2018 valuation implemented the following refinements as a result of a demographic assumption study dated June 28, 2018:

- Changed mortality assumptions to the RP-2014 mortality tables with mortality improvements modeled using Scale MP-2017.
- Adjusted retirement rates.
- Lowered disability rates.
- Adjusted the probability of a vested Regular member electing to receive a deferred benefit.
- Adjusted the merit component of the salary increase assumption.

The 2017 valuation implemented the following refinements as a result of an experience study dated March 24, 2017:

- Decreased the inflation assumption from 3.00% to 2.60%.
- Decreased assumed rate of interest on member accounts from 4.75% to 3.50% per year.
- Decreased the discount rate from 7.50% to 7.00%
- Decreased the wage growth assumption from 4.00% to 3.25%
- Decreased the payroll growth assumption from 4.00% to 3.25%

The 2014 valuation implemented the following refinements as a result of a quadrennial experience study:

- Decreased the inflation assumption from 3.25% to 3.00%
- Decreased the assumed rate of interest on member accounts from 4.00% to 3.75% per year.
- Adjusted male mortality rates for retirees in the Regular membership group.
- Reduced retirement rates for sheriffs and deputies between the ages of 55 and 64.
- Moved from an open 30-year amortization period to a closed 30-year amortization period for the UAL (unfunded actuarial liability) beginning June 30, 2015. Each year thereafter, changes in the UAL from plan experience will be amortized on a separate closed 20-year period.

## **SUPPLEMENTARY INFORMATION**

**CITY OF ANAMOSA, IOWA  
SCHEDULE OF CASH RECEIPTS, DISBURSEMENTS,  
AND CHANGES IN CASH BALANCES  
NONMAJOR GOVERNMENTAL FUNDS  
AS OF AND FOR THE YEAR ENDED JUNE 30, 2019**

**SCHEDULE 1**

	Special Revenue							
	Tax Increment Financing	Police Department Forfeiture	Police Canine	Anamosa/ Monticello Local Access	Wetlands Project	Library Special Gift	Special Assessment	Local Option Sales Tax
<b>RECEIPTS</b>								
Property Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tax Increment Financing	239,728	-	-	-	-	-	-	-
Other City Tax	-	-	-	-	-	-	-	413,088
Use of Money and Property	-	-	3	42	-	4,561	3,090	1,127
Intergovernmental	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Total Receipts	239,728	-	3	42	-	4,561	3,090	414,215
<b>DISBURSEMENTS</b>								
Public Safety	-	-	-	-	-	-	-	48,744
Public Works	-	-	-	-	-	-	-	218,936
Culture and Recreation	-	-	-	-	-	-	-	39,063
Community and Economic Development	15,842	-	-	-	-	-	-	-
General Government	-	-	-	-	-	-	-	37,255
Debt Service	-	-	-	-	-	-	-	-
Capital Projects	-	-	-	-	-	-	-	-
Total Disbursements	15,842	-	-	-	-	-	-	343,998
Excess (Deficiency) of Receipts over Disbursements	223,886	-	3	42	-	4,561	3,090	70,217
<b>OTHER FINANCING SOURCES (USES)</b>								
Transfers in	-	-	-	-	-	-	-	-
Transfers out	(183,390)	-	-	-	-	-	(32,363)	(23,712)
Net Other Financing Sources (Uses)	(183,390)	-	-	-	-	-	(32,363)	(23,712)
<b>NET CHANGE IN CASH BALANCES</b>	40,496	-	3	42	-	4,561	(29,273)	46,505
Cash Balances - Beginning of Year	206,228	618	4,333	3,806	801	587,713	154,544	383,249
<b>CASH BALANCES - END OF YEAR</b>	<u>\$ 246,724</u>	<u>\$ 618</u>	<u>\$ 4,336</u>	<u>\$ 3,848</u>	<u>\$ 801</u>	<u>\$ 592,274</u>	<u>\$ 125,271</u>	<u>\$ 429,754</u>
<b>CASH BASIS FUND BALANCES</b>								
Nonspendable - Cemetery Perpetual Care	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Restricted for:								
Urban Renewal Purposes	246,724	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	125,271	-
Streets	-	-	-	-	-	-	-	150,414
Library	-	-	-	-	-	592,274	-	-
Other Purposes	-	618	4,336	3,848	801	-	-	279,340
Assigned for:								
Park Projects	-	-	-	-	-	-	-	-
Street Projects	-	-	-	-	-	-	-	-
Unassigned	-	-	-	-	-	-	-	-
Total Cash Basis Bund Balances	<u>\$ 246,724</u>	<u>\$ 618</u>	<u>\$ 4,336</u>	<u>\$ 3,848</u>	<u>\$ 801</u>	<u>\$ 592,274</u>	<u>\$ 125,271</u>	<u>\$ 429,754</u>

**CITY OF ANAMOSA, IOWA  
SCHEDULE OF CASH RECEIPTS, DISBURSEMENTS,  
AND CHANGES IN CASH BALANCES  
NONMAJOR GOVERNMENTAL FUNDS  
AS OF AND FOR THE YEAR ENDED JUNE 30, 2019**

**SCHEDULE 1**

Capital Projects				Permanent		
Park & Recreation Project	Street Projects	Water Projects	Debt Service	Cemetery Operations	Cemetery Perpetual Care	Totals
\$ -	\$ -	-	\$ 78,024	\$ -	\$ -	\$ 78,024
-	-	-	-	-	-	239,728
-	-	-	2,758	-	-	415,846
-	-	-	785	-	-	9,608
-	123,170	191,281	1,912	-	-	316,363
-	-	7,133	-	-	750	7,883
-	123,170	198,414	83,479	-	750	1,067,452
-	-	-	-	-	-	48,744
-	-	-	-	-	-	218,936
-	-	-	-	-	-	39,063
-	-	-	-	-	-	15,842
-	-	-	-	-	-	37,255
-	-	-	323,331	-	-	323,331
-	15,448	377,590	-	-	-	393,038
-	15,448	377,590	323,331	-	-	1,076,209
-	107,722	(179,176)	(239,852)	-	750	(8,757)
-	-	-	243,137	-	-	243,137
-	-	-	-	-	-	(239,465)
-	-	-	243,137	-	-	3,672
-	107,722	(179,176)	3,285	-	750	(5,085)
35,235	(69,007)	(548,947)	86,950	10,000	92,903	948,426
<u>\$ 35,235</u>	<u>\$ 38,715</u>	<u>\$ (728,123)</u>	<u>\$ 90,235</u>	<u>\$ 10,000</u>	<u>\$ 93,653</u>	<u>\$ 943,341</u>
\$ -	\$ -	\$ -	\$ -	\$ -	\$ 93,653	\$ 93,653
-	-	-	-	-	-	246,724
-	-	-	90,235	-	-	215,506
-	-	-	-	-	-	150,414
-	-	-	-	-	-	592,274
-	-	-	-	10,000	-	298,943
35,235	-	-	-	-	-	35,235
-	38,715	-	-	-	-	38,715
-	-	(728,123)	-	-	-	(728,123)
<u>\$ 35,235</u>	<u>\$ 38,715</u>	<u>\$ (728,123)</u>	<u>\$ 90,235</u>	<u>\$ 10,000</u>	<u>\$ 93,653</u>	<u>\$ 943,341</u>

**CITY OF ANAMOSA, IOWA  
SCHEDULE OF INDEBTEDNESS  
YEAR ENDED JUNE 30, 2019**

**SCHEDULE 2**

Obligation	Date of Issue	Interest Rates	Amount Originally Issued	Balance Beginning of Year	Issued During Year	Redeemed During Year	Balance End of Year	Interest Paid
<b>General Obligation Notes:</b>								
Corporate Purpose Note 2011	October 18, 2011	1.40-3.80%	\$ 700,000	\$ 280,000	\$ -	\$ 70,000	\$ 210,000	\$ 9,730
Refunding Notes- Series 2012A	May 15, 2012	2.00-2.25%	2,625,000	990,000	-	195,000	795,000	20,752
Fire Truck Bond	October 5, 2017	3.15%	171,400	147,600	-	22,700	124,900	4,649
Total			3,496,400	1,417,600	-	287,700	1,129,900	35,131
<b>Revenue Notes:</b>								
Sewer Revenue Notes	February 12, 2008	3.00%	2,320,000	1,037,000	-	101,000	936,000	20,740
Water Revenue Notes	September 13, 2013	1.75%	2,020,000	1,602,000	-	93,000	1,509,000	32,040
Water Revenue Notes	December 8, 2017	2.00%	953,579	953,579	-	74,000	879,579	19,072
Total			5,293,579	3,592,579	-	268,000	3,324,579	71,852
Total Indebtedness			\$ 8,789,979	\$ 5,010,179	\$ -	\$ 555,700	\$ 4,454,479	\$ 106,983

**CITY OF ANAMOSA, IOWA  
BOND AND NOTE MATURITIES  
YEAR ENDED JUNE 30, 2019**

**SCHEDULE 3**

Year Ending June 30,	GO Corporate Purpose Note Issued October 18, 2011		GO Refunding Bonds, Series 2012A Issued May 15, 2012		GO Fire Truck Bond Issued October 5, 2017	
	Interest Rates	Amount	Interest Rates	Amount	Interest Rates	Amount
2020	3.40%	\$ 70,000	2.00 %	\$ 255,000	3.15 %	\$ 23,500
2021	3.60%	70,000	2.00 %	265,000	3.15 %	24,200
2022	3.80%	70,000	2.10 %	275,000	3.15 %	25,000
2023		-		-	3.15 %	25,700
2024		-		-	3.15 %	26,500
		<u>\$ 210,000</u>		<u>\$ 795,000</u>		<u>\$ 124,900</u>

Year Ending June 30,	Revenue Debt					
	Sewer Revenue Issued February 12, 2008		Water Revenue Issued September 13, 2013		Water Revenue Issued December 8, 2017	
	Interest Rates	Amount	Interest Rates	Amount	Interest Rates	Amount
2020	3.00 %	\$ 104,000	1.75 %	\$ 95,000	1.75 %	\$ 76,000
2021	3.00 %	108,000	1.75 %	96,000	1.75 %	77,000
2022	3.00 %	111,000	1.75 %	98,000	1.75 %	79,000
2023	3.00 %	115,000	1.75 %	100,000	1.75 %	80,000
2024	3.00 %	119,000	1.75 %	102,000	1.75 %	82,000
2025	3.00 %	122,000	1.75 %	104,000	1.75 %	83,000
2026	3.00 %	126,000	1.75 %	106,000	1.75 %	85,000
2027	3.00 %	131,000	1.75 %	109,000	1.75 %	87,000
2028		-	1.75 %	111,000	1.75 %	88,000
2029		-	1.75 %	113,000	1.75 %	90,000
2030		-	1.75 %	115,000	1.75 %	52,579
2031		-	1.75 %	118,000		-
2032		-	1.75 %	120,000		-
2033		-	1.75 %	122,000		-
		<u>\$ 936,000</u>		<u>\$ 1,509,000</u>		<u>\$ 879,579</u>

**CITY OF ANAMOSA, IOWA**  
**SCHEDULE OF RECEIPTS BY SOURCE AND DISBURSEMENTS BY FUNCTION –**  
**ALL GOVERNMENTAL FUNDS**  
**YEAR ENDED JUNE 30, 2019**

**SCHEDULE 4**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>RECEIPTS</b>										
Property Tax	\$ 1,635,694	\$ 1,664,535	\$ 1,703,003	\$ 1,582,700	\$ 1,657,935	\$ 1,682,126	\$ 1,539,742	\$ 1,481,339	\$ 1,400,549	\$ 1,308,682
Tax Increment Financing	239,728	189,723	224,143	876,784	389,230	388,890	408,257	489,084	352,582	379,144
Other City Tax	951,105	908,878	883,382	828,239	758,719	690,332	684,667	648,300	663,602	633,658
Licenses and Permits	43,199	44,733	44,071	7,749	8,427	9,895	15,476	17,955	18,964	21,356
Use of Money and Property	44,335	43,621	30,376	45,828	30,569	15,864	22,195	28,639	49,346	53,078
Intergovernmental	1,227,567	1,599,767	757,397	1,059,187	910,655	821,455	2,371,767	5,156,872	1,563,116	2,480,563
Charges for Service	215,196	238,574	417,898	453,083	391,787	417,423	262,680	259,461	388,069	137,348
Special Assessments	-	-	-	154	18,288	14,560	36,922	26,754	39,568	31,838
Miscellaneous	134,986	109,141	120,730	790,208	116,209	73,329	301,615	288,067	234,884	157,665
<b>Total</b>	<b>\$ 4,491,810</b>	<b>\$ 4,798,972</b>	<b>\$ 4,181,000</b>	<b>\$ 5,643,932</b>	<b>\$ 4,281,819</b>	<b>\$ 4,114,475</b>	<b>\$ 5,643,321</b>	<b>\$ 8,396,471</b>	<b>\$ 4,710,680</b>	<b>\$ 5,203,332</b>

**DISBURSEMENTS**

Operating:

Public Safety	\$ 1,133,363	\$ 1,278,647	\$ 1,026,258	\$ 913,736	\$ 1,137,913	\$ 918,592	\$ 891,994	\$ 681,310	\$ 929,825	\$ 1,281,885
Public Works	1,044,099	985,529	842,393	968,138	809,212	802,874	788,481	768,386	814,898	828,623
Culture and Recreation	789,281	761,352	800,836	755,374	745,751	743,149	703,839	856,699	697,926	771,788
Community and Economic Development	15,842	73,684	73,654	69,845	73,473	76,838	75,730	149,609	19,085	38,207
General Government	563,524	377,105	529,471	502,051	452,474	457,783	542,223	511,355	499,927	510,517
Debt Service	323,331	288,427	388,292	1,129,204	768,772	802,508	854,216	3,550,461	2,696,820	5,038,860
Capital Projects	679,289	4,164,953	365,236	229,805	533,824	1,245,750	1,997,768	5,165,467	1,341,948	163,245
<b>Total</b>	<b>\$ 4,548,729</b>	<b>\$ 7,929,697</b>	<b>\$ 4,026,140</b>	<b>\$ 4,568,153</b>	<b>\$ 4,521,419</b>	<b>\$ 5,047,494</b>	<b>\$ 5,854,251</b>	<b>\$ 11,683,287</b>	<b>\$ 7,000,429</b>	<b>\$ 8,633,125</b>



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN  
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Honorable Mayor and  
Members of the City Council  
City of Anamosa  
Anamosa, Iowa

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the cash basis financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Anamosa, Iowa as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the City of Anamosa, Iowa's basic financial statements, and have issued our report thereon dated January 22, 2020. Our report expressed unmodified opinions on the financial statements which were prepared on the basis of cash receipts and disbursements, a basis of accounting other than accounting principles generally accepted in the United States of America.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the City of Anamosa, Iowa's internal control over financial reporting to determine the audit procedures are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City of Anamosa, Iowa's internal control. Accordingly, we do not express an opinion on the effectiveness of the City of Anamosa, Iowa's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described in the accompanying schedule of findings and responses, we identified certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies 2019-001 and 2019-003 described in the accompanying schedule of findings and responses to be material weaknesses.

Honorable Mayor and  
Members of the City Council  
City of Anamosa

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiency 2019-002 described in the accompanying schedule of findings and responses to be a significant deficiency.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the City of Anamosa, Iowa's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*. However, we noted certain immaterial instances of noncompliance or other matters which are described in Part III of the accompanying schedule of findings and responses.

Comments involving statutory and other legal matters about the City's operations for the year ended June 30, 2019 are based exclusively on knowledge obtained from procedures performed during our audit of the financial statements of the City. Since our audit was based on tests and samples, not all transactions that might have had an impact on the comments were necessarily audited. The comments involving statutory and other legal matters are not intended to constitute legal interpretations of those statutes.

### **City of Anamosa's Responses to Findings**

The City of Anamosa, Iowa's responses to the findings identified in our audit are described in the accompanying schedule of findings and responses. The City of Anamosa, Iowa's responses were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



**CliftonLarsonAllen LLP**

Cedar Rapids, Iowa  
January 22, 2020

**CITY OF ANAMOSA  
SCHEDULE OF FINDINGS AND RESPONSES  
JUNE 30, 2019**

**Part I – Summary of the Independent Auditors' Results**

- (a) Unmodified opinions were issued on the financial statements which were prepared on the basis of cash receipts and disbursements, which is a basis of accounting other than accounting principles generally accepted in the United States of America.
- (b) Two material weaknesses and one significant deficiency in internal control over financial reporting were disclosed by the audit of the financial statements.
- (c) The audit did not disclose any noncompliance which is material to the financial statements.

**Part II – Findings Related to the Financial Statements:**

**INTERNAL CONTROL DEFICIENCIES AND INSTANCES OF NONCOMPLIANCE:**

**2019-001: Preparation of Financial Statements and Audit Adjustments**

Criteria: The City should have controls in place to prevent, or detect and correct, a material misstatement in the annual financial statements including footnote disclosures. The audit firm identified material audit adjustments in the current year.

Condition: The City does not have an internal control policy in place over financial reporting, specifically to prevent and detect material adjustments to the financial statements in a timely manner.

Cause: The City has not adopted an internal control policy over the annual financial reporting; however, they have reviewed and approved the annual financial statements as prepared by the audit firm.

Effect: The potential exists that a material misstatement could occur in the financial statements and not be prevented, or detected and corrected, by the City's internal controls.

Recommendation: We recommend the City continue to evaluate its internal staff and expertise to determine if an internal control policy over the annual financial reporting is beneficial.

Management Response: The City does not have the resources to employ staff possessing the detailed understanding of applicable accounting principles to the extent required to utilize such a disclosure checklist. As a result, the City of Anamosa, Iowa has relied on the independent auditor to identify disclosures required in the financial statements.

Conclusion: Response accepted.

**CITY OF ANAMOSA  
SCHEDULE OF FINDINGS AND RESPONSES  
JUNE 30, 2019**

**2019-002: Violation of Debt Covenants**

Criteria: The City should have adequate procedures in place to ensure debt covenants are met.

Condition: The City did not meet the debt covenant in relation to the water revenue bonds. The covenant states that the City shall maintain in a Sinking Fund an amount equal to 1/12<sup>th</sup> of the installment of principal and 1/6<sup>th</sup> of the installment of interest coming due on the Bond on the next succeeding principal and interest payment date and that net receipts should equal 110% of the principal and interest due on all bonds.

Cause: The City did not maintain a proper balance in the Sinking Fund equivalent to the next succeeding principal and interest payment or maintain net receipts equal to 110% of the next principal and interest payment due.

Effect: The City is in violation of the covenant and the creditor could penalize the City.

Recommendation: We recommend the City complete a regular review over the Water Fund to ensure they have the proper amounts deposited into the Sinking Fund and water receipts are enough to meet 110% of the principal and interest due on all bonds.

Management Response: The City will put processes in place to ensure the transfer of funds occurs timely. Water rates have been adjusted to provide sufficient revenue to meet 110% of the principal and interest due on all water bonds. The new rates will take effect January 2020.

Conclusion: Response accepted.

**2019-003: Segregation of Duties and Lack of Supporting Documentation**

Criteria: The City should have adequate segregation of duties to provide for the accuracy and reliability of the financial statements.

Condition: The City does not have complete segregation of duties over all accounting transactions. Employees have access to many of the same programs and functions. It was specifically noted that bank reconciliations and journal entries were not consistently reviewed throughout the fiscal year. Management could not provide supporting documentation for various journal entries.

Cause: The City has a limited number of personnel performing accounting functions. The City also experienced turnover in key management positions during the fiscal year.

Effect: As a result of this condition, there is a higher risk that errors or irregularities could occur and not be detected within a timely period.

Recommendation: We realize segregation of duties is difficult with a limited number of office employees. However, the City should review its control procedures to obtain maximum internal control possible under the circumstances utilizing currently available staff, including elected officials. Management should ensure they maintain documentation for all journal entries.

Management Response: With a limited number of office employees, segregation of duties is difficult. Management is aware of the lack of segregation of duties and is segregating accounting duties where practical.

Conclusion: Response accepted.

**CITY OF ANAMOSA  
SCHEDULE OF FINDINGS AND RESPONSES  
JUNE 30, 2019**

**Part III – Other Findings Related to Required Statutory Reporting:**

III-A-19 Certified Budget – Disbursements exceeded amounts budgeted in the public safety function before an amendment to the budget was made during the year ended June 30, 2019. Chapter 384.20 of the Code of Iowa states, in part, “Public monies may not be expended or encumbered except under an annual or continuing appropriation.” This appears to be due to employee oversight.

Recommendation – The budget should have been amended in accordance with Chapter 384.18 of the Code of Iowa before disbursements were allowed to exceed the budget.

Response – The budget will be amended in the future, if applicable.

Conclusion – Response accepted.

III-B-19 Questionable Disbursements – We noted no disbursements that fail to meet the requirements of public purpose as defined in an Attorney General's opinion dated April 25, 1979.

III-C-19 Travel Expense – No disbursements of City money for travel expenses of spouses of City officials or employees were noted.

III-D-19 Business Transactions – Business transactions between the City and City officials or employees are detailed as follows:

<b><u>Name, Title and Business Connection</u></b>	<b><u>Transaction Descriptions</u></b>	<b><u>Amount</u></b>
Cody Shaffer, Council member, son of owner of Shaffer Plumbing and Heating	Plumbing, Furnace, & A/C related	\$ 38,170

Chapter 362.5 of the Code of Iowa states, in part, “a city officer shall not have an interest, direct or indirect, in any contract or job of work or material or profits thereof or services to be furnished or performed for the officer's or employee's city.”

The transactions with Mr. Shaffer are for plumbing, furnace, and A/C related work. Transactions totaling \$5,896 are deemed appropriate as the City obtained competitive bids for the work in accordance with Chapter 362.5(3)(d). Transactions totaling \$13,807 are deemed not to be a conflict of interest as these transactions were for emergency situations where time did not allow for the City to obtain a second bid before the work was completed. The remaining \$18,467 of transactions are deemed to be to conflicts of interest.

Recommendation – The City should follow Chapter 362.5 of the Code of Iowa before transactions occur that cause a conflict of interest.

Response – The City will ensure future transactions follow appropriate procedure per Chapter 362.5 of the Code of Iowa.

Conclusion – Response accepted.

**CITY OF ANAMOSA  
SCHEDULE OF FINDINGS AND RESPONSES  
JUNE 30, 2019**

**Part III – Other Findings Related to Required Statutory Reporting (Continued):**

- III-E-19     Bond Coverage - Surety bond coverage of City officials and employees is in accordance with statutory provisions. The amount of coverage should be reviewed annually to ensure that the coverage is adequate for current operations.
- III-F-19     Council Minutes - No transactions were found that we believe should have been approved in the council minutes but were not.
- III-G-19     Deposits and Investments - No instances of noncompliance were noted with the deposit and investment provisions of Chapter 12B and 12C of the Code of Iowa and the City's investment policy.
- III-H-19     Revenue Notes - As of June 30, 2019, the City was not in compliance with the funding and payment provisions of the water revenue note resolutions. The City did not meet the covenant of having an amount equal to 1/12<sup>th</sup> of the next principal payment due and 1/6<sup>th</sup> of the next interest payment due available in the fund. The City did not meet the covenant of having net receipts adequate to equal 110% of the principal and interest on all of the bonds due in the fiscal year.
- III-I-19     Financial Condition – The Water Projects Fund had a deficit balance of (\$728,123) at June 30, 2019.

Recommendation: The City should investigate alternatives to eliminate these deficits in order to return these funds to a sound financial position.

Response: The deficit balance in the Water Projects Fund was a result of project costs incurred prior to availability of funds on the water plant expansion project. The deficit's elimination is anticipated by management through receiving a CDBG grant and State Revolving Loan funds.

Conclusion: Response accepted.

- III-J-19     Annual Urban Renewal Report – The annual urban renewal report was approved and certified to the Iowa Department of Management on or before December 1.

## APPENDIX B

### DESCRIBING BOOK-ENTRY-ONLY ISSUANCE

1. The Depository Trust Company (“DTC”), New York, New York, will act as securities depository for the Bonds (the “Securities”). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for each issue of the Securities, each in the aggregate principal amount of such issue, and will be deposited with DTC.

2. DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a S&P Global Ratings rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com).

3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC’s records. The ownership interest of each actual purchaser of each Security (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.

4. To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Paying Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Paying Agent, or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Paying Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

9. A Beneficial Owner shall give notice to elect to have its Securities purchased or tendered, through its Participant, to any Tender/Remarketing Agent, and shall effect delivery of such Securities by causing the Direct Participant to transfer the Participant's interest in the Securities, on DTC's records, to any Tender/Remarketing Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered Securities to any Tender/Remarketing Agent's DTC account.

10. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to the City or the Paying Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.

11. The City may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.

12. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy thereof.

## APPENDIX C

### DRAFT FORM OF BOND COUNSEL OPINION

We hereby certify that we have examined certified copies of the proceedings (the “Proceedings”) of the City Council of the City of Anamosa (the “Issuer”), in Jones County, State of Iowa, passed preliminary to the issue by the Issuer of its General Obligation Corporate Purpose Bonds, Series 2021 (the “Bonds”) in the amount of \$1,750,000, in the denomination of \$5,000 each, or any integral multiple thereof, dated March 9, 2021, in evidence of the Issuer’s obligation under a certain loan agreement (the “Loan Agreement”), dated as of March 9, 2021, and pursuant to a resolution (the “Resolution”) of the Issuer adopted on February 22, 2021. The Bonds mature on June 1 in each of the respective years and in the principal amounts and bear interest payable semiannually, commencing December 1, 2021, at the respective rates as follows:

<u>Date</u>	<u>Principal</u>	<u>Interest Rate</u>	<u>Date</u>	<u>Principal</u>	<u>Interest Rate</u>
2022	\$120,000	____%	2028	\$150,000	____%
2023	\$135,000	____%	2029	\$150,000	____%
2024	\$135,000	____%	2030	\$155,000	____%
2025	\$140,000	____%	2031	\$155,000	____%
2026	\$140,000	____%	2032	\$160,000	____%
2027	\$145,000	____%	2033	\$165,000	____%

Principal of the Bonds maturing in the years 2029 through 2033, inclusive, is subject to optional redemption prior to maturity on June 1, 2028, or on any date thereafter on terms of par plus accrued interest.

Based upon our examination, we are of the opinion, as of the date hereof, that:

1. The Proceedings show lawful authority for such issue under the laws of the State of Iowa.
2. The Bonds and the Loan Agreement are valid and binding general obligations of the Issuer.
3. All taxable property within the corporate boundaries of the Issuer is subject to the levy of taxes to pay the principal of and interest on the Bonds without constitutional or statutory limitation as to rate or amount.
4. The interest on the Bonds is excluded from gross income for federal income tax purposes and is not treated as a preference item in calculating the federal alternative minimum tax imposed under the Internal Revenue Code of 1986 (the “Code”). The opinions set forth in the preceding sentence are subject to the condition that the Issuer comply with all requirements of the Code that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, or continue to be, excluded from gross income for federal income tax purposes. The Issuer has covenanted to comply with each such requirement. Failure to comply with certain of such requirements may cause the inclusion of interest on the Bonds in gross income for federal income tax purposes to be retroactive to the date of issuance of the Bonds.
5. The Bonds are “qualified tax-exempt obligations” within the meaning of Section 265(b)(3) of the Code. The opinion set forth in the preceding sentence is subject to the condition that the Issuer comply with all requirements of the Code that must be satisfied subsequent to the issuance of the Bonds in order that the Bonds be, or continue to be, qualified tax-exempt obligations. The Issuer has covenanted to comply with each such requirement.

We express no opinion regarding other federal tax consequences arising with respect to the Bonds.

The rights of the owners of the Bonds and the enforceability thereof may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors’ rights heretofore or hereafter enacted to the extent constitutionally applicable, and their enforcement may also be subject to the exercise of judicial discretion in appropriate cases.

DORSEY & WHITNEY LLP

**\*This form of bond counsel opinion is subject to change pending the results of the sale of the Bonds contemplated herein.**

## APPENDIX D

### DRAFT CONTINUING DISCLOSURE CERTIFICATE

This Continuing Disclosure Certificate (the “Disclosure Certificate”) is executed and delivered by the City of Anamosa, Iowa (the “Issuer”), in connection with the issuance of \$1,750,000 General Obligation Corporate Purpose Bonds, Series 2021 (the “Bonds”), dated March 9, 2021. The Bonds are being issued pursuant to a resolution of the Issuer approved on February 22, 2021 (the “Resolution”). The Issuer covenants and agrees as follows:

Section 1. Purpose of the Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the Issuer for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriters in complying with S.E.C. Rule 15c2-12.

Section 2. Definitions. In addition to the definitions set forth in the Resolution, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

“Beneficial Owner” shall mean any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

“Dissemination Agent” shall mean the Dissemination Agent, if any, designated in writing by the Issuer and which has filed with the Issuer a written acceptance of such designation.

“EMMA” shall mean the MSRB’s Electronic Municipal Market Access system available at <http://emma.msrb.org>.

“Financial Obligation” shall mean a (i) debt obligation, (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or, (iii) guarantee of either (i) or (ii). The term “Financial Obligation” shall not include municipal securities as to which a final official statement has been provided to the MSRB pursuant to the Rule.

“Holders” shall mean the registered holders of the Bonds, as recorded in the registration books of the Registrar.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Certificate.

“Municipal Securities Rulemaking Board” or “MSRB” shall mean the Municipal Securities Rulemaking Board, 1300 I Street NW, Suite 1000, Washington, DC 20005.

“Participating Underwriter” shall mean any of the original underwriters of the Bonds required to comply with the Rule in connection with offering of the Bonds.

“Rule” shall mean Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of Iowa.

Section 3. Provision of Annual Reports.

(a) To the extent such information is customarily prepared by the Issuer and is made publicly available, not later than June 30 (the "Submission Deadline") of each year following the end of the 2019-2020 fiscal year, the Issuer shall, or shall cause the Dissemination Agent (if any) to, file on EMMA an electronic copy of its Annual Report which is consistent with the requirements of Section 4 of this Disclosure Certificate in a format and accompanied by such identifying information as prescribed by the MSRB. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the Submission Deadline if they are not available by that date. If the Issuer's fiscal year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(c), and the Submission Deadline beginning with the subsequent fiscal year will become one year following the end of the changed fiscal year.

(b) If the Issuer has designated a Dissemination Agent, then not later than fifteen (15) business days prior to the Submission Deadline, the Issuer shall provide the Annual Report to the Dissemination Agent.

(c) If the Issuer is unable to provide an Annual Report by the Submission Deadline, in a timely manner thereafter, the Issuer shall, or shall cause the Dissemination Agent (if any) to, file a notice on EMMA stating that there has been a failure to provide an Annual Report on or before the Submission Deadline.

Section 4. Content of Annual Reports. The Issuer's Annual Report shall contain or include by reference the following:

(a) The **Audited Financial Statements** of the Issuer for the prior fiscal year, prepared in accordance with generally accepted accounting principles promulgated by the Financial Accounting Standards Board as modified in accordance with the governmental accounting standards promulgated by the Governmental Accounting Standards Board or as otherwise provided under State law, as in effect from time to time, or, if and to the extent such audited financial statements have not been prepared in accordance with generally accepted accounting principles, noting the discrepancies therefrom and the effect thereof. If the Issuer's audited financial statements are not available by the Submission Deadline, the Annual Report shall contain unaudited financial information (which may include any annual filing information required by State law) accompanied by a notice that the audited financial statements are not yet available, and the audited financial statements shall be filed on EMMA when they become available.

(b) other financial information and operating data regarding the Issuer of the type presented in the final official statement distributed in connection with the primary offering of the Bonds; provided, however, other than information included in its audited financial statements, the Issuer does not customarily prepare or make publicly available, most of the information in the final official statement, and accordingly no financial information or operating data (other than that normally included in the audited financial statements) will be provided by the Issuer in the Annual Report other than the following:

NONE

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or related public entities, which are available on EMMA or are filed with the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available on EMMA. The Issuer shall clearly identify each such other document so included by reference.

Section 5.      Reporting of Significant Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds:

- (1) Principal and interest payment delinquencies.
- (2) Non-payment related defaults, if material.
- (3) Unscheduled draws on debt service reserves reflecting financial difficulties.
- (4) Unscheduled draws on credit enhancements reflecting financial difficulties.
- (5) Substitution of credit or liquidity providers, or their failure to perform.
- (6) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the security, or other material events affecting the tax status of the security.
- (7) Modifications to rights of security holders, if material.
- (8) Bond calls, if material, and tender offers.
- (9) Defeasances.
- (10) Release, substitution, or sale of property securing repayment of the securities, if material.
- (11) Rating changes.
- (12) Bankruptcy, insolvency, receivership or similar event of the obligated person.

Note to paragraph (12): For the purposes of the event identified in subparagraph (12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an obligated person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the obligated person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the obligated person.

(13) The consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material.

(14) Appointment of a successor or additional trustee or the change of name of a trustee, if material.

(15) Incurrence of a Financial Obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect security holders, if material.

(16) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties.

(b) If a Listed Event described in Section 5(a) paragraph (2), (7), (8) (but only with respect to bond calls under (8)), (10), (13), (14), or (15) has occurred and the Issuer has determined that such Listed Event is material under applicable federal securities laws, the Issuer shall, in a timely manner but not later than ten business days after the occurrence of such Listed Event, promptly file, or cause to be filed, a notice of such occurrence on EMMA, with such notice in a format and accompanied by such identifying information as prescribed by the MSRB.

(c) If a Listed Event described in Section 5(a) paragraph (1), (3), (4), (5), (6), (8) (but only with respect to tender offers under (8)), (9), (11), (12), or (16) above has occurred the Issuer shall, in a timely manner but not later than ten business days after the occurrence of such Listed Event, promptly file, or cause to be filed, a notice of such occurrence on EMMA, with such notice in a format and accompanied by such identifying information as prescribed by the MSRB. Notwithstanding the foregoing, notice of Listed Events described in Section (5)(a) paragraphs (8) and (9) need not be given under this subsection any earlier than the notice (if any) of the underlying event is given to Holders of affected Bonds pursuant to the Resolution.

Section 6. Termination of Reporting Obligation. The Issuer's obligations under this Disclosure Certificate shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds or upon the Issuer's receipt of an opinion of nationally recognized bond counsel to the effect that, because of legislative action or final judicial action or administrative actions or proceedings, the failure of the Issuer to comply with the terms hereof will not cause Participating Underwriters to be in violation of the Rule or other applicable requirements of the Securities Exchange Act of 1934, as amended.

Section 7. Dissemination Agent. The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Certificate, and may discharge any such Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or Annual Report prepared by the Issuer pursuant to this Disclosure Certificate. The initial Dissemination Agent shall be Speer Financial, Inc.

Section 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the Issuer may amend this Disclosure Certificate, and any provision of this Disclosure Certificate may be waived, provided that the following conditions are satisfied:

(a) (i) the amendment or waiver is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business conducted; (ii) the undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and (iii) the amendment or waiver either (1) is approved by a majority of the Holders, or (2) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners; or

(b) the amendment or waiver is necessary to comply with modifications to or interpretations of the provisions of the Rule as announced by the Securities and Exchange Commission.

In the event of any amendment or waiver of a provision of this Disclosure Certificate, the Issuer shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing audited financial statements, (i) notice of such change shall be given in the same manner as for a Listed Event under Section 5(c), and (ii) the Annual Report for the year in which the change is made will

present a comparison or other discussion in narrative form (and also, if feasible, in quantitative form) describing or illustrating the material differences between the audited financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Section 9. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the Issuer shall have no obligation under this Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

Section 10. Default. In the event of a failure of the Issuer to comply with any provision of this Disclosure Certificate, any Holder or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer to comply with its obligations under this Disclosure Certificate. Direct, indirect, consequential and punitive damages shall not be recoverable by any person for any default hereunder and are hereby waived to the extent permitted by law. A default under this Disclosure Certificate shall not be deemed an event of default under the Resolution, and the sole remedy under this Disclosure Certificate in the event of any failure of the Issuer to comply with this Disclosure Certificate shall be an action to compel performance.

Section 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent, if any, shall have only such duties as are specifically set forth in this Disclosure Certificate, and the Issuer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the Bonds.

Section 12. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

Dated: March 9, 2021

CITY OF ANAMOSA, IOWA

By \_\_\_\_\_  
Mayor

Attest:

By \_\_\_\_\_  
City Clerk

# OFFICIAL BID FORM

City of Anamosa  
107 S. Ford Street  
Anamosa, Iowa 52205

February 8, 2021  
Speer Financial, Inc.  
Facsimile: (319) 291-8628

Dear City Council:

For the \$1,750,000\* General Obligation Corporate Purpose Bonds, Series 2021 (the "Bonds"), of the City of Anamosa, Jones County, Iowa (the "City"), as described in the annexed Official Terms of Offering, which is expressly made a part of this bid, we will pay you \$\_\_\_\_\_ (no less than \$1,736,000). The Bonds are to bear interest at the following respective rates (each a multiple of 1/8 or 1/100 of 1%) for the Bonds of each designated maturity.

## AMOUNTS\* AND MATURITIES – JUNE 1

\$120,000 .....2022 _____%	\$140,000 .....2026 _____%	\$155,000 .....2030 _____%
135,000 .....2023 _____%	145,000 .....2027 _____%	155,000 .....2031 _____%
135,000 .....2024 _____%	150,000 .....2028 _____%	160,000 .....2032 _____%
140,000 .....2025 _____%	150,000 .....2029 _____%	165,000 .....2033 _____%

*Any consecutive maturities may be aggregated into term bonds at the option of the bidder, in which case the mandatory redemption provisions shall be on the same schedule as above.*

*Maturities: \_\_\_\_\_ Term Maturity \_\_\_\_\_ Maturities: \_\_\_\_\_ Term Maturity \_\_\_\_\_*

*Maturities: \_\_\_\_\_ Term Maturity \_\_\_\_\_ Maturities: \_\_\_\_\_ Term Maturity \_\_\_\_\_*

*\*Subject to principal adjustment in accordance with the Official Terms of Offering.*

In submitting this bid, we represent that (i) this bid constitutes a firm offer to purchase the Bonds, and (ii) we have an established industry reputation for underwriting new issuances of municipal bonds and notes.

The Bonds are to be executed and delivered to us in accordance with the terms of this bid accompanied by the approving legal opinion of Dorsey & Whitney LLP, Des Moines, Iowa. The City will pay for the legal opinion. **The Purchaser agrees to apply for CUSIP numbers and pay the fee charged by the CUSIP Service Bureau and will accept the Bonds with the CUSIP numbers as entered on the Bonds.**

As evidence of our good faith, if we are the winning bidder, we will wire transfer the amount of **TWO PERCENT OF PAR** (the "Deposit") **WITHIN TWO HOURS** after the bid opening time to the City's good faith bank and under the terms provided in the Official Terms of Offering for the Bonds. Alternatively, we have wire transferred or enclosed herewith a check payable to the City in the amount of the Deposit under the terms provided in the Official Terms of Offering for the Bonds.

Attached hereto is a list of members of our account on whose behalf this bid is made.

### Form of Deposit (Check One)

Prior to Bid Opening:  
Certified/Cashier's Check ☐  
Wire Transfer ☐

Within TWO Hours of Bid Opening:  
Wire Transfer ☐

Amount: \$35,000

### Account Manager Information

Underwriter/Bank \_\_\_\_\_

Address \_\_\_\_\_

Authorized Rep \_\_\_\_\_

City \_\_\_\_\_ State/Zip \_\_\_\_\_

Direct Phone (\_\_\_\_) \_\_\_\_\_

FAX Number (\_\_\_\_) \_\_\_\_\_

E-Mail Address \_\_\_\_\_

### Bidders Option Insurance

**We have purchased insurance from:**

**Name of Insurer**  
(Please fill in)

**Premium:** \_\_\_\_\_

**Maturities: (Check One)**

☐ \_\_\_\_\_ Years

☐ All

The foregoing bid was accepted and the Bonds sold by resolution of the City on February 8, 2021, and receipt is hereby acknowledged of the good faith Deposit which is being held in accordance with the terms of the annexed Official Terms of Offering.

ATTEST:

CITY OF ANAMOSA  
JONES COUNTY, IOWA

\_\_\_\_\_  
City Administrator/Clerk

\_\_\_\_\_  
Mayor

-----NOT PART OF THE BID-----  
(Calculation of true interest cost)

Gross Interest	\$
Less Premium/Plus Discount	\$
True Interest Cost	\$
True Interest Rate	%
TOTAL BOND YEARS	12.258.61
AVERAGE LIFE	7.005 Years

## OFFICIAL TERMS OF OFFERING

**\$1,750,000\***  
**CITY OF ANAMOSA**  
**Jones County, Iowa**

### **General Obligation Corporate Purpose Bonds, Series 2021**

The City of Anamosa, Jones County, Iowa, (the “City”), will receive electronic bids on the SpeerAuction (“SpeerAuction”) website address “www.SpeerAuction.com” for its \$1,750,000\* General Obligation Corporate Purpose Bonds, Series 2021 (the “Bonds”), on an all or none basis between 10:30 A.M. and 11:00 A.M., C.S.T., Monday, February 8, 2021. To bid electronically, bidders must have: (1) completed the registration form on the SpeerAuction website, and (2) requested and received admission to the City’s sale (as described below). The City will also receive sealed bids for the Bonds, on an all or none basis, at City Hall, 107 S Ford Street, Anamosa, Iowa, before 11:00 A.M., C.S.T., Monday, February 8, 2021. The City will also receive facsimile bids at (319) 291-8628 for the Bonds, on an all or none basis, before 11:00 A.M., C.S.T., Monday, February 8, 2021. Upon receipt, facsimile bids will be sealed and treated as sealed bids, and along with all other sealed bids will be publicly opened and, together with any electronic bids, read.

Award will be made or all bids rejected at a meeting of the City on that date. The City reserves the right to reject all bids, to reject any bid proposal not conforming to this Official Terms of Offering, and to waive any irregularity or informality with respect to any bid. Additionally, the City reserves the right to modify or amend this Official Terms of Offering; however, any such modification or amendment shall not be made less than twenty-four (24) hours prior to the date and time for receipt of bids on the Bonds and any such modification or amendment will be announced on the Amendments Page of the SpeerAuction webpage and through *Thomson Municipal News*.

The Bonds are valid and binding general obligations of the City, and all taxable property within the boundaries of the City is subject to the levy of taxes to pay the principal of and interest on the Bonds without constitutional or statutory limitation as to rate or amount.

*\*ADJUSTMENTS TO PRINCIPAL AMOUNT AFTER DETERMINATION OF BEST BID. The aggregate principal amount of the Bonds, and each scheduled maturity thereof, are subject to increase or reduction by the City or its designee after the determination of the Winning Bidder. The City may increase or decrease each maturity in increments of \$5,000, but the total amount to be issued will not exceed \$1,750,000. Interest rates specified by the Winning Bidder for each maturity will not change. Final adjustments shall be in the sole discretion of the City.*

*The dollar amount of the purchase price proposed by the Winning Bidder will be changed if the aggregate principal amount of the Bonds is adjusted as described above. Any change in the principal amount of any maturity of the Bonds will be made while maintaining, as closely as possible, the Winning Bidder’s net compensation, calculated as a percentage of bond principal. The Winning Bidder may not withdraw or modify its bid as a result of any post-bid adjustment. Any adjustment shall be conclusive, and shall be binding upon the Winning Bidder.*

### **Establishment of Issue Price (10% Test May Apply if Competitive Sale Requirements are Not Satisfied)**

- (a) The winning bidder shall assist the City in establishing the issue price of the Bonds and shall execute and deliver to the City at closing an “issue price” or similar certificate setting forth the reasonably expected initial offering price to the Public or the sales price or prices of the Bonds, together with the supporting pricing wires or equivalent communications, substantially in the form attached hereto as **Exhibit A** to this Notice of Sale, with such modifications as may be appropriate or necessary, in the reasonable judgment of the winning bidder, the City and Dorsey & Whitney LLP (“Bond Counsel”). All actions to be taken by the City under this Notice of Sale to establish the issue price of the Bonds may be taken on behalf of the City by the City’s municipal advisor and any notice or report to be provided to the City may be provided to Speer Financial, Inc., Chicago, Illinois (“Speer”).

- (b) The City intends that the provisions of Treasury Regulation Section 1.148-1(f)(3)(i) (defining “competitive sale” for purposes of establishing the issue price of the Bonds) will apply to the initial sale of the Bonds (the “competitive sale requirements”) because:
- (i) the City shall disseminate this Notice of Sale to potential Underwriters in a manner that is reasonably designed to reach potential Underwriters;
  - (ii) all bidders shall have an equal opportunity to bid;
  - (iii) the City may receive bids from at least three Underwriters of municipal bonds who have established industry reputations for underwriting new issuances of municipal bonds; and
  - (iv) the City anticipates awarding the sale of the Bonds to the bidder who submits a firm offer to purchase the Bonds at the lowest true interest cost, as set forth in this Notice of Sale.

Any bid submitted pursuant to this Notice of Sale shall be considered a firm offer for the purchase of the Bonds, as specified in the bid.

- (c) In the event that the competitive sale requirements are not satisfied, the City shall so advise the winning bidder. **The City will not require bidders to comply with the “hold-the-offering-price rule” and therefore does not intend to use the initial offering price to the Public as of the Sale Date of any maturity of the Bonds as the issue price of that maturity, though the winning bidder may elect to apply the “hold the offering price rule” (as described below). Bids will not be subject to cancellation in the event that the competitive sale requirements are not satisfied. Unless a bidder intends to apply the “hold-the-offering-price rule” as described below, bidders should prepare their bids on the assumption that all of the maturities of the Bonds will be subject to the 10% test (as described below) in order to establish the issue price of the Bonds.** If the competitive sale requirements are not satisfied, the 10% test shall apply to determine the issue price of each maturity of the Bonds unless the winning bidder shall request that the “hold-the-offering-price rule” (as described below) shall apply. The winning bidder must notify Speer of its intention to apply the “hold-the-offering-price rule” at or prior to the time the Bonds are awarded.

- (i) If the winning bidder does not request that the “hold-the-offering-price rule” apply to determine the issue price of the Bonds, the following two paragraphs shall apply:

The City shall treat the first price at which 10% of a maturity of the Bonds (the “10% test”) is sold to the Public as the issue price of that maturity, applied on a maturity-by-maturity basis. The winning bidder shall advise the City if any maturity of the Bonds satisfies the 10% test as of the date and time of the award of the Bonds.

Until the 10% test has been satisfied as to each maturity of the Bonds, the winning bidder agrees to promptly report to the City the prices at which the unsold Bonds of that maturity have been sold to the Public. That reporting obligation shall continue, whether or not the closing date has occurred, until the 10% test has been satisfied as to the Bonds of that maturity or until all Bonds of that maturity have been sold to the Public. In addition, if the 10% test has not been satisfied with respect to any maturity of the Bonds prior to closing, then the purchaser shall provide the City with a representation as to the price of prices, as of the date of closing, at which the purchaser reasonably expects to sell the remaining Bonds of such maturity.

- (ii) If the winning bidder does request that the “hold-the-offering-price rule” apply to determine the issue price of the Bonds, the following three paragraphs shall apply:

The City may determine to treat (i) pursuant to the 10% test, the first price at which 10% of a maturity of the Bonds is sold to the Public as the issue price of that maturity and/or (ii) the initial offering price to the Public as of the Sale Date of any maturity of the Bonds as the issue price of that maturity (the “hold-the-offering-price rule”), in each case applied on a maturity-by-maturity basis. The winning bidder shall advise the City if any maturity of the Bonds satisfies the 10% test as of the date and time of the award of the Bonds. The City shall promptly advise the winning bidder, at or before the time of award of the Bonds, which maturities of the Bonds shall be subject to the 10% test or shall be subject to the hold-the-offering-price rule or both. Bids will *not* be subject to cancellation in the event that the City determines to apply the hold-the-offering-price rule to any maturity of the Bonds.

By submitting a bid, the winning bidder shall (i) confirm that the Underwriters have offered or will offer the Bonds to the Public on or before the date of award at the offering price or prices (the “*initial offering price*”), and (ii) agree, on behalf of the Underwriters participating in the purchase of the Bonds, that the Underwriters will neither offer nor sell unsold Bonds of any maturity to which the hold-the-offering-price rule shall apply to any person at a price that is higher than the initial offering price to the Public during the period starting on the Sale Date and ending on the earlier of the following:

- (1) the close of the fifth business day after the Sale Date; or
- (2) the date on which the Underwriters have sold at least 10% of that maturity of the Bonds to the Public at a price that is no higher than the initial offering price to the Public.

The City acknowledges that, in making the representation set forth above, the winning bidder will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering-price rule, as set forth in an agreement among Underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the Public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the Bonds to the Public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, as set forth in the retail distribution agreement and the related pricing wires. The City further acknowledges that each Underwriter shall be solely liable for its failure to comply with its agreement regarding the hold-the-offering-price rule and that no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement to comply with its corresponding agreement regarding the hold-the-offering-price applicable to the Bonds.

- (d) By submitting a bid, each bidder confirms that: (i) any agreement among Underwriters, any selling group agreement and each retail distribution agreement (to which the bidder is a party) relating to the initial sale of the Bonds to the Public, together with the related pricing wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (a) report the prices at which it sells to the Public the unsold Bonds of each maturity allotted to it until it is notified by the winning bidder that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the Public and (b) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the winning bidder and as set forth in the related pricing wires which shall be at least until the 10% test has been satisfied as to the Bonds of that maturity or until the close of the fifth business day following the date of the award, and (ii) any agreement among Underwriters relating to the initial sale of the Bonds to the Public, together with the related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the Public to require each broker-dealer that is a party to such retail distribution agreement to (a) report the prices at which it sells to the Public the unsold Bonds of each maturity allotted to it until it is notified by the winning bidder or such Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the Public and (b) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the winning bidder or such Underwriter and as set forth in the related pricing wires, which shall be at least until the 10% test has been satisfied as to the Bonds of that maturity or until the close of the fifth business day following the date of the award.
- (e) Sales of any Bonds to any person that is a Related Party to an Underwriter shall not constitute sales to the Public for purposes of this Notice of Sale. Further, for purposes of this Notice of Sale:
  - (i) “Public” means any person other than an Underwriter or a Related Party,
  - (ii) “Underwriter” means (A) any person that agrees pursuant to a written contract with the City (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public including, specifically, the purchaser, and (b) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public),
  - (iii) a purchaser of any of the Bonds is a “Related Party” to an Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and
  - (iv) “Sale Date” means the date that the Bonds are awarded by the City to the winning bidder.

## Bond Details

The Bonds will be in fully registered form in the denominations of \$5,000 and integral multiples thereof in the name of Cede & Co. as nominee of The Depository Trust Company (“DTC”), New York, New York, to which principal and interest payments on the Bonds will be paid. Individual purchases will be in book-entry form only. Interest on each Bond shall be paid by check or draft of the Bond Registrar to the person in whose name such Bond is registered at the close of business on the fifteenth day of the month next preceding an interest payment date on such bond. The principal of the Bonds shall be payable in lawful money of the United States of America at the principal office maintained for the purpose by the Bond Registrar in West Des Moines, Iowa. Semiannual interest is due June 1 and December 1 of each year, commencing December 1, 2021 and is payable by UMB Bank, n.a., West Des Moines, Iowa (the “Bond Registrar”). The Bonds are dated the date of delivery (expected to be on or about March 9, 2021).

### AMOUNTS\* AND MATURITIES – JUNE 1

\$120,000 .....	2022	\$140,000 .....	2026	\$155,000 .....	2030
135,000 .....	2023	145,000 .....	2027	155,000 .....	2031
135,000 .....	2024	150,000 .....	2028	160,000 .....	2032
140,000 .....	2025	150,000 .....	2029	165,000 .....	2033

*Any consecutive maturities may be aggregated into term bonds at the option of the bidder, in which case the mandatory redemption provisions shall be on the same schedule as above.*

The Bonds due June 1, 2022 - 2028, inclusive, are non-callable. The Bonds due June 1, 2029 - 2033, inclusive, are callable in whole or in part and on any date on or after June 1, 2028, at a price of par and accrued interest. If less than all the Bonds are called, they shall be redeemed in any order of maturity as determined by the City and within any maturity by lot.

## Method of Bidding Electronically

Notwithstanding the fact that the City permits receiving bids electronically using SpeerAuction, all bidders must have a signed, but uncompleted, Official Bid Form delivered to Speer Financial, Inc., Suite 608, 531 Commercial Street, Waterloo, Iowa, (319) 291-8628 facsimile, prior to the close of bidding to which a printout of the electronic bid will be attached and delivered to the City.

If bidding electronically, all-or-none bids must be submitted via the internet address [www.SpeerAuction.com](http://www.SpeerAuction.com). The use of SpeerAuction shall be at the bidder’s risk and expense and the City shall have no liability with respect thereto, including (without limitation) liability with respect to incomplete, late arriving and non-arriving bids.

To bid via the SpeerAuction webpage, bidders must first visit the SpeerAuction webpage where, if they have not previously registered with either SpeerAuction, Grant Street Group (the “Auction Administrator”) or any other website administered by the Auction Administrator, they may register and then request admission to bid on the Bonds. Bidders will be notified prior to the scheduled bidding time of their eligibility to bid. Only registered broker-dealers and dealer banks with DTC clearing arrangements will be eligible to bid electronically.

The “Rules” of the SpeerAuction bidding process may be viewed on the SpeerAuction webpage and are incorporated herein by reference. Bidders must comply with the Rules of SpeerAuction in addition to the requirements of the City’s Official Terms of Offering. In the event the Rules of SpeerAuction and this Official Terms of Offering conflict, this Official Terms of Offering shall be controlling.

All electronic bids must be submitted on the SpeerAuction webpage. Electronic bidders may change and submit bids as many times as they choose during the sale period but may not delete a submitted bid. The last bid submitted by an electronic bidder before the deadline for receipt of bids will be compared to all other final bids to determine the winning bidder. During the bidding, no bidder will see any other bidder's bid nor the status of their bid relative to other bids (e.g., whether their bid is a leading bid). The electronic bidder bears all risk of transmission failure. Any questions regarding bidding on the SpeerAuction website should be directed to Grant Street Group at (412) 391-5555 x 370.

Each bidder shall be solely responsible for making necessary arrangements to access SpeerAuction for purposes of submitting its internet bid in a timely manner and in compliance with the requirements of the Terms of Offering. The City is permitting bidders to use the services of the SpeerAuction solely as a communication mechanism to conduct the internet bidding and the SpeerAuction is not an agent of the City. Provisions of the Terms of Offering and Official Bid Form shall control in the event of conflict with information provided by the Internet Bid System.

**Electronic Facsimile Bidding:** Bids may be submitted via facsimile at (319) 291-8628. Electronic facsimile bids will be sealed and treated as sealed bids. Neither the City nor its agents will assume liability for the inability of the bidder to reach the above named fax numbers prior to the time of sale specified above. Transmissions received after the deadline will be rejected. Bidders electing to submit bids via facsimile transmission bear full and complete responsibility for the transmission of such bid. Neither the City nor its agents will assume responsibility for the inability of the bidder to reach the above specified fax number prior to the time of sale. Time of receipt shall be the time recorded by the person receiving the facsimile and shall be conclusive.

### **Bidding Parameters and Award of the Bonds**

All interest rates must be in multiples of one-eighth or one one-hundredth of one percent ( $1/8$  or  $1/100$  of 1%), and not more than one rate for a single maturity shall be specified. The rates bid shall be in non-descending order. The differential between the highest rate bid and the lowest rate bid shall not exceed six percent (6%). All bids must be for all of the Bonds and must be for not less than \$1,736,000.

**Award of the Bonds:** The Bonds will be awarded on the basis of true interest cost, determined in the following manner. True interest cost shall be computed by determining the annual interest rate (compounded semi-annually) necessary to discount the debt service payments on the Bonds from the payment dates thereof to the dated date and to the bid price. For the purpose of calculating true interest cost, the Bonds shall be deemed to become due in the principal amounts and at the times set forth in the table of maturities set forth above. In the event two or more qualifying bids produce the identical lowest true interest cost, the winning bid shall be the bid that was submitted first in time on the SpeerAuction webpage or if all such bids are not submitted electronically, the winning bid shall be determined by lot.

The Bonds will be awarded to the bidder complying with the terms of this Official Terms of Offering whose bid produces the lowest true interest cost rate to the City as determined by the City's Registered Municipal Advisor, which determination shall be conclusive and binding on all bidders; provided, that the City reserves the right to reject all bids or any non-conforming bid and reserves the right to waive any informality in any bid. Electronic bidders should verify the accuracy of their final bids and compare them to the winning bids reported on the SpeerAuction Observation Page immediately after the bidding.

**The premium or discount, if any, is subject to pro rata adjustment if the maturity amounts of the Bonds are changed, maintaining, as close as possible, the same dollar amount of profit per \$1,000 bond as bid.**

The true interest cost of each electronic bid will be computed by SpeerAuction and reported on the Observation Page of the SpeerAuction webpage immediately following the date and time for receipt of bids. These true interest costs are subject to verification by the City's Municipal Advisor, will be posted for information purposes only and will not signify an actual award of any bid or an official declaration of the winning bid. The City or its Municipal Advisor will notify the bidder to whom the Bonds will be awarded, if and when such award is made.

The winning bidder will be required to make the standard filings and maintain the appropriate records routinely required pursuant to MSRB Rules G-8, G-11 and G-36. The winning bidder will be required to pay the standard MSRB charge for Bonds purchased. In addition, the winning bidder who is a member of the Securities Industry and Financial Markets Association ("SIFMA") will be required to pay SIFMA's standard charge per Bond.

### Good Faith Deposit and Other Matters

The winning bidder is required to a wire transfer from a solvent bank or trust company to the City's good faith bank the amount of **TWO PERCENT OF PAR** (the "Deposit") **WITHIN TWO HOURS** after the bid opening time as evidence of the good faith of the bidder. Alternatively, a bidder may submit its Deposit upon or prior to the submission of its bid in the form of a certified or cashier's check on, or a wire transfer from, a solvent bank or trust company for **TWO PERCENT OF PAR** payable to the Treasurer of the City. The City reserves the right to award the Bonds to a winning bidder whose wire transfer is initiated but not received within such two hour time period provided that such winning bidder's federal wire reference number has been received. In the event the Deposit is not received as provided above, the City may award the Bonds to the bidder submitting the next best bid provided such bidder agrees to such award.

If a wire transfer is used for the Deposit, it must be sent according to the following wire instructions:

Amalgamated Bank of Chicago  
Corporate Trust  
30 North LaSalle Street  
38<sup>th</sup> Floor  
Chicago, IL 60602  
ABA # 071003405  
Credit To: 3281 Speer Bidding Escrow  
RE: City of Anamosa, Jones County, Iowa bid for  
\$1,750,000\* General Obligation Corporate Purpose Bonds, Series 2021

If the wire shall arrive in such account prior to the date and time of the sale of the Bonds. Contemporaneously with such wire transfer, the prospective purchaser shall send an email to [biddingscrow@aboc.com](mailto:biddingscrow@aboc.com) with the following information: (1) indication that a wire transfer has been made, (2) the amount of the wire transfer, (3) the issue to which it applies, and (4) the return wire instructions if such prospective purchaser is not awarded the Bonds. The City and any prospective purchaser who chooses to wire the Deposit hereby agree irrevocably that Speer Financial, Inc. ("Speer") shall be the escrow holder of the Deposit wired to such account subject only to these conditions and duties: (i) if the bid is not accepted, Speer shall, at its expense, promptly return the Deposit amount to the unsuccessful prospective purchaser; (ii) if the bid is accepted, the Deposit shall be forwarded to the City, (iii) Speer shall bear all costs of maintaining the escrow account and returning the funds to the prospective purchaser; (iv) Speer shall not be an insurer of the Deposit amount and shall have no liability except if it willfully fails to perform, or recklessly disregards, its duties specified herein; and (v) income earned on the Deposit, if any, shall be retained by Speer.

The City covenants and agrees to enter into a written agreement, certificate or contract, constituting an undertaking (the "Undertaking") to provide ongoing disclosure about the City for the benefit of the beneficial owners of the Bonds on or before the date of delivery of the Bonds as required under Section (b)(5) of Rule 15c2-12 (the "Rule") adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934. The Undertaking shall be as described in the Official Statement, with such changes as may be agreed in writing by the Underwriter.

The Underwriter's obligation to purchase the Bonds shall be conditioned upon the City delivering the Undertaking on or before the date of delivery of the Bonds.

The Bonds will be delivered to the successful purchaser against full payment in immediately available funds as soon as they can be prepared and executed, which is expected to be on or about March 9, 2021. Should delivery be delayed beyond sixty (60) days from the date of sale for any reason beyond the control of the City except failure of performance by the purchaser, the City may cancel the award or the purchaser may withdraw the good faith deposit and thereafter the purchaser's interest in and liability for the Bonds will cease.

The Official Statement, when further supplemented by an addendum or addenda specifying the maturity dates, principal amounts, and interest rates of the Bonds, and any other information required by law or deemed appropriate by the City, shall constitute a “Final Official Statement” of the City with respect to the Bonds, as that term is defined in the Rule. By awarding the Bonds to any underwriter or underwriting syndicate, the City agrees that, no more than seven (7) business days after the date of such award, it shall provide, without cost to the senior managing underwriter of the syndicate to which the Bonds are awarded, up to 50 copies of the Final Official Statement to permit each “Participating Underwriter” (as that term is defined in the Rule) to comply with the provisions of such Rule. The City shall treat the senior managing underwriter of the syndicate to which the Bonds are awarded as its designated agent for purposes of distributing copies of the Final Official Statement to each Participating Underwriter. Any underwriter executing and delivering an Official Bid Form with respect to the Bonds agrees thereby that if its bid is accepted by the City it shall enter into a contractual relationship with all Participating Underwriters of the Bonds for purposes of assuring the receipt by each such Participating Underwriter of the Final Official Statement.

By submission of its bid, the senior managing underwriter of the successful purchaser agrees to supply all necessary pricing information and any Participating Underwriter identification necessary to complete the Official Statement within 24 hours after award of the Bonds. Additional copies of the Final Official Statement may be obtained by Participating Underwriters from the printer at cost.

The City will, at its expense, deliver the Bonds to the purchaser in New York, New York (or arrange for “FAST” delivery) through the facilities of DTC and will pay for the bond attorney’s opinion. At the time of closing, the City will also furnish to the purchaser the following documents, each dated as of the date of delivery of the Bonds: (1) the legal opinion of Dorsey & Whitney LLP, Des Moines, Iowa, that the Bonds are lawful and enforceable obligations of the City in accordance with their terms; (2) the opinion of said attorneys that the interest on the Bonds is exempt from federal income taxes as and to the extent set forth in the Official Statement for the Bonds; and (3) a no litigation certificate by the City.

The City intends to designate the Bonds as “qualified tax-exempt obligations” pursuant to the small issuer exception provided by Section 265(b) (3) of the Internal Revenue Code of 1986, as amended.

Purchaser consents to the receipt of electronic transcripts and acknowledges the City’s intended use of electronically executed documents. Iowa Code chapter 554D establishes electronic signatures have the full weight and legal authority as manual signatures.

The City has authorized the printing and distribution of an Official Statement containing pertinent information relative to the City and the Bonds. Copies of such Official Statement or additional information may be obtained from Beth Brincks, City Administrator/City Clerk, City of Anamosa, 107 S. Ford Street, Anamosa, Iowa, 52205 or an electronic copy of this Official Statement is available from the [www.speerfinancial.com](http://www.speerfinancial.com) website under “Official Statement Sales/Competitive Calendar” or from the Registered Municipal Advisor to the City, Speer Financial, Inc., 531 Commercial Street, Suite 608, Waterloo, Iowa 50701 (telephone (319) 291-2077), and 230 West Monroe Street, Suite 2630, Chicago, Illinois 60606 (telephone (312) 346-3700).

/s/     **BETH BRINCKS**  
          *City Administrator/Clerk*  
          **CITY OF ANAMOSA**  
          **Jones County, Iowa**

**EXHIBIT A**

**EXAMPLE ISSUE PRICE CERTIFICATE**

**[from bond counsel]**

**\$1,750,000**  
**General Obligation Corporate Purpose Bonds, Series 2021**

**ISSUE PRICE CERTIFICATE**  
**(Form - More than 3 bids)**

The undersigned, on behalf of [NAME OF UNDERWRITER] (“[SHORT NAME OF UNDERWRITER]”), hereby certifies as set forth below with respect to the sale of the obligations named above (the “Bonds”).

**1. Reasonably Expected Initial Offering Price.**

(a) As of the Sale Date, the reasonably expected initial offering prices of the Bonds to the Public by [SHORT NAME OF UNDERWRITER] are the prices listed in Schedule A (the “Expected Offering Prices”). The Expected Offering Prices are the prices for the Maturities of the Bonds used by [SHORT NAME OF UNDERWRITER] in formulating its bid to purchase the Bonds. Attached as Schedule B is a true and correct copy of the bid provided by [SHORT NAME OF UNDERWRITER] to purchase the Bonds.

(b) [SHORT NAME OF UNDERWRITER] was not given the opportunity to review other bids prior to submitting its bid.

(c) The bid submitted by [SHORT NAME OF UNDERWRITER] constituted a firm offer to purchase the Bonds.

**2. Defined Terms.** For purposes of this Issue Price Certificate:

(a) *Issuer* means the City of Anamosa, Iowa.

(b) *Maturity* means Bonds with the same credit and payment terms. Any Bonds with different maturity dates, or with the same maturity date but different stated interest rates, are treated as separate Maturities.

(c) *Member of the Distribution Group* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

(d) *Public* means any person (*i.e.*, an individual, trust, estate, partnership, association, company, or corporation) other than a Member of the Distribution Group or a related party to a Member of the Distribution Group. A person is a “related party” to a Member of the Distribution Group if the Member of the Distribution Group and that person are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(e) *Sale Date* means the first day on which there is a binding contract in writing for the sale of the respective Maturity. The Sale Date of each Maturity was February 8, 2021.

The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents [SHORT NAME OF UNDERWRITER]'s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Closing Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Dorsey & Whitney LLP in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.

[UNDERWRITER]

By:\_\_\_\_\_

Name:\_\_\_\_\_

Dated: March 9, 2021

**SCHEDULE A**  
**EXPECTED OFFERING PRICES**  
*(Attached)*

**SCHEDULE B**  
**COPY OF UNDERWRITER'S BID**  
*(Attached)*

**\$1,750,000**  
**General Obligation Corporate Purpose Bonds, Series 2021**

**ISSUE PRICE CERTIFICATE**  
**(Form - Fewer than 3 bids)**

The undersigned, on behalf of [NAME OF UNDERWRITER ([“[SHORT NAME OF UNDERWRITER]”])] hereby certifies as set forth below with respect to the sale of the obligations named above (the “Bonds”).

1. ***Initial Offering Price of the Bonds.*** [SHORT NAME OF UNDERWRITER] offered the Bonds to the Public for purchase at the specified initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire for the Bonds is attached to this certificate as Schedule B.

2. ***First Price at which Sold to the Public.*** On the Sale Date, at least 10% of each Maturity [listed in Schedule C] was first sold to the Public at the respective Initial Offering Price [or price specified [therein][in Schedule C], if different].

3. ***Hold the Offering Price Rule.*** [SHORT NAME OF UNDERWRITER] has agreed in writing that, (i) for each Maturity less than 10% of which was first sold to the Public at a single price as of the Sale Date, it would neither offer nor sell any of the Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “Hold-the-Offering-Price Rule”), and (ii) any agreement among underwriters, selling group agreement, or retail distribution agreement contains the agreement of each underwriter, dealer, or broker-dealer who is a party to such agreement to comply with the Hold-the-Offering-Price Rule. Based on the [SHORT NAME OF UNDERWRITER]’s own knowledge and, in the case of sales by other Members of the Distribution Group, representations obtained from the other Members of the Distribution Group, no Member of the Distribution Group has offered or sold any such Maturity at a price that is higher than the respective Initial Offering Price during the respective Holding Period.

4. ***Defined Terms.*** For purposes of this Issue Price Certificate:

(a) ***Holding Period*** means the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date (February 15, 2021), or (ii) the date on which Members of the Distribution Group have sold at least 10% of such Maturity to the Public at one or more prices, none of which is higher than the Initial Offering Price for such Maturity.

(b) ***Issuer*** means the City of Anamosa, Iowa.

(c) ***Maturity*** means Bonds with the same credit and payment terms. Any Bonds with different maturity dates, or with the same maturity date but different stated interest rates, are treated as separate Maturities.

(d) *Member of the Distribution Group* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

(e) *Public* means any person (*i.e.*, an individual, trust, estate, partnership, association, company, or corporation) other than a Member of the Distribution Group or a related party to a Member of the Distribution Group. A person is a “related party” to a Member of the Distribution Group if the Member of the Distribution Group and that person are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(f) *Sale Date* means the first day on which there is a binding contract in writing for the sale of the respective Maturity. The Sale Date of each Maturity was February 8, 2021.

The representations set forth in this certificate are limited to factual matters only. Nothing in this certificate represents [NAME OF UNDERWRITING FIRM] interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Closing Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Dorsey & Whitney LLP in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.

[UNDERWRITER]

By:\_\_\_\_\_

Name:\_\_\_\_\_

Dated: March 9, 2021

**SCHEDULE A**  
**INITIAL OFFERING PRICES OF THE BONDS**  
*(Attached)*

**SCHEDULE B**  
**PRICING WIRE**

*(Attached)*

**SCHEDULE C**

**SALES OF AT LEAST 10% OF MATURITY TO THE PUBLIC ON THE SALE DATE  
AT THE INITIAL OFFERING PRICE**

*(Attached)*

## RESOLUTION NO. 2021-

Resolution authorizing the use of a preliminary official statement in connection with the issuance of General Obligation Corporate Purpose Bonds, Series 2021 and setting the date for the sale of the Bonds

WHEREAS, the City of Anamosa (the “City”), in Jones County, State of Iowa has heretofore proposed to enter into a loan agreement (the “Loan Agreement #1”), pursuant to the provisions of Section 384.24A of the Code of Iowa, and to borrow money thereunder in a principal amount not to exceed \$250,000 for the purpose of paying the costs, to that extent, of funding economic development grants for downtown property improvements (the “Property Improvements Project”), and in lieu of calling an election upon such proposal, has published notice of the proposed action including notice of the right to petition for an election, and has held a hearing thereon, and as of December 14, 2020, no petition had been filed with the City asking that the question of entering into the Loan Agreement #1 be submitted to the registered voters of the City; and

WHEREAS, the City also proposed to enter into a loan agreement (the “Loan Agreement #2”), pursuant to the provisions of Section 384.24A of the Code of Iowa, and to borrow money thereunder in a principal amount not to exceed \$700,000 for the purpose of paying the costs, to that extent, of constructing, furnishing and equipping municipal police facilities (the “Police Station Project”), and in lieu of calling an election upon such proposal, has published notice of the proposed action including notice of the right to petition for an election, and has held a hearing thereon, and as of December 14, 2020, no petition had been filed with the City asking that the question of entering into the Loan Agreement #2 be submitted to the registered voters of the City; and

WHEREAS, the City also proposed to enter into a loan agreement (the “Loan Agreement #3”), pursuant to the provisions of Section 384.24A of the Code of Iowa, and to borrow money thereunder in a principal amount not to exceed \$700,000 for the purpose of paying the costs, to that extent, of constructing, furnishing and equipping municipal fire protection facilities (the “Fire Station Project”), and in lieu of calling an election upon such proposal, has published notice of the proposed action including notice of the right to petition for an election, and has held a hearing thereon, and as of December 14, 2020, no petition had been filed with the City asking that the question of entering into the Loan Agreement #3 be submitted to the registered voters of the City; and

WHEREAS, the City also proposed to enter into a loan agreement (the “Essential Purpose Loan Agreement”), pursuant to the provisions of Section 384.24A of the Code of Iowa, and to borrow money thereunder in a principal amount not to exceed \$100,000 for the purpose of paying the costs, to that extent, of planning, designing and constructing street and highway improvements (the “Essential Purpose Project,” and together with the Property Improvements Project, the Police Station Project, and the Fire Station Project, the “Projects”), and has published notice of the proposed action and has held a hearing thereon on December 14, 2020; and

WHEREAS, pursuant to the provisions of Section 384.28 of the Code of Iowa, the City Council has combined Loan Agreement #1, Loan Agreement #2, Loan Agreement #3 and the Essential Purpose Loan Agreement into a single loan agreement (the "Loan Agreement"); and

WHEREAS, a Preliminary Official Statement (the "P.O.S.") has been prepared to facilitate the sale of the General Obligation Corporate Purpose Bonds, Series 2021 (the "Bonds") in evidence of the obligation of the City under the Loan Agreement, and it is now necessary to make provision for the approval of a preliminary official statement (the "P.O.S.") and to authorize its use by Speer Financial, Inc., as municipal financial advisor (the "Financial Advisor") to the City; and

WHEREAS, it is now necessary to set the date for the sale of the Bonds and to authorize the Financial Advisor to carry out such sale;

NOW, THEREFORE, Be It Resolved by the City Council of the City of Anamosa, Iowa, as follows:

Section 1. The City Clerk is hereby authorized to take such action as shall be deemed necessary and appropriate, with the assistance of the Financial Advisor, to prepare the P.O.S. describing the Bonds and providing for the terms and conditions of their sale, and all action heretofore taken in this regard is hereby ratified and approved.

Section 2. The use by the Financial Advisor of the P.O.S. relating to the Bonds in substantially the form as has been presented to and considered by the City is hereby approved, and the Financial Advisor is hereby authorized to prepare and use a final Official Statement for the Bonds substantially in the form of the P.O.S. but with such changes therein as are required to conform the same to the terms of the Bonds and the resolution, when adopted, providing for the sale and issuance of the Bonds, and the City Clerk is hereby authorized and directed to execute a final Official Statement for the Bonds, if requested. The P.O.S. as of its date is deemed final by the City within the meaning of Rule 15(c)(2)-12 of the Securities and Exchange Commission.

Section 3. Sealed bids for the purchase of the Bonds shall be received and canvassed on behalf of the City until 11:00 a.m. C.S.T. on February 8, 2021, at City Hall, in the City, and the City Council shall meet on the same date at 6 o'clock p.m., at the Anamosa Library and Learning Center, Anamosa, Iowa **OR list electronic access information]**, for the purpose of considering such bids received and considering and passing a resolution providing for the award of the Bonds, and the Financial Advisor is hereby authorized and directed to disseminate the notice of said sale, in compliance with the Internal Revenue Service regulations governing "Issue Price" determinations, such notice to minimally contain information regarding Establishment of Issue Price set forth in the "Terms of Offering" attached to the P.O.S. and to be in such form as the Financial Advisor may deem to be appropriate.

Section 4. Pursuant to Section 75.14 of the Code of Iowa, the City Council hereby authorizes the Financial Advisor to use electronic bidding procedures for the sale of the Bonds through Speer Auction®, and hereby finds and determines that the Speer Auction® competitive bidding system will provide reasonable security and maintain the integrity of the competitive

bidding process and will facilitate the delivery of bids by interested parties under the circumstances of this bond sale.

Section 5. All resolutions or parts thereof in conflict herewith are hereby repealed to the extent of such conflict.

Section 6. This resolution shall be in full force and effect immediately upon its adoption and approval, as provided by law.

Councilmember \_\_\_\_\_ introduced the foregoing **Resolution No. 2021-** and moved for its adoption. Councilmember \_\_\_\_\_ seconded the motion to adopt. The roll was called and the following indicates the result of the vote.

COUNCILMEMBER	AYES	NAYS	ABSENT	ABSTAIN
CRUMP				
SMITH				
MACHART				
ZUMBACH				
STOUT				
CAPRON				

Passed and approved January 25, 2021.

\_\_\_\_\_  
Mayor

Attest:

\_\_\_\_\_  
City Clerk

**RESOLUTION NO. 2021-**

***RESOLUTION SETTING THE DATE FOR THE PUBLIC HEARING TO REVIEW THE APPLICATION FOR STATE REVOLING FUNDS LOAN FOR JORDAN WELL #6***

***WHEREAS***, the City of Anamosa found it necessary to construct a new well; and

***WHEREAS***, the City of Anamosa will be holding a Public Hearing to review an application for a State Revolving Fund (SRF) loan and to make available to the public the contents of an environmental information document and the City's project plan. These documents include design and environmental information related to the proposed improvements to the City's drinking water infrastructure.

***WHEREAS***, the purpose of this Public Hearing is to inform area residents of the community of Anamosa of this proposed action, discuss the actual cost and user fees associated with this project, and to address citizen's concerns, if any, with the plan; and

***WHEREAS***, a public notice of said public hearing is required to be published in the designated local paper no less than 30 days prior to the public hearing;

***NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF ANAMOSA, IOWA***, that the City of Anamosa City Council does hereby set March 8, 2021 at 6:00 p.m. as the date and time for the public hearing to be held in the Anamosa Library and Learning Center in Anamosa, Iowa and via Zoom.

***FURTHERMORE***, that publication of said public notice shall be made in accordance with the State Code of Iowa.

Councilmember \_\_\_\_\_ introduced the foregoing **Resolution No. 2021-** and moved for its adoption. Councilmember \_\_\_\_\_ seconded the motion to adopt. The roll was called and the following indicates the result of the vote.

COUNCILMEMBER	AYES	NAYS	ABSENT	ABSTAIN
CRUMP				
SMITH				
MACHART				
ZUMBACH				
STOUT				
CAPRON				

***PASSED AND APPROVED*** this 25<sup>th</sup> day of January, 2021.

\_\_\_\_\_  
Rod Smith, Mayor

ATTEST:

\_\_\_\_\_  
Beth Brincks, City Clerk

**CITY OF ANAMOSA**  
**APPROVAL FORM FOR LIQUOR AND BEER LICENSE APPLICATIONS**

Class Beer/Liquor  
Sunday: Yes    No     
New/Renewal/Amended  
Circle Appropriate Info.

NAME OF APPLICANT: Tapkens Convenience Plus

TRADE NAME (DBA): Anamosa Travelmart Inc

STREET ADDRESS: 401 N. High St.

PHONE (BUSINESS): 319-462-4241 HOME (OR CELL):                     

*The undersigned have by the signatures of the officials noted below, certify that the above mentioned structure conforms to all laws within the jurisdictional limits of enforcement of said officials and may receive approval of this application.*

**ANAMOSA POLICE DEPARTMENT**

The above named applicant(s) is approved by this department to have a beer and/or liquor license at the above location.

[Signature] 01/18/21  
Police Chief Date  
Leave form at City Hall after Fire and Health signatures are complete

**ANAMOSA FIRE DEPARTMENT:** Fire Inspection Fee -- \$35.00, includes two inspections. Each inspection after that will be \$25 each. (Make check out to: City of Anamosa)

[Signature] 1-15-21  
Fire Chief (or designee) Date  
Phone: 319-462-4434 for appointment

**JONES COUNTY ENVIRONMENTAL HEALTH DEPARTMENT: (If applicable)**

The above mentioned structure and business is in compliance with the Jones County Board of Health Regulations.

[Signature] 1-18-21  
Jones County Environmental Health Official Date  
Phone: 319-462-4715 for appointment

**PLEASE RETURN FORM TO REENIE AT CITY HALL WHEN COMPLETED**

Received at City Hall                      for the                      Council Meeting

## CITY OF ANAMOSA

## Payments for Approval at the January 25, 2021 City Council Meeting

## Fire Department Pay July 1, 2020-Dec 31,2020

Vendor Name	Description	Amount
BALENTINE/CARTER	7/1/20-12/1/20 FIRE PAY	360.00
BARNES/CHUCK	7/1/20-12/1/20 FIRE PAY	520.00
BARNES/JASON	7/1/20-12/1/20 FIRE PAY	305.00
BUCK/JUSTIN	7/1/20-12/1/20 FIRE PAY	175.00
CAMP/RICHARD	7/1/20-12/1/20 FIRE PAY	110.00
CAMPBELL/TOM	7/1/20-12/1/20 FIRE PAY	160.00
CARSON/DAVID	7/1/20-12/1/20 FIRE PAY	515.00
EDWARDS/ROBERT	7/1/20-12/1/20 FIRE PAY	715.00
FABER/ALEXANDER	7/1/20-12/1/20 FIRE PAY	125.00
FRANK/DANIEL	7/1/20-12/1/20 FIRE PAY	655.00
GIBBS JR/TIM	7/1/20-12/1/20 FIRE PAY	285.00
GINTER/DANIEL	7/1/20-12/1/20 FIRE PAY	90.00
GINTER/JAMIE	7/1/20-12/1/20 FIRE PAY	120.00
HANDEL/LANCE	7/1/20-12/1/20 FIRE PAY	130.00
KOOB/WESLEY	7/1/20-12/1/20 FIRE PAY	505.00
KULA/DYLAN	7/1/20-12/1/20 FIRE PAY	140.00
MCCARTHY/TYLER	7/1/20-12/1/20 FIRE PAY	435.00
MCGREEVY/MICHAEL	7/1/20-12/1/20 FIRE PAY	1,105.00
MCNAMARA/MATT	7/1/20-12/1/20 FIRE PAY	120.00
MINER JR/MIKE	7/1/20-12/1/20 FIRE PAY	175.00
MINER/CHRIS	7/1/20-12/1/20 FIRE PAY	250.00
MOELLER/JAMES	7/1/20-12/1/20 FIRE PAY	230.00
PAULSON/KEITH	7/1/20-12/1/20 FIRE PAY	200.00
SHADA/TIM	7/1/20-12/1/20 FIRE PAY	910.00
SNOW/JASON	7/1/20-12/1/20 FIRE PAY	460.00
SNOW/JEREMIAH	7/1/20-12/1/20 FIRE PAY	620.00
STRUBE/KYLE	7/1/20-12/1/20 FIRE PAY	175.00
SWISHER/JEFF	7/1/20-12/1/20 FIRE PAY	175.00
TAPKEN/MATTHEW	7/1/20-12/1/20 FIRE PAY	185.00
ZIMMERMAN/BRODY	7/1/20-12/1/20 FIRE PAY	170.00
	Final Totals...	10,120.00

## FUND RECAP:

FUND DESCRIPTION	DISBURSEMENTS
01 GENERAL FUND	10,120.00
TOTAL ALL FUNDS	10,120.00

## January Library Vouchers

Vendor Name	Description	Amount
AMAZON	DVDS	141.38
BAKER & TAYLOR	BOOKS	736.05
EDWARDS SANITATION	TRASH SERVICE	33.50
GRAYBILL ELECTRONICS	NEW SECURITY/ALARM	1,764.00
KOCH OFFICE GROUP	QTRLY COPIER PAYMENT	307.80
LEAF	MONTHLY COPIER LEASE	96.00
MIDWEST TAPE	DIGITAL MATERIALS	77.05
OFFICE EXPRESS	COPIER PAPER	41.89
WALMART COMMUNITY BRC	JAN ACTIVITY BAGS	82.32
	Final Totals...	3,279.99

## FUND RECAP:

FUND DESCRIPTION	DISBURSEMENTS
01 GENERAL FUND	1,480.94
09 LOCAL OPTION TAX	1,799.05
TOTAL ALL FUNDS	3,279.99

## January 25, 2021 City Council Vouchers

Date Issued	Warrant In Favor of	Check Amount	Description
1/25/2021	66446 ALEXIS FIRE EQUIPMENT CO.	12,146.04	RESCUE VEHICLE INS REPRS
1/25/2021	66447 AMERICAN BANKERS INSURANCE CO	5,459.00	WWTP FLOOD INS
1/25/2021	66448 ANIMAL WELFARE FRIENDS	105.00	PICK UP AND HOLD
1/25/2021	66449 AUTOMOTIVE SERVICES	131.17	SPARK PLUGS COIL BOOT
		30.00	TIRE REPAIR
		276.48	VEHICLE PARTS
TOTAL **	66449	437.65	
1/25/2021	66450 BARRON MOTOR SUPPLY	2.58	GROTE
		26.60	5W20
		98.99	OIL TOP BARREL
TOTAL **	66450	128.17	

1/25/2021	66451	BLACK HILLS ENERGY	188.76	100 E 1ST ST PD
			282.51	108 N FORD PD
			320.40	FD
			398.78	STREETS
			88.42	CITY HALL
			776.05	LLC
			31.53	POOL
			194.67	WATER
			31.53	1205 WWTP
			705.53	1205 WALWORTH
			910.17	2ND STREET LIFT STATION
TOTAL **	66451		3,928.35	
1/25/2021	66452	BROWN SUPPLY CO., INC.	270.00	MUELLER SSR CLAMP
1/25/2021	66453	BUNTING/DON	1,037.13	LANDSCAPING MATERIALS
1/25/2021	66454	CARQUEST	37.60	OXYGEN
1/25/2021	66455	CASEY'S GENERAL STORES INC.	24.72	GASOLINE
1/25/2021	66456	CHEM RIGHT LABORATORIES INC	85.00	BACTERIA SAMPLING
1/25/2021	66457	CHEMSEARCH	150.00	ECOSTORM PROGRAM
1/25/2021	66458	CITIZENS SAVINGS BANK	71.65	PAYROLL ACH
			52.17	52.00.3.5200.320011
			52.18	PAYROLL ACH
TOTAL **	66458		176.00	
1/25/2021	66459	ECICOG	2,100.00	CDBG GRANT ADMIN DTOWN
1/25/2021	66460	ELAN-CARDMEMBER SERVICE	29.98	MEETING SOFTWARE
			60.00	WATER EXAM FEE
			139.10	SANTA COSTUME RENTAL
TOTAL **	66460		229.08	
1/25/2021	66461	EMC INSURANCE	393.95	WORK COMP DED PD
			1,000.00	WORK COMP DED CITYHALL
TOTAL **	66461		1,393.95	
1/25/2021	66462	FAREWAY STORES, INC.	11.97	WATER
			499.36	FUNDRAISER SUPPLIES
TOTAL **	66462		511.33	
1/25/2021	66463	FREEDOM AUTOMOTIVE	72.45	TIRE REPAIR
1/25/2021	66464	GINTER/JAMIE	45.00	3 HOURS PAY
1/25/2021	66465	HELLE FARM EQUIPMENT	1,836.75	MOWER DECK 3/4

			612.25	MOWER DECK 1/4
TOTAL **	66465		2,449.00	
1/25/2021	66466	HENDERSON PRODUCTS	420.00	HITCH REPAIR
1/25/2021	66467	HOME DECORATING CENTER	10.15	KUP
1/25/2021	66468	HOUSBY HEAVY EQUIPMENT	133.98	SCREWS
			32.13	FLANGE NUTS
			719.63	BOLTON EDGE
TOTAL **	66468		885.74	
1/25/2021	66469	INFRASTRUCTURE TECHNOLOGY SOLU	144.00	ITS ONLINE BACKUP
1/25/2021	66470	IOWA ONE CALL	38.80	EMAIL NOTIFICATION
			38.80	EMAIL NOTIFICATIONS
TOTAL **	66470		77.60	
1/25/2021	66471	IOWA PRISON INDUSTRIES	14.95	SPEED WARNING SIGN
			79.80	NO PARKING SIGNS
			130.95	SCHOOL ZONE SIGNS
			156.90	W MAIN E MAIN SIGNS
TOTAL **	66471		382.60	
1/25/2021	66472	JOHN DEERE FINANCIAL	12.98	FUEL DIESEL SUPPLMENT
			4.99	SCUBBING CLEANER
			9.99	SHOP TOWELS
			20.56	COUPLER & FITTING
			16.79	RURAL MAILBOX
			34.99	UTILITY BATTERY
			378.41	HEDGE TRIMMER AND OIL
			26.78	ICE MELT
			8.99	FUNDRAISER SUPPLIES
			30.99	CLEAR PLASTIC
TOTAL **	66472		545.47	
1/25/2021	66473	JONES COUNTY SOLID WASTE MGMT	5,416.25	3RD QTR FY21 ASSESSMENT
1/25/2021	66474	JONES REGIONAL MEDICAL CENTER	414.00	MEDICAL HENSON
1/25/2021	66475	KIECK'S	865.00	BLACK CARRIER BLACK HILI
1/25/2021	66476	KONICA MINOLTA BUSINESS SOLUTI	16.85	COPIES
			81.00	COPIER MAINT
TOTAL **	66476		97.85	
1/25/2021	66477	KONICA PREMIER FINANCE	151.64	COPIER PURCHASE CONTRACT
1/25/2021	66478	LEAF	13.86	PRINTER COPIER

1/25/2021	66479	LYNCH FORD	82.11	MOULDING WIN
1/25/2021	66480	MAQUOKETA VALLEY ELECTRIC COOP	139.85	INTERNET WATER
			66.21	INDUSTRIAL PARK LIGHTS
TOTAL **	66480		206.06	
1/25/2021	66481	MARY STICKLEY	3.14	REFUND
1/25/2021	66482	MARY STICKLEY	3.15	REFUND
1/25/2021	66483	MEDIACOM	83.02	INTERNET FD
			136.90	CITY HALL INTERNET
TOTAL **	66483		219.92	
1/25/2021	66484	MENARDS	134.98	CONVERTERS
1/25/2021	66485	MUNICIPAL SUPPLY, INC.	979.20	15 M510
			455.00	5 M510
			603.00	6 M510
			440.00	4 M510
			122.10	1 M510
TOTAL **	66485		2,599.30	
1/25/2021	66486	NELSON ELECTRIC	977.98	PUMP ROOM OUTLETS CONTRL
			1,000.00	VFD PUMP ROOM
TOTAL **	66486		1,977.98	
1/25/2021	66487	PETTY CASH	62.10	CERTIFIED MAIL
1/25/2021	66488	PUSH PEDAL PULL	299.70	REPAIR CABLE RECMBIKE
			140.00	SERVICE ALL MACHINES
TOTAL **	66488		439.70	
1/25/2021	66489	SHAFFER PLBG & HTG	1,880.00	LABOR/EXCAVATOR
			412.42	ROCK
			1,750.00	EXCAVATOR WORK
TOTAL **	66489		4,042.42	
1/25/2021	66490	SKYLINE CONSTRUCTION OF DBQ	400.00	400 GAL HOT MIX APPLIED
1/25/2021	66491	STONE CITY QUARRIES	183.98	ROAD ROCK
			176.45	CLEAN ROCK
			1,769.55	SAND
TOTAL **	66491		2,129.98	
1/25/2021	66492	TIFCO INDUSTRIES	2,188.88	TIFCO MISC SHOP PARTS
1/25/2021	66493	TRANSWORLD NETWORK, CORP	7.98	PD
			76.06	CITY HALL
			7.36	LLC

			2.46	STREETS
			1.23	FD
			1.23	POOL
			2.46	WATER
			1.23	WWTP
TOTAL **	66493		100.01	
1/25/2021	66494	TYLER TECHNOLOGIES, INC	25,422.00	3RD STAGE IMPLEMENT
1/25/2021	66495	WAPSI WASTE SERICE, INC.	347.00	DEC CITY HALL
			45.00	DEC FIRE
			45.00	DEC WWTR
			55.00	GARBAGE PICKUP
TOTAL **	66495		492.00	
1/25/2021	66496	WATER SOLUTIONS UNLIMITED	3,430.98	HMO SOLUTION 7002 LBS
			1,895.47	POLYPHOSPHATE
			1,080.00	CHLORINE GAS
TOTAL **	66496		6,406.45	
1/25/2021	66497	WELAND CLINCAL LABS	360.00	INVESTIGATORY DRUG SCRNS
1/25/2021	66498	WOODWARD COMMUNITY MEDIA	345.72	LEGALS
1/25/2021	66499	ZIPPY'S SALT BARN	695.78	RED BROWN MULCH
Total			88,521.31	

FUND

RECAP:

FUND	DESCRIPTION	DISBURSEMENTS
01	GENERAL FUND	31,324.95
06	ROAD USE TAX FUND	5,166.05
09	LOCAL OPTION TAX	25,488.21
51	WATER FUND	16,973.07
52	WASTEWATER FUND	7,469.03
73	DOWNTOWN REVITALIZATION PROG	2,100.00
TOTAL	ALL FUNDS	88,521.31

-		FY 2018 ACTUAL	FY 2019 ACTUAL	FY 2020 ACTUAL	FY 2021 ADOPTED BUDGET	USED AS OF NOV 30,2020 11/4/2020	FY2022 PROPOSED BUDGET	DESCRIPTION/EXPLANATION
	Project "Booth, 1St and Ford St,"							
	Budget to remain the same							
WATER	To be completed by administration							
	Increase in budget							
	question							
51.00.3.5100.110001	FULL TIME SALARIES	\$ 170,351.86	\$ 119,984.02	\$ 155,891.21	\$ 155,000.00	62,497.39	\$162,750.00	3% and 5% supervisor
51.00.3.5100.110003	PART TIME SALARIES							
51.00.3.5100.110004	TEMPORARY PART TIME SALARIES							
51.00.3.5100.110005	CONTRACT SALARIES							
51.00.3.5100.130000	F.I.C.A. -- CITY'S SHARE	\$ 6,713.74	\$ 7,209.09	\$ 9,305.30	\$ 9,610.00	\$ 3,749.70	\$ 10,090.50	6.20%
51.00.3.5100.140000	MEDICARE -- CITY'S SHARE	\$ 1,570.17	\$ 1,685.99	\$ 2,176.38	\$ 2,247.50	\$ 876.92	\$ 2,359.88	1.45%
51.00.3.5100.150000	I.P.E.R.S -- CITY'S SHARE	\$ 9,772.30	\$ 9,548.68	\$ 14,716.02	\$ 14,632.00	\$ 5,899.73	\$ 15,363.60	9.44%
51.00.3.5100.160000	GROUP INSURANCE	\$ 87,352.69	\$ 34,056.58	\$ 53,754.98	\$ 57,000.00	\$ 15,054.33	\$ 59,850.00	5.00%
51.00.3.5100.160001	SELF FUNDED INS					\$ 373.35		
51.00.3.5100.170000	WORKER'S COMP. INSURANCE	\$ 4,108.00	\$ 4,502.00	\$ 5,987.06	\$ 4,210.70	\$ 905.84	\$ 6,286.41	5%
51.00.3.5100.180001	UNIFORM EXPENSE	\$ 506.85	\$ 1,810.82	\$ 955.16	\$ 1,500.00	\$ 965.45	\$1,500.00	
51.00.3.5100.190000	EDUCATION EXPENSE							
		\$ 280,375.61	\$ 178,797.18	\$ 242,786.11	\$ 244,200.20	\$ 90,322.71	\$ 258,200.39	
51.00.3.5100.210000	GENERAL ADVERTISING	\$ 606.84	\$ 328.73	\$ 132.00	\$ 500.00	\$ -	\$500.00	
51.00.3.5100.220000	PROFESSIONAL SERVICES	\$ 6,597.74	\$ 12,151.19	\$ 6,544.35	\$ 2,500.00	\$ (1,155.00)	\$2,500.00	
51.00.3.5100.220001	SAFETY COUNCIL EXPENSES	\$ 4,008.15	\$ 2,425.44	\$ 3,079.22	\$ 3,000.00	\$ 1,568.80	\$ 6,100.00	NEED NUMBER FOR NEW PROGRAM
51.00.3.5100.220010	LEGAL SERVICES		\$ 13,864.36	\$ 24,336.16		\$ 3,005.22		
51.00.3.5100.220020	ENGINEERING SERVICES	\$ 7,288.48	\$ 32,115.84	\$ 13,480.11	\$ 21,000.00	\$ 11,027.54	\$ 21,000.00	
51.00.3.5100.220051	LIABILITY INSURANCE	\$ 3,723.00	\$ 4,325.00	\$ 4,004.00	\$ 3,816.10	\$ (302.00)	\$ 4,204.20	
51.00.3.5100.220052	STRUCTURE INSURANCE	\$ 13,073.00	\$ 14,532.00	\$ 16,167.00	\$ 15,000.00	\$ -	\$ 16,975.35	
51.00.3.5100.220053	CONTENT INSURANCE							
51.00.3.5100.220054	VEHICLE INSURANCE	\$ 4,026.00	\$ 5,310.00	\$ 5,173.00	\$ 5,500.00	\$ 1,642.00	\$ 5,500.00	
51.00.3.5100.220055	EQUIPMENT INSURANCE	\$ 221.00	\$ 249.00	\$ 230.00	\$ 250.00	\$ -	\$ 250.00	
51.00.3.5100.220057	UMBRELLA LIABILITY INSURANCE	\$ 1,470.00	\$ 1,859.00	\$ 1,906.00	\$ 2,050.00	\$ -	\$ 2,050.00	
51.00.3.5100.220058	E&O LIABILITY	\$ 514.00	\$ 788.00	\$ 852.00	\$ 514.00	\$ -	\$ 894.60	
51.00.3.5100.220060	EMPLOYEE PHYSICALS - MEDICAL	\$ 334.20	\$ 1,335.00	\$ 60.00	\$ 300.00	\$ 150.61	\$ 300.00	
51.00.3.5100.220065	WORK COMP DEDUCTIBLE	\$ 1,346.50	\$ -	\$ -	\$ 500.00	\$ -	\$ 500.00	
51.00.3.5100.220070	PROFESSIONAL SERVICES, TESTING	\$ 2,915.78	\$ 2,161.48	\$ 2,317.58	\$ 3,000.00	\$ 569.00	\$ 3,000.00	
51.00.3.5100.230053	EQUIPMENT MAINTENANCE	\$ 10,053.30	\$ 2,705.86	\$ 3,092.82	\$ 4,000.00	\$ 1,791.34	\$ 4,000.00	
51.00.3.5100.235051	SYSTEM MANAGEMENT CONTRACT						\$29,072.00	1st year hosted, training and set up. Fixed b
51.00.3.5100.235151	ADMINISTRATIVE CONTRACT	\$ -	\$ -	\$ 101,776.50	\$ 88,201.00	\$ -	\$99,074.00	
51.00.3.5100.240000	MEMBERSHIPS & SUBSCRIPTIONS	\$ 375.00	\$ -	\$ 460.50				
51.00.3.5100.250000	SHIPPING EXPENSES	\$ 492.63	\$ -	\$ -	\$ 500.00	\$ -	\$500.00	
51.00.3.5100.260050	SYSTEM MAINTENANCE/REPAIRS	\$ 40,389.89	\$ 88,152.40	\$ 42,539.68	\$ 50,000.00	\$ 50,687.96	\$65,000.00	Watermain break repairs, Kaitlynn Project (T&M
51.00.3.5100.265000	MAINTENANCE VEHICLE	\$ 2,076.45	\$ 5,525.21	\$ 1,161.99	\$ 2,000.00	\$ 1,508.72	\$2,000.00	
51.00.3.5100.270010	TELEPHONE UTILITIES	\$ 2,174.68	\$ 2,115.02	\$ 2,041.60	\$ 2,000.00	\$ 1,290.99	\$ 2,000.00	
51.00.3.5100.270020	ELECTRIC UTILITIES	\$ 83,811.88	\$ 95,743.04	\$ 99,781.82	\$ 115,000.00	\$ 40,490.81	\$ 115,000.00	
51.00.3.5100.270030	GAS UTILITIES	\$ 2,180.54	\$ 2,157.79	\$ 1,463.26	\$ 2,000.00	\$ 127.10	\$ 2,000.00	
51.00.3.5100.280010	TRAINING AND REGISTRATION	\$ 615.00	\$ 330.00	\$ 1,609.00	\$ 2,500.00	\$ 574.14	\$ 2,500.00	
51.00.3.5100.280020	TRAVEL EXPENSES	\$ 48.12	\$ 8.97	\$ -	\$ 200.00	\$ 16.33	\$ 200.00	

51.00.3.5100.280030	TRAINING EXPENSES		\$ 117.00	\$ 162.61	\$ 1,000.00	\$ -	\$ 1,000.00	
51.00.3.5100.280040	LODGING EXPENSES		\$ 244.16	\$ 292.32	\$ 750.00	\$ -	\$ 750.00	
		\$ 188,342.18	\$ 288,544.49	\$ 332,663.52	\$ 326,081.10	\$ 112,993.56	\$ 386,870.15	
51.00.3.5100.310000	SMALL EQUIPMENT/Meters	\$ 12,420.07	\$ 20,311.00	\$ 16,892.88	\$ 15,000.00	\$ 28,461.32	\$25,000.00	ChemTrak Chlorine Analyzer 4,520 Change from
51.00.3.5100.310060	Equipment, Bldg Maint			\$ 2,529.05		\$ 1,578.73		
51.00.3.5100.320000	CHEMICALS	\$ 31,183.04	\$ 32,747.12	\$ 40,567.28	\$ 38,000.00	\$ 7,048.63	\$21,000.00	With the change of supplier the water depr. is pro
51.00.3.5100.320010	OPERATIONS SUPPLIES	\$ 7,307.44	\$ 7,431.74	\$ 3,279.11	\$ 6,000.00	\$ 58.70	\$6,000.00	
51.00.3.5100.320011	BILLING SUPPLIES	\$ 1,369.68	\$ 1,609.56	\$ 1,530.91	\$ 3,000.00	\$ 1,650.04	\$2,500.00	
51.00.3.5100.320020	OFFICE SUPPLIES	\$ 2,180.43	\$ 1,201.17	\$ 1,895.08	\$ 1,500.00	\$ 1,440.68	\$1,000.00	
51.00.3.5100.320030	COMPUTER SUPPLIES	\$ 9,380.50	\$ 521.41	\$ 639.37	\$ 2,000.00	\$ 264.83	\$2,000.00	
51.00.3.5100.320050	POSTAGE	\$ 3,796.17	\$ 3,863.16	\$ 4,003.16	\$ 4,000.00	\$ 1,620.14	\$4,000.00	
51.00.3.5100.320070	Supplies, Bldg and Gounds			\$ 714.50		\$ 148.20		
51.00.3.5100.330010	FUEL EXPENSE	\$ 2,775.30	\$ 2,864.13	\$ 1,998.31	\$ 3,000.00	\$ 986.01	\$3,000.00	
51.00.3.5100.350000	MISCELLANEOUS EXPENSES	\$ 2,642.57	\$ 901.50	\$ 1,487.13	\$ 1,500.00	\$ 788.52	\$6,500.00	Radio System divided between departments aprox
51.00.3.5100.360000	SYSTEM MAINTENANCE/REPAIRS	\$ 1,481.99			\$ 7,000.00	\$ 5,084.93	\$15,000.00	Tower Cleaning added \$8000
51.00.3.5100.360001	WELL #4 & #5	\$ 2,479.98	\$ 1,165.75	\$ 155.21	\$ 30,000.00	\$ 166.00	\$30,000.00	
51.00.3.5100.360010	EQUIPMENT MAINTENANCE	\$ 1,012.30	\$ 214.88	\$ 2,364.53	\$ 6,000.00	\$ -	\$3,000.00	Lowered
51.00.3.5100.360020	BUILDING & GROUND SUPPLIES	\$ 2,465.26	\$ 1,495.85	\$ 1,532.59	\$ 2,500.00	\$ 218.46	\$2,500.00	
		\$ 80,494.73	\$ 74,327.27	\$ 79,589.11	\$ 119,500.00	\$ 49,515.19	\$ 121,500.00	
	CAPITAL EQUIPMENT							
51.00.3.5100.410000	OPERATIONS EQUIPMENT						\$34,000.00	Tower gateway base station (Municipal Supply- fi
51.00.3.5100.410020	SYSTEM EQUIPMENT							
51.00.3.5100.410030	PLANT EQUIPMENT		\$ 3,070.95	\$ 4,675.85		\$ 780.00		
51.00.3.5100.420000	TRUCK/VEHICLE EQUIPMENT				\$ 41,000.00	\$ 40,311.99	\$1,810.00	Ladder rack
		\$ -	\$ 3,070.95	\$ 4,675.85	\$ 41,000.00	\$ 41,091.99	\$ 35,810.00	
	CAPITAL IMPROVEMENTS							
51.00.3.5100.510000	TREATMENT IMPROVEMENTS	\$ -	\$ 229,500.00	\$ 529.00				
51.00.3.5100.510010	SYSTEM IMPROVEMENTS	\$ 27,564.69	\$ 1,070.58	\$ 30,304.19		\$ 1,925.00	\$517,000.00	Exterior south tower cleaning / Booth, 1St and Fo
51.00.3.5100.510020	PROJECT ENGINEERING	\$ 811.03						
51.00.3.5100.510021	LAND ACQUISTIONS			\$ -		\$ -		
51.00.3.5100.510030	PROJECT CONSTRUCTION							
51.00.3.5100.530000	BUILDING IMPROVEMENTS		\$ 13,791.00					
	RADIUM REMOVAL PROJECT							
		\$ 28,375.72	\$ 244,361.58	\$ 30,833.19	\$ -	\$ 1,925.00	\$ 517,000.00	
51.00.3.5100.610000	SALES TAXES REIMBURSED TO STATE	\$ 43,047.03	\$ 42,461.77	\$ 50,673.66	\$ 42,000.00	\$ 24,951.00	\$52,000.00	WET TAX 6%
51.00.3.5100.610001	SALES TAX PENALTIES							
51.00.3.5100.610010	LOCAL OPTION SALES TAXES PAID	\$ 7,174.52	\$ 618.74	\$ -		\$ -		
51.00.3.5100.610020	LOT PAID -- SCHOOLS							
		\$ 50,221.55	\$ 43,080.51	\$ 50,673.66	\$ 42,000.00	\$ 24,951.00	\$ 52,000.00	
51.00.3.5100.710000	BOND EXPENSE							
51.00.3.5100.710001	\$510,000 G.O BOND EXPENSE							

51.00.3.5100.720000	PRINCIPAL PAYMENT							
51.00.3.5100.720001	\$510,000 PRINCIPAL PAYMENT							
51.00.3.5100.720002	SRF #1 PRINCIPAL PAYMENT	\$ 91,000.00	\$ 93,000.00	\$ 169,000.00	\$ 96,000.00	\$ -	\$98,000.00	
51.00.3.5100.720003	SRF #2 PRINCIPAL			\$ 76,000.00	\$ 77,000.00	\$ -	\$79,000.00	
51.00.3.5100.730001	\$510,000 INTEREST PAYMENT							
51.00.3.5100.730002	SRF #1 INTEREST PAYMENT	\$ 33,860.00	\$ 133,040.00	\$ (70,820.00)	\$ 28,280.00	\$ -	\$26,360.00	
51.00.3.5100.730003	WTR SRF #2 INTEREST	\$ 3,108.78	\$ 21,652.82	\$ 17,591.57	\$ 33,021.00	\$ -	\$31,480.00	
51.00.3.5100.740000	INTERIM FINANCING PAYMENT							
		\$ 127,968.78	\$ 247,692.82	\$ 191,771.57	\$ 234,301.00	\$ -	\$ 234,840.00	
51.00.0.5100.800011	TRANSFER TO DEBT SERVICE							
50.00.3.5100.800210	TRANS TO WATER FUND							
51.00.0.5100.800510	TRANSFER TO SINKING FUND	\$ 148,066.27	\$ 232,345.87	\$ 234,494.00	\$ 234,301.00	\$ 117,150.50	\$234,840.00	
51.00.0.5100.800520	TRANSFER TO BOND COVERAGE							
51.00.0.5100.800530	TRANSFER TO IMPROVEMENT FUND							
51.00.0.5100.800540	TRANSFER TO RESERVCE ACCOUNT							
51.00.0.5100.800700	TRANSFER TO PROJECTS							
51.02.0.5100.800212	TRANSFER TO WATER							
51.03.0.5100.800212	TRANSFER TO WATER							
51.04.0.5100.800212	TRANSFER TO WATER							
		\$ 148,066.27	\$ 232,345.87	\$ 234,494.00	\$ 234,301.00	\$ 117,150.50	\$ 234,840.00	
50.00.3.5100.920000	CONSUMER DEPOSIT REFUNDS	\$ 100.00	\$ 200.00	\$ 200.00	\$ 200.00	\$ -	\$200.00	
51.00.3.5100.920000	REFUNDS	\$ 129,971.27	\$ 11,900.24	\$ 388.72	\$ 2,000.00	\$ 323.03	\$1,000.00	
		\$ 130,071.27	\$ 12,100.24	\$ 588.72	\$ 2,200.00	\$ 323.03	\$ 1,200.00	
		\$ 755,778.57	\$ 1,079,874.80	\$ 932,993.01	\$ 1,007,082.30	\$ 320,799.45	\$ 1,606,220.54	31.85%
WASTEWATER								
52.00.3.5200.110001	FULL TIME SALARIES	\$ 188,699.43	\$ 168,962.62	\$ 174,626.52	\$ 205,000.00	\$ 80,699.73	\$205,000.00	
52.00.3.5200.110003	PART TIME SALARIES							
52.00.3.5200.110004	TEMPORARY PART TIME SALARIES							
52.00.3.5200.110005	CONTRACT SALARIES							
52.00.3.5200.130000	F.I.C.A. -- CITY'S SHARE	\$ 7,768.70	\$ 10,063.84	\$ 10,442.11	\$ 12,710.00	\$ 4,857.83	\$ 12,710.00	
52.00.3.5200.140000	MEDICARE -- CITY'S SHARE	\$ 1,816.98	\$ 2,353.62	\$ 2,442.15	\$ 2,972.50	\$ 1,136.10	\$ 2,972.50	
52.00.3.5200.150000	I.P.E.R.S -- CITY'S SHARE	\$ 11,852.93	\$ 15,942.07	\$ 16,477.04	\$ 19,352.00	\$ 7,618.08	\$ 19,352.00	
52.00.3.5200.160000	GROUP INSURANCE	\$ 99,558.97	\$ 59,984.77	\$ 55,970.09	\$ 71,000.00	\$ 18,820.77	\$71,000.00	
52.00.3.5200.160001	SELF FUNDED INS					\$ 486.89		
52.00.3.5200.170000	WORKER'S COMP. INSURANCE	\$ 2,553.00	\$ 2,798.00	\$ 817.46	\$ 2,617.00	\$ 679.38	\$2,617.00	
52.00.3.5200.170001	UNEMPLOYMENT	\$ 12,064.00	\$ 10,290.00	\$ -				
52.00.3.5200.180001	ALLOWANCE UNIFORMS	\$ 720.88	\$ 1,215.40	\$ 794.91	\$ 2,050.00	\$ 310.96	\$2,050.00	
		\$ 325,034.89	\$ 271,610.32	\$ 261,570.28	\$ 315,701.50	\$ 114,609.74	\$ 315,701.50	

52.00.3.5200.210000	GENERAL ADVERTISING	\$ -	\$ 110.37	\$ 198.82	\$ 150.00	\$ -	\$150.00	
52.00.3.5200.220000	PROFESSIONAL SERVICES	\$ 6,627.00	\$ 5,320.00	\$ 4,003.00	\$ 10,000.00	\$ 250.00	\$10,000.00	
52.00.3.5200.220001	SAFETY COUNCIL EXPENSES	\$ 3,139.68	\$ 4,667.35	\$ 3,079.22	\$ 5,000.00	\$ 2,665.79	\$6,100.00	
52.00.3.5200.220010	LEGAL SERVICES		\$ 25.00	\$ 203.50		\$ 155.23		
52.00.3.5200.220020	ENGINEERING SERVICES	\$ 8,943.16	\$ 54,025.59	\$ 39,707.17	\$ 170,000.00	\$ 9,771.47	\$45,000.00	
52.00.3.5200.220049	FLOOD INSURANCE	\$ 6,598.50	\$ 17,182.50	\$ 15,757.50	\$ 16,230.23	\$ -	\$ 16,717.13	
52.00.3.5200.220051	LIABILITY INSURANCE	\$ 3,970.00	\$ 4,615.00	\$ 4,163.00	\$ 4,287.89	\$ (329.00)	\$ 4,416.53	
52.00.3.5200.220052	STRUCTURE INSURANCE	\$ 20,925.00	\$ 20,476.00	\$ 26,630.00	\$ 27,428.90	\$ -	\$ 28,251.77	
52.00.3.5200.220053	CONTENT INSURANCE			\$ -	\$ -			
52.00.3.5200.220054	VEHICLE INSURANCE	\$ 5,675.00	\$ 7,838.00	\$ 11,839.00	\$ 12,194.17	\$ -	\$ 12,560.00	3%
52.00.3.5200.220055	EQUIPMENT INSURANCE							
52.00.3.5200.220057	UMBRELLA LIABILITY INSURANCE	\$ 1,487.00	\$ 1,881.00	\$ 1,906.00	\$ 1,963.18	\$0.00	\$ 2,022.08	
52.00.3.5200.220058	E& O LIABILITY INSURANCE	\$ 523.00	\$ 807.00	\$ 994.00	\$ 1,023.82	\$0.00	\$ 1,054.53	
52.00.3.5200.220060	EMPLOYEE PHYSICALS - MEDICAL	\$ 33.60	\$ 246.00	\$ 279.00	\$ 250.00	\$140.00	\$250.00	
52.00.3.5200.220065	WORK COMP DEDUC	\$ 470.05	\$ -	\$ 282.00	\$ 1,000.00	\$207.00	\$1,000.00	
52.00.3.5200.220070	PROFESSIONAL SERVICES, TESTING	\$ 23,521.45	\$ 28,099.92	\$ 42,330.08	\$ 50,000.00	\$10,558.58	\$50,000.00	
52.00.3.5200.235054	SYSTEM MANAGEMENT CONTRACT			\$ 2,507.50				
52.00.3.5200.235151	ADMINISTRATIVE CONTRACT	\$ -	\$ -	\$ 101,729.00	\$ 88,201.00	\$0.00	\$99,074.00	
52.00.3.5200.240000	MEMBERSHIPS & SUBSCRIPTIONS	\$ 177.74	\$ 395.00	\$ 2,680.45	\$ 2,500.00	\$ 514.95	\$2,500.00	
52.00.3.5200.250000	SHIPPING EXPENSES	\$ 3,248.45	\$ 674.91	\$ 1,034.65	\$ 1,065.69	\$ 301.60	\$1,200.00	
52.00.3.5200.260000	EQUIPMENT MAINTENANCE	\$ 68,983.15	\$ 143,323.50	\$ 18,665.03	\$ 50,000.00	\$ 2,606.60	\$50,000.00	
52.00.3.5200.260050	SYSTEM MAINTENANCE/REPAIRS	\$ 75,283.31	\$ 49,482.73	\$ 70,792.63	\$ 50,000.00	\$ 7,374.20	\$50,000.00	
52.00.3.5200.	JETTER MAINTENANCE		\$ 3,323.46	\$ 3,353.75	\$ 3,000.00	\$ -	\$3,000.00	
52.00.3.5200.265000	VEHICLE MAINTENANCE	\$ 6,519.77	\$ 3,695.05	\$ 7,801.30	\$ 4,000.00	\$ 2,049.05	\$4,000.00	
52.00.3.5200.270010	TELEPHONE UTILITIES	\$ 6,060.07	\$ 3,884.00	\$ 3,876.99	\$ 3,250.00	\$ 2,571.39	\$6,000.00	ALL EMPLOYEES HAVE CELL PHONES
52.00.3.5200.270020	ELECTRIC UTILITIES	\$ 147,318.67	\$ 156,218.93	\$ 153,185.00	\$ 175,000.00	\$ 72,735.24	\$175,000.00	
52.00.3.5200.270030	GAS UTILITIES	\$ 12,914.35	\$ 8,980.18	\$ 9,440.71	\$ 6,000.00	\$ 1,326.76	\$10,000.00	
52.00.3.5200.280010	TRAINING AND REGISTRATION	\$ 1,950.00	\$ 3,555.00	\$ 1,989.00	\$ 4,000.00	\$ 1,075.00	\$3,500.00	
52.00.3.5200.280030	TRAINING EXPENSES			\$ 79.91		\$ 340.00	\$350.00	
52.00.3.5200.280020	TRAVEL EXPENSES						\$500.00	
52.00.3.5200.280040	LODGING EXPENSES	\$ 166.83	\$ 881.43	\$ 658.86	\$ 1,500.00	\$ -	\$1,000.00	
		\$ 404,535.78	\$ 519,707.92	\$ 529,167.07	\$ 688,044.87	\$ 114,313.86	\$ 583,646.03	
52.00.3.5200.310000	SMALL EQUIPMENT	\$ 25,011.23	\$ 10,205.94	\$ 20,527.98	\$ 20,000.00	\$ 4,238.94	\$20,000.00	
52.00.3.5200.310010	OFFICE EQUIPMENT	\$ 90.00	\$ 133.83	\$ -	\$ 1,000.00	\$ 28.25	\$1,000.00	
52.00.3.5200.31052	SAFETY EQUIPMENT		\$ 2,508.00	\$ 2,710.55	\$ 4,000.00	\$ 141.97	\$3,000.00	
52.00.3.5200.320000	CHEMICALS	\$ 20,275.16	\$ 27,142.57	\$ 22,369.84	\$ 30,000.00	\$ 7,833.60	\$30,000.00	
52.00.3.5200.320010	OPERATIONS SUPPLIES	\$ 6,966.50	\$ 11,585.20	\$ 4,523.31	\$ 5,000.00	\$ 1,448.79	\$5,000.00	
52.00.3.5200.320011	BILLING SUPPLIES	\$ 2,282.92	\$ 1,653.87	\$ 2,435.41	\$ 3,000.00	\$ 1,650.07	\$3,000.00	
52.00.3.5200.320020	OFFICE SUPPLIES	\$ 2,286.03	\$ 1,982.27	\$ 539.73	\$ 1,000.00	\$ 126.27	\$1,000.00	
52.00.3.5200.320030	COMPUTER SUPPLIES	\$ 9,380.50	\$ 29.95	\$ 1,381.01	\$ 2,000.00	\$ 195.60	\$2,000.00	
52.00.3.5200.320050	POSTAGE	\$ 3,796.02	\$ 3,863.04	\$ 4,990.54	\$ 4,000.00	\$ 1,820.78	\$4,000.00	
52.00.3.5200.320070	supplies bldg grounds			\$ 1,201.15		\$ 124.07	\$1,500.00	
52.00.3.5200.330010	FUEL EXPENSE	\$ 7,068.48	\$ 8,774.22	\$ 5,436.83	\$ 8,000.00	\$ 3,222.55	\$8,000.00	
52.00.3.5200.350000	MISCELLANEOUS EXPENSES	\$ 2,050.02	\$ 1,931.14	\$ 1,350.42	\$ 1,000.00	\$ 437.35	\$7,000.00	New Radios 1/3
52.00.3.5200.360000	SYSTEM MAINTENANCE/REPAIRS	\$ 1,660.84	\$ 3,541.06	\$ 5,612.93	\$ 7,000.00	\$ 415.00	\$7,000.00	
52.00.3.5200.360010	EQUIPMENT MAINTENANCE	\$ 3,307.06	\$ 8,190.07	\$ 12,796.51	\$ 10,000.00	\$ 1,365.90	\$10,000.00	
52.00.3.5200.360020	BUILDING & GROUND SUPPLIES	\$ 3,301.03	\$ 3,409.14	\$ 972.85	\$ 4,000.00	\$ 475.08	\$4,000.00	
52.00.3.5200.	DECONSTRUCTION	\$ -				\$ -		

		\$ 87,475.79	\$ 84,950.30	\$ 86,849.06	\$ 100,000.00	\$ 23,524.22	\$ 106,500.00	
52.00.3.5200.410000	SLUDGE HAULING & EQUIPMENT	\$ 6,780.00	\$ 4,379.04	\$ 10,386.11	\$ 15,000.00	\$ 161.47	\$38,000.00	Tower gateway base station (Municipal Supply- fr
52.00.3.5200.410020	SYSTEM EQUIPMENT	\$ 25,081.15	\$ 13,042.02	\$ 8,600.05	\$ 25,000.00	\$ 8,699.77	\$25,000.00	
52.00.3.5200.410050	PLANT EQUIPMENT	\$ -	\$ 19,604.66	\$ 51,043.86	\$ 50,000.00	\$ 13,605.10	\$50,000.00	
52.00.3.5200.420000	TRUCK/VEHICLE EQUIPMENT	\$ 76,670.00	\$ 22,500.00	\$ 72,117.34	\$ 341,000.00	\$ 341,500.00	\$0.00	
		\$ 108,531.15	\$ 59,525.72	\$ 142,147.36	\$ 431,000.00	\$ 363,966.34	\$ 113,000.00	
52.00.3.5200.520000	TREATMENT IMPROVEMENTS	\$ 8,995.00	\$ 30,585.60	\$ 489,200.56	\$ 65,000.00	\$ 51,871.56	\$65,000.00	SLIP LINING
52.00.3.5200.520010	SYSTEM IMPROVEMENTS	\$ 35,109.11	\$ 63,981.25	\$ -	\$ 240,000.00	\$ 1,200.00	\$240,000.00	
52.00.3.5200.520020	WWTP IMPROVEMENTS - SLUDGE REMOVAL	\$ 40,147.50		\$ 21,543.50				
		\$ 84,251.61	\$ 94,566.85	\$ 510,744.06	\$ 305,000.00	\$ 53,071.56	\$ 305,000.00	
52.00.3.5200.610000	SALES TAXES REIMBURSED TO STATE	\$ 7,741.61	\$ 7,589.60	\$ 9,430.09	\$ 12,000.00	\$ 4,225.00	\$12,000.00	
52.00.3.5200.610001	SALES TAX PENALTIES							
52.00.3.5200.610010	LOCAL OPTION SALES TAXES PAID	\$ 1,290.29	\$ 1,173.24	\$ 1,538.94	\$ 2,000.00	\$ 704.00	\$2,000.00	
52.00.3.5200.610020	LOT PAID -- SCHOOLS							
		\$ 9,031.90	\$ 8,762.84	\$ 10,969.03	\$ 14,000.00	\$ 4,929.00	\$ 14,000.00	
52.00.3.5200.710000	\$510,00 BOND EXPENSE							
52.00.3.5200.710001	SRF LOAN #1 BOND EXPENSE							
52.00.3.5200.710003	SRF LOAN #2 FLOOD BOND EXPENSE							
52.00.3.5200.720000	\$510,000 PRINCIPAL PAYMENT							
52.00.3.5200.720002	SRF LOAN #1 PRINCIPAL PAYMENT	\$ 98,000.00	\$ 74,000.00	\$ 131,000.00	\$ 108,000.00	\$ -	\$111,000.00	
52.00.3.5200.720003	SRF LOAN #2 FLOOD PRINCIPAL							
52.00.3.5200.730000	\$510,000 INTEREST PAYMENT							
52.00.3.5200.730001								
52.00.3.5200.730002	SRF LOAN PAYMENT #1 - INTEREST	\$ 36,887.50	\$ 18,609.54	\$ -	\$ 16,640.00		\$14,480.00	
52.00.3.5200.730003	SRF LOAN #2 PRINCIPAL PAYMENT			\$ 18,720.00				
	ESCROW - RETIRE 1993 DEBT							
		\$ 134,887.50	\$ 92,609.54	\$ 149,720.00	\$ 124,640.00	\$ -	\$ 125,480.00	
52.00.0.5200.800011	TRANSFER TO DEBT SERVICE							
52.00.0.5200.800510	TRANSFER TO SINKING FUND	\$ 134,887.50	\$ 134,703.00	\$ 122,720.00	\$ 124,640.00	\$ 62,320.00	\$125,480.00	
52.00.0.5200.800520	TRANSFER TO BOND COVERAGE							
52.00.0.5200.800530	TRANSFER TO IMPROVEMENT FUND							
52.00.0.5200.800540	TRANSFER TO RESERVE ACCOUNT							
52.00.0.5200.800550	TRANS. FROM BOND COVERAGE TO WWTR							
52.00.0.5200.800560	TRANSFER FROM WWTR TO WATER							
52.00.3.5200.800700	TRASFER TO PROJECTS		\$ -	\$ -		\$ -		
		\$ 134,887.50	\$ 134,703.00	\$ 122,720.00	\$ 124,640.00	\$ 62,320.00	\$ 125,480.00	

52.00.3.5200.920000	REFUNDS	\$ 145,596.69	\$ 11,201.14	\$ 438.66	\$ 2,000.00	\$ 138.02	\$1,000.00	
<b>SUB-TOTAL REFUNDS</b>		\$ 145,596.69	\$ 11,201.14	\$ 438.66	\$ 2,000.00	\$ 138.02	\$ 1,000.00	
<b>TOTAL W/W EXPENDITURES W/O TRANSFERS &amp; REFUNDS</b>		<b>\$ 1,153,748.62</b>	<b>\$ 1,131,733.49</b>	<b>\$ 1,691,166.86</b>	<b>\$ 1,978,386.37</b>	<b>\$ 674,414.72</b>	<b>\$ 1,563,327.53</b>	
<b>TOTAL EXPENDITURES FOR PROGRAM IX W/O TRANS. &amp; REFUNDS</b>		<b>\$ 1,909,527.19</b>	<b>\$ 2,211,608.29</b>	<b>\$ 2,624,159.87</b>	<b>\$ 2,985,468.67</b>	<b>\$ 995,214.17</b>	<b>\$ 3,169,548.07</b>	

FY 2020 EXPENDITURE WORK BUDGET

DEPT. & LINE ITEM NUMBERS		FY 2019 ACTUAL	FY 2020 ACTUAL	FY21 ADOPTED	AS OF Dec 31, 2020	PROPOSED FY 2022	DESCRIPTION N/ EXPLANATIO N
<b>WATER MAIN/WATER WELL PROJECT</b>							
71.04.8.9051.110001	FULL TIME SALARIES						
71.04.8.9051.130000	F.I.C.A. -- CITY'S SHARE						
71.04.8.9051.140000	MEDICARE -- CITY'S SHARE						
71.04.8.9051.150000	I.P.E.R.S -- CITY'S SHARE						
71.04.8.9051.160000	GROUP HEALTH INSURANCE						
71.04.8.9051.210000	GENERAL ADVERTISING						
71.04.8.9051.220000	PROFESSIONAL SERVICES						
71.04.8.9051.220010	LEGAL SERVICES						
71.04.8.9051.220020	ENGINEERING SERVICES				\$23,700.03		
71.04.8.9051.220050	INSURANCE SERVICES						
71.04.8.9051.230000	GENERAL CONTRACTS						
71.04.8.9051.270020	ELECTRIC UTILITIES						
71.04.8.9051.320090	SUPPLIES						
71.04.8.9051.520000	CONSTRUCTION			\$3,000,000.00		\$3,000,000.00	
71.04.8.9051.520001	CONSTRUCTION OBSERVATION						
71.04.8.9051.520002	CONSTRUCTION CONTIGENCY						
71.04.8.9051.540000	PROPERTY ACQUISITION						
				\$3,000,000.00	\$23,700.03	\$3,000,000.00	
<b>WATER TREATMENT PLANT EXPANSION</b>							
71.05.8.9051.110001	FULL TIME SALARIES						
71.05.8.9051.130000	F.I.C.A. -- CITY'S SHARE						
71.05.8.9051.140000	MEDICARE -- CITY'S SHARE						
71.05.8.9051.150000	I.P.E.R.S -- CITY'S SHARE						
71.05.8.9051.160000	GROUP HEALTH INSURANCE						
71.05.8.9051.210000	GENERAL ADVERTISING						

# FY 2020 EXPENDITURE WORK BUDGET

DEPT. & LINE ITEM NUMBERS		FY 2019 ACTUAL	FY 2020 ACTUAL	FY21 ADOPTED	AS OF Dec 31, 2020	PROPOSED FY 2022	DESCRIPTION N/ EXPLANATION
71.05.8.9051.220000	PROFESSIONAL SERVICES	3097.00					
71.05.8.9051.220010	LEGAL SERVICES						
71.05.8.9051.220020	ENGINEERING SERVICES	95178.05					
71.05.8.9051.220050	INSURANCE SERVICES						
71.05.8.9051.230000	GENERAL CONTRACTS						
71.05.8.9051.270020	ELECTRIC UTILITIES						
		\$ 98,275.05	\$ -	\$ -	\$ -	\$ -	
71.05.8.9051.320090	SUPPLIES						
71.05.8.9051.520000	CONSTRUCTION	279315.20	\$ 118,366.22				
71.05.8.9051.520001	CONSTRUCTION OBSERVATION						
71.05.8.9051.520002	CONSTRUCTION CONTIGENCY						
71.05.8.9051.540000	PROPERTY ACQUISITION						
		\$ 279,315.20	\$ 118,366.22	\$ -	\$ -	\$ -	
		\$ 377,590.25	\$ 118,366.22	\$ -	\$ -	\$ -	
<b>WWTP IMPROVEMENT PROJECT- FLOW EQ</b>							
72.01.8.9052.110001	FULL TIME SALARIES						
72..01.8.9052.130000	F.I.C.A. -- CITY'S SHARE						
72..01.8.9052.140000	MEDICARE -- CITY'S SHARE						
72.01.8.9052.150000	I.P.E.R.S -- CITY'S SHARE						
72..01.8.9052.160000	GROUP HEALTH INSURANCE						
72.01.8.9052.210000	GENERAL ADVERTISING						
72.01.8.9052.220000	PROFESSIONAL SERVICES						
72.01.8.9052.220010	LEGAL SERVICES				\$1,079.70		

**FY 2020 EXPENDITURE WORK BUDGET**

<b>DEPT. &amp; LINE ITEM NUMBERS</b>		<b>FY 2019 ACTUAL</b>	<b>FY 2020 ACTUAL</b>	<b>FY21 ADOPTED</b>	<b>AS OF Dec 31, 2020</b>	<b>PROPOSED FY 2022</b>	<b>DESCRIPTIO N/ EXPLANATIO N</b>
72.01.8.9052.220020	ENGINEERING SERVICES	1737.7			\$34,362.50		
72.01.8.9052.220050	INSURANCE SERVICES						
72.01.8.9052.230000	GENERAL CONTRACTS						
72.01.8.9052.270020	ELECTRIC UTILITIES						
		\$ 1,737.70	\$ -	\$ -	\$ 35,442.20		
 72.01.8.9052.320090	 SUPPLIES						
 72.01.8.9052.520000	 CONSTRUCTION	\$ 188,609.44	\$ -	\$2,000,000.00	\$ -	\$2,000,000.00	
72.01.8.9052.520001	CONSTRUCTION OBSERVATION						
72.01.8.9052.520002	CONSTRUCTION CONTINGENCY						
72.01.8.9052.520025	WWTP - EQUIPMENT						
72.01.8.9052.540000	PROPERTY ACQUISITION						
		\$ 188,609.44	\$ -	\$ 2,000,000.00	\$ -	\$ 2,000,000.00	
		<b>\$ 190,347.14</b>	<b>\$ -</b>	<b>\$ 2,000,000.00</b>	<b>\$ 35,442.20</b>	<b>\$ 2,000,000.00</b>	
 2ND ST LS PHASE II (TO ROSEMARY LS)							
 72.04.8.9052.110001	 FULL TIME SALARIES						
72.04.8.9052.130000	F.I.C.A. -- CITY'S SHARE						
72.04.8.9052.140000	MEDICARE -- CITY'S SHARE						
72.04.8.9052.150000	I.P.E.R.S -- CITY'S SHARE						
72.04.8.9052.160000	GROUP HEALTH INSURANCE						
 72.04.8.9052.210000	 GENERAL ADVERTISING						
72.04.8.9052.220000	PROFESSIONAL SERVICES						
72.04.8.9052.220010	LEGAL SERVICES						
72.04.8.9052.220020	ENGINEERING SERVICES	\$ -				\$65,000.00	

# FY 2020 EXPENDITURE WORK BUDGET

DEPT. & LINE ITEM NUMBERS		FY 2019 ACTUAL	FY 2020 ACTUAL	FY21 ADOPTED	AS OF Dec 31, 2020	PROPOSED FY 2022	DESCRIPTION N/ EXPLANATIO N
72.04.8.9052.220050	INSURANCE SERVICES						
72.04.8.9052.230000	GENERAL CONTRACTS						
72.04.8.9052.270020	ELECTRIC UTILITIES						
		\$ -			\$0.00	\$ 65,000.00	
72.04.8.9052.320090	SUPPLIES						
72.04.8.9052.520000	CONSTRUCTION					\$1,300,000.00	
72.04.8.9052.520001	CONSTRUCTION OBSERVATION						
72.04.8.9052.520002	CONSTRUCTION CONTIGENCY						
72.04.8.9052.520025	WWTP - EQUIPMENT						
72.04.8.9052.540000	PROPERTY ACQUISITION						
		\$ -			\$0.00	\$ 1,300,000.00	
		\$ -			\$0.00	\$ 1,365,000.00	