

ADDENDUM NUMBER 4

FOR THE

CITY OF CORCORAN

**2020 WASTEWATER TREATMENT PLANT
MODIFICATIONS**

January 29, 2021



OWNER:
City of Corcoran
832 Whitley Avenue
Corcoran, CA 93212

PREPARED BY:
A&M
220 N Locust Street
Visalia, CA 93291

ADDENDUM NUMBER 4

The following additions, deletions, or modifications shall become part of the Contract Documents for the City of Corcoran 2020 Wastewater Treatment Plant Modifications project:

REVISIONS TO NOTICE TO CONTRACTORS

REVISION:

SEALED PROPOSALS will be received by the City of Corcoran prior to 11:00 AM on Thursday, February 25th, 2021 to be publicly opened and read immediately thereafter in the offices of the City, 832 Whitley Avenue, Corcoran, CA. for the following work:

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REVISIONS TO BIDDER'S PROPOSAL

REVISION:

Replace Section 00 41 43 Bidder's Proposal with attached revised Section. Attached Bidder's Proposal added new Bid Alternative 3 "Increase pipe diameter for air header from 14-inch to 16-inch and 10-inch to 12-inch."

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REVISIONS TO DIVISION 01 – STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

REVISION:

Include the following sections (attached) to the Standard General Conditions of the Construction Contract:

SECTION 00 73 19 - HEALTH AND SAFETY REQUIREMENTS
SECTION 01 11 10 - COORDINATION OF WORK
SECTION 01 22 00 - EXPLANATION OF BID ITEMS
SECTION 01 33 00 – SUBMITTALS
SECTION 01 33 01 - MASTER LIST OF SUBMITTALS
SECTION 01 35 00 - MATERIAL SUBSTITUTION PROCEDURES
SECTION 01 43 00 - QUALITY CONTROL AND TESTING
SECTION 01 50 00 - TEMPORARY FACILITIES
SECTION 01 56 16 - DUST CONTROL
SECTION 01 57 23 - STORM WATER POLLUTION PREVENTION PLAN

SECTION 01 72 00 - CONSTRUCTION SEQUENCING AND CONTROLS
SECTION 01 77 00 - CONTRACT CLOSEOUT

REVISIONS TO INSTRUCTIONS TO BIDDERS:

REVISION:

8. The Contractor shall begin Work within fourteen (14) calendar days after receiving the Notice to Proceed by the Owner. The Notice to Proceed will be issued on a date mutually agreed upon by the Owner and Contractor. However, the Notice to Proceed will be issued no later than sixty (60) calendar days following issuance of the Notice of Award. The Contractor shall complete all Work within **two hundred seventy (270) calendar days** following the date of the Notice to Proceed. The calendar days may be increased in an event that manufacture cannot provide the necessary equipment on time; however, the project will need to be completed before July 2023. Contractor shall provide proof of manufacture lead times. Time is of the essence and time of completion as specified will be enforced.

**REVISIONS TO AGREEMENT BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE):**

REVISION:

4.02 Contract Times: Days

A. The Work will be substantially completed within **270 calendar days** after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 0 days after the date when the Contract Times commence to run. The calendar days may be increased in an event that manufacture cannot provide the necessary equipment on time; however, the project will need to be completed before July 2023. Contractor shall provide proof of manufacture lead times.

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REVISIONS TO SUPPLEMENTARY GENERAL CONDITIONS:

REVISION:

SC-4.01 CONTRACT TIME

The Contract time shall be 270 calendar days. The calendar days may be increased in an event that manufacture cannot provide the necessary equipment on time; however, the project will

need to be completed before July 2023. Contractor shall provide proof of manufacture lead times.

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REVISIONS TO SECTION 00 43 93 BIDDER'S CHECKLIST:

REVISION:

Revise Bidder's checklist with revised attached bidder's checklist. Checklist includes all documents found on the special provisions.

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CONTRACTOR QUESTIONS:

QUESTION: Regarding the Section 3 Requirements;

What is the metropolitan target area for Section 3 Business outreach?

Can a link be provided to the information referenced in SP2.04 Compliance Guide to Section 3 Housing and Urban Development Act 1968, rather than requesting a USB Drive?

Under "Section 3" of "SP2.10 Information Internet Website" it states: "We encourage bidders to sign up (ONLINE) in relation to Section 3;" is this just meant to guide bidders who believe they may qualify as a Section 3 Business to register as such? Is there any action necessary here for bidders that are NOT Section 3 Businesses?

MBE/WBE:

There are a few references made to MBE/WBEs in the specifications: but no clear direction. Are there any formal good faith efforts required of bidders for MBE/WBE firms?

SP2.02 HUD FORM 2516 – Contractor and Subcontractor Activity (MBE/WBE) – will this form be applicable to this contract? The form references: "OMB Approval No.: 2535-0117 (exp. 12/31/2006)," the form goes on to say; "HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB Contract Number." Is there a valid OMB Contract Number?

RESPONSE:

The city does not have a target metropolitan area for Section 3 business outreach at this time; however, local businesses is encouraged.

Yes, a link maybe provided for “Compliance Guide to Section 3 Housing and Urban Development Act 1968”.

The section is provided for business that may qualify for Section 3 status. This project requires the participation of Section 3. Refer to 24 CFR Part 135.32 for Section 3 Requirements for notification requirements and good faith efforts.

HUD FORM 2516 is currently not required at this time. The form is to be completed voluntary.

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QUESTION: Regarding the bid forms---Section 00 43 93 has a checklist for bid documents required for submission. This checklist does not include bid forms located in the Special Provisions section. Please clarify if the bid forms located under the Special Provisions, must be submitted with items under the checklist?

RESPONSE: Yes, all forms in all special provisions must be completed. The checklist has been revised to include all additional special provision forms.

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QUESTION: Can you clarify whether or not the Title 49, Code of Federal Regulations, Part 29 Debarment and Suspension Certification form (below/attached) is required from both the Subcontractors and Prime Contractors at time of bid, or just from the Prime Contractors, allowing the subcontractors forms to be submitted posted bid by the awarded contractor? Gathering this sort of documentation form subcontractors during the bidding process is difficult.

RESPONSE: The City will require the “Debarment and Suspension Certification” to be submitted by the prime bidder at the time of bid opening. Subcontractor certifications will need to be submitted by the lowest bidder after bid opening to be considered lowest responsive bidder.

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QUESTION: Is the metal blower building subject to Buy America requirements?

RESPONSE: Yes, all parts of the project are subject to Buy America requirements.

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QUESTION: Does the existing soils available at the designated borrow site meet the requirements anticipated for the “Engineered Fill” designated on Sheet C-1.3 or is the City anticipating commercial import?

RESPONSE: Per the project plans and specifications, import fill is available at City sampled borrow areas as shown on Sheet G-1.2 from the project plans.

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QUESTION: The XR-5 6730 floating baffles are designed to have a 10” dia float log encased on the top of each floating baffle. Industry standard for this application is a 6” dia Closed cell Polyethylene Float (2.2 lb density). To our knowledge a 10” log is not available from any manufacturer. Would a 6” dia float log be acceptable?

RESPONSE: A 6-inch diameter float log is acceptable if it provides sufficient buoyancy for the baffle curtain. Submit buoyancy calculations to demonstrate adequate buoyancy.

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QUESTION: -The spec states the baffles are to be produced in 50’ max lengths and mechanically fastened during installation. LCSi can factory fabricate the baffles in one continuous length that does not require mechanically attached sections. Would it be acceptable to produce each of the baffles in one continuous length?

RESPONSE: The baffle may be installed in one continuous length.

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QUESTION: Can you provide pipe trenching details for the buried air piping?

RESPONSE: The buried air piping shall be backfilled with trench side native material and compacted mechanically to 92 percent of max density to match compaction of the embankments.

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QUESTION: I did not see the air percentage for the concrete mix. It asked for air in “high” alkali areas, but the soils report doesn’t state there’s “high” alkali. Please advise.

RESPONSE: The design engineer is working on the air percentage for concrete. This information will be made available when completed.


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QUESTION: Would the City accept a standard pre-engineered metal building of comparable size and detail in lieu of a metal stud constructed building?

RESPONSE: Yes. A pre-engineered metal building may be used if approved by the project engineer to meet project dimensions and specifications.

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NOTE: One copy of this Addendum Number 4 shall be signed by the Contractor and must be submitted with the bid as acknowledgement of receipt and the acceptance of this Addendum Number 4.

Prepared by:  _____
Orfil Muniz, P.E.
A&M Consulting Engineers

January 29, 2021
Date

Accepted by: _____
Contractor (signature)

Date

SECTION 00 41 43

BIDDER'S PROPOSAL

To the City of Corcoran, (hereinafter the Owner):

The undersigned, as Bidder, declares that the only persons, or parties interested in this proposal as principals are those named herein, that this proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the Plans therein referred to; and he proposes and agrees if this proposal is accepted, that he will contract with the Owner to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefor the following unit prices and/or lump sum set forth in the following schedule, to-wit:

If this proposal shall be accepted and the undersigned shall fail to contract, as aforesaid, and to give the two bonds in the sums to be determined as aforesaid, with surety satisfactory to the Owner, within ten (10) days not including Sundays and legal holidays, after the Bidder has received Notice of Award of the contract, the Owner, at its option, may determine that the Bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void, and the forfeiture of such security accompanying this proposal shall operate and the same shall be the property of the Owner. Owner shall then be free to accept the bid of another bidder.

Construction of Wastewater Treatment Plant Modifications for the following unit prices:

Item No.	Estimated Quantity	Unit of Measure	Item	Unit Price (in figures)	Extension Price (in figures)
1.	1	LS	Mobilization, Bonds, and Insurance		
2.	1	LS	Construction of Modifications to Secondary Treatment Plant located on Plymouth Avenue.		
3.	1	LS	Replacement of Effluent Pump 2		
4.	1	LS	Replacement of Sludge Pump 2		
5.	3	EA.	Replacement of Effluent Pump Suction Plug Valves		
6.	4	EA.	Replacement of Sludge/Scum Suction Piping Plug Valves		
TOTAL BASE BID					

Total _____ Base _____ Bid _____ in
 words _____
 _____ (dollars)

Bid Alternatives

Item No.	Estimated Quantity	Unit of Measure	Item	Unit Price (in figures)	Extension Price (in figures)
Alt 1.	2	EA	Replacement of Effluent Pump 1 and 3		
Alt 2.	2	EA	Replacement of Sludge/Scum Pump 1 and 3		
Alt 3.	1	LS	Increase pipe diameter for air header from 14-inch to 16-inch and 10-inch to 12-inch.		
TOTAL BID ALTERNATIVES					

Total _____ Alternative _____ Bid _____ in
 words _____
 _____ (dollars)

The above bid items include the provision for adequate sheeting, shoring and bracing or equipment method for the protection of life or limb, which shall conform too applicable safety orders.

Bidder agrees that in case of a discrepancy between the price stated in words and the price stated in figures, the words will prevail.

The representations made herein are made under the penalty of perjury.

The work is to be constructed in accordance with the Contract Documents annexed hereto.

The work to be done is shown on a set of Drawings, entitled: "2020 WASTEWATER TREATMENT PLANT MODIFICATIONS", included in the Contract Documents.

In submitting this Bid, Bidder represents, as set forth in the Agreement, that:

Bidder has visited the Site and became familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance of the Work.

Bidder has examined and carefully studied the Contract Documents, the other related data identified in the Contract Documents and the following Addenda, receipt of all which is hereby acknowledged.

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____
_____	_____

Bids are required for the entire work. Bids will be compared on the basis of the lump sum base bid. The project will be awarded to the lowest responsible Bidder.

Accompanying this proposal is a Bid Security in the form of Cash, Certified Check or Bid Bond amount that equals at least ten percent (10%) of the total amount of the base bid.

BIDDER: _____

The names of all persons interested in the foregoing proposals as principals are as follows:

IMPORTANT NOTICE: *If Bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Bidder or other interested person is an individual, state first and last name in full.*

Licensed in accordance with an act providing for the registration of Contractors:

Class _____ License No. _____ Expiration date _____

DIR Contractor Registration No. _____

By _____
Signature of Bidder Dated _____

NOTE: *If Bidder is a corporation, the legal name of the corporation shall be set forth above together with the seal and signature of the officer or officers authorized to sign contracts on behalf of the corporation; if Bidder is a co-partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the co-partnership; and if Bidder is an individual, his signature shall be placed above. If signature is by an agent, other than an officer of a corporation or member of a partnership, a Power of Attorney must be on file with the Owner prior to opening bids or submitted with the bid; otherwise, the bid will be disregarded as irregular and unauthorized.*

BUSINESS ADDRESS: _____

MAILING ADDRESS: _____

BUSINESS PHONE: _____

CONTACT NAME: _____

CONTACT EMAIL: _____

END OF SECTION

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SECTION 00 73 19

HEALTH AND SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 SUPERVISION AND SUPERINTENDENCE

- A. Contractor shall supervise, inspect, and direct the Work competently and apply such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the specific means, methods, techniques, sequence, or procedure of construction required to complete the project as specified by the Contract Documents. Contractor shall be responsible to see that the completed Work complies accurately with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent thereto who shall not be replaced without written notice to Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

1.2 SAFETY REPRESENTATIVE

- A. The Contractor shall provide, at the site, such equipment and medical facilities as are necessary to supply first aid service to anyone who may be injured in connection with the Work. The Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with the performance of the Work, whether on or adjacent to the site, with cause of death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injury or serious damage to the property are caused, the accident shall be reported immediately by telephone or messenger to the Engineer. If any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

1.3 SAFETY AND PROTECTION

- A. Safety and Protection: The Contractor shall have at the work site, copies or suitable extracts of Construction Safety Orders, issued by Cal-OSHA. He shall comply with provisions of these and all other applicable laws, ordinances and regulations.
 - 1. Contractors must comply with provisions of the safety and health regulations for construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29 C.F.R.
 - 2. In order to protect the lives and health of his employees under the Contract, the Contractor shall comply with all pertinent provisions of the "Manual of

Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment or work under the Contract.

3. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his facilities, appliances, and methods and for any damage which may result from their failure or their improper construction, maintenance or operation.
4. The Contractor agrees that it shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner, and W3i Engineering harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of Owner or the Engineer.
5. The duty of the Engineer to conduct construction review of the Contractor's performance and the undertaking of inspections by the Engineer or the giving of instructions as authorized herein is not intended to include review of the adequacy of the Contractor's safety measures in, on, or near the construction site and shall not be construed as supervision of the actual construction nor make the Engineer or the Owner responsible for providing a safe place for the performance of work by the Contractor, subcontractors, or suppliers; or for access, visits, use, work, travel or occupancy by any person.
6. The Owner, the Engineer, and their respective employees' site responsibilities are limited solely to the activities of the Owner's and Engineer's employees on site. These responsibilities shall not be inferred by any party to mean that the Owner or Engineer has responsibility for site safety. Safety in, on, or about the site is the sole and exclusive responsibility of the Contractor alone. The contractor's methods of work performance, superintendence and the Contractor's employees, and sequencing of construction are also the sole and exclusive responsibilities of the Contractor alone.
7. A potential health issue within the Project area is the presence of a fungus living in the soil which can cause Valley Fever (coccidioidomycosis) in humans. As is typical of many desert and arid areas in the southwestern United States, Valley Fever is endemic to several counties in the south San Joaquin Valley including Fresno, Kern, Kings, Madera, Merced and Tulare. Monterey and San Luis Obispo Counties also have high rates of Valley Fever. Other counties may also be affected. The State of California should be contacted for updated information, one source of Valley Fever information is the State's web site link below: <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ValleyFeverFactSheet.pdf>.. Although everyone living in the valley has some

contact with the disease-causing organisms, the illness is especially hazardous to those whose work brings them into close contact with the soil, for example, as in the case of agricultural and construction workers.

- a. In accordance with AB 203, the Contractor shall provide effective awareness training on Valley Fever to all employees by May 1, 2020, and annually by that date thereafter, and before an employee begins work that is reasonably anticipated to cause exposure to substantial dust disturbance. Substantial dust disturbance means visible airborne dust for a total duration of one hour or more on any day. The training may be included in the employer's injury and illness prevention program training or as a standalone training program. More information on the content of the training is available at <https://www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/Pages/COCCI.aspx#>.

B. Contractor shall comply with Public Contract Code Section 7104

1. The Contractor's attention is directed to the provisions of Public Contract Code Section 7104. This section requires that any public works contract which involves digging trenches or other excavations that extend deeper than four feet below ground level contain provisions requiring that (i) the Contractor must notify the local agency of certain specified conditions relating to hazardous waste, unexpected subsurface or latent conditions, or unknown physical conditions, (ii) the local agency must promptly investigate any such conditions reported to it and issue a change order if it makes certain findings regarding those conditions, and (iii) in the event of a dispute between the local agency and the Contractor as to whether hazardous waste exists or whether the conditions encountered differ from those expected, the Contractor is not excused from performance, but must proceed with all Work to be performed under the contract.
2. Full compensation for all costs involved in locating, verifying, protecting, exposing, bracing, and otherwise providing for utilities and compliance with Public Contract Code Section 7104 shall be included in the amounts bid for the various items of Work, and no separate payment shall be made therefor.

1.4 ACCIDENT PREVENTION

- A. Precaution shall always be exercised by the Contractor for the protection of persons (including Owner, Engineer, and Regulatory Agency employees and property). The safety provisions of applicable laws and of building and construction codes shall be observed. Machinery, equipment and other hazards shall be guarded or eliminated.
- B. First aid facilities and information posters conforming at least to the minimum requirements of the Occupational Safety and Health Administration shall be provided in a readily accessible location or locations.
- C. The Contractor shall make all reports as are, or may be, required by any authority having jurisdiction, and permit all safety inspections of the work being performed

under this Contract. Before proceeding with any construction work, the Contractor shall take the necessary action to comply with all provisions for safety and accident prevention.

1.5 EMERGENCIES

- A. In the event of an emergency or unusual conditions endangering life, the Work, or adjacent property, the Contractor may, without special instructions or authorization, act at his discretion to prevent or eliminate such danger. If the Engineer determines that a change in the Contract Documents is required due to the action taken by the Contractor in response to such an emergency, a change order will be issued.

1.6 NOTIFICATION

- A. The Owner shall be supplied at all times with the names and telephone numbers of at least two (2) persons in charge of or responsible for the work, who can be reached for emergency work twenty-four (24) hours a day, seven (7) days a week.

An Emergency Contact List with contract numbers and addresses for the Sheriff, Police, Fire Department, the names and telephone numbers of at least two (2) medical doctors practicing in the vicinity and the local ambulance service shall be prominently displayed adjacent to telephones.

- B. The Contractor shall notify the Owner at least forty-eight (48) hours prior to commencing work.
- C. Contractor shall notify. USA Underground Service Alert Organization for utility underground permits per Section 4216 of the government Code. The Contractor shall obtain all identification numbers and certifications required for underground utility locations prior to starting excavation within the project limits of work. The Underground Service Alert Phone Number is 800-227-2600. The Contractor shall immediately notify the District and the utility owner if he/she disturbs, disconnects, or damages any utility.

1.7 LABOR

- A. No person whose age or physical condition is such as to make his employment dangerous to his health and safety or to the health and safety of others shall be employed on the Work, and in no event shall any person under the age of sixteen (16) years be employed.

1.8 PAYMENT

- A. The Contractor shall include all costs for ALL the above items in the various bid items, and no separate payment will be made therefor.

END OF SECTION

SECTION 01 11 10

COORDINATION OF WORK

PART 1 GENERAL

1.1 RESPONSIBILITY OF CONTRACTOR

- A. If any part of the Work depends for proper execution or results upon the work of others, the Contractor shall inspect and promptly report to the Engineer any apparent discrepancies or defects in such work of others that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the work of others as fit and proper except as to defects which may develop in the work of others after execution of the Work by the Contractor.

1.2 RELATED WORK

- A. Section 01 72 00 Construction Sequence

1.3 WORK INVOLVED WITH EXISTING SYSTEM

- A. Existing materials and equipment removed not designated to be salvaged for Owner in the execution of the Work shall become the property of the Contractor and shall be removed from, and disposed of, off the site by the Contractor in an acceptable and lawful manner.

1.4 COORDINATION OF WORK

- A. The Contractor shall maintain overall coordination for the execution of the Work. Based on the Construction Schedule prepared in accordance with these Specifications, he shall obtain from each of his subcontractors a similar schedule and shall be responsible for all parties maintaining these schedules or for coordinating required modifications.
- B. The Contractor shall coordinate his work with the Wastewater Treatment Facility operations staff so the interruption and interference with normal operations are minimized and mitigated. Replacement of equipment that will require interruption of a normal continuous operating process shall be scheduled so that the down time is as short as is reasonably feasible. Where there are processes with multiple units, only one unit process shall be interrupted at a time. Notify the City Representative and the plant operators at least 7 days in advance of a planned process interruption.

END OF SECTION

SECTION 01 22 00

EXPLANATION OF BID ITEMS

PART 1 GENERAL

The Contract payment for the specified items of work as set forth in the Bid Schedule shall be full compensation for furnishing all labor, materials, methods or processes, implements, tools, equipment and incidentals and for doing all work involved as required by the provisions of the Contract Documents for a complete in place and operational system.

- A. Unless otherwise specified in the Specifications, quantities of work shall be determined per each, or from measurements or dimensions in a horizontal plane. All materials shall be measured based on "in place" quantities and paid for using the units listed in the bid schedule.
- B. Except as noted, the Engineer will make field measurements of unit price items to determine the quantities of the various items as a basis for payment. On all unit price items, the contractor will be paid for the actual amount of the work performed in accordance with the contract documents, as computed from field measurements.
- C. Work or quantities not listed in the description of bid items are considered incidental to other construction and will not be separately measured or paid for. Compensation for such work and/or material shall be included in the prices paid for other items of work.

1.2 BID ITEMS

Bid Item 1 – **Mobilization, Bonds and Insurance:** This item shall include full compensation for all labor, materials, tools, equipment and incidentals making up the cost of mobilization, move-in, move-out, all necessary bonds, insurance, permits, licenses, and fees required during the performance of the work as specified. This item also includes demobilization, including the removal of all equipment, supplies, personnel, and incidentals from the project at the end of construction. Lump sum payment shall not exceed five percent (5.0%) of the total amount bid. Payment for mobilization shall be made with the first progress payment and shall not exceed 80 percent of the lump sum bid item amount. Payment for demobilization shall be made with the last progress payment and shall not be less than 20 percent of the lump sum bid item amount.

Bid Item 2 – **Construction of Modifications to Secondary Treatment Plant located on Plymouth Avenue.** This item shall include full compensation for all labor, materials, tools, equipment and incidentals necessary for the construction of the west aerated lagoon treatment system generally shown on sheets C-1.1 to C-1.4; C-2.1 to C-2.5; C-3.1 to C-3.4; A-1.1 to A-1.3; S-100 to S-522; and M-1.1 to M-1.2.

Bid Item 3 – **Replacement of Effluent Pump 2.** This item shall include full

compensation for all labor, materials, tools, equipment, and incidentals necessary for the removal and demolition of the existing pump and the furnishing installation of new Effluent Pump 2. This item shall include all electrical work, pump controls and incidental concrete, painting testing and commissioning of the pump. This bid item shall include the complete pump control system, including Effluent Pumps 1 and 3.

Bid Item 4 – Replacement of Sludge Pump 2. This item shall include full compensation for all labor, materials, tools, equipment, and incidentals necessary for the removal and demolition of the existing pump and the furnishing installation of new Sludge Pump 2. This item shall include all electrical work, pump controls and incidental concrete, painting testing and commissioning of the pump.

Bid Item 5 – Replacement of Effluent Pump Suction Plug Valves. This item shall include removal and demolition of existing suction plug valves and furnishing, and installation of new suction 12-inch plug valves. The bid item shall be a unit price for each valve replacement.

Bid Item 6 – Replacement of Sludge/Scum Suction Piping Plug Valves. This item shall include removal and demolition of existing suction plug valves and furnishing, and installation of new suction 6-inch plug valves. The bid item shall be a unit price for each valve replacement.

Bid items 1 through 6 constitute the base bid.

BID ALTERNATIVES

Alternative Bid Item 1. Replacement of Effluent Pump 1 and 3. This item shall include full compensation for all labor, materials, tools, equipment, and incidentals necessary for the removal and demolition of the existing pumps and the furnishing installation of new Effluent Pumps 1 and 3. This item shall include all electrical work; pump controls and incidental concrete, painting testing and commissioning of the pumps. The bid items shall be a unit price for each pump replaced.

Alternative Bid Item 2. Replacement of Sludge/Scum Pump 1 and 3. This item shall include full compensation for all labor, materials, tools, equipment, and incidentals necessary for the removal and demolition of the existing pumps and the furnishing installation of new sludge/Scum Pumps 1 and 3. This item shall include all electrical work; pump controls and incidental concrete, painting testing and commissioning of the pumps. The bid items shall be a unit price for each pump replaced.

Alternative Bid Item 3. Increase pipe diameter for air header from 14-inch to 16-inch and 10-inch to 12-inch. This item shall include full compensation for all labor, materials, tools, equipment, and incidentals necessary to increase the pipe diameter of the air header from the blower building to the end of the line. The pipe shall be increased from 14-inch to 16-inch from the Blower building to the reducer and then from 10-inch to 12 inch to the end of the line.

END OF SECTION

SECTION 01 33 00

SUBMITTALS

PART 1 GENERAL

1.1 WORK INCLUDED

- A. The work described in this section includes general requirements and procedures related to the preparation and transmission of submittals to include Shop Drawings, Samples, Manuals, and Record Drawings

1.2 RELATED WORK

- A. General Conditions
- B. Individual equipment specifications
- C. Section 01 33 01 – Master List of Submittals
- D. Section 01 35 00 – Materials and Substitutions

1.3 GENERAL

- A. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - 1. Reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - 2. Determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - 3. Determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 4. Determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- B. Submit each submittal document under separate cover or transmittal. Transmittal shall include the following identification data, as applicable:
 - 1. Contract number
 - 2. Project name and location
 - 3. Submittal number and revision

4. Product identification
 5. Applicable contract drawing number, specification section, and paragraph number
 6. Stamp Space: Blank space of approximately 2-1/2 inches high by 4 inches wide adjacent to the identification data to receive Engineer's status stamp.
 7. Contractor's certification statement as described below
- C. To each submittal affix the following signed Certification Statement.
1. "Certification Statement: : "By this signature, <contractor> hereby certifies that this submittal has been reviewed and approved and it is in substantial conformance with the requirements of the Contract Documents." Include signature of Contractor's authorized representative.
- D. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- E. Furnish neat, legible, and sufficiently explicit detail to enable proper review for Contract compliance. Where multiple products are shown on a cut sheet or catalog, clearly indicate and mark the specific model to be provided and list accessories to be furnished.
- F. Contractor assumes all risks of error and omission.
- G. Work performed before approval, or not conforming to approved submittals, shall be at Contractor's risk.
- H. Submittal requirements contained in this specification are general and apply to all submittals. Individual equipment specifications may include additional specific items or requirements to be included in the submittal.

1.4 REVIEW PROCESS

- A. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- B. Engineer's review will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incidental thereto.

- C. Engineer's review of a separate item as such will not indicate approval of the assembly in which the item functions.
- D. Engineer's review of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has given Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the Contract Documents and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
- E. Engineer's review of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- F. Submittals will be returned in PDF format, marked with one of the following classifications:
 - a. NO EXCEPTIONS TAKEN: Accepted subject to its compatibility with further submittals and additional partial submittals for portions of the work not covered in this submittal. Does not constitute approval or deletion of specified or required items not shown in the partial submittal.
 - b. MAKE CORRECTIONS NOTED: Same as a., except that minor corrections as noted shall be made by the Contractor. No re-submittal required.
 - c. REVISE AND RESUBMIT: Rejected because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to subsequent review by the Engineer. Re-submittal required.
 - d. SUBMIT SPECIFIED ITEM: Minor item in submittal missing or incomplete. Submit data, specifications, drawings covering specified item only. Submittal shall be referenced to the main submittal under review.
 - e. REJECTED: Submitted material does not conform to Plans and Specifications in major respect, i.e.: wrong item, wrong size, model, capacity, or material. Re-submittal required.

PART 2 SUBMITTAL DOCUMENTS

2.1 SHOP DRAWINGS

- A. Unless otherwise noted in the individual specification sections, submit five (5) sets of shop drawings. Submittals may be submitted electronically as pdf file if approved in advance by Owner and Engineer.

- B. All catalog and specification sheets shall be clearly marked to indicate the specific model number and configuration to be used. Items not applicable to the project shall be crossed out.
- C. Show complete and detailed fabrication; assembly and installation details; wiring and control diagrams; catalog data; pamphlets; descriptive literature; and performance and test data.
- D. Include calculations or other information sufficient to show comprehensive description of structure, equipment, or system provided and its intended manner of use.
- E. Include Manufacturer's installation recommendations.

2.2 *SAMPLES*

- A. Unless otherwise noted in the individual specification sections, submit three (3) samples of each item.
- B. Samples shall be representative of the actual material proposed for use in the project and of sufficient size to demonstrate design, color, texture, and finish.
- C. Permanently attach to each sample
 - 1. The contract number
 - 2. Project name and location
 - 3. Product identification
 - 4. Applicable contract drawing and specification section number
 - 5. Subcontractor's, vendor's and/or manufacturer's name, address, and telephone number.
- D. Certain samples may be tested for specific requirements by the Owner and/or Engineer prior to approval. Failure of sample to pass tests will be sufficient cause for refusal to consider further samples of the same brand and make.
- E. Rejected samples will be returned upon request, and resubmittals shall consist of new samples.

2.3 *RECORD DRAWINGS*

- A. Maintain one record copy of Contract Documents at site in good order and annotated to show revisions made during construction. Keep annotations current for periodic inspection.
 - 1. Make record drawings available to Engineer at all times during life of Contract.
 - 2. Drawings: Made part of record drawings and to include:

Submittals
01 33 00—4

- a. Contract Drawings: Annotate or redraft, as required, to show revisions, substitutions, variations, omissions, and discrepancies made or discovered during construction concerning location and depth of utilities, piping, duct banks, conduits, manholes, pumps, valves, vaults, and other equipment. Make revisions and show on all drawing views with actual dimensions established to permanent points.
 - b. Working/Layout Drawings: When required as submittals, record actual layouts of conduit runs between various items of electrical equipment for power, control, and instrumentation; wire sizes, numbers, and functions; configuration of conduits; piping layouts; and duct layouts.
3. Before preliminary inspection, furnish reproducible of record drawings. At completion of Contract and before final payment is made, furnish Engineer one set of reproducible of finally approved record drawings reflecting revisions herein described.

2.4 OPERATION AND MAINTENANCE MANUALS

- A. Furnish Operation and Maintenance Manuals for various types of equipment and systems, as required by Contract Documents. Operation and Maintenance Manuals shall be provided for all mechanical and electrical equipment. Unless otherwise indicated, furnish separate manual for each piece of equipment and system. If manual contains other items or equipment, indicate where specified items are located in manual. Include in manual complete information necessary to operate, maintain, and repair specific equipment and system furnished under this Contract, and include the following specific requirements;
1. Contents.
 - a. Table of Contents and Index.
 - b. Brief description of equipment/system and principal components.
 - c. Starting and stopping procedures, both normal and emergency.
 - d. Installation, maintenance, and overhaul instructions including detailed assembly drawings with parts list and numbers, and recommended spare parts list with recommended quantity, manufacturer's price, supplier's address, and telephone number.
 - e. Recommended schedule for servicing, including technical data sheets that indicate weights and types of oil, grease, or other lubricants recommended for use and their application procedures.
 - f. One copy of each component wiring diagram and system wiring diagram showing wire size and identification.
 - g. One reviewed and stamped copy of each submittal with changes made during construction properly noted, including test certificates, characteristic curves, factory and field test results.

- h. For electrical systems, include dimensioned installation drawings, single line diagrams, control diagrams, wiring and connection diagrams, list of material for contactors, relays and controls, outline drawings showing relays, meters, controls and indication equipment mounted on equipment or inside cubicles, control and protective schematics, and recommended relay settings.

2. Material:

- a. Covers: Oil, moisture, and wear resistant 9 inches by 11-1/2 inches size.
- b. Pages: 60 pound paper 8-1/2 inches by 11 inches size with minimum of 2 punched holes 8-1/2 inches apart reinforced with plastic, cloth, or metal.
- c. Fasteners: Metal screw post or Acco metal strap type.
- d. Diagrams and Illustrations: Attach foldouts, as required.

B. Copies:

- 1. Submit in electronic pdf format preliminary copies of manuals for review and approval no later than date of shipment of equipment. Installation shall not begin until manuals are accepted by Engineer. Include in preliminary copies all items required under "Contents" above. A PDF format copy will be marked and returned to the Contractor.
- 2. Deliver three (3) copies and one electronic copy in PDF format of finally approved manuals to Engineer before startup.
- 3. Operations and maintenance manuals may be submitted electronically if approved in advance by Owner and Engineer.

2.5 MEASUREMENT & PAYMENT

- A. The Contractor shall include all costs for the above items in the various bid items, and no separate payment will be made therefor.

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01 33 01
MASTER LIST OF SUBMITTALS

PART 1 GENERAL

- A. The following submittals are required for the Work. Other submittals may be required as requested by the Owner or Owner's Representative.
1. Post-Bid Pre-Award Construction Schedule
 2. Post-Award Construction Schedule
 3. Contractor's Plan of Activities (submitted weekly)
 4. Copies of all agency permits, including, but not limited to: Business License.
 5. Schedule of values
 6. Submittals as specified in the technical specifications.
- B. Post award and prior to start of construction, the Contractor shall supply a list of submittals to be provided and a schedule for their preparation. The Contractor shall identify and flag submittal reviews that are time critical to the proposed construction schedule.

END OF SECTION

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SECTION 01 35 00

MATERIAL SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.1 GENERAL

- A. The materials furnished and used shall be new, except as may be provided elsewhere in these Specifications, or on the Plans.
- B. All materials required to complete the work under this contract shall be furnished by the Contractor, unless otherwise stated.
- C. It shall be the duty of the Contractor to call the Engineer's attention to apparent errors or omissions and request instruction before proceeding with the Work. The Engineer may, by appropriate instructions, correct said apparent errors and omissions, which instructions shall be as binding upon the Contractor as though contained in the original Contract Documents.

1.2 DEFINITIONS

- A. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor.
- B. Revisions: Changes to Contract Documents requested by Owner or Engineer.
- C. Options: Specified options of products and construction methods included in Contract Documents.

1.3 TRADE NAMES AND ALTERNATIVES

- A. Wherever an article, or any class of materials, is specified by the trade name or by the name of any particular patentee, manufacturer or dealer, or by reference to the catalog of any such manufacturer or dealer, it shall be taken as intending to mean and specify the article or material described or any other equal thereto in quality, finish and durability, and equally as serviceable for the purpose for which it is or they are intended. The intent of the Plans and Specifications is to specify highest grade standard equipment, and it is not the intent of these Plans and Specifications to exclude or omit the products of any responsible manufacturer, if such products are equal in every practical respect to those mentioned herein, as determined by the Engineer.

1.4 SAMPLES

- A. At the option of the Engineer, the source of supply of materials for the Work shall be subject to tests and inspection before the delivery is started and before such materials are used in the Work. Samples representative of the character and

quality of materials shall be submitted by the Contractor. Samples shall be of sufficient quantities or amounts for testing or examination.

- B. All tests of materials furnished by the Contractor shall be made in accordance with the commonly recognized standards of national technical organizations, and such special methods and tests as are prescribed in the Contract Documents.
- C. The Contractor shall furnish such samples of materials as are requested by the Engineer, without charge. No material shall be used until the Engineer has had the opportunity to test or examine such materials. Samples will be secured and tested whenever necessary to determine the quality of the material. Samples and test specimens prepared at the jobsite, such as concrete test cylinders, shall be taken or prepared by the Engineer, or his designated representative, in the presence and with the assistance of the Contractor.

1.5 SUBMITTALS

- A. As specified in Section 01 33 00 – Submittals.

1.6 INSPECTION OF MATERIALS BY THE CONTRACTOR

- A. Contractor shall make a close inspection of all materials as delivered and shall promptly return all defective materials without waiting for their rejection by the Engineer.

1.7 CERTIFICATES OF COMPLIANCE

- A. A Certificate of Compliance may be required for certain materials and equipment that become final products of the completed Work. Certificates of Compliance shall be furnished prior to the use of any materials for which these Specifications require that such a certificate be furnished. In addition, when so authorized in these Specifications, the Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance.
- B. The Certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the Specifications.
- C. A Certificate of Compliance shall be furnished with each lot of material delivered to the Work and the lot so certified shall be clearly identified in the certificate.
- D. All materials used based on a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Plans and Specifications and any such material not conforming to such requirements will be subject to rejection whether in place or not.
- E. The Owner reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.

1. The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer.

1.8 MANUFACTURER TESTING

- A. At the option of the Engineer, materials and equipment to be supplied under this Contract will be tested and inspected either at their place of origin or at the site of the Work. The Contractor shall give the Engineer written notification well in advance of actual readiness of materials and equipment to be tested and inspected at point of origin.
 1. Satisfactory tests and inspections at the point of origin shall not be construed as a final acceptance of the materials and equipment nor shall such tests and inspections preclude retesting or re-inspection at the site of the Work.
 2. Materials and equipment which will require testing and inspection at the place of origin shall not be shipped prior to such testing and inspection.

1.9 MANUFACTURERS' RECOMMENDATIONS

- A. All equipment specified and used in the project shall be installed in accordance with the approved manufacturer's current written recommendations.
- B. All such equipment, material, etc., shall be of the manufacturer's latest system or line.

1.10 SUBSTITUTIONS

- A. Conditions: Contractor's substitutions shall be considered when one or more conditions are satisfied, as determined by the Engineer. (The Contractor's submittal and Engineer's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.)
 1. Extensive revisions to Contract Documents are not required.
 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 3. Request is timely, fully documented and properly submitted.
 4. Request is directly related to an "or equal" clause or similar language in the Contract Documents.
 5. The specified product or method of construction cannot be provided within the Contract Time. The request shall not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.

6. The specified product or method of construction cannot receive necessary approval by governing authority, and the requested substitution can.
7. Substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the Owner may be required to bear.
 - a. Additional responsibilities for the Owner may include additional compensation to the Engineer for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.
 - b. Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.
8. Specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.
9. Specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.
10. Specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.

1.11 SUBSTITUTION REQUEST FORM

- A. Use Substitution Request Form in on page 01 35 00-5.
- B. Submit one form (4 copies) for each request.

END OF SECTION

SUBSTITUTION REQUEST FORM

Page 1 of 2

TO: _____

PROJECT: _____

We hereby submit for your consideration the following product instead of the specified item for the above project:

SECTION:	PARAGRAPH:	SPECIFIED ITEM:
_____	_____	_____
_____	_____	_____

Proposed Substitution: _____

- Attach: 1) Complete technical data, including laboratory tests, if applicable.
2) Complete information on changes to Drawings and/or Specifications which proposed substitution will require for its proper installation.

A. Does the substitution affect dimensions on Drawings?

B. Will the undersigned pay for changes to the project design, including engineering and detailing costs caused by the requested substitution?

C. What affect does substitution have on other trades?

D. Differences between proposed substitution and specified item?

E. Manufacturer's guarantees of the proposed and specified items are:

____ Same _____ Different (explain on attached sheet)

Material Substitutions
01 35 00-5

SUBSTITUTION REQUEST FORM

Page 2 of 2

The undersigned states that the function, appearance and quality are equivalent or superior to the specified item.

Submitted By:

Signature _____

Firm _____

Address _____

Date _____

Telephone _____

For Use by Design Consultant
Accepted Accepted as Noted Not Accepted Received Late By _____
Date _____
Remarks _____

SECTION 01 43 00

QUALITY CONTROL AND TESTING

PART 1 GENERAL

1.1 NOTICE OF DEFECTS

- A. Owner or Engineer will notify the Contractor promptly of defective Work of which they have actual knowledge.
- B. Defective Work may be rejected, corrected, or accepted, at the discretion of the Owner and Engineer.

1.2 ACCESS TO WORK

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests shall have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith.

1.3 MATERIALS AND EQUIPMENT

- A. Materials and equipment shall be subject to the requirements of Section 01 35 00 - Material Substitution Procedures.

1.4 PROJECT SITE TESTING

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Unless otherwise stated in the specifications, all initial routine site tests of materials shall be at the expense of the Owner and shall be performed by an independent certified laboratory designated by the Owner. Whenever a specified test is required and the material or portion thereof so tested fails to meet or exceed the standard specified, all subsequent retesting shall be performed at the expense of the Contractor.
- C. All material suitability tests shall be at the expense of the Contractor. Testing shall be by an independent certified laboratory approved by the Engineer.

1.5 TEST STANDARDS

- A. All sampling, specimen preparation, and testing of materials shall be in accordance with the standards of nationally recognized technical organizations.

- B. The physical characteristics of all materials not particularly specified shall conform to the latest standards applicable to the item published by ASTM or other standards published by recognized organizations such as ANSI or AWWA.

1.6 UNCOVERING WORK

- A. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without concurrence of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and re-covered at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be re-observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall promptly correct said defects, including all work involved in uncovering and recovering the work, at no cost to the Owner.
 - 2. If, the uncovered Work is not found to be defective, Contractor may be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction provided that the Contractor was not at fault for covering the work before it could be inspected.

1.7 CORRECTION OR REMOVAL OF DEFECTIVE OR REJECTED WORK

- A. Upon receipt of notice, Contractor shall correct all defective or rejected Work and replace it with Work that is not defective, at no additional cost to the Owner.

1.8 ACCEPTANCE OF DEFECTIVE WORK

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so.
 - 1. If any such acceptance occurs, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted.
 - 2. Engineer shall determine the reasonableness of the diminished value of Work so accepted and Contractor shall pay all costs involved in making such determination.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES

PART 1 GENERAL

1.1 GENERAL

- A. The Contractor shall provide all temporary facilities and utilities required for completion of the Work as well as safety precautions and programs. No attempt is made to set out in detail the Contractor's means or methods necessary to accomplish the tasks involved.

1.2 TEMPORARY UTILITIES

A. Water

1. The Contractor may arrange with the Owner to use municipal water where appropriate during construction. Contractor shall pay for municipal water at the current applicable City contractor rate for metered water.
2. Treated wastewater may be used for dust control if it is first disinfected in the water truck/wagon and it is not applied where workers may come into contact with spray. Watering with wastewater effluent shall not occur during windy conditions where spray may be transported downwind.
3. Water used for human consumption shall be kept free from contamination and shall conform to the requirements of the State and local authorities for potable water.

B. Sanitary Facilities

1. The Contractor shall provide suitable and adequate sanitary conveniences for the use staff at the site of the Work. Such conveniences shall include chemical toilets or water closets and shall be located at appropriate locations at the site of the Work. All sanitary conveniences shall conform to the regulations of the public authority having jurisdiction over such matters. At the completion of the Work, all such sanitary conveniences shall be removed, and the site left in a sanitary condition. Sanitary Facilities shall be regularly serviced and cleaned to maintain sanitary standards.
2. With respect to sanitation facilities, the Contractor shall cooperate with and follow directions of representatives of the Public Health Service and the State. State and County Public Health Service representatives shall have access to the Work, whether it is in preparation or progress, and the Contractor shall provide facilities for such access and inspection.

1.3 TEMPORARY CONSTRUCTION FACILITIES

- A. Construction hoists, shoring, and similar temporary facilities shall be of ample size and capacity to adequately support and move the loads to which they will be subjected. Railings, enclosures, safety devices, and controls required by law or for adequate protection of life and property shall be provided.
- B. Temporary supports shall be designed with an adequate safety factor to assure adequate load bearing capability. The Contractor shall submit design calculations prepared by a professional registered engineer for staging and shoring prior to application of loads.
- C. Barriers shall be placed at each end of all excavations and at such places as may be necessary along excavations to warn all pedestrian and vehicular traffic of such excavations from one hour before sunset each day to one hour after sunrise of the next day until such excavation is entirely refilled, compacted, and paved. All excavations shall be barricaded in such a manner as to prevent person from falling, walking, or otherwise entering any excavation in any street, roadway, parking lot, treatment plant, or any other area, public or private.
- D. The Contractor shall adequately identify and guard all hazardous areas and conditions by visual warning devices and, where necessary, physical barriers. Such devices shall, as a minimum, conform to the requirements of Cal/OSHA.
- E. At such time or times any temporary construction facilities and utilities are no longer required for the work, the Contractor shall notify the Engineer of his intent and schedule for removal of the temporary facilities and utilities and obtain the Engineer's approval before removing the same. As approved, the Contractor shall remove the temporary facilities and utilities from the site as his property and leave the site in such condition as specified, as directed by the Engineer, and/or as indicated on the Plans.

1.4 ACCESS ROADS AND STAGING AREA

- A. Adequate access shall be maintained to all storage areas and other areas to which frequent access is required. The Contractor shall limit the location of his storage of equipment and materials outside of the project site. The Contractor shall make his own arrangements for space that may be required and bear all associated costs. The Contractor shall provide any temporary storage required for the protection of equipment and materials as recommended by manufacturers of such materials.
- B. Storage and protection:
 - 1. Materials and equipment shall be stored in accordance with supplier's written instructions, with seals and labels intact and legible. Exposed metal surfaces of valves, fittings and similar materials shall be coated with accordance with manufacturer's recommendations to prevent corrosion. Storage of items subject to degradation by UV light, such as PVC, shall be stored under cover.

2. Storage shall be arranged to provide access for inspection. The Contractor shall periodically inspect to assure materials and equipment are undamaged and are maintained under required conditions.

END OF SECTION

SECTION 01 56 16

DUST CONTROL

PART 1 GENERAL

1.1 WORK INCLUDED

- A. The work of this section consists of implementing measures to prevent air pollution during construction activities, in accordance with Federal, State, and local regulations, and in accordance with the Dust Control Plan (DCP).
- B. The Contractor shall prepare a DCP in accordance with SJVAPCD requirements. The Contractor is responsible for addressing all comments from the SJVAPCD and obtaining final approval from the SJVAPCD prior to the start of construction.
- C. The DCP shall be amended by the Contractor, as needed, should revisions be determined necessary during construction activities.

1.2 REFERENCES

- A. SJVAPCD Regulation VIII.
- B. Section 7 - Responsibilities of the Contractor in the Conduct of his Work, City Standard Specifications.

1.3 SUBMITTALS

- A. As specified in Section 01 33 00 - Submittals.
- B. Submit DCP for review and approval by the Owner, prior to beginning work.
- C. Submit proof that the DCP has been approved by the SJVAPCD prior to the beginning of work.

1.4 QUALITY ASSURANCE

- A. Before commencing grading, excavation or filling in any part of the site, the Contractor shall construct the required measures specified in the DCP.
- B. Arrange demolition activities to minimize dust to the maximum practical extent. Clearing, excavation, and grading shall be limited to those areas of the Project site necessary for construction. Minimize the area exposed and unprotected.
- C. Clearly mark and delineate the work limits activities. Equipment shall not be allowed to operate outside the limits of work or to disturb existing vegetation.

1. The Contractor shall comply with all provisions of the SJVAPCD regulations, as well as Federal and State regulations.
2. The requirements of the Dust Control Plan shall apply continuously through the duration of the Contract.

PART 2 PROUCTS

2. 1 EQUIPMENT

A. Before the work begins, sufficient equipment and resources shall be available on the site to assure that the operation and adequacy of the dust control measures can be continuously maintained.

2.2 DUST CONTROL MEASURES

A. Water shall be available at all time to the Contractor for dust control as specified in the Contract Documents. Contractor shall make arrangements for water as needed at his own expense.

B. If dust suppressants other than water are utilized, Contractor shall submit MSDS, Manufacturer's Usage Instructions, and certification by the manufacturer that the product is safe for ground application. Dust Suppressants shall be polymer emulsions or hygroscopic suppressants. Petroleum emulsions and bituminous materials will not be allowed.

C. Gravel used for Gravel Pads shall be washed gravel, a minimum of one and a half inches in diameter and shall be placed a minimum of three (3) inches deep.

PART 3 EXECUTION

3. 1 GENERAL DESCRIPTION

A. Dust control measures may include water application, dust suppressant application, physical barriers limiting site access, reduction of vehicle speed on site, utilization of gravel pads, utilization of grizzlies, and wheel washers. If physical barriers are utilized, the Engineer shall approve the location, size, and type. Physical barriers shall be removed upon project completion.

B. Furnish, install, maintain, and operate necessary control measures and other equipment necessary to prevent dust. Temporary measures shall be to Contractor's own design and Contractor shall be solely responsible

3.2 METHODS

- A. As described in the DCP and approved by the Engineer.

3.3 MAINTENANCE OF TEMPORARY FACILITIES

- A. Inspect dust control facilities daily and as specified in the DCP.
- B. Sediment shall be removed from grizzlies, gravel pads, and/or paved surfaces as required by the DCP, or as directed by the Engineer.
- C. If areas are seeded, the Contractor shall examine those areas during or after major storms to check that grass is becoming established.

3.4 REMOVAL OF TEMPORARY DUST CONTROL MEASURES

- A. Temporary control measures shall be removed once grading is completed and soils have stabilized.

3.5 RECORD KEEPING

- A. The Contractor shall keep accurate records as required by the SJVAPCD of dust control methods utilized during construction. The Contractor shall utilize the forms provided by the SJVAPCD.
- B. The Contractor shall keep a copy of the approved DCP, any approved revisions, and all dust control records at the site.
- C. The Contractor shall furnish upon request by the Owner, Engineer, or SJVAPCD Inspector the approved DCP, approved revisions, and dust control records.
- D. The Contractor shall maintain dust control records for one year after project completion.
- E. The Dust Control Plan

- 1. The Contractor shall take whatever steps, procedures, or means as are required to limit dust generated by his operations during the Work, including Saturdays, Sundays, and Holidays. Dust shall be controlled to the standards of the local governing agency or, in the absence of local standards, to the satisfaction of the Engineer. Dust control shall extend to any unpaved road which the Contractor or any of his subcontractors are using, to excavation or fill areas, to demolition operations, and to other activities. Control shall be by sprinkling, use of dust palliatives, modification of operations, or any other means acceptable to the local governing agency or, in the absence of same, the Engineer.

2. If the dust control is not adequate in the opinion of the Owner, this work may be done by others, and the cost shall be deducted from the total payment due the Contractor.

END OF SECTION

SECTION 01 57 23

STORM WATER POLLUTION PREVENTION PLAN

PART 1 GENERAL

1.1 WORK INCLUDED

- A. The work of this section consists of preventing storm water pollution during construction activities, in accordance with Federal, State, and local regulations, and in accordance with the Storm Water Pollution Prevention Plan (SWPPP) as prepared by the Contractor. The work shall include the following:
1. The Contractor shall comply with the requirements of the State Water Resources Control Board (SWRCB) "General Permit" Order No. 2009-0009-DWQ.
 2. The Contractor shall employ a Qualified SWPPP Developer (QSD) to prepare the permit registration documents including a SWPPP, Notice of Intent (NOI) and other required attachments and submit them to the SWRCB via the Storm Water Multi-Application and Report Tracking System (SMARTS) website 30 days prior to the start of construction activities for coverage under the General Permit. The Contractor will pay fees associated with the application.
 - a. A "Draft" SWPPP shall be prepared and submitted to the Owner for review and approval prior to submittal to the SWRCB.
 3. The Owner will certify the permit registration documents on the SWRCB SMARTS website.
 4. The Contractor shall implement the SWPPP for the duration of construction. The implementation of the SWPPP shall be conducted under the supervision of the Contractor's Qualified SWPPP Practitioner (QSP) in accordance with Order No. 2009-0009-DWQ and subsequent revisions.
 5. The Contractor shall submit SWPPP amendments to the Owner during construction if changes are determined to be necessary by the Contractor and Owner. The SWPPP shall be amended by the Contractor and approved by the QSD prior to implementation.
 6. The Contractor shall be responsible for all implementation activities prescribed in the approved SWPPP. Any required documentation to be

uploaded to SMARTS as part of the implementation shall be uploaded by the Contractor's QSP and certified by the Owner. All records of implementation activities shall be retained by the Contractor for use in preparation of the Annual Report(s).

7. The Contractor's QSD will prepare the Annual Reports and Notice of Termination and submit both to SMARTS, which will be certified by the Owner.

8. The Contractor shall provide copies of all records to the Owner at project completion.

1.2 REFERENCES

- A. SWRCB Order NO. 2009-0009-DWQ, NPDES NO. CAS000002, General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities and subsequent revisions.

https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_complete.pdf

1.3 SUBMITTALS

- A. As specified in Section 01 33 00 - Submittals.
- B. Submit initial SWPPP, with all sections completed, for review and approval prior to the start of construction activities.
- C. Submit all subsequent SWPPP amendments for review and approval throughout the duration of construction.

1.4 QUALITY ASSURANCE

A. Control the rate and effect of dewatering in such a manner as to avoid all objectionable settlement and subsidence as approved by the QSD and to assure the integrity of the finished work

B. Where critical structures or facilities exist immediately adjacent to areas of proposed dewatering, establish reference points, and observe at frequent intervals to detect any settlement that may develop. Conduct the dewatering operation in a manner that protects adjacent natural resources and facilities. Cost of repairing all damage to adjacent resources and facilities shall be the sole responsibility of the Contractor.

C. Before commencing grading, excavation or filling in any part of the site, the Contractor shall construct Best Management Practice (BMPs) measures identified in the SWPPP.

D. Arrange demolition activities to minimize erosion to the maximum practical extent. Clearing, excavation, and grading shall be limited to those areas of the Project site necessary for demolition. Minimize the area exposed and unprotected.

E. Clearly mark and delineate the work limits activities. Equipment shall not be allowed to operate outside the limits of work or to disturb existing vegetation. Excavation and grading shall be completed during the dry season to the maximum extent possible.

1.5 REGULATORY REQUIREMENTS

A. The Contractor shall comply with all the provisions of the General Permit SWRCB Order No. 2009-0009-DWQ and subsequent revisions as well as any local regulations,

PART 2 PROUCTS

2.1 EQUIPMENT

A. Before the work begins, sufficient equipment shall be available on the site to assure that the operation and adequacy of the SWPPP can be continuously maintained.

2.2 BEST MANAGEMENT PRACTICE (BMP) CONTROL MEASURES

A. BMP control measures shall be in accordance with the SWPPP and California Stormwater Quality Association (CASQA) BMP Handbook, latest edition.

PART 3 EXECUTION

3.1 GENERAL DESCRIPTION

A BMP control measures shall include those measures identified in the SWPPP.

B. Furnish, install, maintain, and operate necessary control measures and other equipment necessary to prevent erosion. Temporary measures shall be of the

Contractor's own design and Contractor shall be solely responsible for risks related to the management of erosion control during construction.

3.2 TRAINING

A. Conduct training of contractor and subcontractor personnel as specified in the SWPPP.

3.3 METHODS

A. As described in the SWPPP and approved by the QSD.

3.4 MAINTENANCE OF TEMPORARY FACILITIES

A. Inspect BMP control structures daily and as specified in the SWPPP.

B. Sediment trapped in control structures shall be removed after each storm, or as directed by the QSD.

3.5 DISPOSAL OF SEDIMENT FROM STORM WATER POLLUTION CONTROL STRUCTURES

A. Sediment excavated from temporary sediment control structures shall be disposed on the site with general fill or with topsoil. Sediment shall be allowed to dry out as required before reuse. Any trash shall be removed before reuse.

B. Contractor shall place the sediment removed from any traps or other structures where it will not enter a storm drain or water course and where it will not immediately reenter the basin.

3.6 REMOVAL OF TEMPORARY BMP CONTROL MEASURES

A. Temporary control measures shall be removed once grading is completed and slopes have stabilized, and permanent drainage works have been constructed. Contractor shall not breach any temporary control structures until the associated catchment area is complete unless approved by the QSD.

END OF SECTION

SECTION 01 72 00

CONSTRUCTION SEQUENCING AND CONTROLS

PART 1 GENERAL

1.1 WORK INCLUDED

A. This section includes requirements for construction sequencing and scheduling of any required flow diversions, pump arounds, tie-ins, and interconnections. The existing wastewater treatment facilities shall remain in operation throughout the duration of the project. Contractor shall include within his scope of work all necessary temporary facilities to maintain operations.

1.2 RELATED WORK

A. Section 01 33 00 - Submittals

1.3 SUBMITTALS

A. Submittals shall be in accordance with Section 01 33 00 — Submittals, the General Conditions, and shall include at least the following:

1. Contractor shall submit his proposed means, methods and schedule for any construction work that will interfere with or disrupt the operation of the wastewater treatment plant. This includes any power interruptions, flow diversions, bypassing, pump-arounds, interconnections, interties, or any proposed work that may impact the on-going operation of the treatment plant. A plan for commissioning and final switchover to the new facilities shall be included. Submittals shall be made a minimum of 14 days in advance of the proposed work.

2. Work that will have minimal impact on operations shall be coordinated with the Engineer or Owners Representative and the affected WWTP Operator a minimum of 7 days in advance.

1.4 QUALITY ASSURANCE

A. Contractor's work shall not cause a violation of the facility Waste Discharge Requirements (WDRs) issued by the Central Valley Region Regional Water Quality Control Board (CVR-RWQCB). The bypass, spillage or overflow of untreated or partially treated waste is prohibited. Contractor shall be solely responsible for bypass pumping, temporary piping and construction activities that may affect the existing wastewater treatment facilities.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

A. Contractor shall provide all material, equipment, pumps, temporary piping, plugs, temporary electrical connections, power and manpower required for work covered in this section.

PART 3 EXECUTION

3.1 GENERAL

A. The existing wastewater treatment plant shall remain in operation throughout the construction period.

1. Contractor shall coordinate his work with the Engineer and the Operator to minimize disruptions or interference in pumping.

3.2 PRIMARY TREATMENT PLANT

A. Sludge and Scum Pumping

- a. At least one sludge pump shall always remain fully operational . Contractor shall replace the pumps sequentially. Coordinate with the operator for planned shut downs.
- b. Sludge piping and valves may be temporarily shut down for a maximum period of 4 hours at a time, after which the sludge pump must operate to remove solids/scum from the clarifiers.

B. Effluent Pumping

- a. Effluent pumping is essential to the primary plant operation and can only be shut down for short durations of about two hours. Lowest flow will occur during the night and early morning hours.
- b. Suction plug valves shall all be replaced before pump replacement.
- c. At least two effluent pumps shall always be fully operational . Pumps shall be replaced sequentially.
- d. Coordinate switchover to new control system with Operator.

3.3 SECONDARY TREATMENT PLANT

A. Flow to the East Aerated Lagoon shall be continuous throughout the project until the commissioning of the new West Aerated Lagoon.

B. New cut-in diversion valves on the existing 14-inch force main will require the plugging of the existing inlet pipe to Cell 1 of the East Aerated Lagoon or the use of an insertion valve. Effluent pumping can be diverted at the concrete valve box temporarily to storage ponds but backflow from the east aerated lagoon must be plugged.

C. Upon completion of the West Aerated Lagoon, it shall be filled with effluent by pumping or diverting treated effluent from the storage ponds. After filling, the new aeration system shall be tested and commissioned. After the aeration system is fully functional, primary effluent shall be diverted to the new West Aerated lagoon and the valve to the East Aerated Lagoon closed.

3.4 ALTERNATE CONSTRUCTION SEQUENCES

A. At Contractor's sole risk, alternate construction sequences may be proposed to accelerate completion of the work. Submit alternate plans for approval a minimum of 14 days in advance of the planned construction.

END OF SECTION

SECTION 01 77 00

CONTRACT CLOSEOUT

PART 1 GENERAL

1.1 GENERAL

- A. It is the intent of these Contract Documents that the Contractor shall deliver a complete and operable facility capable of performing its intended functions and ready for use.

1.2 CLEANING

- A. Throughout the period of construction the Contractor shall keep the Work site free and clean of all rubbish and debris, and shall promptly remove from the site, or from property adjacent to the site of the Work, all unused and rejected materials, surplus earth, concrete, plaster, and debris, excepting select material which may be required for refilling or grading.

1.3 FINAL SITE CLEAN-UP

- A. Upon completion of the Work, and prior to final acceptance, the Contractor shall remove from the vicinity of the Work all paint, surplus material, and equipment belonging to him or used under his direction during construction.
- B. The Contractor shall restore to original condition all property not designated for alteration by these Contract Documents.

1.4 FINAL CLEAN-UP

- A. This project and wherever else applicable, besides general broom cleaning, the following special cleaning shall be performed at completion of the Work:
 - 1. Hardware shall be cleaned and polished of all traces; this shall include removal of stains, dust, dirt, paints, and blemishes.
 - 2. Fixtures and equipment shall be cleaned, and stains, paint, dirt, and dust shall be removed.

1.5 WASTE DISPOSAL

- A. The Contractor shall dispose of surplus materials, waste products, demolition materials, and debris. The Contractor shall transport and dispose of waste materials in accordance with applicable laws and regulations.

1.6 PROJECT RECORD DOCUMENTS

- A. The Contractor shall maintain at the site, available to the Owner and Engineer, one copy of the Contract Documents, Drawings, Shop Drawings, Change Orders, and

other modifications in good order and annotated to show all changes made during construction. These Documents shall be delivered to the Engineer for the Owner upon completion of the Work.

- B. Record documents shall be reviewed during progress meetings to ascertain that all changes have been recorded.
- C. Store Record Documents separate from documents used for construction.

1.7 TOUCH-UP AND REPAIR

- A. The Contractor shall touch-up or repair finished surfaces on structures, equipment, or installations that have been damaged prior to final acceptance. Surfaces on which such touch-up or repair cannot be successfully accomplished shall be completely refinished or in the case of hardware and similar small items, the item shall be replaced. Such items shall include, but not be limited to, the following:
 - 1. Exposed structure surfaces
 - 2. Exposed equipment surfaces
 - 3. Exposed piping surfaces

1.8 EQUIPMENT START-UP

- A. After all acceptance tests have been completed by the Contractor and Owner but prior to final acceptance, the Contractor shall recheck all equipment for proper alignment and adjustment, check oil levels, re-lubricate all bearings and wearing points, and in general assure that all equipment is in proper condition for continuous operation.

1.9 OPERATION AND MAINTENANCE (O&M) MANUALS

- A. See Section 01 33 00 for Operation and Maintenance Manuals.

1.10 FINAL EQUIPMENT CHECK

- A. After testing and before acceptance, all equipment shall be test run by the Owner for a minimum of 7 days to ensure proper operation. At the end of the test run each piece of machinery shall be lubricated and all components and couplings checked for proper alignment and adjustment.
- B. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer's inspection.
- C. Provide submittals to the Owner required by other governing authorities.

1.11 MANUFACTURER'S CERTIFICATES OF PROPER INSTALLATION

1. The Contractor shall submit manufacturers' certificates of proper installation for all items of equipment.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

END OF SECTION

SECTION 00 43 93

BIDDER'S CHECKLIST

SUBMIT THIS BIDDER'S CHECKLIST WITH YOUR BID DOCUMENTS.

Bidders shall complete and submit all documents listed below for bids to be considered responsive.

REQUIRED

1. Section 00 41 43 – Bidders Proposal
2. Acknowledgment of receipt of all issued Addenda (In Bidder's proposal)
3. Section 00 43 36 – List of Subcontractors
4. Section 00 45 13 – Qualification Statement
5. Section 00 45 16 - Non-Collusion Affidavit
6. Section 00 45 26 – Workers Compensation Certification
7. Section 00 45 47 – PCC 10162 – Questionnaire on Disqualification
8. Special provision forms.
9. Bid Security attached to front of Proposal in the form of (check one):

- | | |
|--|---|
| <input type="checkbox"/> Certified Check | <input type="checkbox"/> Bidder's Bond (Section 00 43 13) |
| <input type="checkbox"/> Cashier's Check | <input type="checkbox"/> Cash |

SUBMITTED BY:

Name of Contractor _____

Contact Name _____

Address _____

City _____ State _____ Zip _____

Phone No. _____ Fax No. _____

Contractor's License No. _____ Class: _____ Expiration date _____

Documents required in the list but not included with your bid may render your bid non-responsive and ineligible for award. Bids received by the scheduled bid opening time will be opened and publicly read but are subject to verification that all required documents have been submitted.

END OF SECTION