



**October 6, 2022**

**Planning Commission**

**Meeting**

**Information Packet**

# **AGENDA ITEM #1**

Consideration to recommend approval of the Final Plat for Reuban Wayman Subdivision located at 800 North Hale Street.



811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
TOWNSHIP 2 SOUTH, RANGE 6 WEST  
SALT LAKE BASE AND MERIDIAN  
  
ELEV = 4261.64'

# WAYMAN SUBDIVISION

APPROXIMATELY 800 NORTH HALE STREET  
GRANTSVILLE, UTAH

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FOR REVIEW  
NOT FOR CONSTRUCTION

DATE PRINTED  
September 14, 2022

NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

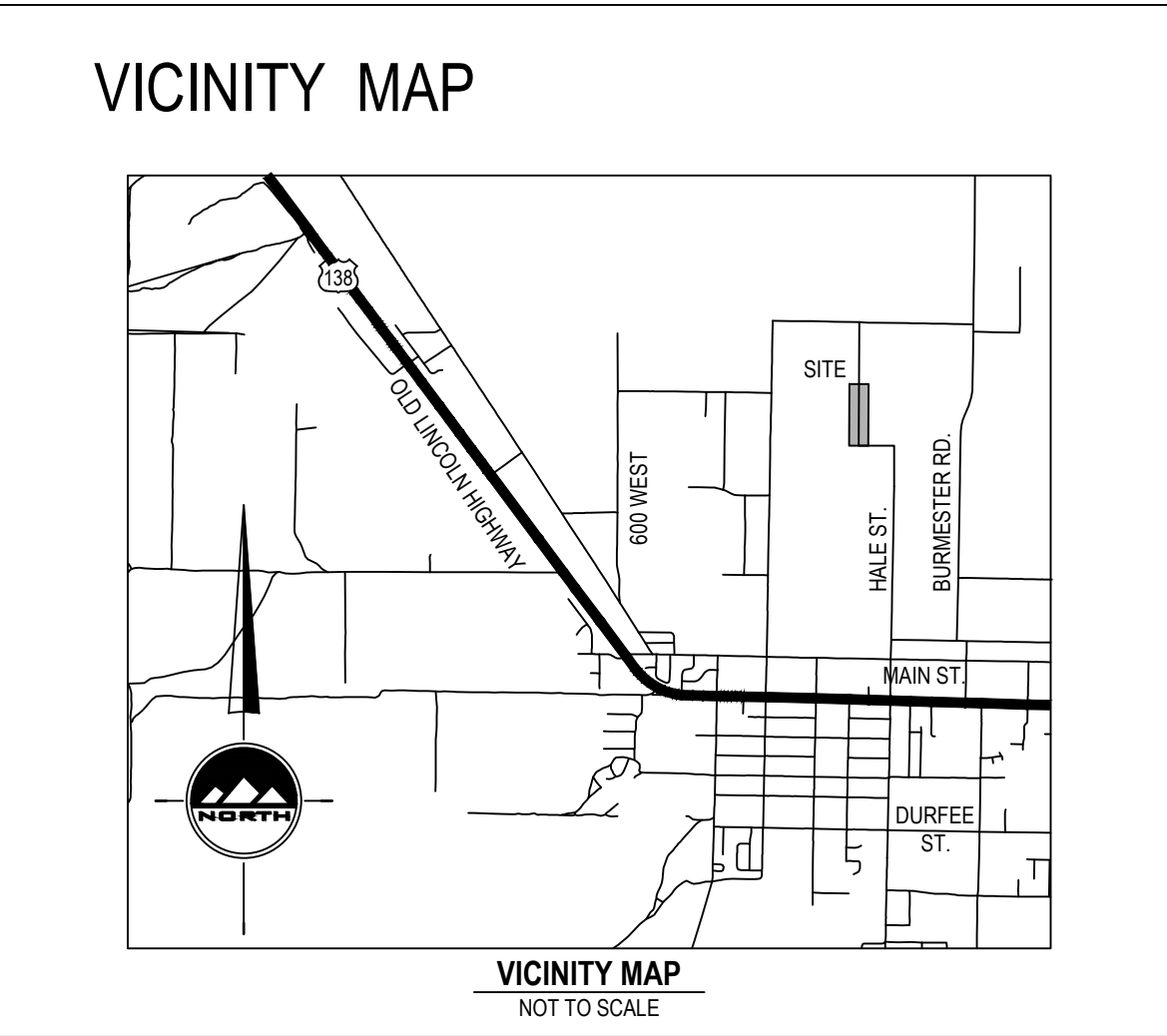
CONTRACTOR FURTHER AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER 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 THE OWNER OR ENGINEER.

NOTICE TO DEVELOPER/ CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

UTILITY DISCLAIMER

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.



GENERAL NOTES

- ALL WORK SHALL CONFORM TO GRANTSVILLE CITY STANDARDS & SPECIFICATIONS.
- CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

NOTES:  
- APPROVED BY CITY COUNCIL ON: \_\_\_\_\_  
- PRE-CONSTRUCTION MEETING DATE: \_\_\_\_\_

APPROVED FOR CONSTRUCTION ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
  
GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

APPROVED BY CITY ENGINEER, GRANTSVILLE CITY, UTAH  
FOR PUBLIC IMPROVEMENTS ONLY (SHEETS \_\_\_\_\_)  
  
CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
  
APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER FROM RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION THE PUBLIC INTEREST REQUIRES A MODIFICATION OR A DEPARTURE FROM THE CITY SPECIFICATIONS, OR THE APPROVED PLANS, THE CITY SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OR A DEPARTURE, AND TO SPECIFY THE MANNER WHICH THE SAME IS MADE.

WAYMAN SUBDIVISION

APPROXIMATELY 800 NORTH HALE STREET  
GRANTSVILLE, UTAH 84029

For Review  
09/14/2022 3:26:48 PM

COVER

PROJECT NUMBER  
10899A  
DRAWN BY  
H. CARTER  
PROJECT MANAGER  
D. KINSMAN  
PRINT DATE  
9/14/22  
CHECKED BY  
C. CHILD

C-000

WWW.ENSIGNENG.COM

FOR:  
REUBAN WAYMAN  
6094 NORTH BURMESTER ROAD  
GRANTSVILLE, UT 84029  
CONTACT:  
REUBEN WAYMAN  
PHONE: 801-403-6927

EN SIGN

THE STANDARD IN ENGINEERING

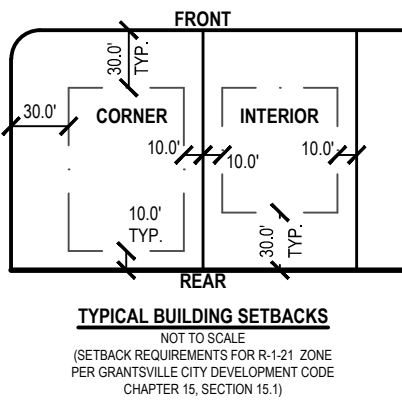
TOOELE  
169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

SALT LAKE CITY  
Phone: 801.255.0529

LAYTON  
Phone: 801.547.1100

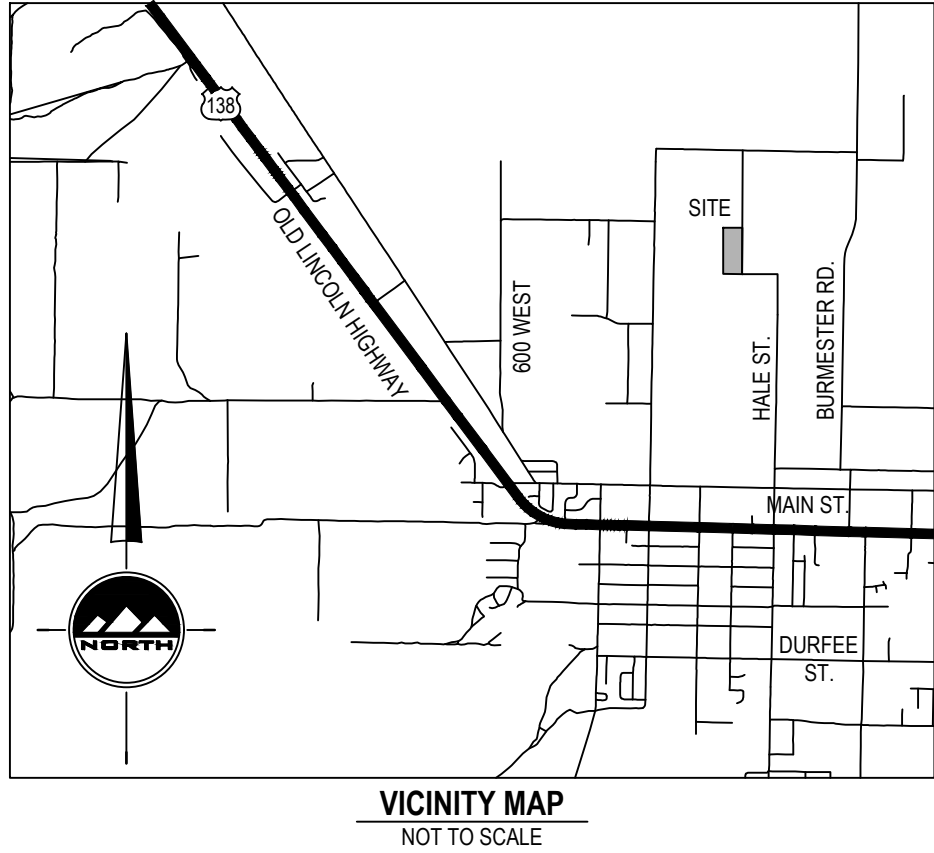
CEDAR CITY  
Phone: 435.866.1453

RICHFIELD  
Phone: 435.896.2983



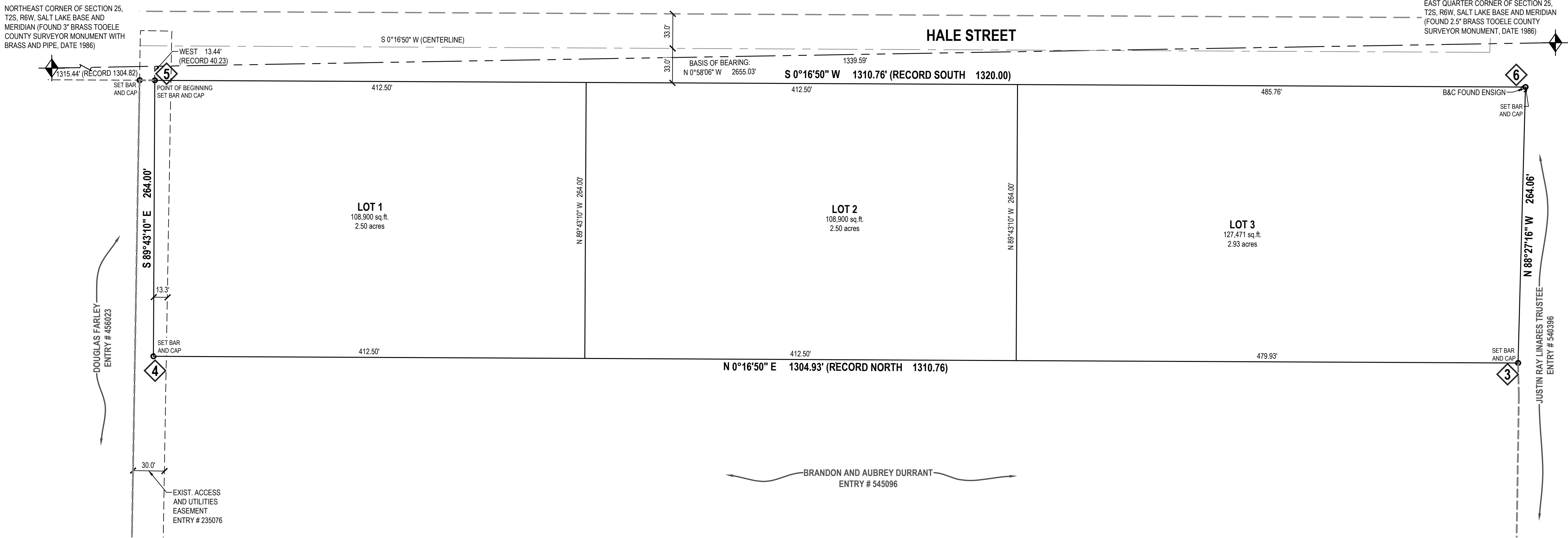
FINAL PLAT  
WAYMAN SUBDIVISION  
LOCATED IN THE NORTHEAST QUARTER  
OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 6 WEST, SALT LAKE BASE  
AND MERIDIAN, GRANTSVILLE CITY, TOOELE COUNTY, UTAH

BOUNDARY STATE PLANE COORDINATES (NAD27 US SURVEY FEET)		
POINT #	NORTHING	EASTING
3	7394066.41	1371819.30
4	7395370.90	1371839.89
5	7395366.78	1372103.61
6	7394056.46	1372083.12



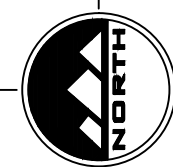
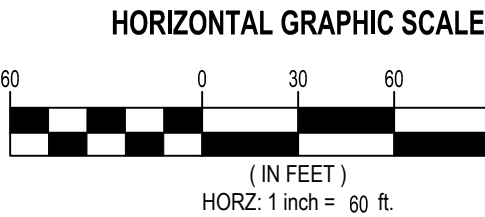
NOTES

- ALL PUBLIC STREETS ARE HEREBY DEDICATED TO GRANTSVILLE CITY AS RIGHT-OF-WAY ("R.O.W.") FOR PUBLIC USE.
- NO DRIVEWAYS SHALL BE CONSTRUCTED SO AS TO SLOPE TOWARD ANY STRUCTURES WITHOUT WRITTEN PERMISSION FROM GRANTSVILLE CITY ENGINEER.
- 5/8" X 24" REBAR AND CAP TO BE SET AT ALL LOT CORNERS UNLESS OTHERWISE INDICATED.
- UTILITIES SHALL HAVE THE RIGHT TO INSTALL, MAINTAIN, AND OPERATE THEIR EQUIPMENT ABOVE AND BELOW GROUND AND ALL OTHER RELATED FACILITIES WITHIN THE PUBLIC UTILITY EASEMENTS IDENTIFIED ON THIS PLAT MAP AS MAY BE NECESSARY OR DESIRABLE IN PROVIDING UTILITY SERVICES WITHIN AND WITHOUT THE LOTS IDENTIFIED HEREIN, INCLUDING THE RIGHT OF ACCESS TO SUCH FACILITIES AND THE RIGHT TO REQUIRE REMOVAL OF ANY OBSTRUCTIONS INCLUDING STRUCTURES, TREES AND VEGETATION THAT MAY BE PLACED WITHIN THE P.U.E. THE UTILITY MAY REQUIRE THE LOT OWNER TO REMOVE ALL STRUCTURES WITHIN THE P.U.E. AT THE LOT OWNER'S EXPENSE, OR THE UTILITY MAY REMOVE SUCH STRUCTURES AT THE LOT OWNER'S EXPENSE. AT NO TIME MAY ANY PERMANENT STRUCTURES BE PLACED WITHIN THE P.U.E. OR ANY OTHER OBSTRUCTION WHICH INTERFERES WITH THE USE OF THE P.U.E. WITHOUT THE PRIOR WRITTEN APPROVAL OF THE UTILITIES WITH FACILITIES IN THE P.U.E.
- LOTS 1 AND 2 ARE PAPER LOTS ONLY. LOT 3 IS THE ONLY ONE CURRENTLY BEING DEVELOPED.



LEGEND

	EXISTING STREET MONUMENT		PUBDE PUBLIC UTILITY & DRAINAGE EASEMENT		EASEMENT LINE
	PROPOSED STREET MONUMENT TO BE SET		BOUNDARY LINE		RIGHT OF WAY LINE
	SECTION CORNER		ADJACENT PROPERTY LINE		ADJACENT RIGHT OF WAY LINE
	5/8"X24" REBAR WITH YELLOW PLASTIC CAP, OR NAIL STAMPED "ENSGN ENG. & LAND SURV."		SECTION LINE		TANGENT LINE
	CENTER LINE				



SURVEYOR'S CERTIFICATE

I, Douglas J. Kinsman, do hereby certify that I am a Professional Land Surveyor, and that I hold License No. 334575, in accordance with Title 58, Chapter 22, of the Professional Engineers and Land Surveyors Act. I further certify that by authority of the owners I have completed a survey of the property described on this subdivision plat in accordance with Section 17-23-17, have verified all measurements, and have subdivided said tract of land into lots and streets, together with easements, hereafter to be known as

WAYMAN SUBDIVISION

and that the same has been correctly surveyed and monumented on the ground as shown on this plat.

BOUNDARY DESCRIPTION

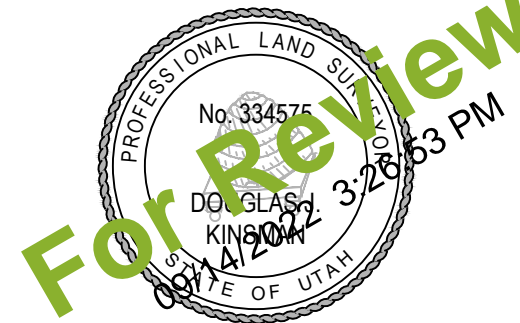
A parcel of land, situate in the Northeast Quarter of Section 25, Township 2 South, Range 6 West, Salt Lake Base and Meridian, said parcel also being located in Grantville, Tooele County, Utah, more particularly described as follows:

Beginning at a point on the West line of Hale Street, said point being South 0°58'00" East 1315.44 feet (Record Distance 1304.82 feet), and West 13.44 feet (Record Distance 40.23 feet) from the Northeast Corner of Section 25, Township 2 South, Range 6 West, Salt Lake Base and Meridian, and running:

thence South 0°16'50" West 1310.76 feet (Record Distance South 1320.00 feet) more or less along an ancient barb wire fence and along the said West line;  
thence North 88°27'16" West 264.06 feet more or less along an ancient barb wire fence;  
thence North 0°16'50" East 1304.93 feet (Record Distance North 1310.76 feet) more or less along and beyond an ancient barb wire fence;  
thence South 89°43'10" East 264.00 feet to the said West line of Hale Street, also to the Point of Beginning.

Contains 345,271 square feet or 7.93 acres.

Date  
Douglas J. Kinsman  
License no. 334575



OWNER'S DEDICATION

Know all men by these present that the undersigned are the owner(s) of the hereon described tract of land and hereby cause the same to be divided into lots together with easements as set forth hereafter to be known as:

WAYMAN SUBDIVISION

The undersigned owner(s) also hereby convey to Grantville City and to any and all public utility companies providing service to the hereon described tract a perpetual, non-exclusive easement over the public utility and drainage easements shown on this plat, the same to be used for sewer, water lines appurtenances, fire facilities, drainage facilities and the installation, maintenance and operation of public utility service lines and facilities. The undersigned owners also hereby convey any other easements as shown and/or noted on this plat to the parties indicated and for the purposes shown herein.

In witness whereof I / we have hereunto set my / our hand this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_\_\_.

By: REUBAN WAYMAN \_\_\_\_\_ By: \_\_\_\_\_

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH  
County of Tooele

JS.S.

On the \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_\_\_, personally appeared before me, the undersigned Notary Public, in and for said County of \_\_\_\_\_ in the State of Utah, who after being duly sworn, acknowledged to me that He/She is the \_\_\_\_\_ of \_\_\_\_\_ a Limited Liability Company and that He/She signed the Owner's Dedication freely and voluntarily for and in behalf of said Limited Liability Company for the purposes therein mentioned and acknowledged to me that said Corporation executed the same.

MY COMMISSION EXPIRES: \_\_\_\_\_  
RESIDING IN \_\_\_\_\_ COUNTY.

FINAL PLAT  
WAYMAN SUBDIVISION

LOCATED IN THE NORTHEAST QUARTER  
OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 6 WEST, SALT LAKE  
BASE AND MERIDIAN, GRANTSVILLE CITY, TOOELE COUNTY, UTAH

TOOELE COUNTY RECORDER

RECORDED # \_\_\_\_\_  
STATE OF UTAH, COUNTY OF TOOELE, RECORDED AND FILED AT THE  
REQUEST OF: \_\_\_\_\_  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
FEES \_\_\_\_\_ TOOELE COUNTY RECORDER

CITY FIRE DEPARTMENT APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY THE GRANTSVILLE CITY FIRE DEPT.

GRANTSVILLE CITY FIRE CHIEF

GRANTSVILLE CITY PUBLIC WORKS APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY THE GRANTSVILLE CITY PUBLIC WORKS.

GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

PLANNING COMMISSION APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY THE GRANTSVILLE CITY PLANNING COMMISSION.

CHAIR, GRANTSVILLE CITY PLANNING COMMISSION

TOOELE COUNTY SURVEY DEPARTMENT

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY THE TOOELE COUNTY SURVEY DEPARTMENT.

RECORD OF SURVEY FILE # \_\_\_\_\_

TOOELE COUNTY SURVEY DEPT. DIRECTOR

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT  
AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN  
THIS OFFICE.

GRANTSVILLE CITY ENGINEER DATE

TOOELE COUNTY TREASURER

I HEREBY CERTIFY THAT PROPERTY TAXES DUE AND OWNING HAVE BEEN  
PAID IN FULL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
FOR PARCEL NO. \_\_\_\_\_

TOOELE COUNTY TREASURER

CITY MAYOR APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY THE GRANTSVILLE CITY MAYOR.

GRANTSVILLE CITY MAYOR

CITY ATTORNEY'S APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY THE GRANTSVILLE CITY ATTORNEY.

GRANTSVILLE CITY ATTORNEY

DEVELOPER

REUBEN WAYMAN  
6094 NORTH BURMESTER ROAD  
GRANTSVILLE, UTAH, 84029  
RWAYMAN1995@GMAIL.COM

SHEET 1 OF 1

PROJECT NUMBER: 10899A

MANAGER: D. KINSMAN

DRAWN BY: T. HUSSEY

CHECKED BY: D. KINSMAN

DATE: 9/14/22



TOOELE  
189 North Main Street Unit 1  
Tooele, Utah 84074  
Phone: 435.843.3590  
Fax: 435.578.0108

WWW.ENSGNENG.COM

SALT LAKE CITY  
Phone: 801.251.0525  
LAYTON  
Phone: 801.547.1100  
CEDAR CITY  
Phone: 435.865.1453  
RICHFIELD  
Phone: 435.555.2883



**GRANTSVILLE GENERAL NOTES**

- ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS ON ALL KINDS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE. FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CURB, GUTTER, AND SIDEWALK, FOUND TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TOOELE COUNTY SURVEYORS REQUIREMENTS.
- ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SPOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
- REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR MORE DETAILS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- ALL CITY MAINTAINED UTILITIES INCLUDING: WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS. WATER LINES, WATER MAINS, IRRIGATION, STREET LIGHTING, AND POWER, AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS. NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1 .DWG COPY, 1 .PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPs WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOT OUT SEPARATOR.
- ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORICULTURE.
- WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET FENCING ALONG THE BACK OF SIDEWALK, THE DEVELOPMENT SHALL ALSO BE REQUIRED PUT IN A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERGATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
- CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO: SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATER WAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
- CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND UP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

**GRANTSVILLE CITY GRADING NOTES**

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

**GRANTSVILLE CITY TRAFFIC NOTES**

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKINGS, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNER.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE. IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 108 (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A 2" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- PAVING ASPHALT BINDER GRADE SHALL BE PG 48-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE 1/2 INCH FOR RESIDENTIAL AND COLLECTOR ROADS. NO MORE THAN 1% RAP REQUIRED ASPHALT PAVEMENT BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 1% PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3% AIR VOIDS.
- POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
- ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPING, GRANULAR AND FLOWABLE, 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS POMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS POMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
- ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

**GRANTSVILLE CITY WATER NOTES**

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
- ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPERS EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
- FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPERS EXPENSE) AND INSTALLED BY DEVELOPER.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY. REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER); IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPER'S EXPENSE.
- ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
- ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNER.
- ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIRES STAINLESS STEEL TIE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL TIE-DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUT-DOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNER, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.

**GRANSTVILLE CITY FIRE DEPARTMENT NOTES**

- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES. PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5' MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR. THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV IS/NOT FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF ITS CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
- POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- ROADS AND ACCESSSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAPS) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

**ABBREVIATIONS**

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BMP	BEST MANAGEMENT PRACTICES
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
CB	CURB
C	CATCH BASIN
CF	CURB FACE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EDA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HP	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
PV	POST INDICATOR VALVE
PRC	POINT OF REVERSE CURVATURE
PRO	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROAD DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SIDEWALK
SWL	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TOG	TOP OF GRATE
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TYP	TYPICAL
VC	VERTICAL CURVE
WIV	WALL INDICATOR VALVE
WL	WATER LINE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

**LEGEND**

	SECTION CORNER		EXISTING EDGE OF ASPHALT
	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
	PROPOSED MONUMENT		EXISTING STRIPING
	EXISTING REBAR AND CAP		PROPOSED STRIPING
	SET ENSIGN REBAR AND CAP		EXISTING FENCE
	EXISTING WATER METER		PROPOSED FENCE
	PROPOSED WATER METER		EXISTING FLOW LINE
	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
	PROPOSED WATER MANHOLE		GRADE BREAK
	EXISTING WATER BOX		EXISTING STORM DRAIN LINE
	EXISTING WATER VALVE		PROPOSED STORM DRAIN LINE
	PROPOSED WATER VALVE		ROOF DRAIN LINE
	EXISTING FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE HYDRANT		HIGHWATER LINE
	PROPOSED FIRE DEPARTMENT CONNECTION		EXISTING SANITARY SEWER
	EXISTING SECONDARY WATER VALVE		PROPOSED SANITARY SEWER LINE
	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN. SWR. SERVICE LINE
	EXISTING IRRIGATION BOX		EXISTING LAND DRAIN LINE
	EXISTING IRRIGATION VALVE		PROPOSED LAND DRAIN LINE
	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN SERVICE LINE
	EXISTING SANITARY SEWER MANHOLE		EXISTING CULINARY WATER LINE
	PROPOSED SANITARY SEWER MANHOLE		PROPOSED CULINARY WATER LINE
	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE LINE
	EXISTING STORM DRAIN CLEAN OUT BOX		EXISTING SECONDARY WATER LINE
	PROPOSED STORM DRAIN CLEAN OUT BOX		PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX		PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN		EXISTING IRRIGATION LINE
	PROPOSED STORM DRAIN CATCH BASIN		PROPOSED IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX		EXISTING OVERHEAD POWER LINE
	PROPOSED STORM DRAIN COMBO BOX		EXISTING ELECTRICAL LINE
	EXISTING STORM DRAIN CLEAN OUT		EXISTING GAS LINE
	EXISTING STORM DRAIN CULVERT		EXISTING TELEPHONE LINE
	PROPOSED STORM DRAIN CULVERT		ACCESSIBLE ROUTE
	TEMPORARY SAG INLET PROTECTION		SAW CUT LINE
	TEMPORARY IN-LINE INLET PROTECTION		STRAW WATTLE
	ROOF DRAIN		TEMPORARY BERM
	EXISTING ELECTRICAL MANHOLE		TEMPORARY SILT FENCE
	EXISTING ELECTRICAL BOX		LIMITS OF DISTURBANCE
	EXISTING TRANSFORMER		EXISTING WALL
	EXISTING UTILITY POLE		PROPOSED WALL
	EXISTING LIGHT		EXISTING CONTOURS
	PROPOSED LIGHT		PROPOSED 0.5' CONTOURS
	EXISTING GAS METER		BUILDABLE AREA WITHIN SETBACKS
	EXISTING GAS MANHOLE		PUBLIC DRAINAGE EASEMENT
	EXISTING GAS VALVE		EXISTING ASPHALT TO BE REMOVED
	EXISTING TELEPHONE MANHOLE		PROPOSED ASPHALT
	EXISTING TELEPHONE BOX		EXISTING CURB AND GUTTER
	EXISTING TRAFFIC SIGNAL BOX		PROPOSED CURB AND GUTTER
	EXISTING CABLE BOX		PROPOSED REVERSE PAN CURB AND GUTTER
	EXISTING BOLLARD		TRANSITION TO REVERSE PAN CURB
	PROPOSED BOLLARD		TYPE D MOUNTABLE CURB AND GUTTER
	EXISTING SIGN		CONCRETE TO BE REMOVED
	PROPOSED SIGN		EXISTING CONCRETE
	EXISTING SPOT ELEVATION		PROPOSED CONCRETE
	PROPOSED SPOT ELEVATION		STAMPED CONCRETE
	EXISTING FLOW DIRECTION		BUILDING TO BE REMOVED
	EXISTING TREE		EXISTING BUILDING
	DENSE VEGETATION		PROPOSED BUILDING



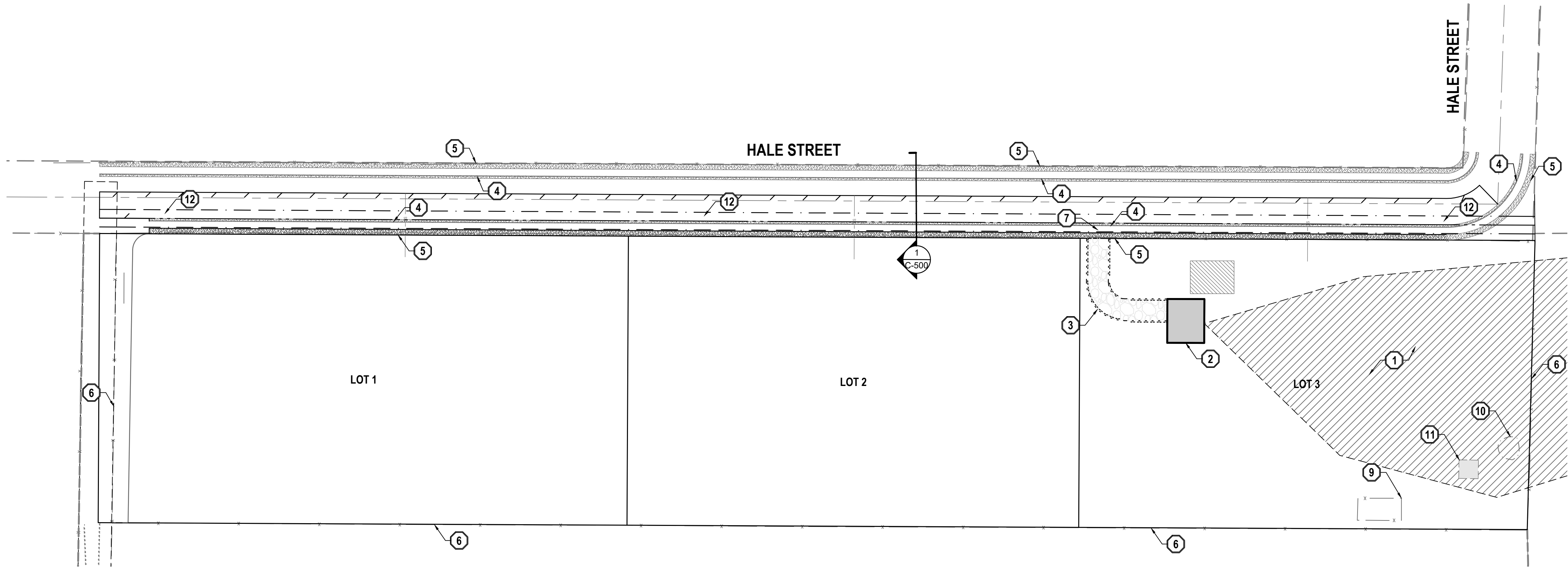
811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
TOWNSHIP 2 SOUTH, RANGE 6 WEST  
SALT LAKE BASE AND MERIDIAN  
  
ELEV = 4261.64'



- GENERAL NOTES
1.

ALL WORK TO COMPLY WITH THE GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
2.

ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3.

ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
4.

ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
5.

THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
6.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS, BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
7.

ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY OR APWA STANDARD PLANS AND SPECIFICATIONS.
8.

ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
9.

THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
10.

NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
11.

THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
12.

LOTS 1 AND 2 ARE PAPER LOTS ONLY. LOT 3 IS THE ONLY ONE CURRENTLY BEING DEVELOPED.

- SCOPE OF WORK:
- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

EXISTING WETLAND AREA NOT TO BE DISTURBED DURING CONSTRUCTION.
- 2

PROPOSED HOME LOCATION.
- 3

PROPOSED DRIVEWAY LOCATION.
- 4

FUTURE 30" TYPE "A" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205 AND SPECIFICATIONS.
- 5

FUTURE 6" THICK CONCRETE SIDEWALK PER APWA STANDARD PLAN NO. 231 AND SPECIFICATIONS.
- 6

EXISTING FENCE TO REMAIN OR BE REPLACED.
- 7

CULVERT UNDER ROAD PER DETAIL 8/C-500.
- 8

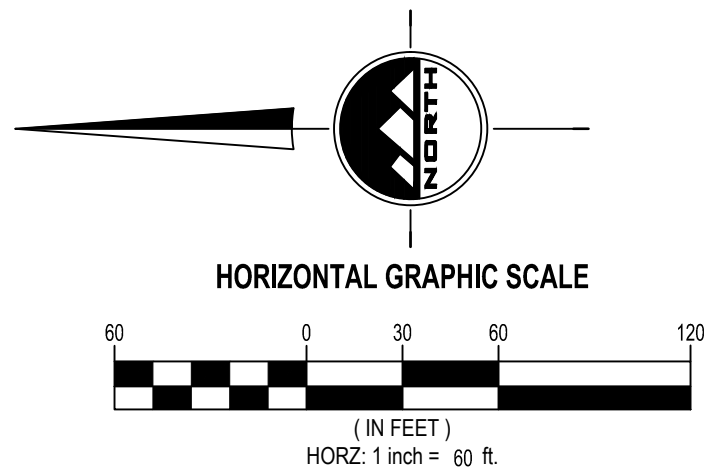
NOT USED
- 9

EXISTING SITE AMENITIES TO REMAIN.
- 10

EXISTING CATTLE TROUGH TO REMAIN.
- 11

EXISTING PUMP HOUSE SHED TO REMAIN.
- 12

DITCH IN PLACE OF CURB AND GUTTER PER DETAIL 2/C-500. DITCH TO BE USED IN PLACE OF CURB AND GUTTER FOR THE FIRST LOT. CURB AND GUTTER TO BE INSTALLED AT LATER DATE ALONG WITH SURROUNDING AREA.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT ON THIS SHEET.



EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

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LAYTON

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FOR:  
REUBEN WAYMAN  
6094 NORTH BURMESTER ROAD  
GRANTSVILLE, UT 84029  
CONTACT:  
REUBEN WAYMAN  
PHONE: 801-403-6927

WAYMAN SUBDIVISION

APPROXIMATELY 800 NORTH HALE STREET

GRANTSVILLE, UTAH 84029

For Review

09/14/2022 3:26:56 PM

SITE PLAN

PROJECT NUMBER  
10899A  
PRINT DATE  
9/14/22  
DRAWN BY  
H. CARTER  
CHECKED BY  
C. CHILD  
PROJECT MANAGER  
D. KINSMAN

C-100

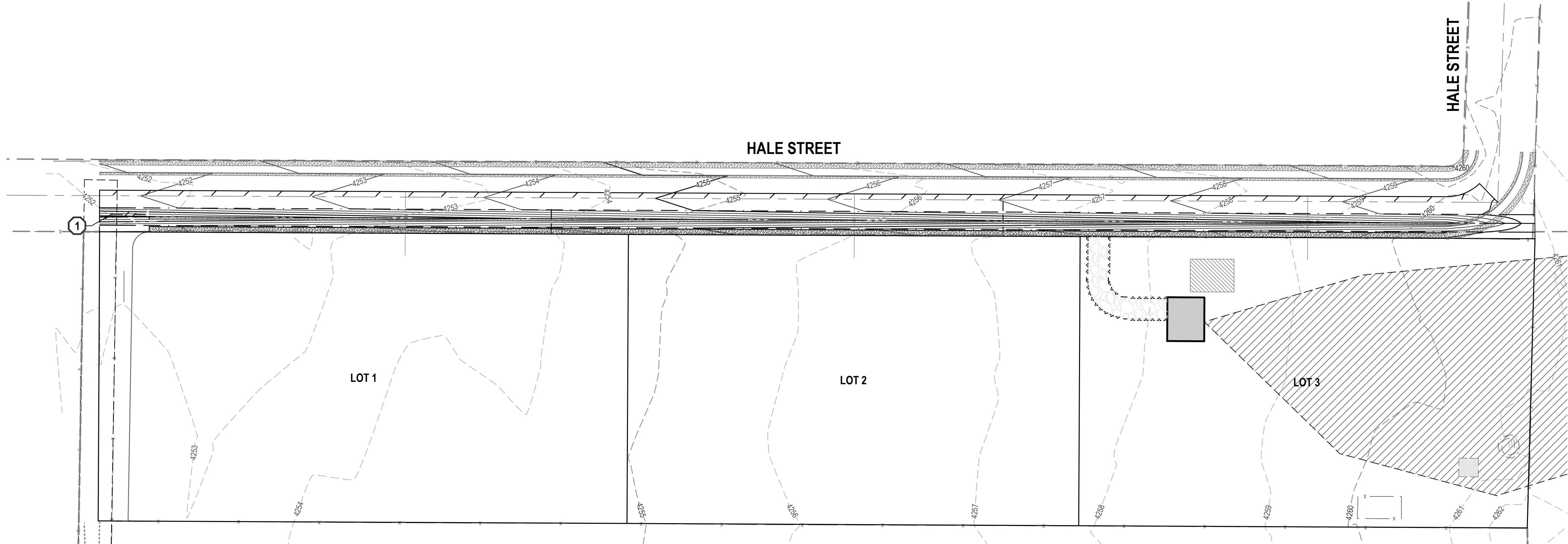
811

Know what's below.  
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CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
TOWNSHIP 2 SOUTH, RANGE 6 WEST  
SALT LAKE BASE AND MERIDIAN  
  
ELEV = 4261.64'



- GENERAL NOTES
1. ALL WORK TO COMPLY WITH GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.

2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.

3. ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE ENGINEER OR GOVERNING AGENCY POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.

4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.

5. LANDSCAPED AREAS REQUIRE SUBGRADE TO BE MAINTAINED AT A SPECIFIC ELEVATION BELOW FINISHED GRADE AND REQUIRE SUBGRADE TO BE PROPERLY PREPARED AND SCARIFIED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.

6. SLOPE ALL LANDSCAPED AREAS AWAY FROM BUILDING FOUNDATIONS TOWARD CURB AND GUTTER OR STORM DRAIN INLETS.

7. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.

8. ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY'S OR APWA STANDARD PLANS AND SPECIFICATIONS.

9. ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.

10. ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.

11. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.

12. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.

13. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

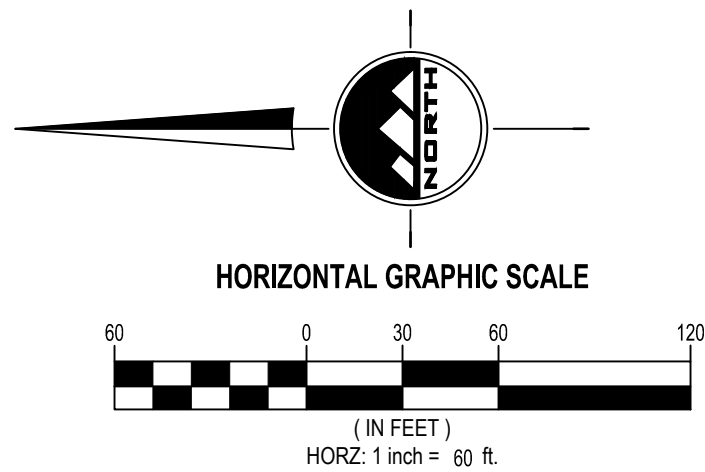
14. LOTS 1 AND 2 ARE PAPER LOTS ONLY. LOT 3 IS THE ONLY ONE CURRENTLY BEING DEVELOPED.
- SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. 100 YEAR OVERFLOW PATH.

2. INSTALL DRAINAGE SWALE ALONG PROPERTY LINE PER DETAIL 2/C-500.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT ON THIS SHEET.



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WAYMAN SUBDIVISION

APPROXIMATELY 800 NORTH HALE STREET  
GRANTSVILLE, UTAH 84029

For Review

09/14/2022 3:26:57 PM

GRADING AND  
DRAINAGE PLAN

PROJECT NUMBER  
10899A

PRINT DATE  
9/14/22

DRAWN BY  
H. CARTER

CHECKED BY  
C. CHILD

PROJECT MANAGER  
D. KINSMAN

C-200



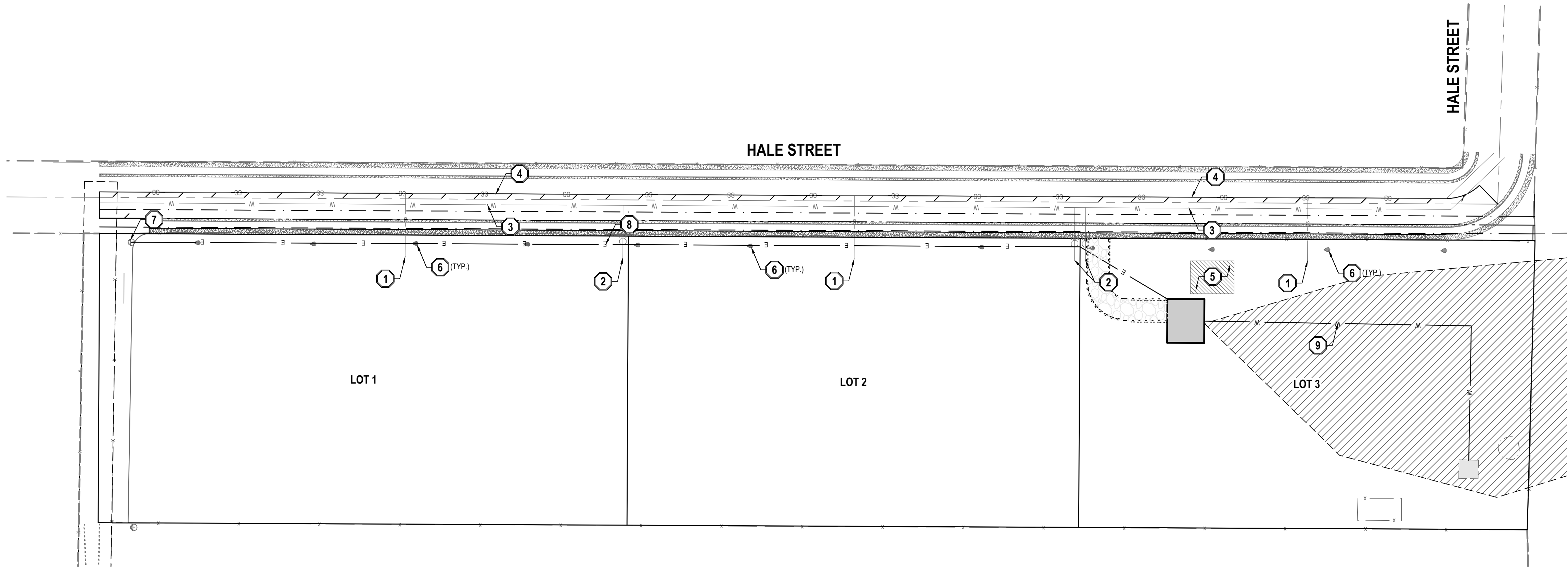
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BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
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SALT LAKE BASE AND MERIDIAN  
ELEV = 4261.64'



- GENERAL NOTES
1.

ALL WORK TO COMPLY WITH THE GRANTSVILLE CITY AND APWA STANDARDS AND SPECIFICATIONS.
2.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
3.

ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY AND APWA STANDARD PLANS AND SPECIFICATIONS.
4.

ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY AND APWA STANDARD PLANS AND SPECIFICATIONS.
5.

NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
6.

DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER TOOELE COUNTY'S STANDARDS AND SPECIFICATIONS. DEFLECTION APPROVED BY TOOELE COUNTY INSPECTOR. TOOELE COUNTY RESERVES THE RIGHT TO LOOP RATHER THAN DEFLECT AT THE COUNTY'S DISCRETION PER APWA MANUFACTURES GUIDELINES.
7.

PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION.
8.

THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
9.

THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER TOOELE COUNTY'S STANDARDS AND SPECIFICATIONS.
11.

LOTS 1 AND 2 ARE PAPER LOTS ONLY. LOT #3 IS THE ONLY ONE CURRENTLY BEING DEVELOPED.

- SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

FUTURE 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN NO. 431, TYPICAL.
- 2

FUTURE 1" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 1" METER SET PER APWA STANDARD PLAN NO. 521 LOCATED APPROX. 5' FROM LOT CORNER, TYPICAL.
- 3

FUTURE CULINARY WATER LINE.
- 4

FUTURE SANITARY SEWER LINE.
- 5

SEPTIC TANK TO BE USED IN PLACE OF SANITARY SEWER.
- 6

EXISTING WATER SPIGOT TO BE REMOVED OR TO REMAIN AND BE PROTECTED IN PLACE.
- 7

EXISTING POWER STATION.
- 8

POWER LINE FOR LOT 3.
- 9

EXISTING CULINARY WATER LINE.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT ON THIS SHEET.

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WAYMAN SUBDIVISION

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GRANTSVILLE, UTAH 84029

For Review

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UTILITY PLAN

PROJECT NUMBER  
10899A

PRINT DATE  
9/14/22

DRAWN BY  
H. CARTER

CHECKED BY  
C. CHILD

PROJECT MANAGER  
D. KINSMAN

C-300

The figure shows a north arrow pointing towards the top of the page. Below it is a horizontal graphic scale bar with markings for 0, 30, 60, and 120 feet. The text below the scale bar reads: ( IN FEET ) and HORZ: 1 inch = 60 ft.

811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
TOWNSHIP 2 SOUTH, RANGE 6 WEST  
SALT LAKE BASE AND MERIDIAN  
  
ELEV = 4261.64'

REVISION SCHEDULE			
NUMBER	DATE	AUTHOR	COMPANY REPRESENTATIVE SIGNATURE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

- GENERAL NOTES
1.

THIS PLAN IS DESIGNED AS A FIRST APPRAISAL OF NECESSARY MEANS TO PROTECT THE WATERS OF THE STATE FROM POTENTIAL POLLUTION. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO ADD WARRANTED BEST MANAGEMENT PRACTICES (BMPs) AS NECESSARY, MODIFY THOSE SHOWN AS APPROPRIATE, AND DELETE FROM THE PROJECT THOSE FOUND TO BE UNNECESSARY. FEDERAL AND STATE LAW ALLOWS THESE UPDATES TO BE MADE BY THE OWNER/OPERATOR ONSITE AND RECORDED BY THE OWNER/OPERATOR ON THE COPY OF THE SWPPP KEPT ONSITE.
2.

DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. HOWEVER, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3.

RESEED DISTURBED LAND WITH NATIVE GRASS MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE TO STABILIZE SOILS IF LAND IS NOT TO BE RE-WORKED WITHIN 14 CALENDAR DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
4.

DETAILS SHOWN ARE TO BE EMPLOYED TO PROTECT RUNOFF AS APPROPRIATE DURING CONSTRUCTION. NOT ALL DETAILS ARE NECESSARY AT ALL PHASES OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE APPROPRIATE BEST MANAGEMENT PRACTICES AT THE APPROPRIATE PHASE OF CONSTRUCTION. SEE SWPPP FOR BMP IMPLEMENTATION SCHEDULE.
5.

VARIOUS BEST MANAGEMENT PRACTICES HAVE BEEN SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE AND RECONFIGURE THESE BMPs TO OTHER LOCATIONS IF PREFERRED, PROVIDED THE INTENT OF THE DESIGN IS PRESERVED.
6.

NOT ALL POSSIBLE BMPs HAVE BEEN SHOWN. THE CONTRACTOR IS RESPONSIBLE TO APPLY CORRECT MEASURES TO PREVENT THE POLLUTION OF STORM WATER PER PROJECT SWPPP.
7.

A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE.
8.

LOT 1 AND LOT 2 ARE PAPER LOTS ONLY. LOT 3 IS THE ONLY ONE CURRENTLY BEING DEVELOPED.

- SCOPE OF WORK:
- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

SILT FENCE AROUND ENTIRE CONSTRUCTION SITE PER DETAIL 5/C-500.
- 2

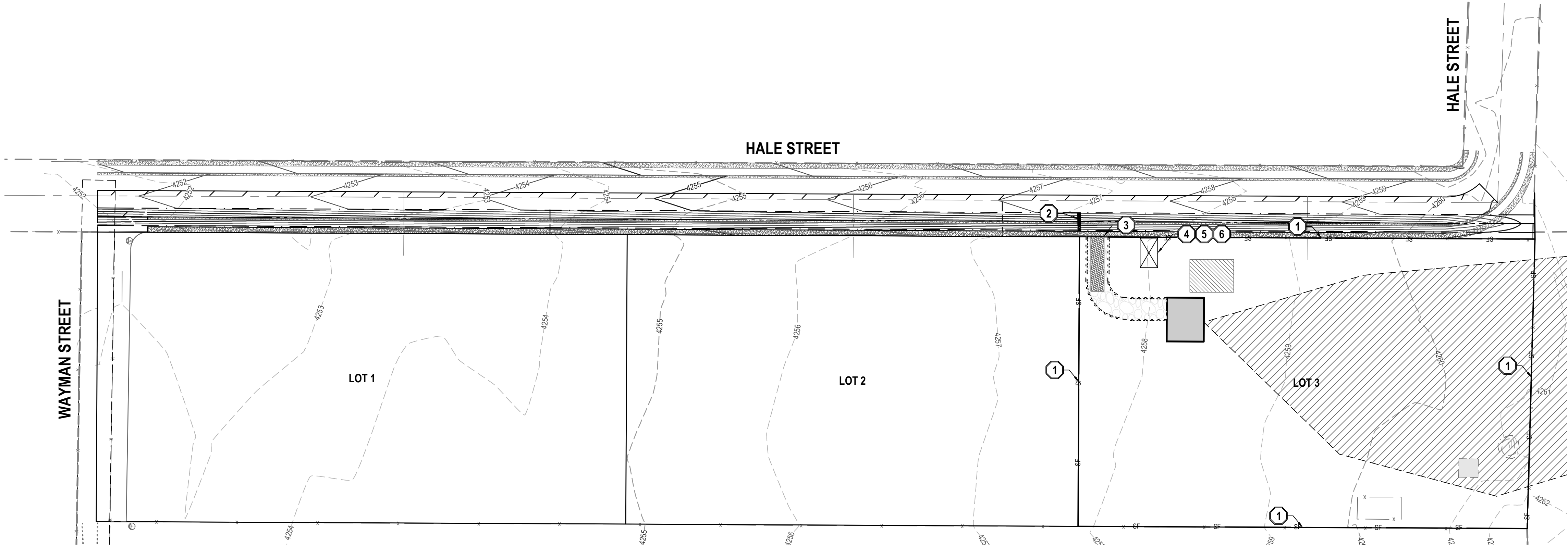
EROSION CONTROL WATTLE
- 3

RECOMMENDED VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 3/C-500.
- 4

PORTABLE TOILET PER DETAIL 4/C-500.
- 5

SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, STAGING, DUMPSTER, AND MATERIAL STORAGE AREA.
- 6

SUGGESTED STOCKPILE AREA.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT ON THIS SHEET.



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EROSION CONTROL PLAN

PROJECT NUMBER  
10899A

PRINT DATE  
9/14/22

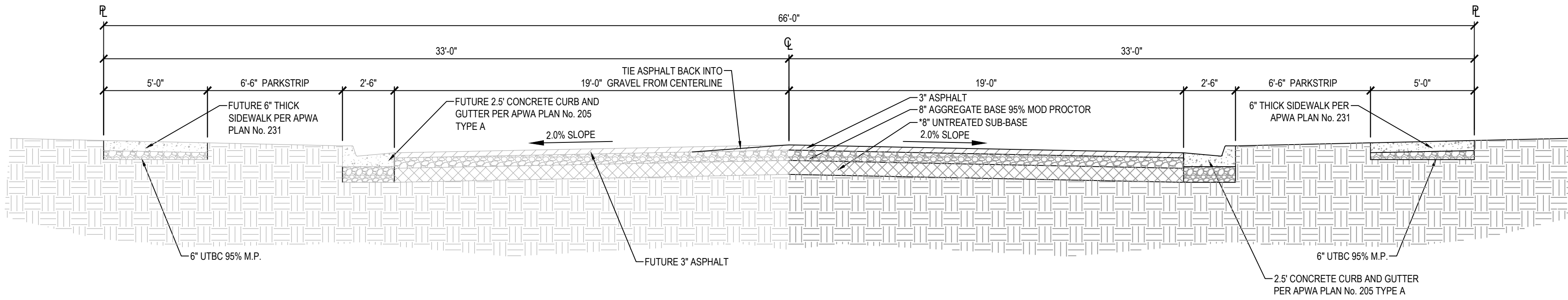
DRAWN BY  
H. CARTER

CHECKED BY  
C. CHILD

PROJECT MANAGER  
D. KINSMAN

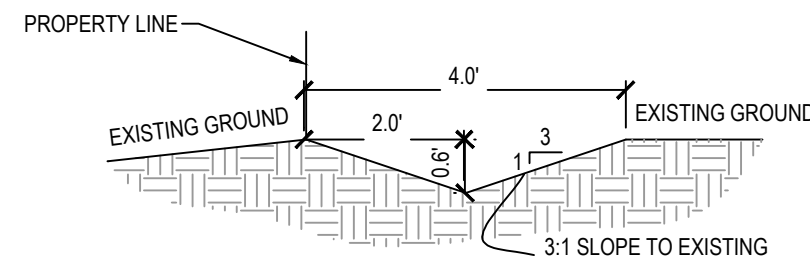
C-400





1 TYPICAL 66 FOOT ROAD CROSS SECTION

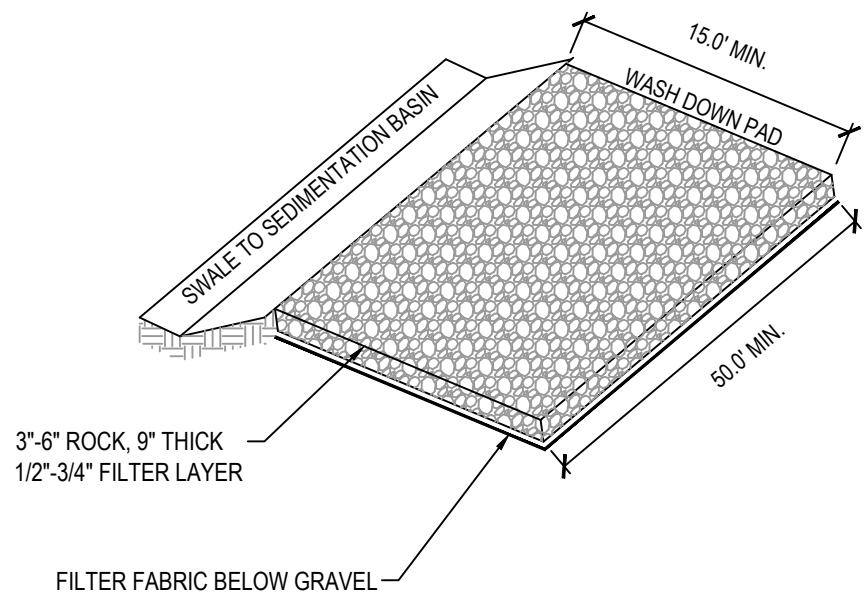
SCALE: NONE



- NOTES:
1. PROTECT CHANNEL FROM EROSION AS NECESSARY WITH RIP RAP. EROSION CONTROL MATS AND/OR ROCK CHECK DAMS
  2. SEDIMENT TRAPS REQUIRED AT 200' SPACING OR AS SHOWN ON PLANS, WHICHEVER IS MORE STRINGENT.
  3. FOR SWALES STEEPER THAN 5%, STABILIZE SWALES WITH RIP RAP LINING IN SWALE AND ROCK CHECK DAMS SPACED AT EVERY THREE FEET OF DROP IN FLOWLINE.

2 DITCH DETAIL

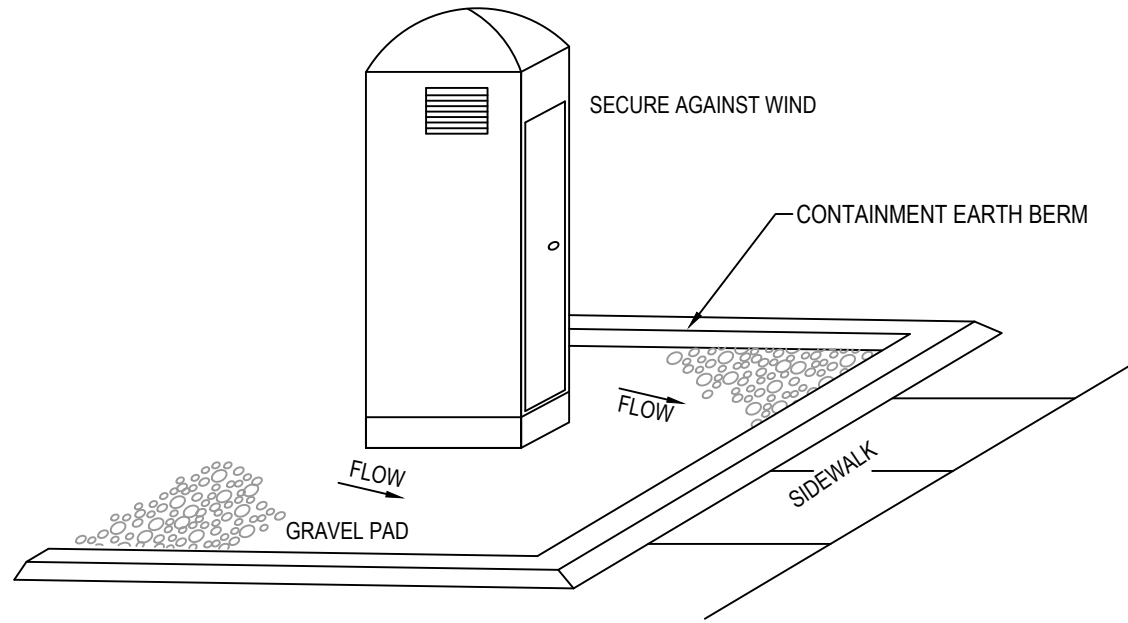
SCALE: NONE



- NOTE:
1. PLACE SIGN ADJACENT TO ENTRANCE "CONSTRUCTION TRAFFIC ONLY - ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT SITE AT THIS LOCATION"

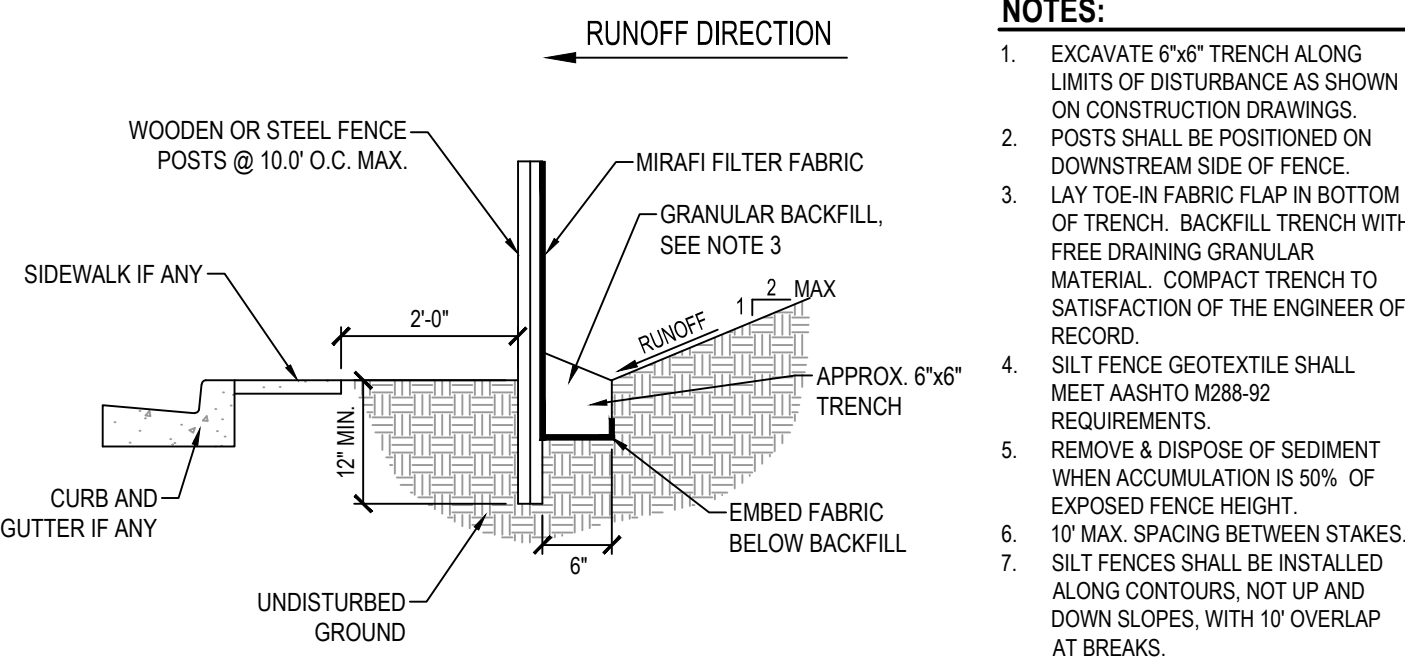
3 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NONE



4 PORTABLE TOILET

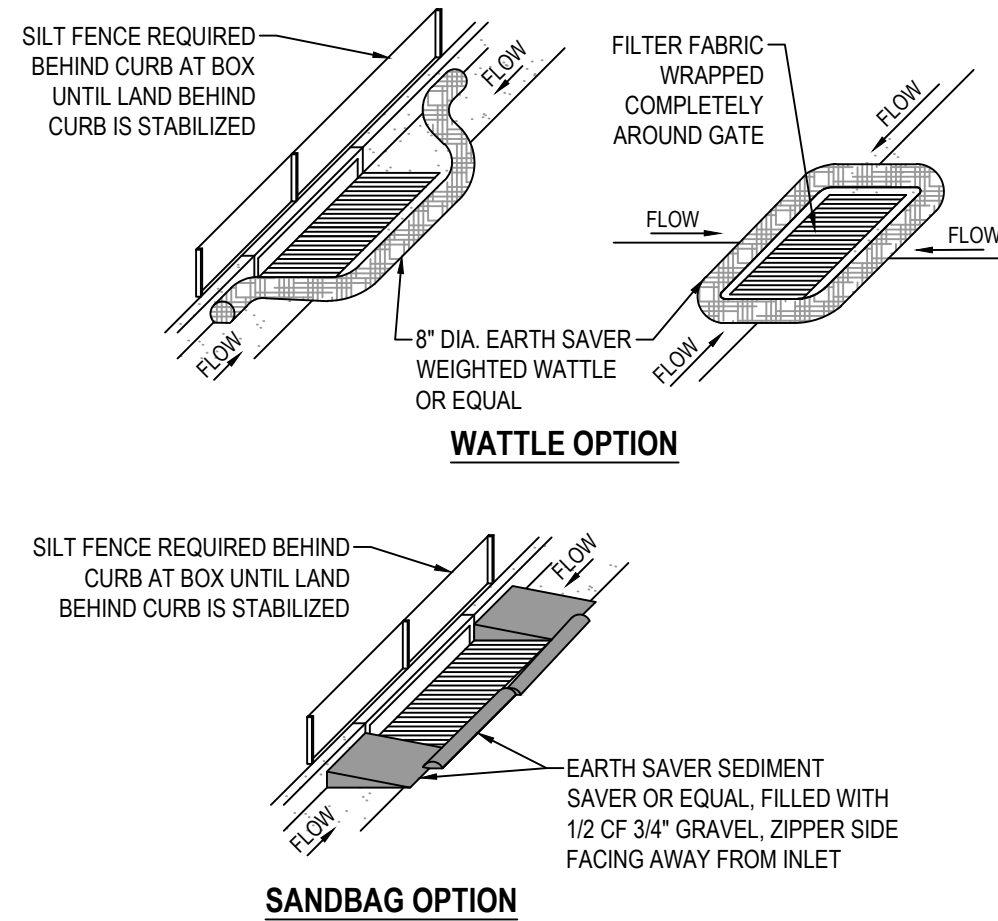
SCALE: NONE



- NOTES:
1. EXCAVATE 6"x6" TRENCH ALONG LIMITS OF DISTURBANCE AS SHOWN ON CONSTRUCTION DRAWINGS.
  2. POSTS SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE.
  3. LAY TOE-IN FABRIC FLAP IN BOTTOM OF TRENCH. BACKFILL TRENCH WITH FREE DRAINING GRANULAR MATERIAL. COMPACT TRENCH TO SATISFACTION OF THE ENGINEER OF RECORD.
  4. SILT FENCE GEOTEXTILE SHALL MEET AASHTO M288-92 REQUIREMENTS.
  5. REMOVE & DISPOSE OF SEDIMENT WHEN ACCUMULATION IS 50% OF EXPOSED FENCE HEIGHT.
  6. 10' MAX. SPACING BETWEEN STAKES. SILT FENCES SHALL BE INSTALLED ALONG CONTOURS, NOT UP AND DOWN SLOPES, WITH 10' OVERLAP AT BREAKS.

5 TEMPORARY SILT FENCE

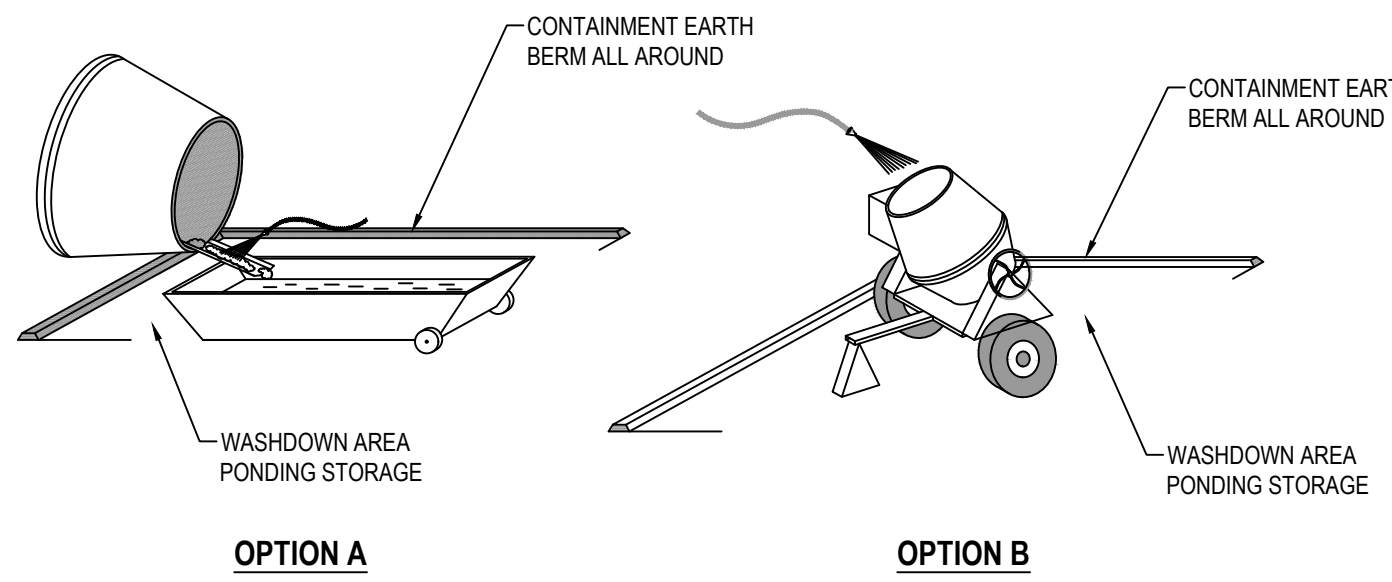
SCALE: NONE



- NOTES:
1. PLACE WATTLES OR GRAVEL BAGS TIGHT AGAINST CURB TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN CURB AND WATTLE/BAG.
  2. PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP CURB OR ROAD CENTERLINE.
  3. INSPECT INLET PROTECTION AFTER EVERY LARGE STORM EVENT AND AT LEAST BI-WEEKLY, OR PER SWPPP REQUIREMENTS, WHICHEVER IS MORE STRINGENT, TO ENSURE THAT SEDIMENT CONTROL IS MEETING ITS DESIGN INTENT. MAINTAIN AND/OR REPLACE AS NEEDED.
  4. REMOVE SEDIMENT ACCUMULATED WHEN IT REACHES 50% OF GRAVEL BAG OR WATTLE HEIGHT.
  5. CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF INLET PROTECTION. THE ALTERNATIVE METHOD SHALL BE APPROVED BY THE CITY INSPECTOR AND THE ENGINEER OF RECORD.
  6. BEFORE PLACEMENT OF CURB, STABILIZATION OF LAND BEHIND CURB, AND/OR PAVING, MAINTAIN TOP OF INLET AT 6" ABOVE GRADE, AND SURROUND WITH SILT FENCE FOR SEDIMENTATION AROUND BOX. MAINTAIN SILT FENCE BEHIND BOX UNTIL LAND BEHIND CURB IS STABILIZED.

6 SAG INLET PROTECTION

SCALE: NONE

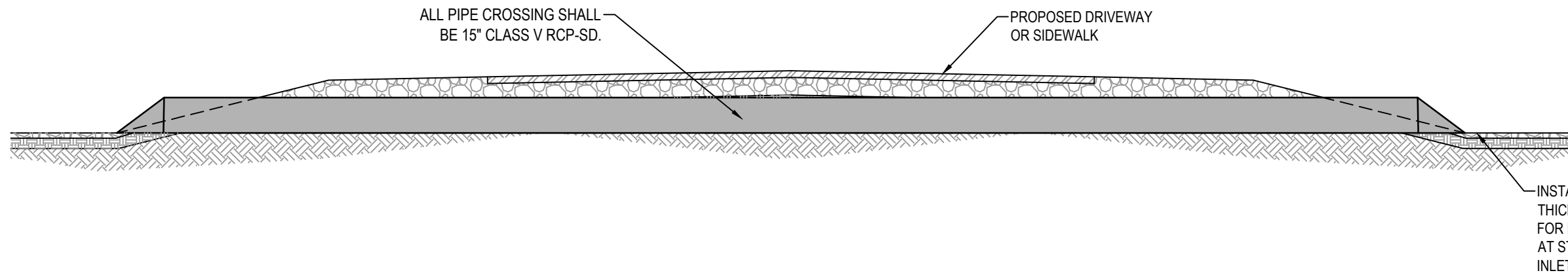


OPTION A

OPTION B

7 CONCRETE WASTE MANAGEMENT

SCALE: NONE



8 TYPICAL STORM DRAIN LINE CROSSING

SCALE: NONE



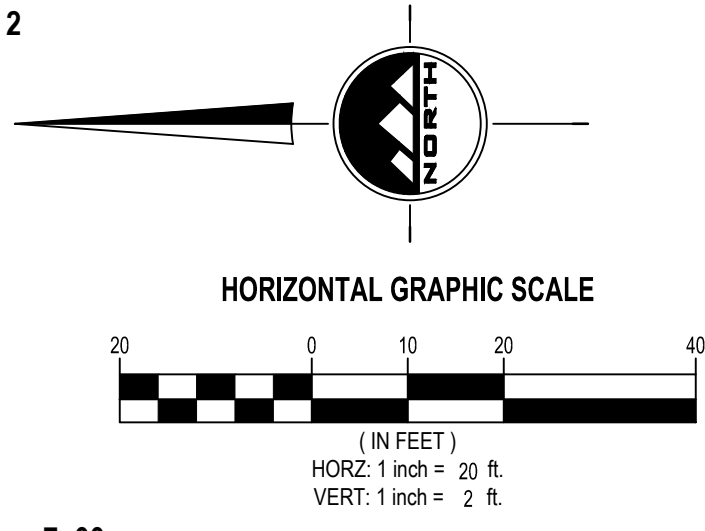
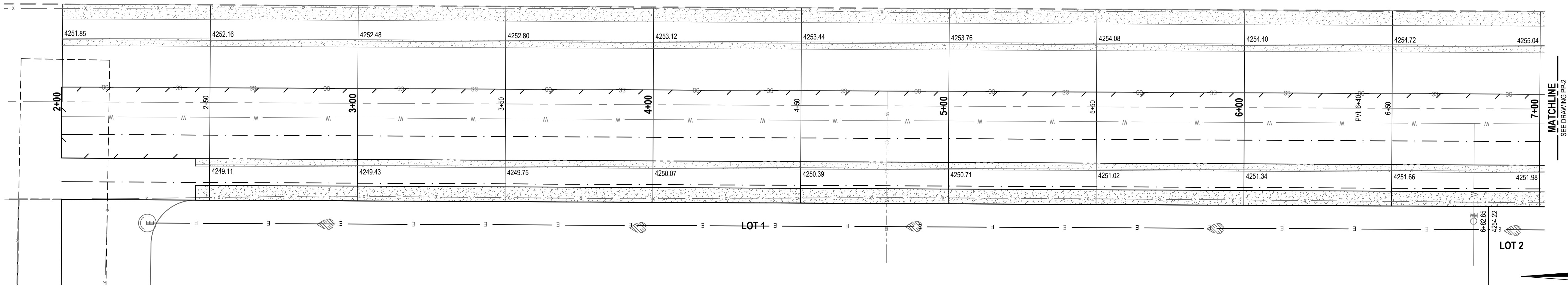
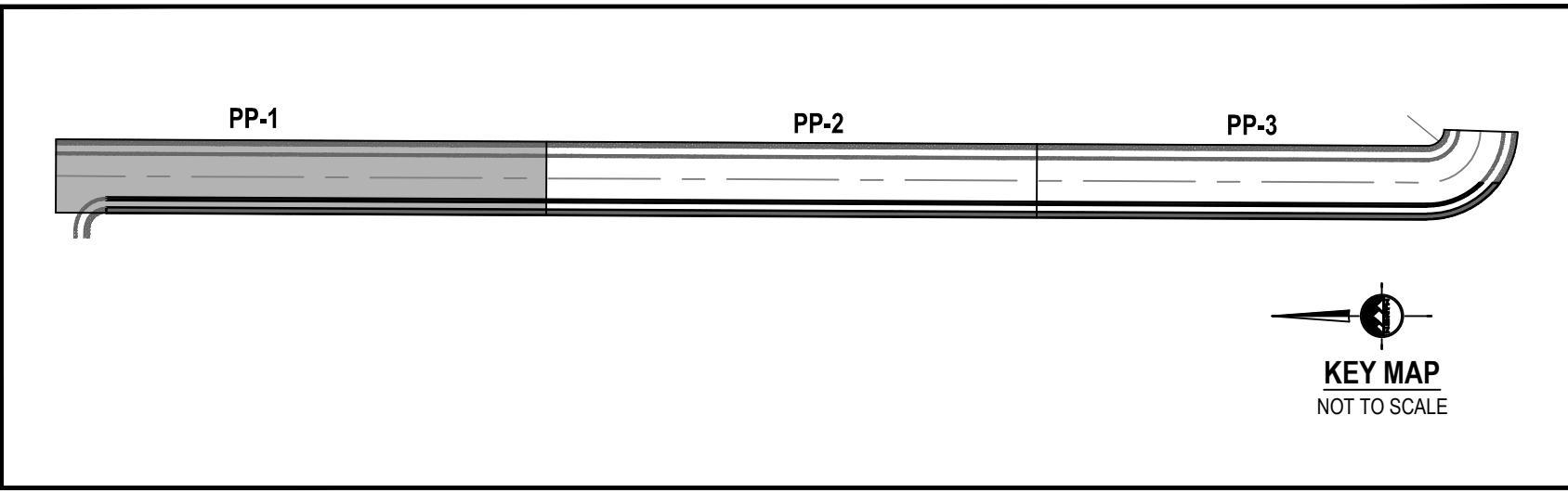
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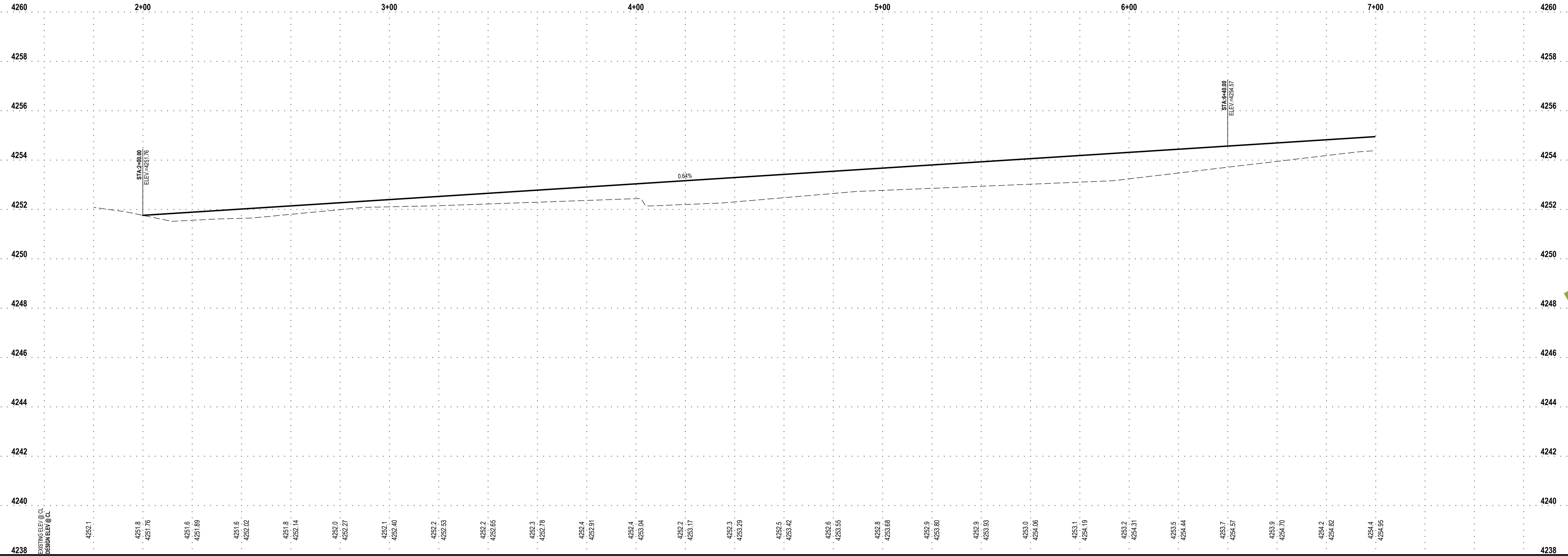
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ELEV = 4261.64'



# HALE STREET



EN SIGN

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GRANTSVILLE, UTAH 84029

For Review

09/14/2022 3:27:04 PM

PLAN AND PROFILE

PROJECT NUMBER  
10899A

PRINT DATE  
9/14/22

DRAWN BY  
H. CARTER

CHECKED BY  
C. CHILD

PROJECT MANAGER  
D. KINSMAN

PP-1

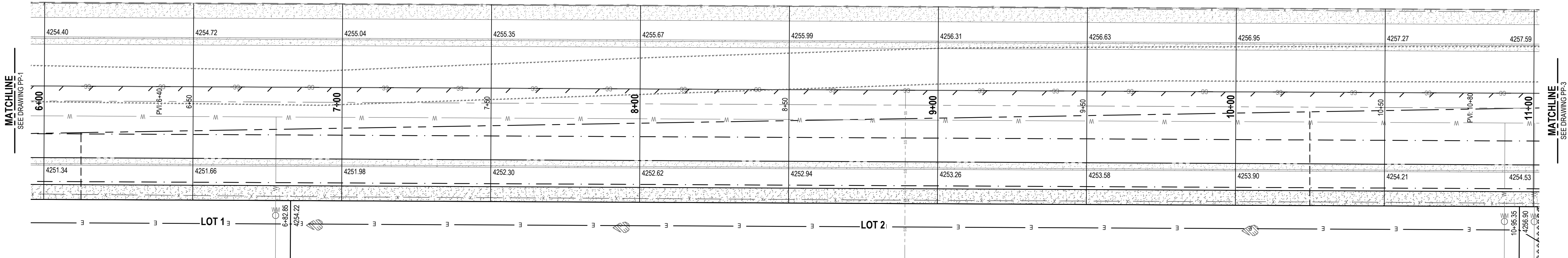
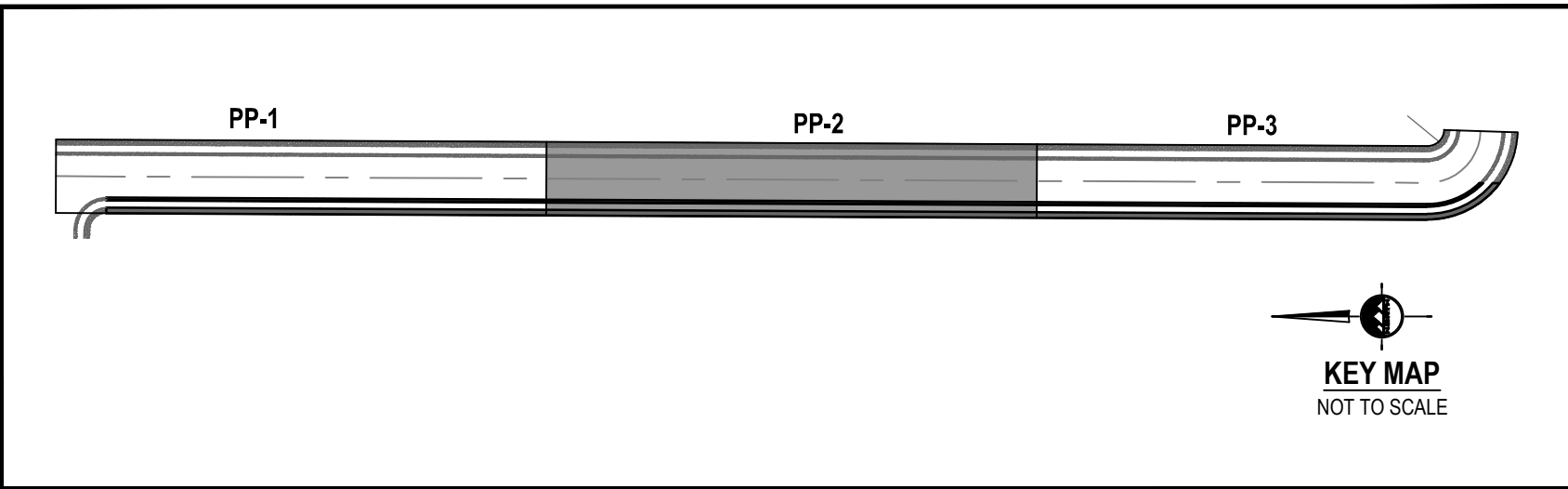
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Know what's below.  
Call before you dig.

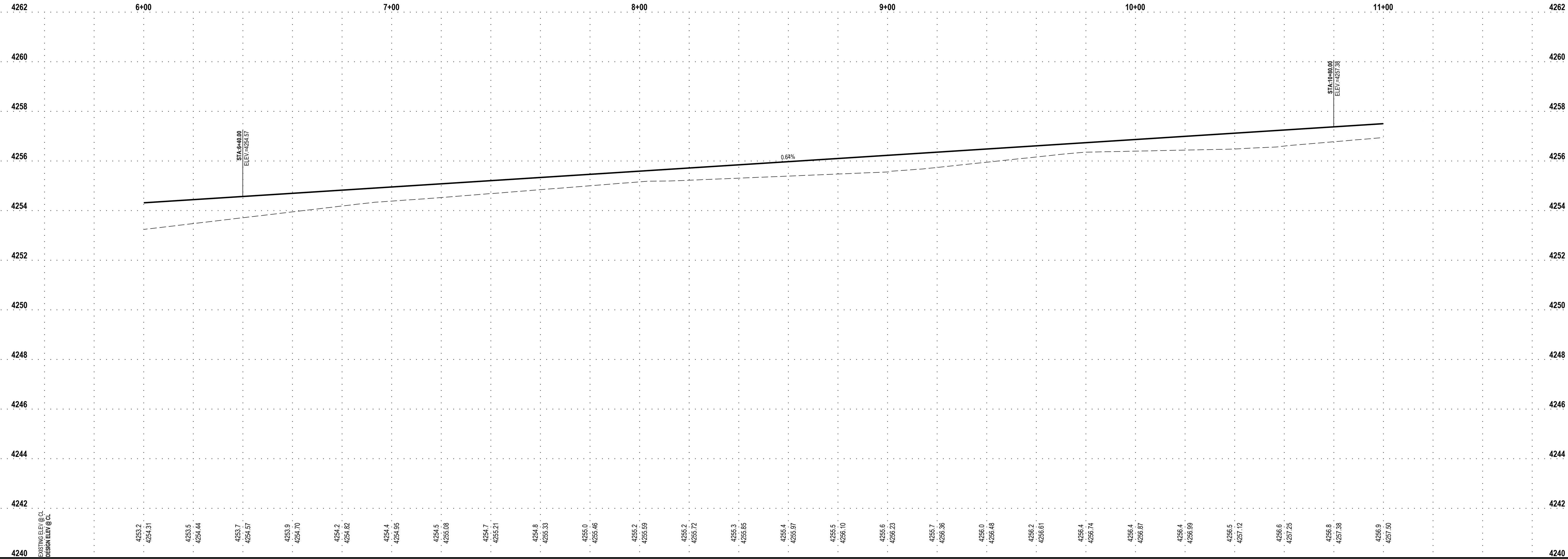
CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
TOWNSHIP 2 SOUTH, RANGE 6 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV = 4261.64'



HALE STREET



EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

SALT LAKE CITY

Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY

Phone: 435.866.1453

RICHFIELD

Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:

REUBEN WAYMAN  
6094 NORTH BURMESTER ROAD  
GRANTSVILLE, UT 84029

CONTACT:

REUBEN WAYMAN  
PHONE: 801-403-6927

WAYMAN SUBDIVISION  
APPROXIMATELY 800 NORTH HALE STREET  
GRANTSVILLE, UTAH 84029

For Review  
09/14/2022 3:27:05 PM

PLAN AND PROFILE

PROJECT NUMBER 10899A	PRINT DATE 9/14/22
DRAWN BY H. CARTER	CHECKED BY C. CHILD
PROJECT MANAGER D. KINSMAN	

PP-2



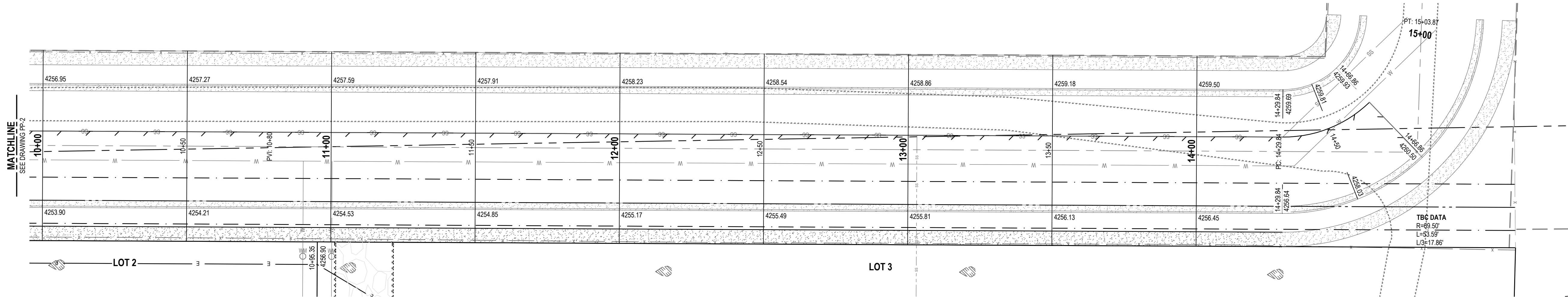
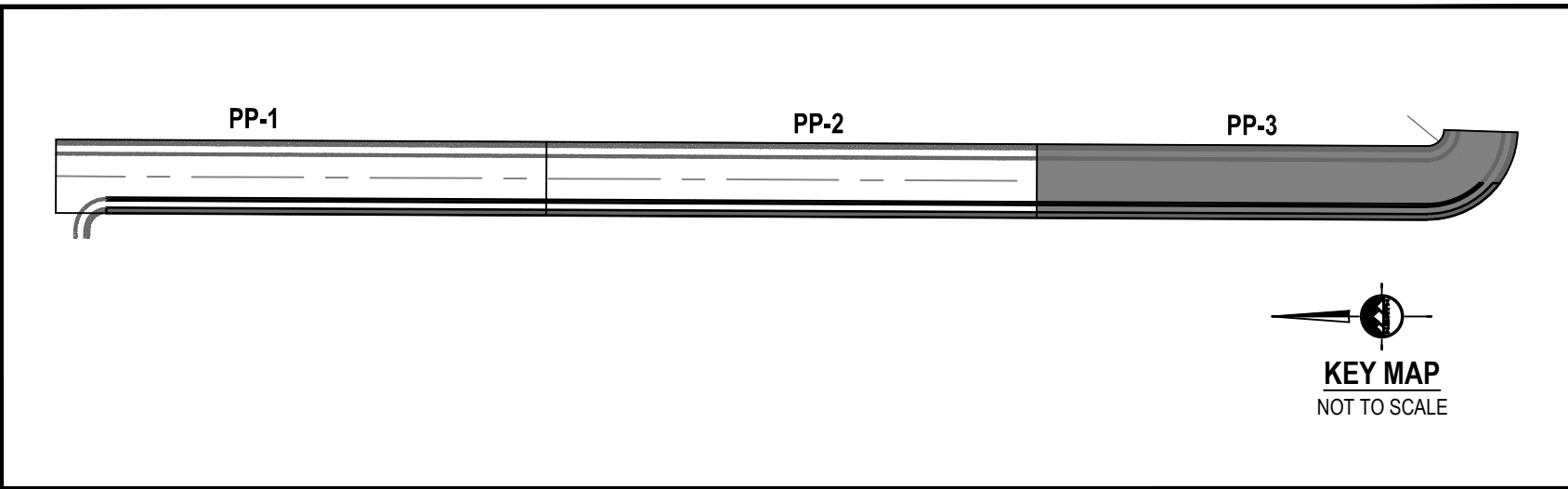
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Know what's below.  
Call before you dig.

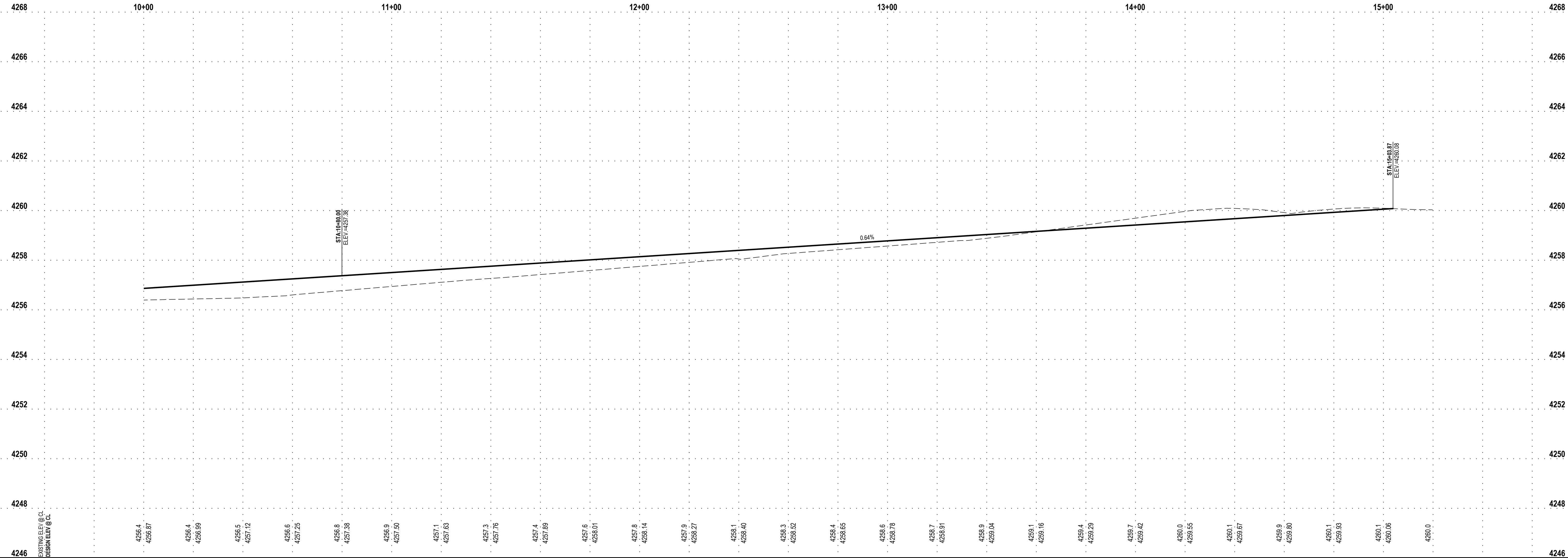
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@ 811 AT LEAST 48 HOURS  
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BENCHMARK

EAST QUARTER CORNER OF SECTION 25,  
TOWNSHIP 2 SOUTH, RANGE 8 WEST  
SALT LAKE BASE AND MERIDIAN  
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# HALE STREET



EN SIGN

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6094 NORTH BURMESTER ROAD  
GRANTSVILLE, UT 84029  
CONTACT:  
REUBEN WAYMAN  
PHONE: 801-403-6927

WAYMAN SUBDIVISION  
APPROXIMATELY 800 NORTH HALE STREET  
GRANTSVILLE, UTAH 84029

For Review  
09/14/2022 3:27:07 PM

PLAN AND PROFILE

PROJECT NUMBER  
10899A  
PRINT DATE  
9/14/22  
DRAWN BY  
H. CARTER  
CHECKED BY  
C. CHILD  
PROJECT MANAGER  
D. KINSMAN

PP-3

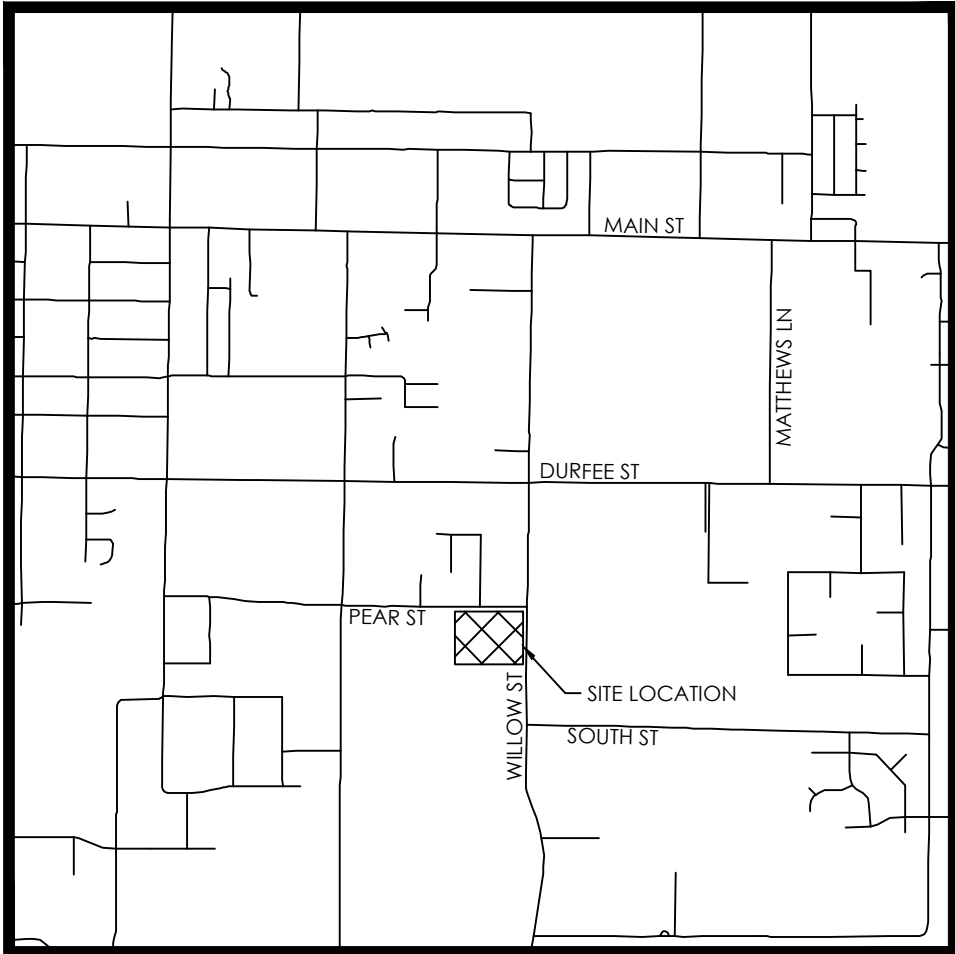
# **AGENDA ITEM #2**

Consideration to recommend approval of the Final Plat for Cowboy Estates.

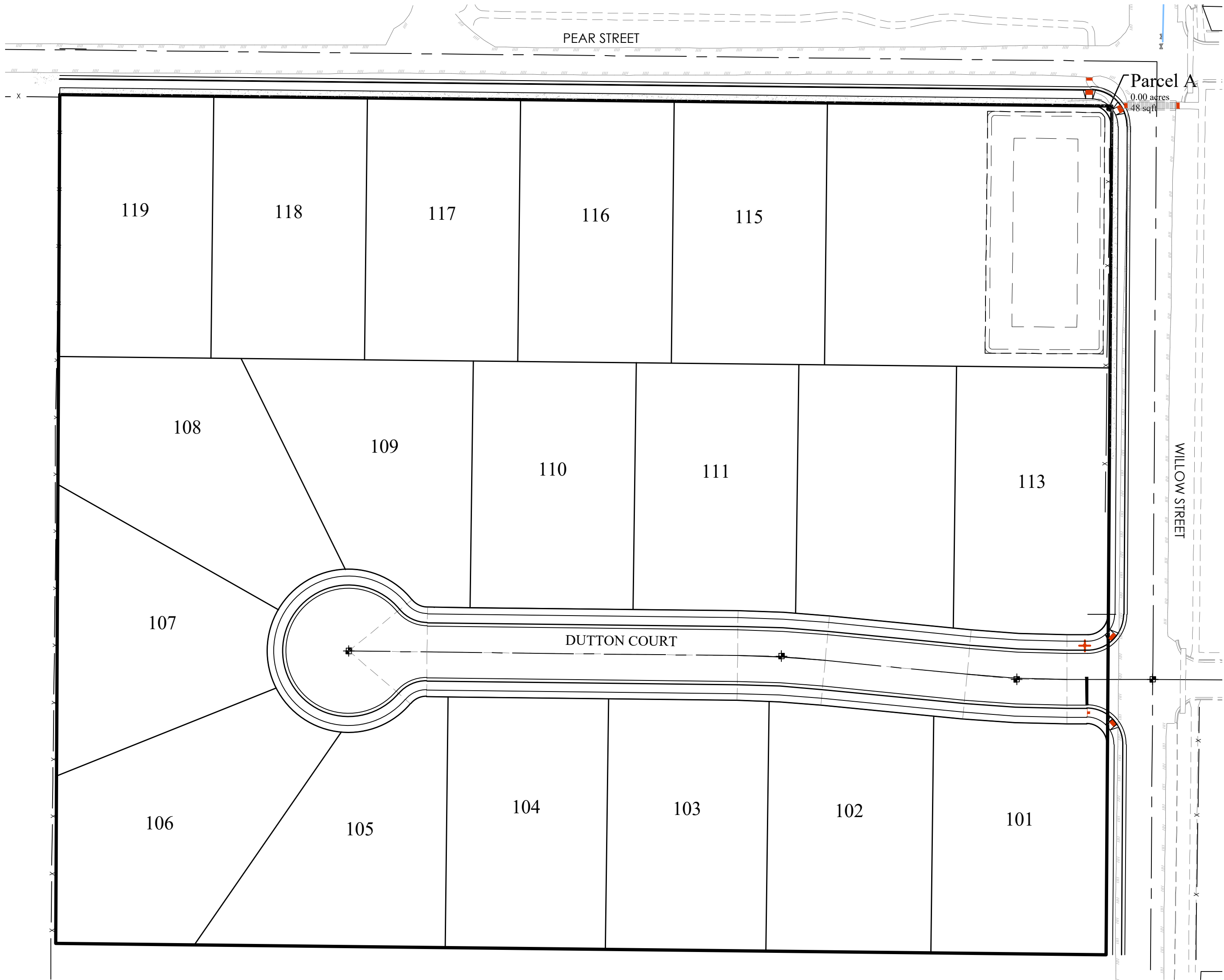


# COWBOY ESTATES SUBDIVISION

PREPARED FOR:  
GRANTSVILLE'S NEW TEAM LLC  
LOCATED IN:  
GRANTSVILLE, UT



VICINITY MAP  
NTS



SITE MAP

## GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
- ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL ADHERE TO GRANTSVILLE CITY AND APWA STANDARD PLANS AND SPECIFICATIONS.
- ALL UTILITIES AND ROAD IMPROVEMENTS SHOWN ON THE PLANS HEREIN SHALL BE CONSTRUCTED USING REFERENCE TO SURVEY CONSTRUCTION STAKES PLACED UNDER THE SUPERVISION OF A PROFESSIONAL LICENSED SURVEYOR WITH A CURRENT LICENSE ISSUED BY THE STATE OF UTAH. ANY IMPROVEMENTS INSTALLED BY ANY OTHER VERTICAL OR HORIZONTAL REFERENCE WILL NOT BE ACCEPTED OR CERTIFIED BY THE ENGINEER OF RECORD.
- THIS DRAWING SET IS SCALED TO BE PRINTED ON A 24" X 36" SIZE OF PAPER (ARCH D). IF PRINTED ON A SMALLER PAPER SIZE, THE DRAWING WILL NOT BE TO SCALE AND SHOULD NOT BE USED TO SCALE MEASUREMENTS FROM THE PAPER DRAWING. ALSO USE CAUTION, AS THERE MAY BE TEXT OR DETAIL THAT MAY BE OVERLOOKED DUE TO THE SMALL SIZE OF THE DRAWING.

## NOTICE

BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.

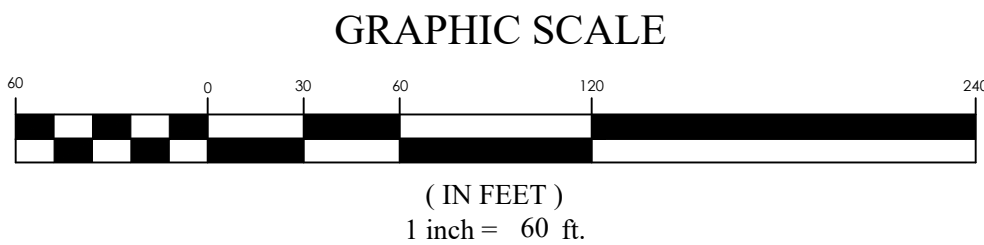
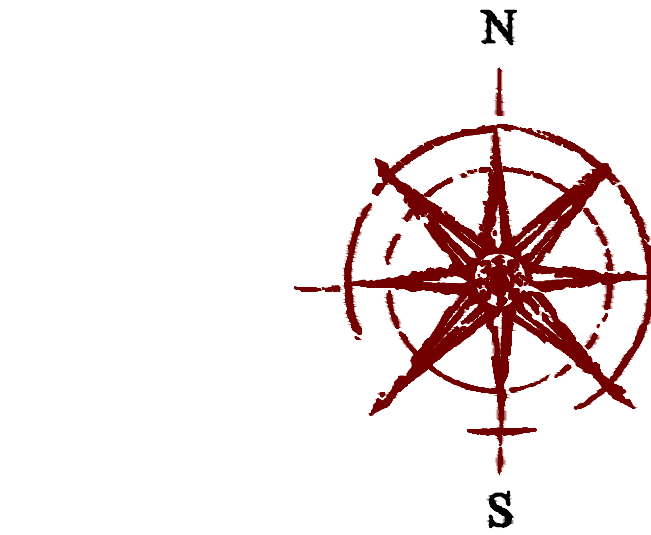
## ENGINEER'S NOTES TO CONTRACTOR

- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. IF UTILITY LINES ARE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT IDENTIFIED BY THESE PLANS, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
- CONTRACTOR AGREES THAT HE 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 CITY, THE OWNER, AND THE ENGINEER 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 THE OWNER OR THE ENGINEER.
- UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
- ALL CONTOUR LINES SHOWN ON THE PLANS ARE AN INTERPRETATION BY CAD SOFTWARE OF FIELD SURVEY WORK PERFORMED BY A LICENSED SURVEYOR. DUE TO THE POTENTIAL DIFFERENCES IN INTERPRETATION OF CONTOURS BY VARIOUS TYPES OF GRADING SOFTWARE BY OTHER ENGINEERS OR CONTRACTORS, FOCUS DOES NOT GUARANTEE OR WARRANT THE ACCURACY OF SUCH LINework. FOR THIS REASON, FOCUS WILL NOT PROVIDE ANY GRADING CONTOURS IN CAD FOR ANY TYPE OF USE BY THE CONTRACTOR. SPOT ELEVATIONS AND PROFILE ELEVATIONS SHOWN IN THE DESIGN DRAWINGS GOVERN ALL DESIGN INFORMATION ILLUSTRATED ON THE APPROVED CONSTRUCTION SET. CONSTRUCTION EXPERTISE AND JUDGMENT BY THE CONTRACTOR IS ANTICIPATED BY THE ENGINEER TO COMPLETE BUILD-OUT OF THE INTENDED IMPROVEMENTS.

## CONTACTS

ENGINEER & SURVEYOR  
FOCUS ENGINEERING & SURVEYING, LLC  
6949 S. HIGH TECH DRIVE SUITE 200  
MIDVALE, UTAH 84047  
(801) 352-0075  
PROJECT MANAGER: MATT CHRISTENSEN  
SURVEY MANAGER: EVAN WOOD

OWNER/DEVELOPER  
GRANTSVILLE'S NEW TEAM LLC  
1676 PROGRESS WAY  
TOOELE, UTAH 84074  
(801) 301-8591  
CONTACT: SHAWN HOLSTE



Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	FINAL PLAT
C3	SITE PLAN
C4	GRADING AND DRAINAGE PLAN
C4.1	GRADING AND DRAINAGE PLAN
C4.2	GRADING AND DRAINAGE PLAN
C4.3	GRADING AND DRAINAGE PLAN
C4.4	POND CALCULATIONS
C5	SEWER PLAN
C6	WATER PLAN
C7	EROSION CONTROL PLAN
PP01	DUTTON COURT
PP02	DUTTON COURT
PP03	WILLOW STREET
PP04	WILLOW STREET
PP05	PEAR STREET
PP06	PEAR STREET
PP07	RETENTION POND
D1	DETAILS
D2	DETAILS
D3	DETAILS
D4	DETAILS
D5	DETAILS
D6	DETAILS
D7	DETAILS
D8	DETAILS
D9	DETAILS
D10	CITY NOTES
D11	PRE CONSTRUCTION NOTES



COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
COVER SHEET

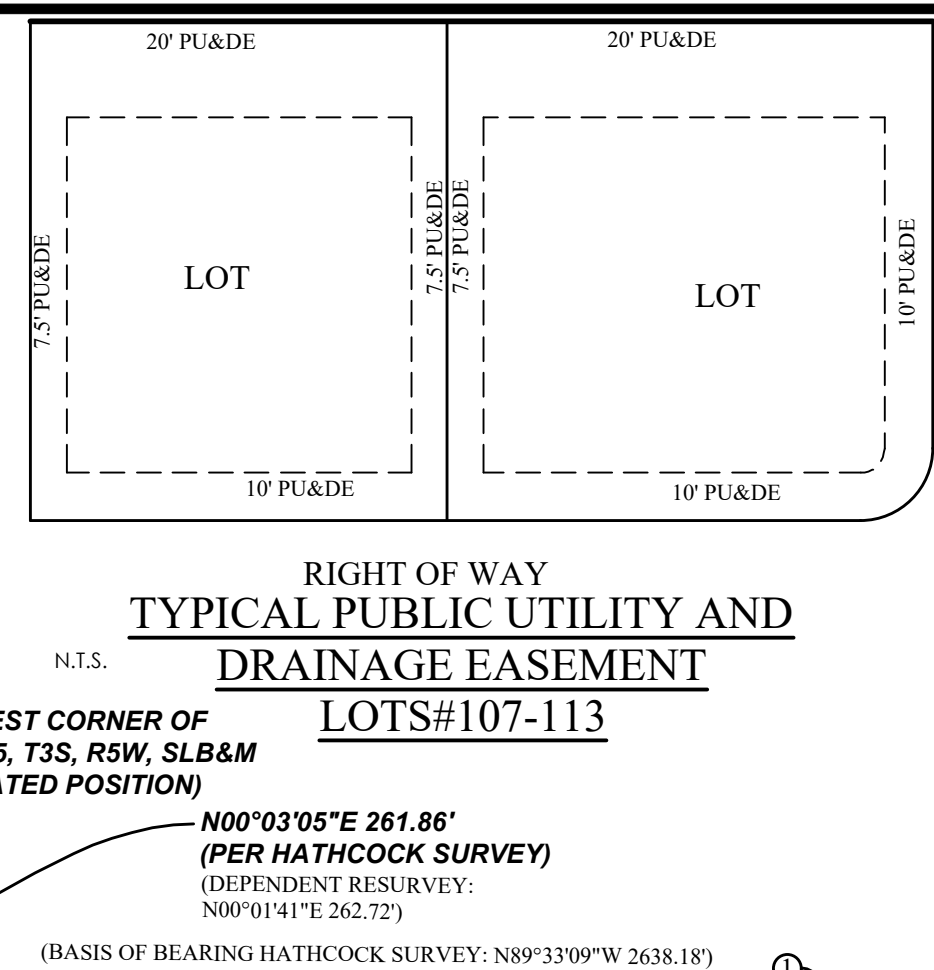
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## COVER SHEET

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Date: 09/13/22  
Sheet: C1

Drawn: MEF  
Job #: 21-0512

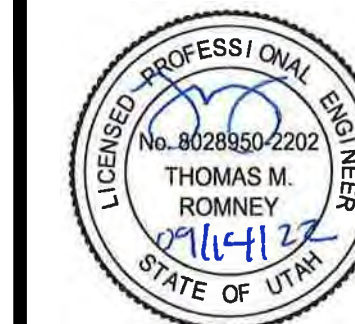
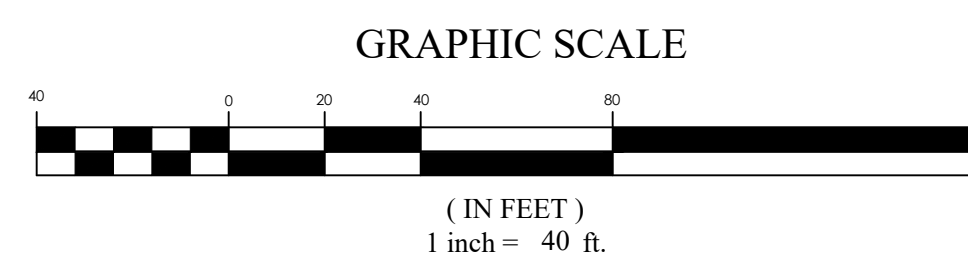
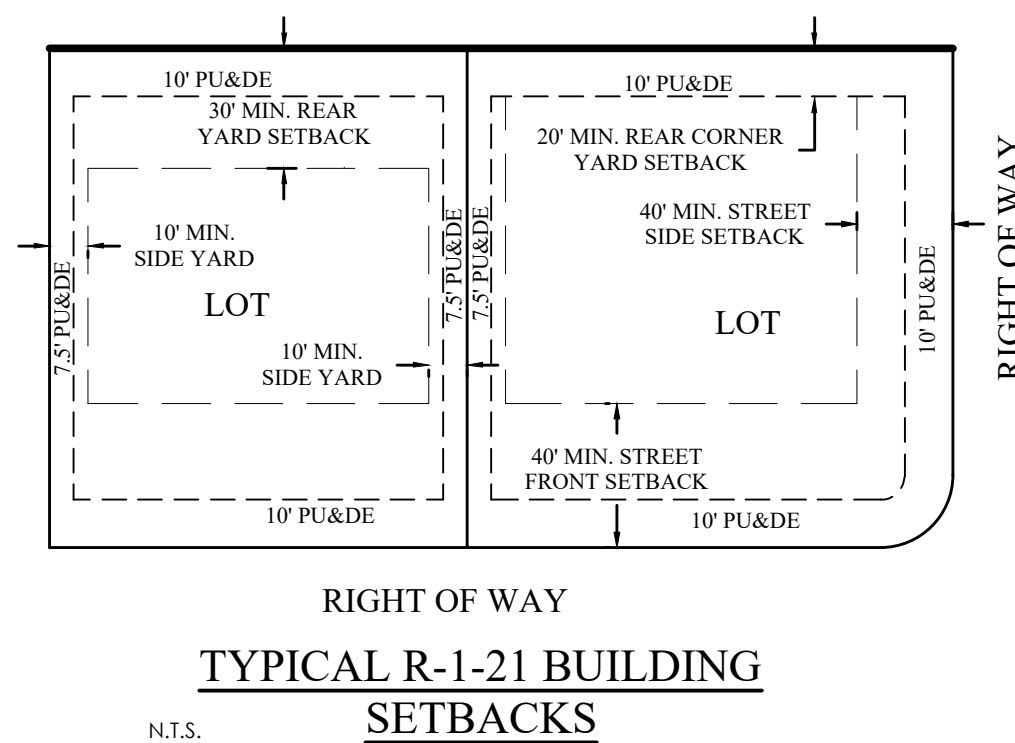
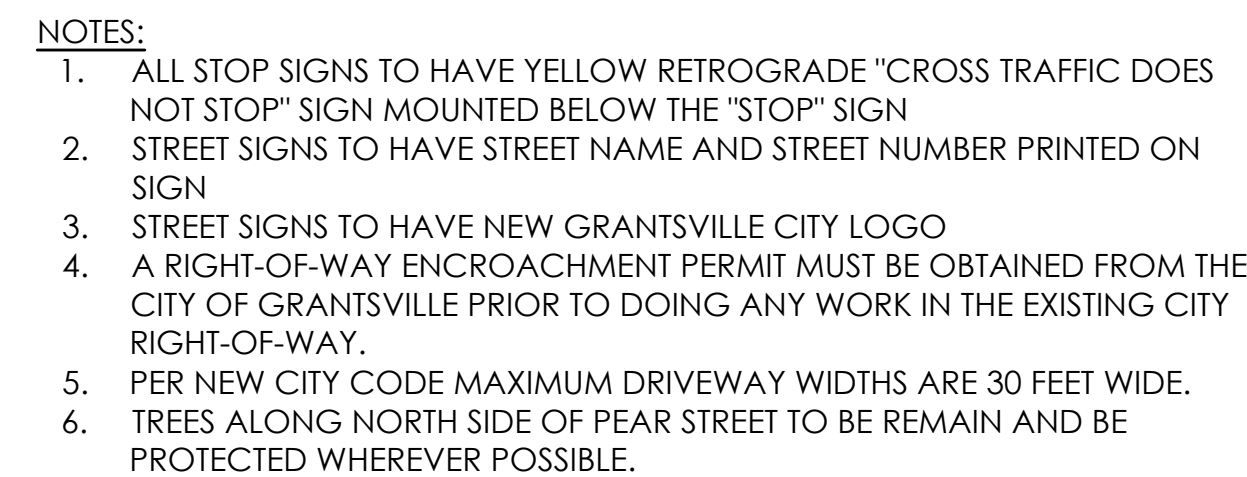
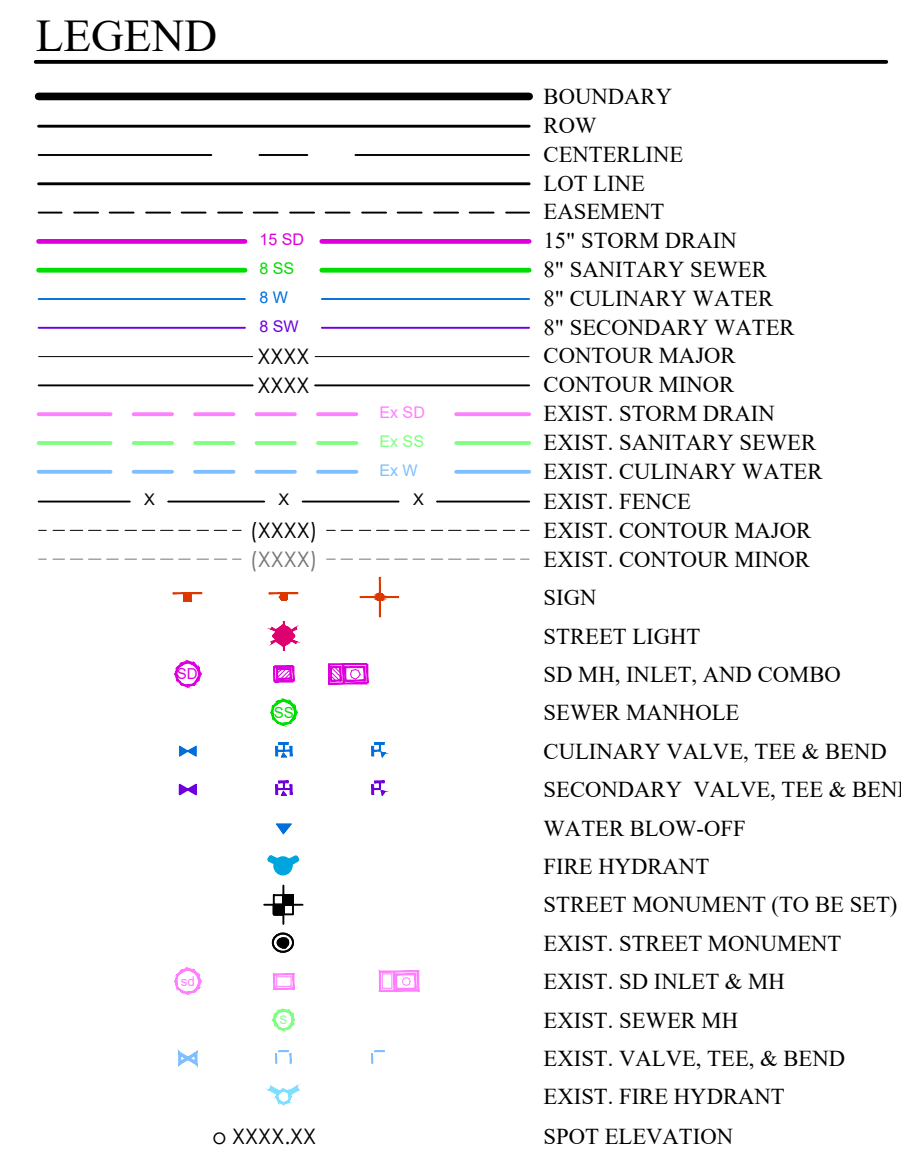




<b>TOOELE COUNTY RECORDER</b>			
NO. _____			
STATE OF UTAH, COUNTY OF TOOELE, RECORDED & FILED AT THE			
REQUEST OF _____			
DATE _____	TIME _____	BOOK _____	PAGE _____
FEE \$ _____		TOOELE COUNTY RECORDER _____	

WITNESS CORNER TO THE  
WEST 1/4 CORNER OF  
SECTION 5, T3S, R5W, SLB&M  
FOUND 2.5" STANDARD FLAT  
BRASS MONUMENT





**COWBOY ESTATES SUBDIVISION**  
**GRANTSVILLE, UT**  
**SITE PLAN**

REVISION BLOCK		
#	DATE	DESCRIPTION
1	10-1-88	10-1-88
2	10-1-88	10-1-88
3	10-1-88	10-1-88
4	10-1-88	10-1-88
5	10-1-88	10-1-88
6	10-1-88	10-1-88

Scale: 1"=40'		Drawn: MEF	
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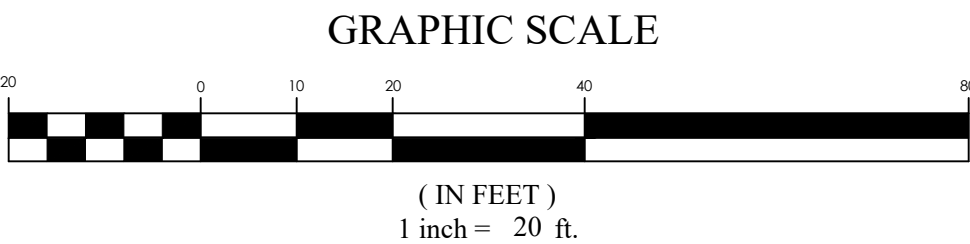
C3





MATCHLINE SEE C4.3

- NOTES:**
1. ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS INDIVIDUAL LOT RETENTION BASIN SHOWN.
  2. HOMEOWNER/CONTRACTOR/BUILDER TO ADHERE TO APPROVED GRADING PLAN. IF THERE IS ANY DEVIATION FROM PLAN, IMMEDIATELY CONTACT ENGINEER.
  3. THE CIVIL ENGINEER CERTIFYING THESE PLANS FOR THE ONSITE DRAINAGE OF THE DEVELOPMENT ACKNOWLEDGES THAT IT WAS PREPARED BY HIM/ (OR UNDER HIS DIRECT SUPERVISION) IN ACCORDANCE WITH THE PROVISIONS OF GRANVILLE CITY STANDARD SPECIFICATIONS AND DRAWINGS, AND WAS DESIGNED TO COMPLY WITH THE PROVISIONS THEREOF. SAME CIVIL ENGINEER UNDERSTANDS THAT THE CITY ASSUMES NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR THIS DESIGN.
  4. ALL REQUIRED CONSTRUCTION DRAWINGS OR A GRADING PERMIT MUST BE OBTAINED FROM GRANVILLE CITY ENGINEER PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEERING DEPT AT 435-884-1661
  5. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
  6. A MINIMUM OF 18" VERTICAL SEPARATION NEEDS TO BE MAINTAINED BETWEEN ALL CULINARY AND STORM DRAIN CROSSINGS, IF A CONFLICT ARISES CONTACT FOCUS ENGINEERING IMMEDIATELY.



COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
GRADING AND DRAINAGE PLAN

REVISION BLOCK	
#	DATE DESCRIPTION
1	10-1-2000
2	10-1-2000
3	10-1-2000
4	10-1-2000
5	10-1-2000
6	10-1-2000

# GRADING AND DRAINAGE PLAN

Scale: 1"=20'	Drawn: MEF
Date: 09/13/22	Job #: 21-0512

C4

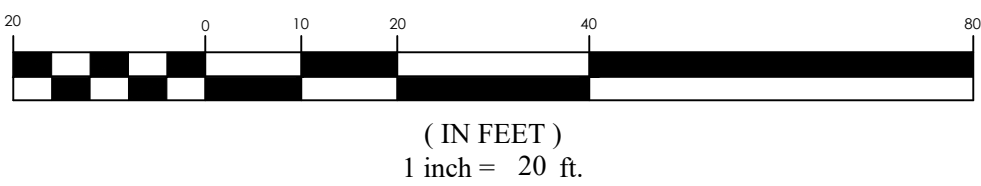


NOTES:

- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS INDIVIDUAL LOT RETENTION BASIN SHOWN
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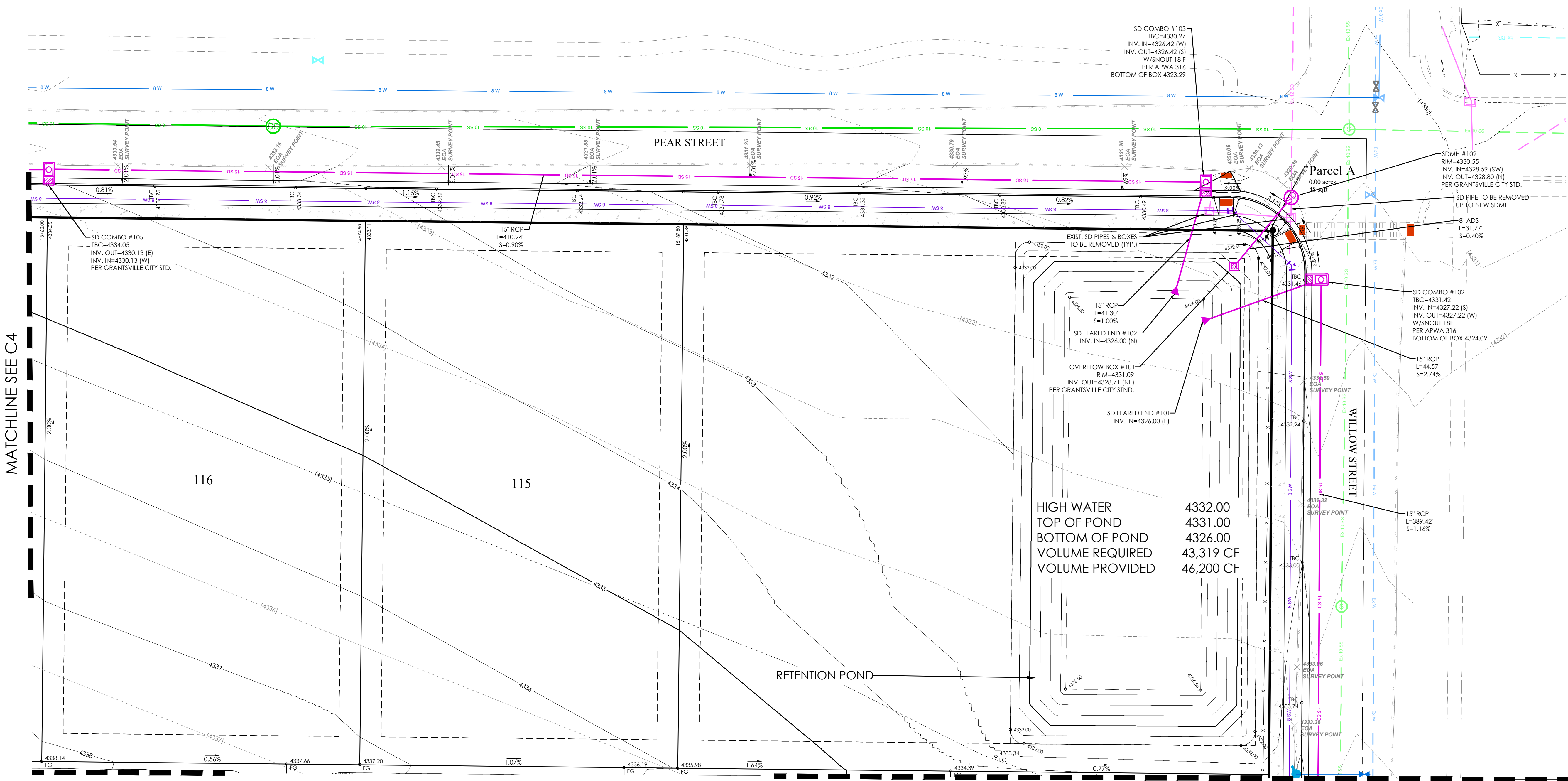


GRAPHIC SCALE



LEGEND

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" STORM DRAIN	15" STORM DRAIN
8" SANITARY SEWER	8" SANITARY SEWER
8" CULINARY WATER	8" CULINARY WATER
8" SECONDARY WATER	8" SECONDARY WATER
CONTOUR MAJOR	CONTOUR MAJOR
CONTOUR MINOR	CONTOUR MINOR
EXIST. STORM DRAIN	EXIST. STORM DRAIN
EXIST. SANITARY SEWER	EXIST. SANITARY SEWER
EXIST. CULINARY WATER	EXIST. CULINARY WATER
EXIST. FENCE	EXIST. FENCE
EXIST. CONTOUR MAJOR	EXIST. CONTOUR MAJOR
EXIST. CONTOUR MINOR	EXIST. CONTOUR MINOR
SIGN	SIGN
STREET LIGHT	STREET LIGHT
SD MH, INLET, AND COMBO	SD MH, INLET, AND COMBO
SEWER MANHOLE	SEWER MANHOLE
CULINARY VALVE, TEE & BEND	CULINARY VALVE, TEE & BEND
SECONDARY VALVE, TEE & BEND	SECONDARY VALVE, TEE & BEND
WATER BLOW-OFF	WATER BLOW-OFF
FIRE HYDRANT	FIRE HYDRANT
STREET MONUMENT (TO BE SET)	STREET MONUMENT (TO BE SET)
EXIST. STREET MONUMENT	EXIST. STREET MONUMENT
EXIST. SD INLET & MH	EXIST. SD INLET & MH
EXIST. SEWER MH	EXIST. SEWER MH
EXIST. VALVE, TEE, & BEND	EXIST. VALVE, TEE, & BEND
EXIST. FIRE HYDRANT	EXIST. FIRE HYDRANT
SPOT ELEVATION	SPOT ELEVATION



MATCHLINE SEE C4.3

MATCHLINE SEE C4.2

COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
GRADING AND DRAINAGE PLAN

REVISION BLOCK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

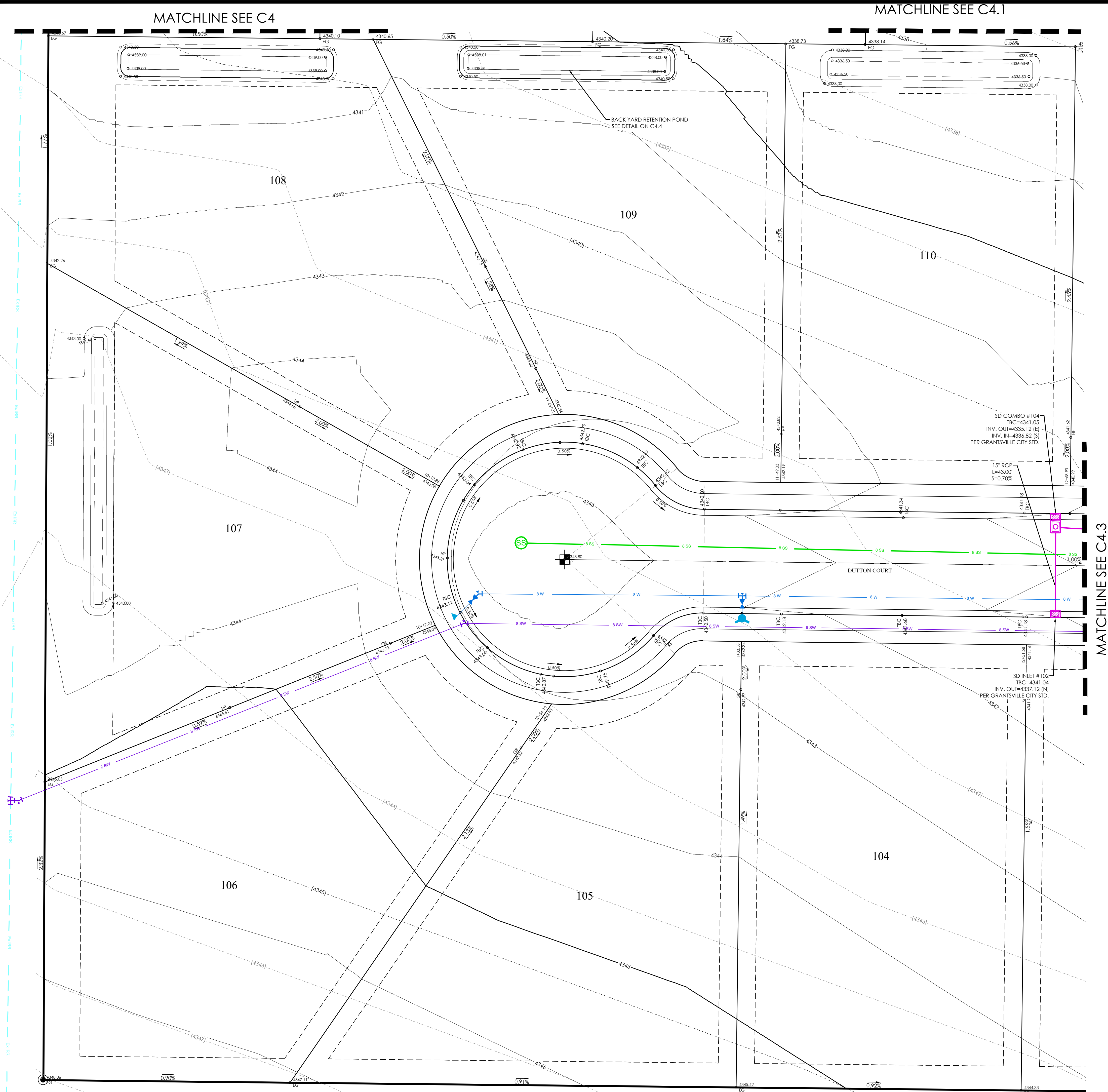
GRADING  
AND  
DRAINAGE  
PLAN

Scale: 1"=20'  
Date: 09/13/22  
Job #: 21-0512

Sheet: C4.1

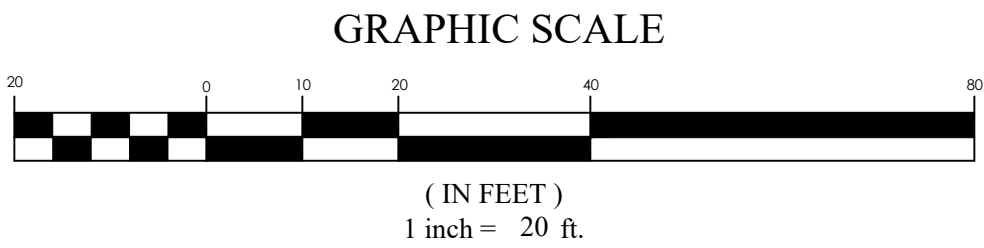






LEGEND

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" STORM DRAIN	15" STORM DRAIN
8" SANITARY SEWER	8" SANITARY SEWER
8" CULINARY WATER	8" CULINARY WATER
8" SECONDARY WATER	8" SECONDARY WATER
CONTOUR MAJOR	CONTOUR MAJOR
CONTOUR MINOR	CONTOUR MINOR
EXIST. STORM DRAIN	EXIST. STORM DRAIN
EXIST. SANITARY SEWER	EXIST. SANITARY SEWER
EXIST. CULINARY WATER	EXIST. CULINARY WATER
EXIST. FENCE	EXIST. FENCE
EXIST. CONTOUR MAJOR	EXIST. CONTOUR MAJOR
EXIST. CONTOUR MINOR	EXIST. CONTOUR MINOR
SIGN	SIGN
STREET LIGHT	STREET LIGHT
SD MH, INLET, AND COMBO	SD MH, INLET, AND COMBO
SEWER MANHOLE	SEWER MANHOLE
CULINARY VALVE, TEE & BEND	CULINARY VALVE, TEE & BEND
SECONDARY VALVE, TEE & BEND	SECONDARY VALVE, TEE & BEND
WATER BLOW-OFF	WATER BLOW-OFF
FIRE HYDRANT	FIRE HYDRANT
STREET MONUMENT (TO BE SET)	STREET MONUMENT (TO BE SET)
EXIST. STREET MONUMENT	EXIST. STREET MONUMENT
EXIST. SD INLET & MH	EXIST. SD INLET & MH
EXIST. SEWER MH	EXIST. SEWER MH
EXIST. VALVE, TEE, & BEND	EXIST. VALVE, TEE, & BEND
EXIST. FIRE HYDRANT	EXIST. FIRE HYDRANT
SPOT ELEVATION	SPOT ELEVATION



- NOTES:
- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS INDIVIDUAL LOT RETENTION BASIN SHOWN.
  - HOMEOWNER/CONTRACTOR/BUILDER TO ADHERE TO APPROVED GRADING PLAN. IF THERE IS ANY DEVIATION FROM PLAN, IMMEDIATELY CONTACT ENGINEER.
  - THE CIVIL ENGINEER CERTIFYING THESE PLANS FOR THE ONSITE DRAINAGE OF THIS DEVELOPMENT ACKNOWLEDGES THAT IT WAS PREPARED BY HIM (OR UNDER HIS DIRECT SUPERVISION) IN ACCORDANCE WITH THE PROVISIONS OF GRANTSVILLE CITY STANDARD SPECIFICATIONS AND DRAWINGS, AND WAS DESIGNED TO COMPLY WITH THE PROVISIONS THEREOF. SAME CIVIL ENGINEER UNDERSTANDS THAT THE CITY ASSUMES NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR THIS DESIGN.
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  - A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
  - A MINIMUM OF 18" VERTICAL SEPARATION NEEDS TO BE MAINTAINED BETWEEN ALL CULINARY AND STORM DRAIN CROSSINGS. IF A CONFLICT ARISES CONTACT FOCUS ENGINEERING IMMEDIATELY.

COWBOY ESTATES SUBDIVISION

GRANTSVILLE, UT

GRADING AND DRAINAGE PLAN

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
2		
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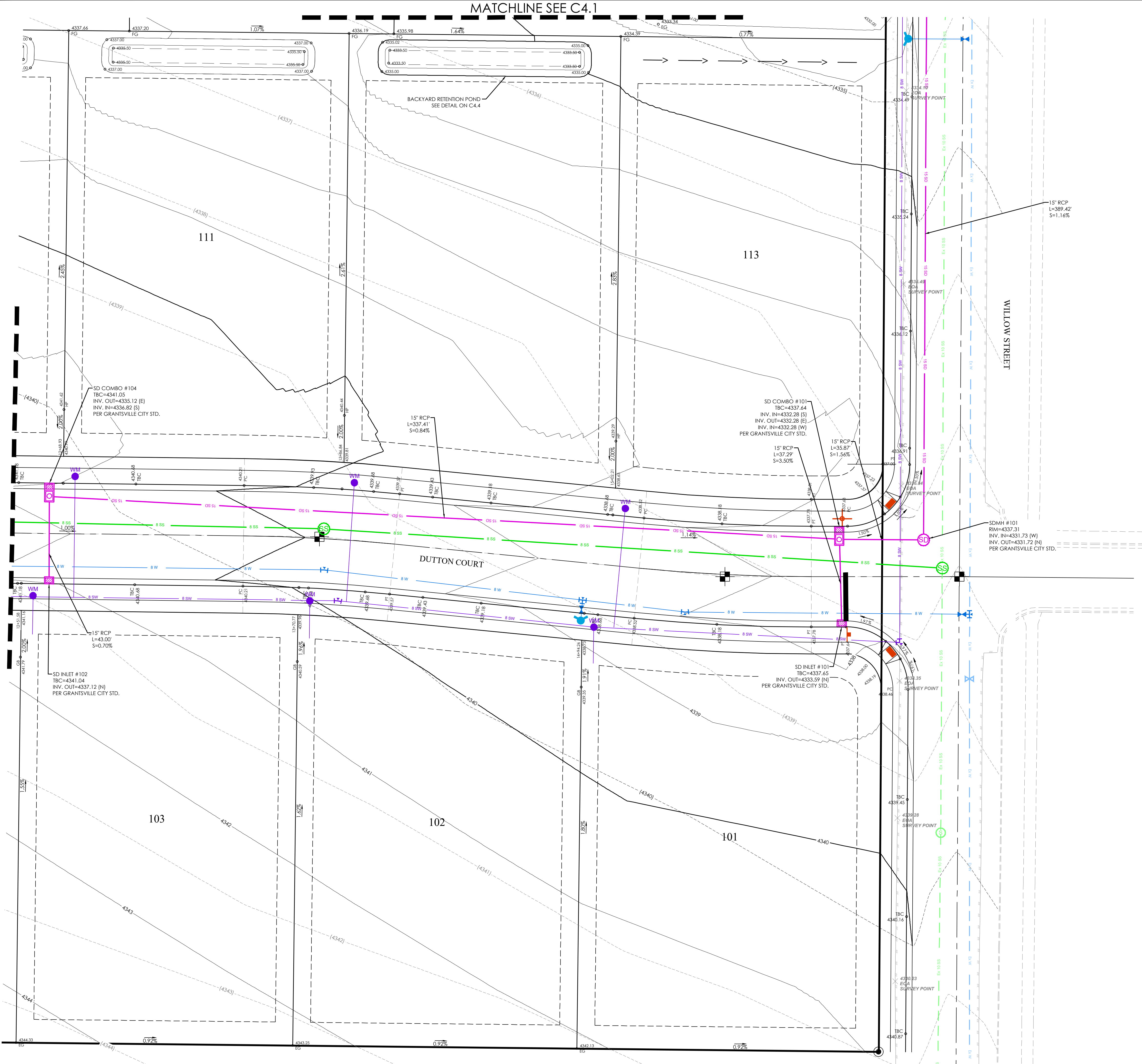
GRADING AND DRAINAGE PLAN	
Scale: 1"=20'	Drawn: MEF
Date: 09/13/22	Job #: 21-0512
Sheet:	C4.2





MATCHLINE SEE C4.2

MATCHLINE SEE C4.1

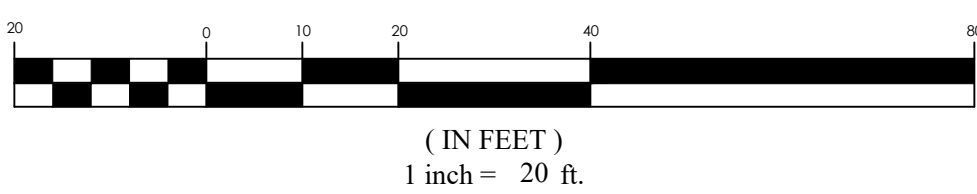


LEGEND

---	BOUNDARY
---	ROW
---	CENTERLINE
---	LOT LINE
---	EASEMENT
---	15" STORM DRAIN
---	8" SANITARY SEWER
---	8" CULINARY WATER
---	8" SECONDARY WATER
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
---	EXIST. CONTOUR MAJOR
---	EXIST. CONTOUR MINOR
---	SIGN
---	STREET LIGHT
---	SD MH, INLET, AND COMBO
---	SEWER MANHOLE
---	CULINARY VALVE, TEE & BEND
---	SECONDARY VALVE, TEE & BEND
---	WATER BLOW-OFF
---	FIRE HYDRANT
---	STREET MONUMENT (TO BE SET)
---	EXIST. STREET MONUMENT
---	EXIST. SD INLET & MH
---	EXIST. SEWER MH
---	EXIST. VALVE, TEE, & BEND
---	EXIST. FIRE HYDRANT
---	SPOT ELEVATION



GRAPHIC SCALE



NOTES:

- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS INDIVIDUAL LOT RETENTION BASIN SHOWN.
- HOMEOWNER/CONTRACTOR/BUILDER TO ADHERE TO APPROVED GRADING PLAN. IF THERE IS ANY DEVIATION FROM PLAN, IMMEDIATELY CONTACT ENGINEER.
- THE CIVIL ENGINEER CERTIFYING THESE PLANS FOR THE ONSITE DRAINAGE OF THIS DEVELOPMENT ACKNOWLEDGES THAT IT WAS PREPARED BY HIM (OR UNDER HIS DIRECT SUPERVISION) IN ACCORDANCE WITH THE PROVISIONS OF GRANTSVILLE CITY STANDARD SPECIFICATIONS AND DRAWINGS, AND WAS DESIGNED TO COMPLY WITH THE PROVISIONS THEREOF. SAME CIVIL ENGINEER UNDERSTANDS THAT THE CITY ASSUMES NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR THIS DESIGN.
- ACCEPTED CONSTRUCTION DRAWINGS OR A GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY ENGINEER PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEERING DEPT AT 435-884-1461.
- A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
- A MINIMUM OF 18" VERTICAL SEPARATION NEEDS TO BE MAINTAINED BETWEEN ALL CULINARY AND STORM DRAIN CROSSINGS. IF A CONFLICT ARISES CONTACT FOCUS ENGINEERING IMMEDIATELY.

COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
GRADING AND DRAINAGE PLAN

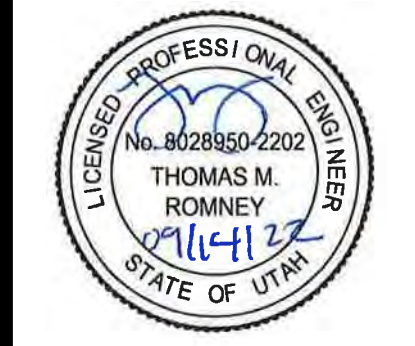
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2	09/13/22	2
3	09/13/22	3
4	09/13/22	4
5	09/13/22	5
6	09/13/22	6

GRADING  
AND  
DRAINAGE  
PLAN

Scale: 1"=20'	Drawn: MEF
Date: 09/13/22	Job #: 21-0512
Sheet:	

C4.3

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Retention Pond

Project: COWBOY ESTATES SUBDIVISION  
Location: Grantsville, Utah  
Date: 12/7/2021  
Designer: MEC



100-Year Retention Sizing

Design Criteria

Intensity Table: Per NOAA Atlas 14  
Return Period: 100 year  
Allowable Discharge: 0.00 cfs/acre Per Grantsville City Standards

Allowable Discharges

Storm Drain Discharge: 0.00 cfs  
Other Discharge: 0.00 cfs  
Total Discharge: 0 cfs  
Source:

Weighted "C" Value

Surface Type	Area (sf)	"C" Value	C*A
Homes (rooftops)	55,000	0.85	46,750
Drives	8,800	0.85	7,480
Roadway and Sidewalk	62,098	0.85	52,783
Landscape	326,576	0.15	48,986
Totals	452,474		155,999.70
Weighted "C" Value		0.34	

Drainage Calculations

Duration	Intensity	Runoff C	Area	Rainfall	ccumulate Flow	Allowable Discharge	Discharge	Required Storage
min	in/hr		Ac	cfs	cf	cfs	cf	cf
15.0	4.56	0.34	10.39	16.33	14,697	0.00	0	14,697
30.0	3.07	0.34	10.39	10.99	19,790	0.00	0	19,790
60.0	1.90	0.34	10.39	6.80	24,496	0.00	0	24,496
120.0	1.11	0.34	10.39	3.98	28,621	0.00	0	28,621
180.0	0.76	0.34	10.39	2.72	29,395	0.00	0	29,395
360.0	0.41	0.34	10.39	1.47	31,716	0.00	0	31,716
720.0	0.24	0.34	10.39	0.86	37,131	0.00	0	37,131
1440.0	0.14	0.34	10.39	0.50	43,319	0.00	0	43,319

Maximum Storage Requirement: 43,319  
Maximum Storage Requirement (ac-ft): 0.99

Retention Basin Design

Storage Requirement: 43,319 cf  
Allowable Depth: 5.0 ft  
Retention Pond Volume: 48,663 cf  
Roadway Sump Storage: 0 cf  
Retention Calculated Using Basic Geometry of a Trapezoidal Trench

Total Storage 48,663 RETENTION ADEQUATE

Retention Pond

Project: COWBOY ESTATES SUBDIVISION  
Location: Grantsville, Utah  
Date: 12/3/2021  
Designer: RSH



100-Year Retention Sizing

Design Criteria

Intensity Table: Per NOAA Atlas 14  
Return Period: 100 year  
Allowable Discharge: 0.00 cfs/acre Per xxxxxxxxxxx Standards

Allowable Discharges

Storm Drain Discharge: 0.00 cfs  
Other Discharge: 0.00 cfs  
Total Discharge: 0 cfs  
Source:

Weighted "C" Value

Surface Type	Area (sf)	"C" Value	C*A
Homes (rooftops)	2,500	0.85	2,125
Drives	0	0.85	0
Roadway and Sidewalk	0	0.85	0
Landscape	13,663	0.15	2,049
Totals	16,163		4,174.45
Weighted "C" Value		0.26	

Drainage Calculations

Duration	Intensity	Runoff C	Area	Rainfall	ccumulate Flow	Allowable Discharge	Discharge	Required Storage
min	in/hr		Ac	cfs	cf	cfs	cf	cf
15.0	4.56	0.26	0.37	0.44	393	0.00	0	393
30.0	3.07	0.26	0.37	0.29	530	0.00	0	530
60.0	1.90	0.26	0.37	0.18	655	0.00	0	655
120.0	1.11	0.26	0.37	0.11	766	0.00	0	766
180.0	0.76	0.26	0.37	0.07	787	0.00	0	787
360.0	0.41	0.26	0.37	0.04	849	0.00	0	849
720.0	0.24	0.26	0.37	0.02	994	0.00	0	994
1440.0	0.14	0.26	0.37	0.01	1,159	0.00	0	1,159

Maximum Storage Requirement: 1,159  
Maximum Storage Requirement (ac-ft): 0.03

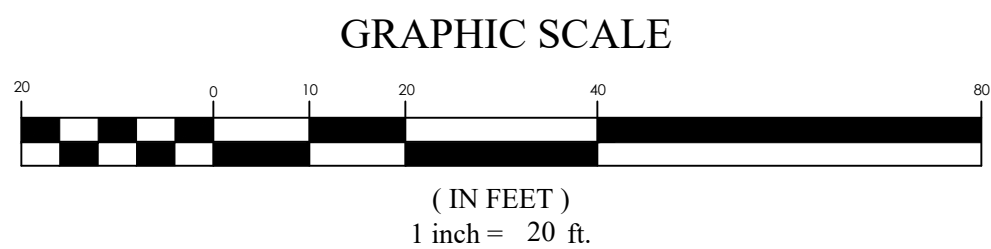
Retention Basin Design

Storage Requirement: 1,159 cf  
Allowable Depth: 1.5' ft  
Retention Pond Volume: 1,375 cf  
Roadway Sump Storage: 0 cf  
Retention Calculated Using Basic Geometry of a Trapezoidal Trench

Total Storage 1,375 RETENTION ADEQUATE

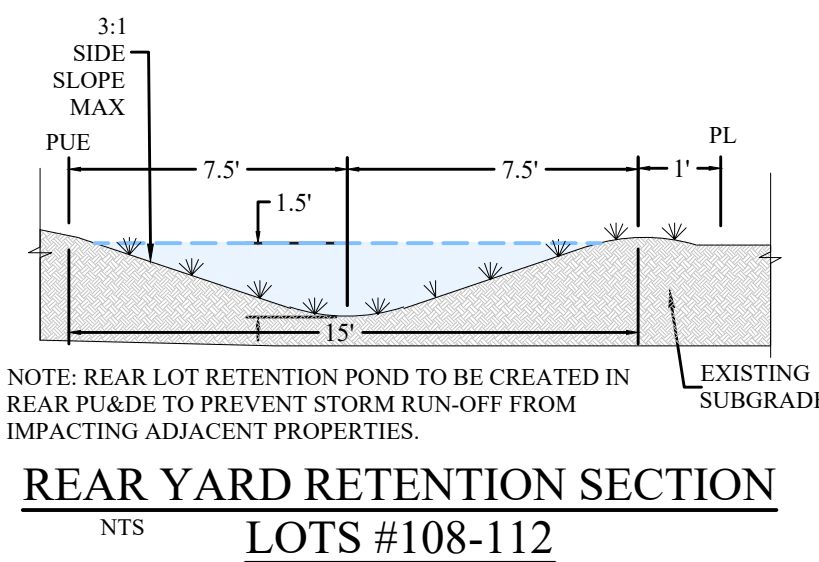
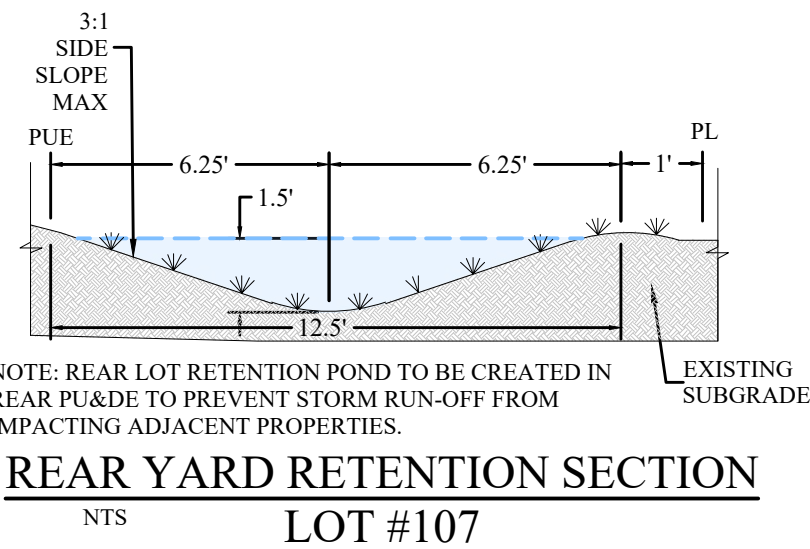
LEGEND

BOUNDARY	18" SD	EXIST. STORM DRAIN
ROW	8" SS	EXIST. SANITARY SEWER
CENTERLINE	8" W	EXIST. CULINARY WATER
LOT LINE	8" W	EXIST. SECONDARY WATER
EASEMENT	XXXX	EXIST. STORM DRAIN
15" STORM DRAIN	XXXX	EXIST. SANITARY SEWER
8" SANITARY SEWER	XXXX	EXIST. CULINARY WATER
8" CULINARY WATER	XXXX	EXIST. FENCE
8" SECONDARY WATER	XXXX	EXIST. CONTOUR MAJOR
CONTOUR MAJOR	XXXX	EXIST. CONTOUR MINOR
CONTOUR MINOR	XXXX	SIGN
EXIST. STORM DRAIN	XXXX	STREET LIGHT
EXIST. SANITARY SEWER	XXXX	SD MH, INLET, AND COMBO
EXIST. CULINARY WATER	XXXX	SEWER MANHOLE
EXIST. FENCE	XXXX	CULINARY VALVE, TEE & BEND
EXIST. CONTOUR MAJOR	XXXX	SECONDARY VALVE, TEE & BEND
EXIST. CONTOUR MINOR	XXXX	WATER BLOW-OFF
SIGN	XXXX	FIRE HYDRANT
STREET LIGHT	XXXX	STREET MONUMENT (TO BE SET)
SD MH, INLET, AND COMBO	XXXX	EXIST. STREET MONUMENT
SEWER MANHOLE	XXXX	EXIST. SD INLET & MH
CULINARY VALVE, TEE & BEND	XXXX	EXIST. SEWER MH
SECONDARY VALVE, TEE & BEND	XXXX	EXIST. VALVE, TEE, & BEND
WATER BLOW-OFF	XXXX	EXIST. FIRE HYDRANT
FIRE HYDRANT	XXXX	SPOT ELEVATION
STREET MONUMENT (TO BE SET)	XXXX	
EXIST. STREET MONUMENT	XXXX	
EXIST. SD INLET & MH	XXXX	
EXIST. SEWER MH	XXXX	
EXIST. VALVE, TEE, & BEND	XXXX	
EXIST. FIRE HYDRANT	XXXX	
SPOT ELEVATION	XXXX	



NOTES:

- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS INDIVIDUAL LOT RETENTION BASIN SHOWN.
- HOMEOWNER/CONTRACTOR/BUILDER TO ADHERE TO APPROVED GRADING PLAN. IF THERE IS ANY DEVIATION FROM PLAN, IMMEDIATELY CONTACT ENGINEER.
- THE CIVIL ENGINEER CERTIFYING THESE PLANS FOR THE ONSITE DRAINAGE OF THIS DEVELOPMENT ACKNOWLEDGES THAT IT WAS PREPARED BY HIM (OR UNDER HIS DIRECT SUPERVISION) IN ACCORDANCE WITH THE PROVISIONS OF GRANTSVILLE CITY STANDARD SPECIFICATIONS AND DRAWINGS, AND WAS DESIGNED TO COMPLY WITH THE PROVISIONS THEREOF. SAME CIVIL ENGINEER UNDERSTANDS THAT THE CITY ASSUMES NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR THIS DESIGN.
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- A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
- A MINIMUM OF 18" VERTICAL SEPARATION NEEDS TO BE MAINTAINED BETWEEN ALL CULINARY AND STORM DRAIN CROSSINGS. IF A CONFLICT ARISES CONTACT FOCUS ENGINEERING IMMEDIATELY.
- PERCOLATION RATE ACROSS THE SITE WAS FOUND TO BE 40min/1in PER GEOTECHNICAL REPORT.



COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
POND CALCULATIONS

REVISION BLOCK	DATE	DESCRIPTION
1		
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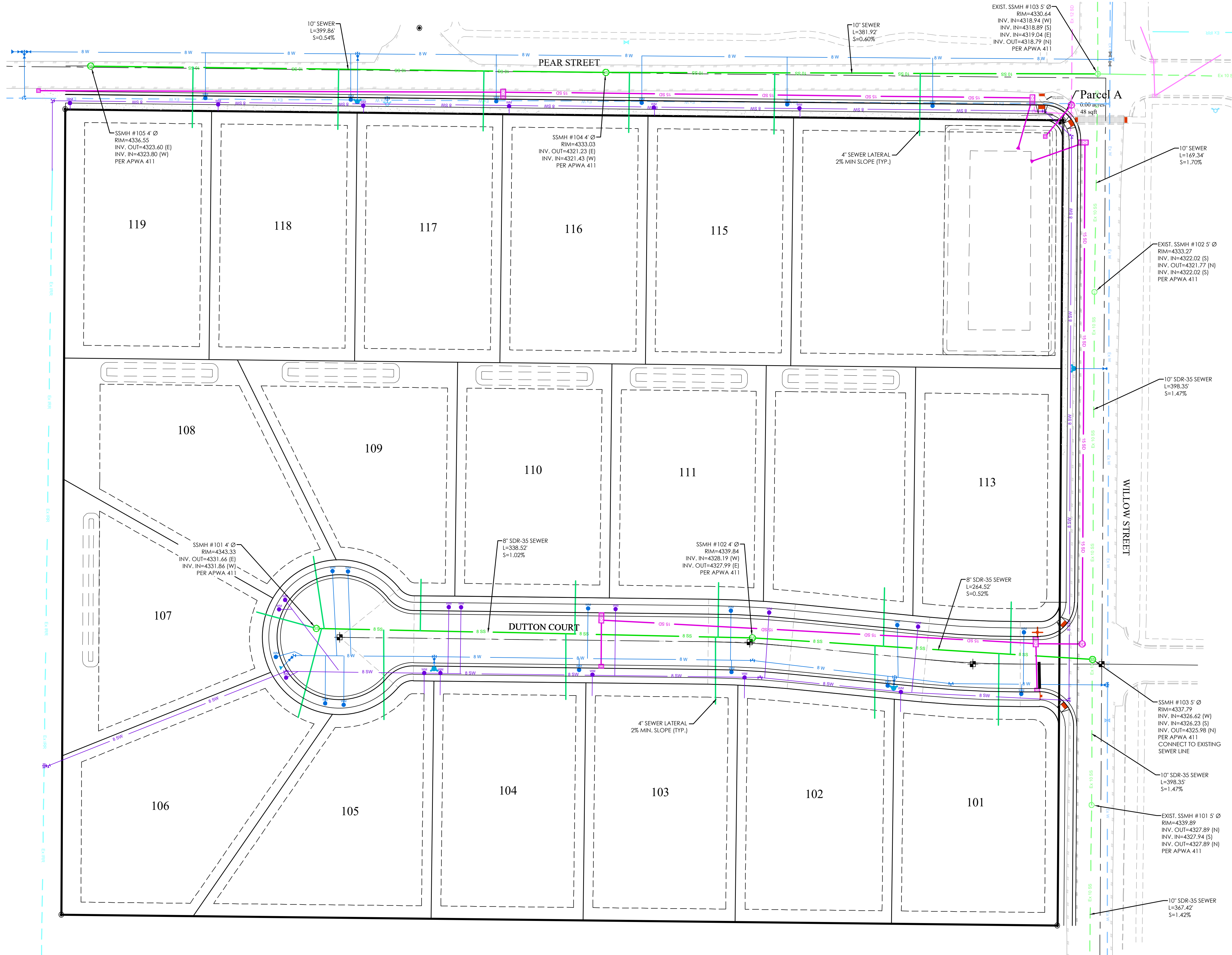
POND CALCULATIONS

Scale: 1"=20'  
Date: 09/13/22  
Sheet: C4.4

Drawn: MEF  
Job #: 21-0512







LEGEND

BOUNDARY	15" SDR	EXIST. STORM DRAIN
ROW	8" SS	EXIST. SANITARY SEWER
CENTERLINE	8" W	EXIST. CULINARY WATER
LOT LINE	XXXX	EXIST. STORM DRAIN
EASEMENT	XXXX	EXIST. SANITARY SEWER
15" SDR	XXXX	EXIST. CULINARY WATER
8" SS	XXXX	EXIST. FENCE
8" W	XXXX	EXIST. CONTOUR MAJOR
XXXX	XXXX	EXIST. CONTOUR MINOR
XXXX	XXXX	SIGN
XXXX	XXXX	STREET LIGHT
XXXX	XXXX	SD MH, INLET, AND COMBO
XXXX	XXXX	SEWER MANHOLE
XXXX	XXXX	CULINARY VALVE, TEE & BEND
XXXX	XXXX	SECONDARY VALVE, TEE & BEND
XXXX	XXXX	WATER BLOW-OFF
XXXX	XXXX	FIRE HYDRANT
XXXX	XXXX	STREET MONUMENT (TO BE SET)
XXXX	XXXX	EXIST. STREET MONUMENT
XXXX	XXXX	EXIST. SD INLET & MH
XXXX	XXXX	EXIST. SEWER MH
XXXX	XXXX	EXIST. VALVE, TEE, & BEND
XXXX	XXXX	EXIST. FIRE HYDRANT
XXXX	XXXX	SPOT ELEVATION

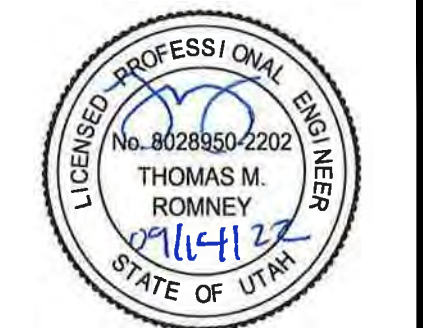
- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS 18" MIN. OF VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. WHEN SEPARATION CAN NOT BE OBTAINED, AN EXCEPTION CAN BE APPLIED FOR WITH ADDITIONAL MEASURES TO PROTECT PUBLIC HEALTH, IN ACCORDANCE WITH UAC R309-105-6(2)(B). IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  - A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED BY GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING CITY RIGHT-OF-WAY.
  - 10' MIN. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.
  - UTILITY WATER TO THE NORTH SIDE OF PEAR STREET TO BE RECONNECTED WHERE EXISTING AND NEW SEWER SERVICES TO BE INSTALLED.

N

S

GRAPHIC SCALE

(IN FEET)  
1 inch = 40 ft.



**COWBOY ESTATES SUBDIVISION**  
**GRANTSVILLE, UT**  
**SEWER PLAN**

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
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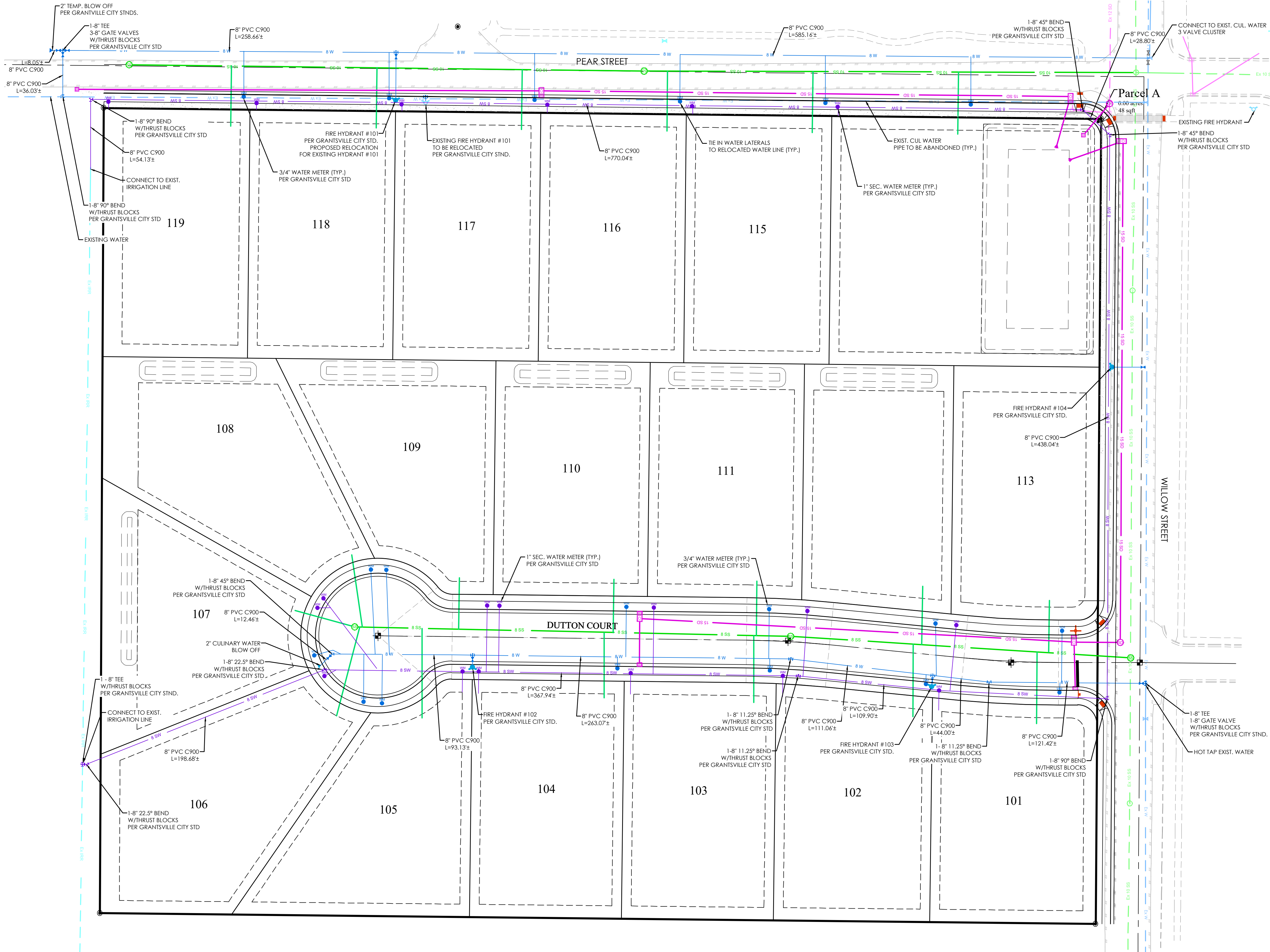
**SEWER PLAN**

Scale: 1"=40'  
Date: 09/13/22  
Sheet: C5

Drawn: MEF  
Job #: 21-0512







**LEGEND**

[Symbol]	BOUNDARY
[Symbol]	ROW
[Symbol]	CENTERLINE
[Symbol]	LOT LINE
[Symbol]	EASEMENT
[Symbol]	15" STORM DRAIN
[Symbol]	8" SANITARY SEWER
[Symbol]	8" CULINARY WATER
[Symbol]	8" SECONDARY WATER
[Symbol]	CONTOUR MAJOR
[Symbol]	CONTOUR MINOR
[Symbol]	EXIST. STORM DRAIN
[Symbol]	EXIST. SANITARY SEWER
[Symbol]	EXIST. CULINARY WATER
[Symbol]	EXIST. FENCE
[Symbol]	EXIST. CONTOUR MAJOR
[Symbol]	EXIST. CONTOUR MINOR
[Symbol]	SIGN
[Symbol]	STREET LIGHT
[Symbol]	SD MH, INLET, AND COMBO
[Symbol]	SEWER MANHOLE
[Symbol]	CULINARY VALVE, TEE & BEND
[Symbol]	SECONDARY VALVE, TEE & BEND
[Symbol]	WATER BLOW-OFF
[Symbol]	FIRE HYDRANT
[Symbol]	STREET MONUMENT (TO BE SET)
[Symbol]	EXIST. STREET MONUMENT
[Symbol]	EXIST. SD INLET & MH
[Symbol]	EXIST. SEWER MH
[Symbol]	EXIST. VALVE, TEE, & BEND
[Symbol]	EXIST. FIRE HYDRANT
[Symbol]	SPOT ELEVATION

**GRAPHIC SCALE**

(IN FEET)  
1 inch = 40 ft.

- NOTES:
1. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED BY GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING CITY RIGHT-OF-WAY.
  2. UTILITY WATER TO THE NORTH SIDE OF PEAR STREET TO BE RECONNECTED WHERE EXISTING AND NEW SEWER SERVICES TO BE INSTALLED.

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LICENSED PROFESSIONAL ENGINEER  
No. 8028850-2202  
THOMAS M. ROMNEY  
1/14/12  
STATE OF UTAH

**COWBOY ESTATES SUBDIVISION**  
GRANTSVILLE, UT  
**WATER PLAN**

REVISION BLOCK	
#	DESCRIPTION
1	
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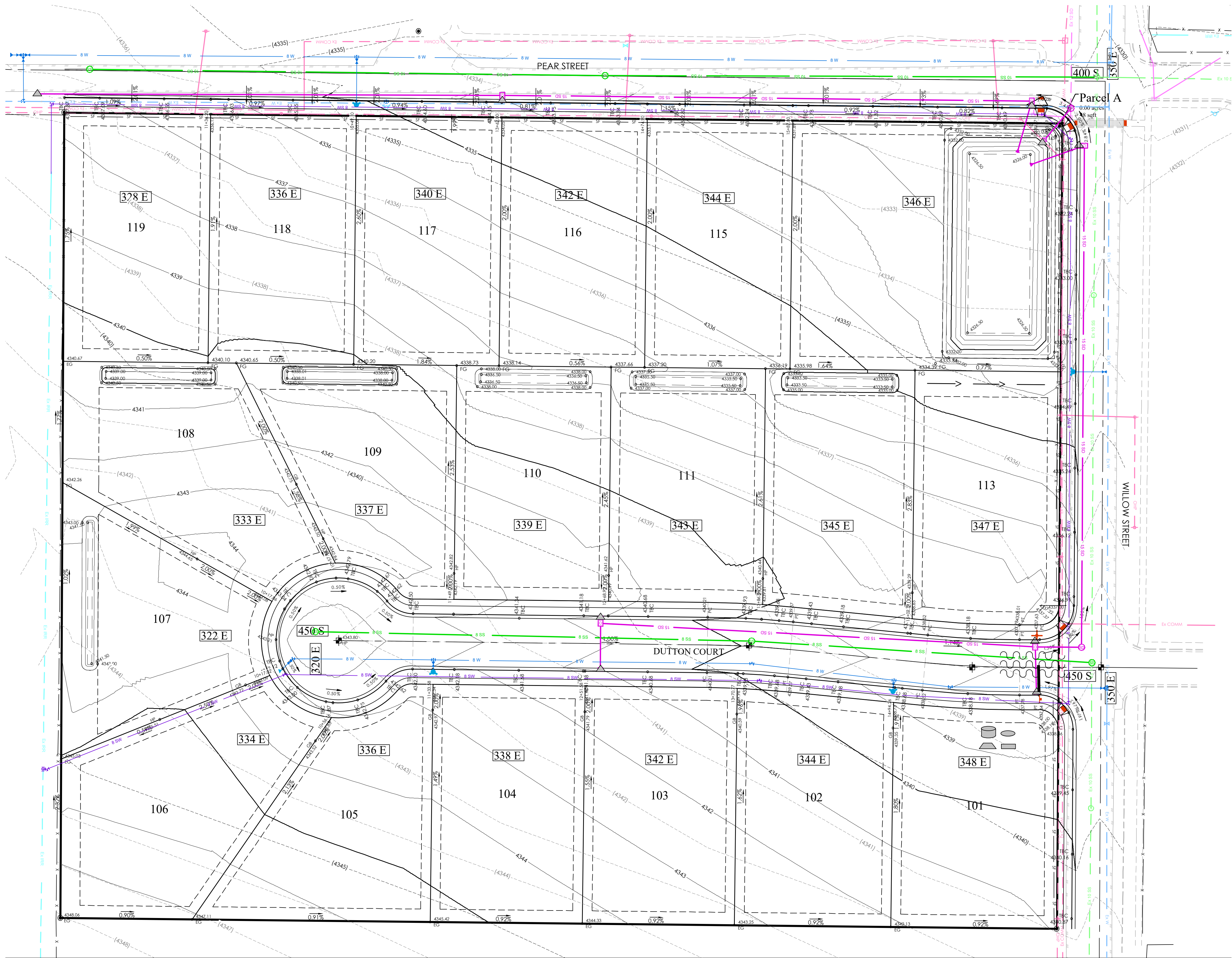
**WATER PLAN**

Scale: 1"=40'	Drawn: MEF
Date: 09/13/22	Job #: 21-0512
Sheet:	C6

**811**  
Know what's below.  
Call 811 before you dig.

Z:\\_2021\21-0512 Grantsville Willow Street Design\21-0512-Gwg\Sheets\WVAL\CA WATER PLAN.dwg





EROSION CONTROL LEGEND

- CONSTRUCTION ENTRANCE
- MATERIALS STORAGE
- FUEL TANKS
- CONCRETE WASHOUT
- TRASH BIN
- PORTABLE TOILET
- CONSTRUCTION TRAILER
- INLET PROTECTION
- SURFACE WATERS
- OUTFALL
- SILT FENCE
- CUTBACK CURB
- FIBER ROLL

SWPPP DATA:

PROJECT LOCATION (LAT/LONG):  
NORTHING:40°35'14" EASTING:112°26'59"

RECEIVING WATERS: GREAT SALT LAKE

AREA AFFECTED:

- TOTAL PROJECT AREA IS 11.1 ACRES. AN ESTIMATED 11.1 ACRES WITHIN THE PROJECT LIMITS WILL BE DISTURBED WITH NEW CONSTRUCTION OR CONTRACTOR STORAGE ACTIVITIES.
- THE MAJORITY OF EXISTING SITE GRADES RANGE FROM 1.5% TO 2.5%. THE PROPOSED GRADING RAISES THE SITE APPROXIMATELY 1' WITH ROADS OF APPROXIMATELY 1.00% TO PROVIDE THE PROPER DRAINAGE.
- THE INITIAL SITE IS APPROXIMATELY 0% IMPERVIOUS. THE FINISHED SITE WILL BE APPROXIMATELY 50% IMPERVIOUS.

CONSTRUCTION ACTIVITIES:

- THE PROJECT EXTENTS CONSIST OF 19 INDIVIDUALLY GRADED RESIDENTIAL LOTS. PLANNED ACTIVITIES INCLUDE CONSTRUCTION OF THE INFRASTRUCTURE, VERTICAL CONSTRUCTION OF HOMES, LANDSCAPING AND RELATED ACTIVITIES. OBTAIN UPDES "NOT" PERMIT AND ANY OTHER REQUIRED STORM WATER PERMIT PRIOR TO THE BEGINNING OF CONSTRUCTION.
- INSTALL BMP'S ACCORDING TO THE PHASE OF CONSTRUCTION AS INDICATED IN THIS SWPPP.
- CONSTRUCTION ACTIVITIES WILL PROCEED AS FOLLOWS: ROUGH GRADING, UTILITY INFRASTRUCTURE, ROADWAY INFRASTRUCTURE, HOME CONSTRUCTION AND LANDSCAPING. AS NEW DRAINAGE ELEMENTS ARE COMPLETED, CONTRACTOR SHALL IMPLEMENT THE USE OF PROPER BMP'S AS OUTLINED IN SECTION 3.5.1B IN THE UPDES PERMIT REGULATIONS.
- SITE STABILIZATION OF AREAS DISTRIBUTED BY CONSTRUCTION ACTIVITIES MUST BE FINISHED WITHIN 14 DAYS OF COMPLETION OF CONSTRUCTION AND PRIOR TO OBTAINING AN "NOT" PERMIT.
- CLEAR SITE OF NON-ESSENTIAL MATERIALS AND CLEAN STREETS AND ASSOCIATED GUTTERS, UPON PROJECT COMPLETION AND OBTAINING "NOT" PERMIT. REMOVE TEMPORARY STORM WATER MEASURES AND PERFORM REQUIRED STORM DRAIN SYSTEM MAINTENANCE PRIOR TO RELEASE OF SYSTEM TO THE OWNER.

RUNOFF COEFFICIENTS OF DISCHARGE:

- THE EXISTING RUNOFF COEFFICIENT FOR THE PROJECT AREA IS ESTIMATED TO BE 0.15. THE PROPOSED RUNOFF COEFFICIENT WILL BE APPROXIMATELY 0.34 FOR THE PROPOSED IMPROVEMENTS UPON COMPLETION OF IMPROVEMENTS.
- DISCHARGE FROM THE SITE WILL BE THROUGH THE EXISTING STORM DRAIN SYSTEM.

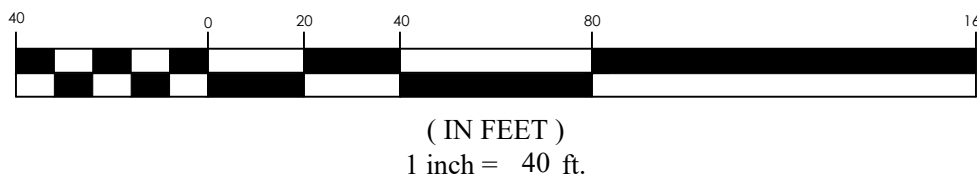
GENERAL STORM WATER POLLUTION CONTROL NOTES:

- FOR INSTALLATION PROCEDURES, SEE SWPPP DETAIL BEST MANAGEMENT PRACTICES (BMP) SPECIFICATIONS IN SECTION 5.
- THE BMP'S AND SITE WILL BE MONITORED REGULARLY. ANY ADDITIONAL BMP'S THAT ARE NEEDED WILL BE DETERMINED DURING REGULAR INSPECTIONS AND INSTALLED ACCORDING TO SPECIFICATION. ANY CHANGES TO PROTECT BMP'S WILL NEED TO BE REFLECTED ON THE SWPPP MAP(S).
- SWPPP PLAN COMPILED FROM INFORMATION OBTAINED FROM MATERIAL PRODUCED BY: FOCUS ENGINEERING AND SURVEYING  
6949 S. HIGH TECH DRIVE, SUITE 200  
MIDVALE, UTAH 84047  
PH: (801) 352-0075

ALL INFORMATION SHOWN ON SWPPP MAPS WAS TAKEN OR DERIVED FROM THE ABOVE STATED SOURCE. ANY INFORMATION NOT DEPICTED WAS NOT PROVIDED AS PART OF THIS PROJECT.



GRAPHIC SCALE



COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
EROSION CONTROL PLAN

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
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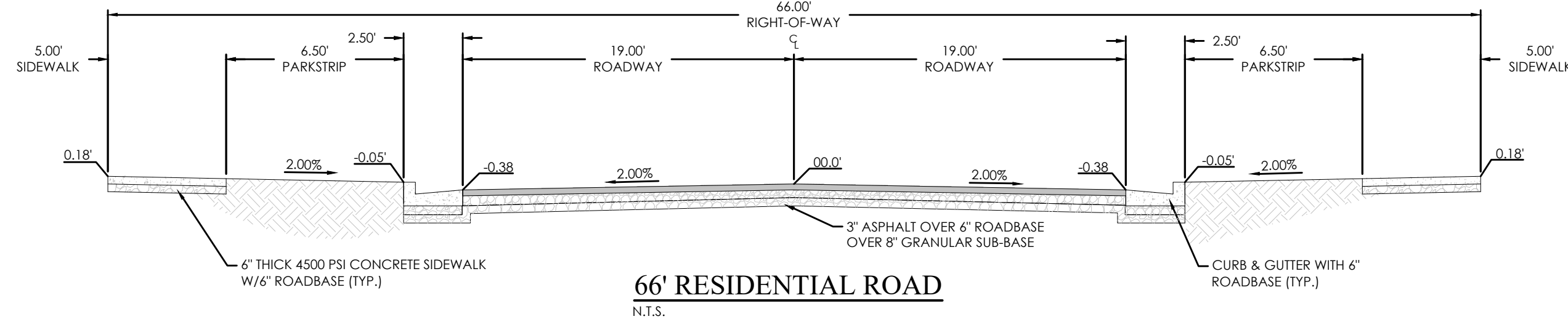
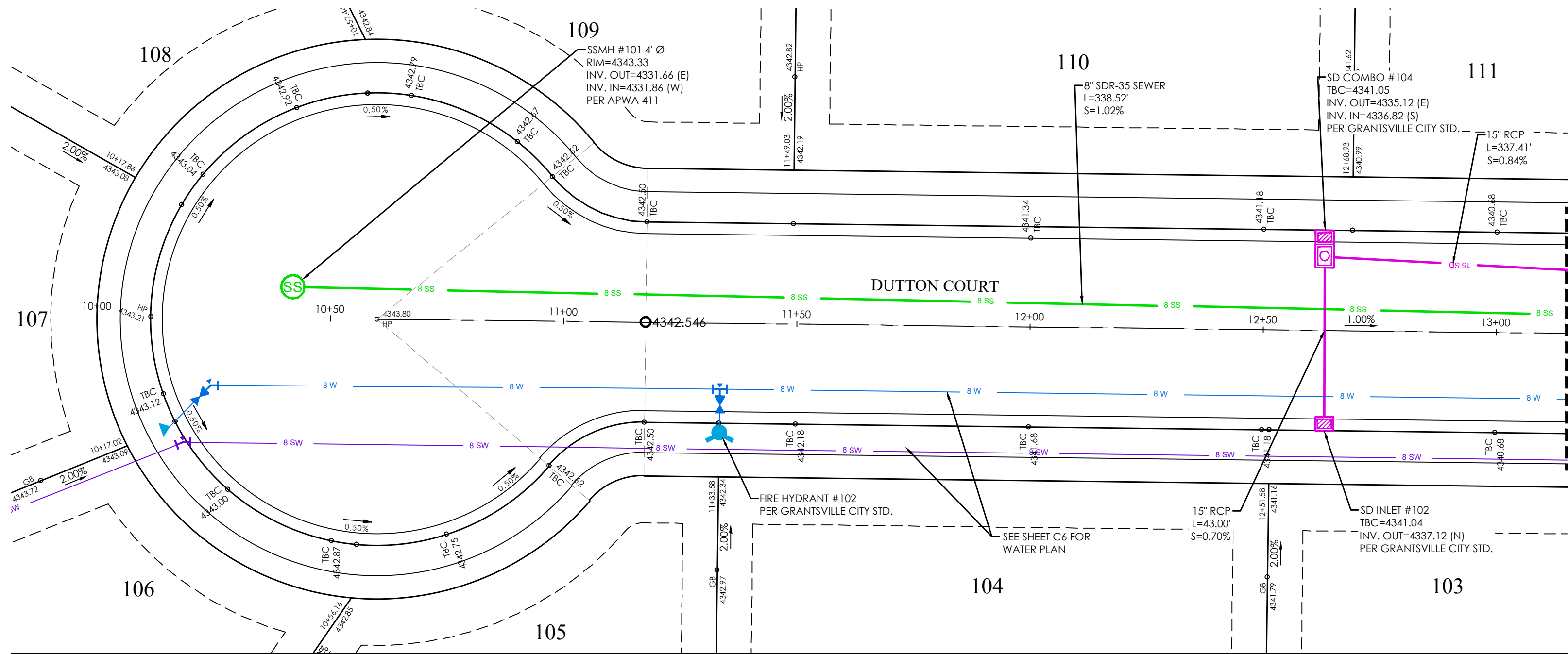
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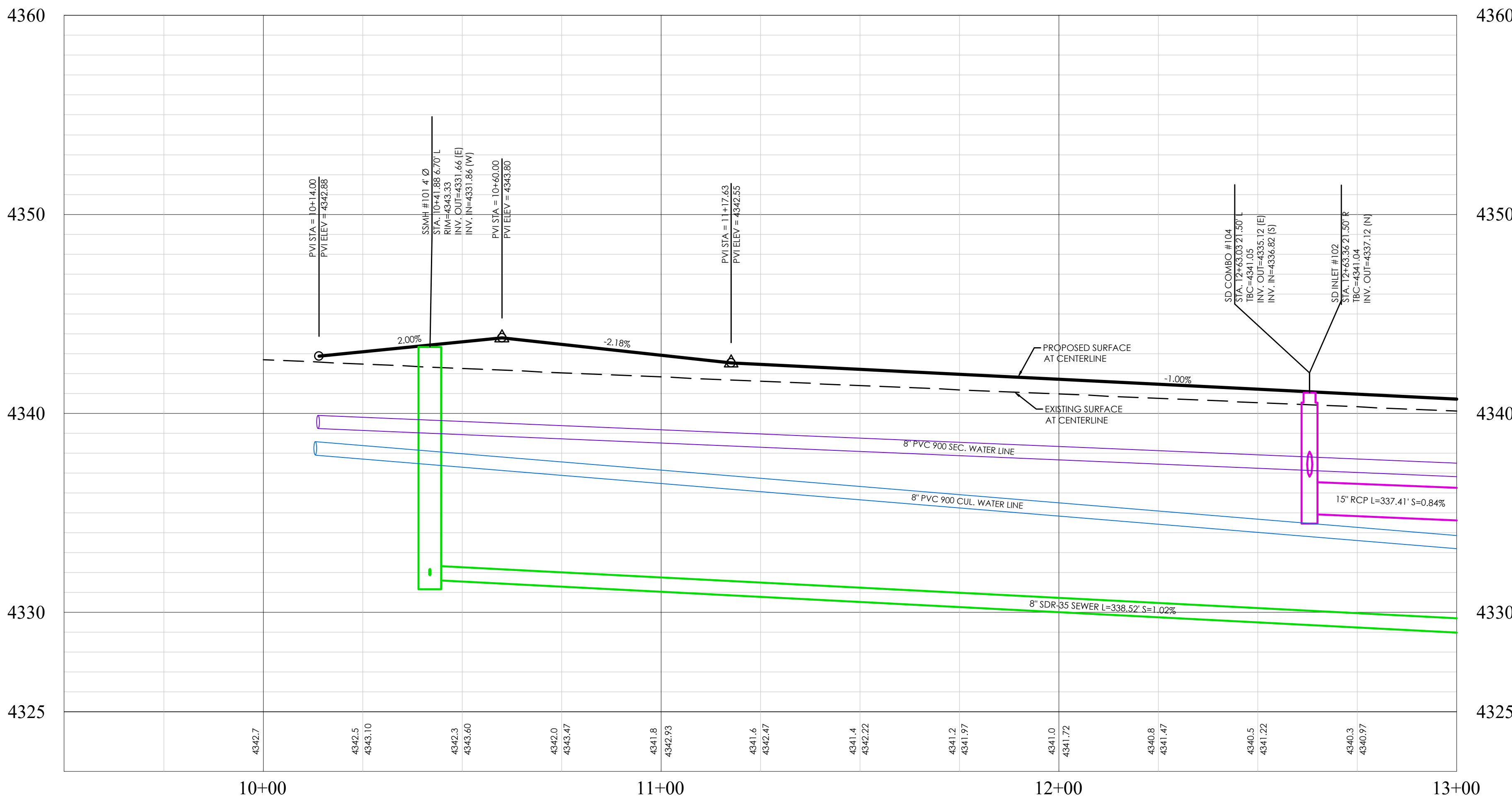
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Job #: 21-0512

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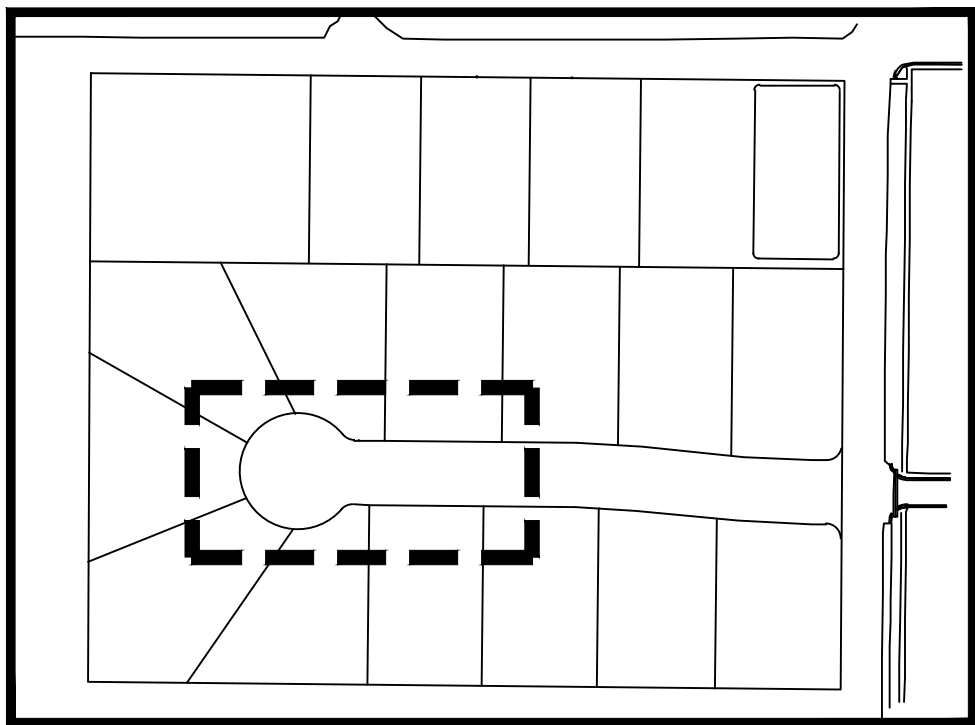


DUTTON COURT PLAN



DUTTON COURT PROFILE

LEGEND	
	BOUNDARY
	CENTERLINE
	EASEMENT
	LOT LINE
	15" STORM DRAIN
	8" SANITARY SEWER
	8" CULINARY WATER
	8" SECONDARY WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE, & BEND
	SECONDARY VALVE, TEE, & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION



KEY MAP  
N.T.S.

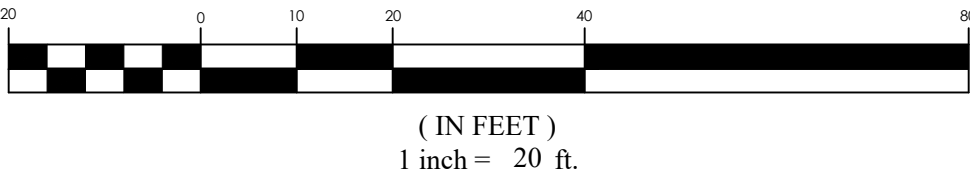
- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  - PROVIDE 12" SUMP ON ALL STORM WATER MANHOLES AND BOXES
  - ALL WATER SERVICES TO BE LOOPED UNDER THE STORM DRAIN WHERE EVER CONFLICTS OCCUR.

BENCHMARK

NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88



GRAPHIC SCALE



COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
DUTTON COURT

REVISION BLOCK	
#	DESCRIPTION
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DUTTON COURT

Scale: 1"=20'  
Date: 09/13/22  
Sheet:

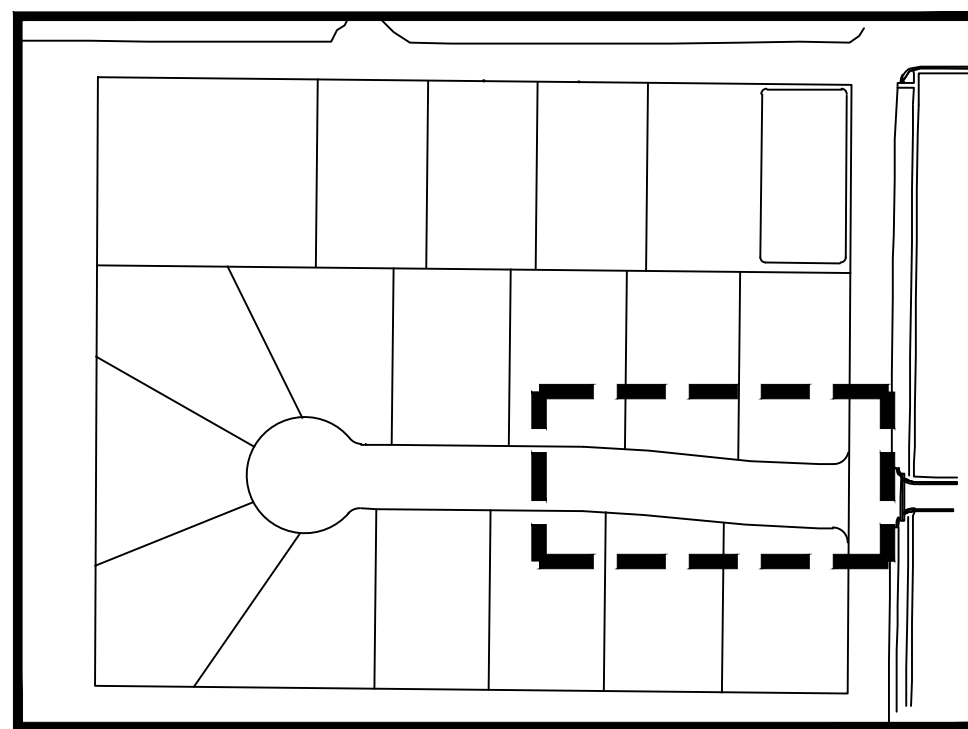
Drawn: MEF  
Job #: 21-0512  
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NOTES:

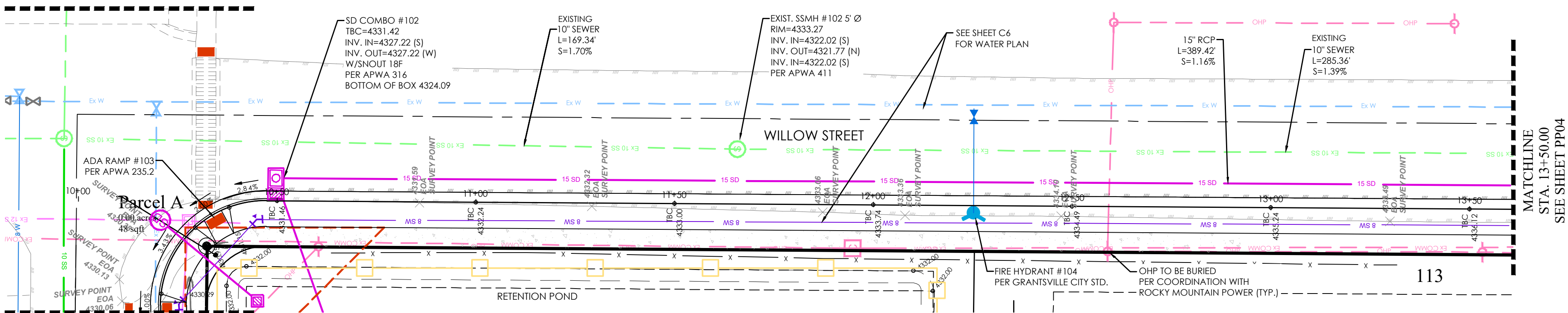
1. CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
2. PROVIDE 12" SUMPS ON ALL STORM WATER MANHOLES AND BOXES
3. ALL WATER SERVICES TO BE LOOPED UNDER THE STORM DRAIN WHERE EVER CONFLICTS OCCUR.



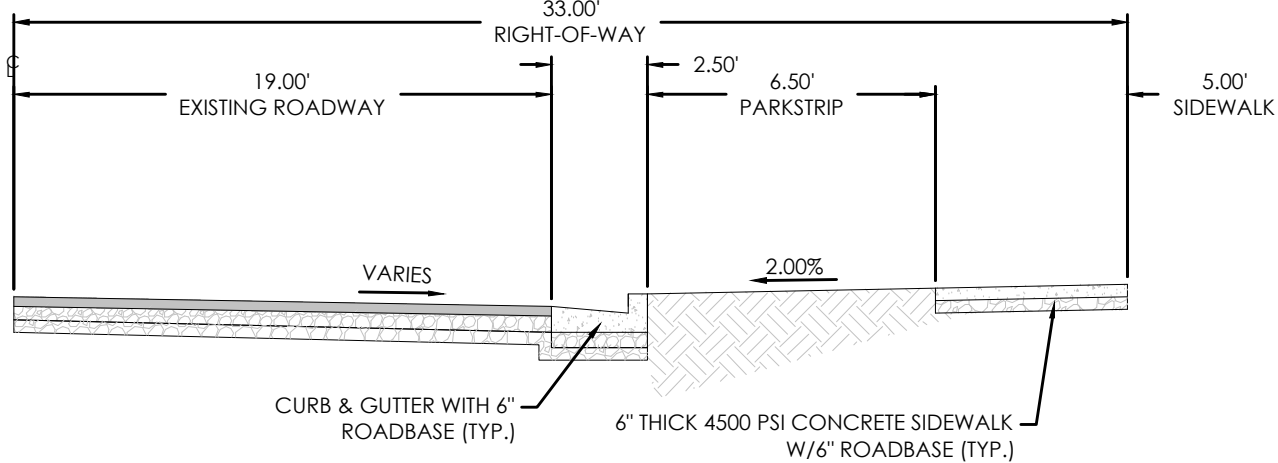
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6	10-1-2000	10-1-2000



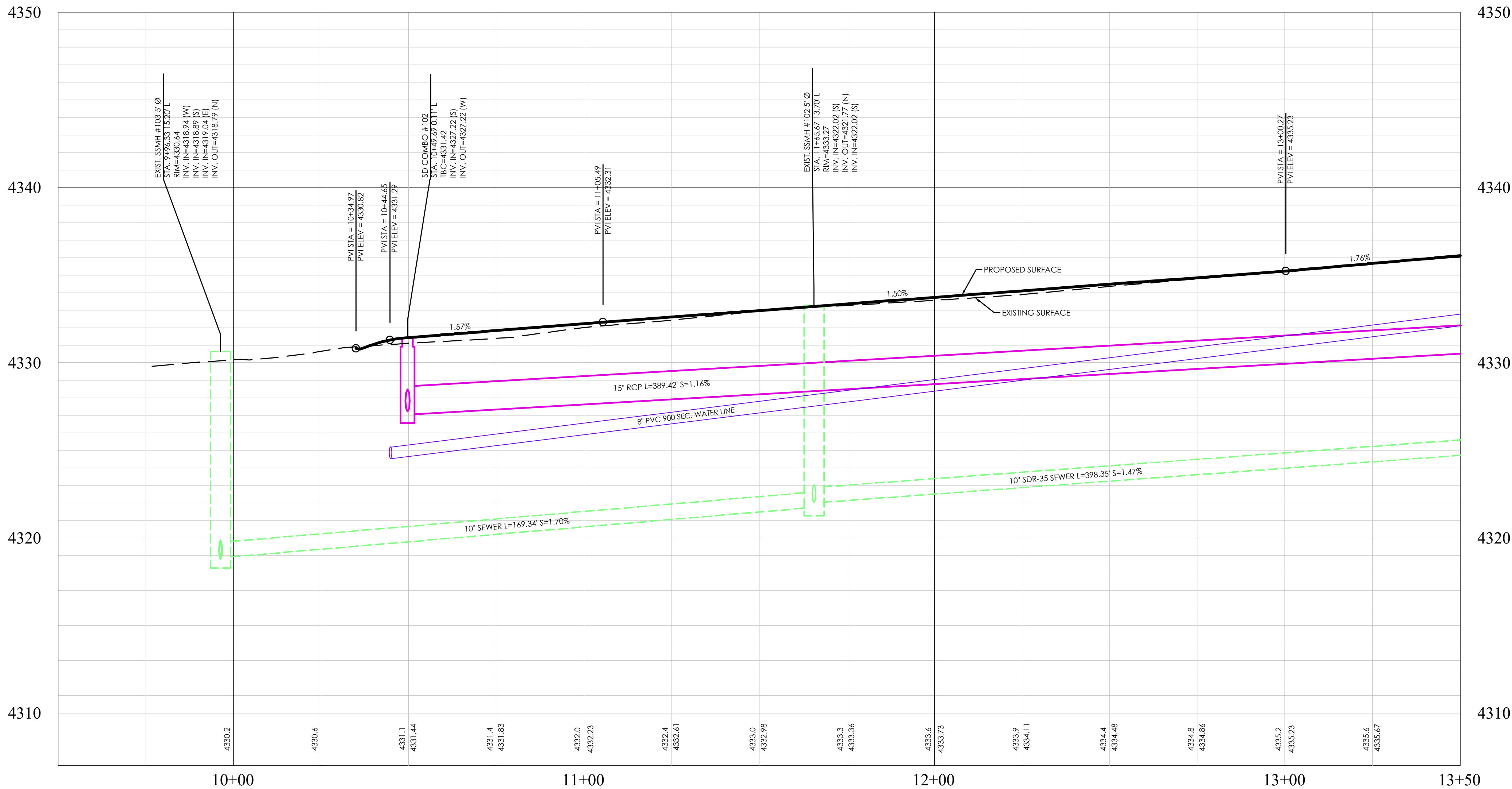
MATCH PEAR STREET  
PLAN AND PROFILE  
SEE SHEET PP06



### WILLOW STREET TBC PLAN



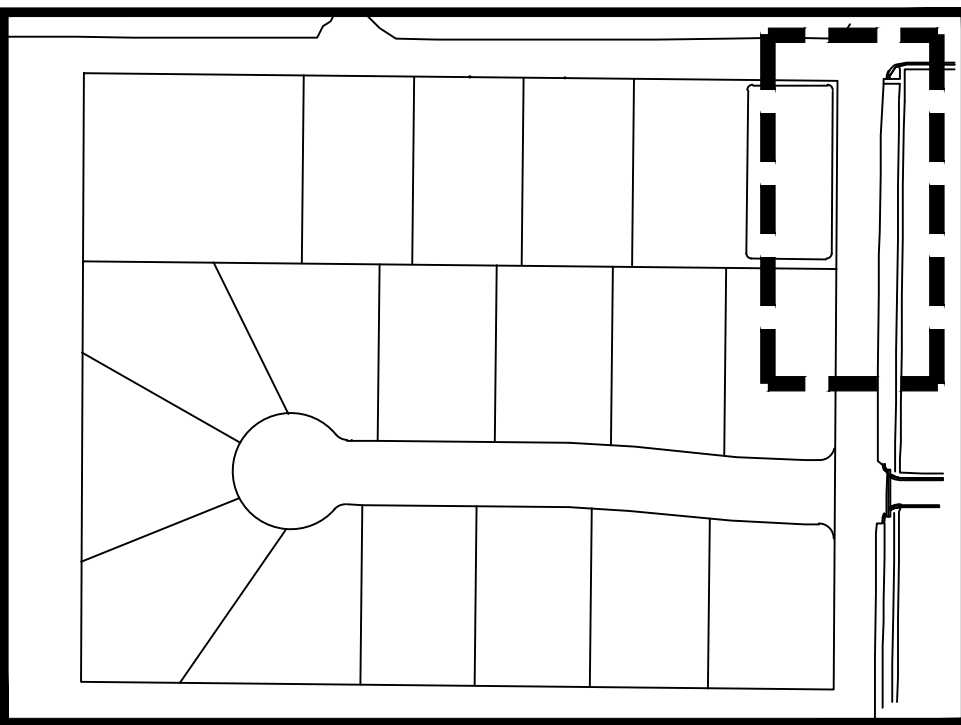
66' ROW WILLOW STREET (HALF WIDTH)  
N.T.S.



### WILLOW STREET TBC PROFILE

### LEGEND

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15 SD	15" STORM DRAIN
8 SS	8" SANITARY SEWER
8 W	8" CULINARY WATER
8 SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
Ex SD	EXIST. STORM DRAIN
Ex SS	EXIST. SANITARY SEWER
Ex W	EXIST. CULINARY WATER
Ex SW	EXIST. SECONDARY WATER
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
+	SIGN
+	STREET LIGHT
+	SD MH, INLET, AND COMBO
+	SEWER MANHOLE
+	CULINARY VALVE, TEE, & BEND
+	SECONDARY VALVE, TEE, & BEND
+	WATER BLOW-OFF
+	FIRE HYDRANT
+	STREET MONUMENT (TO BE SET)
+	EXIST. STREET MONUMENT
+	EXIST. SD INLET & MH
+	EXIST. SEWER MH
+	EXIST. VALVE, TEE, & BEND
+	EXIST. FIRE HYDRANT
+	SPOT ELEVATION



KEY MAP  
N.T.S.

### NOTES:

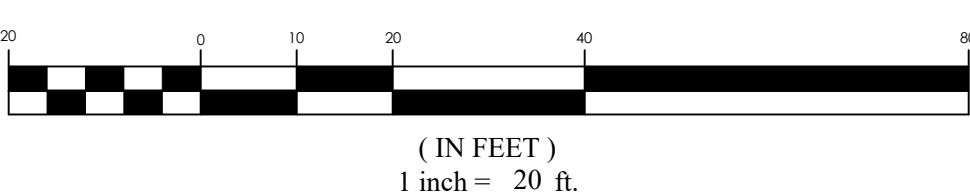
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- PROVIDE 12" SUMP ON ALL STORM WATER MANHOLES AND BOXES
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### BENCHMARK

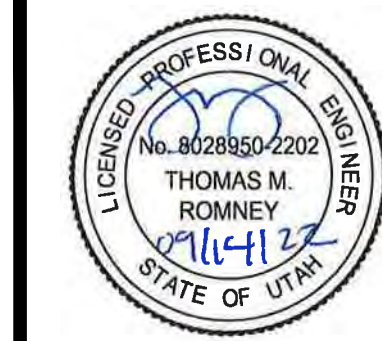
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88



### GRAPHIC SCALE



(IN FEET)  
1 inch = 20 ft.



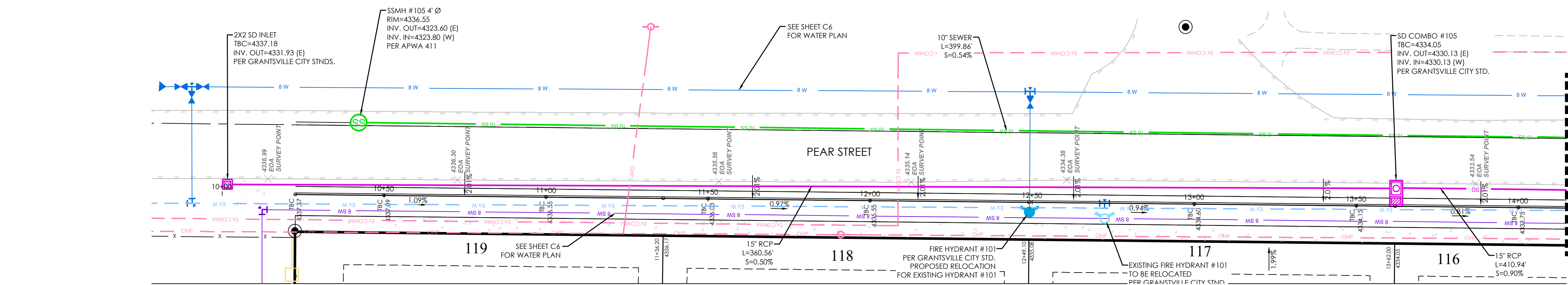
## COWBOY ESTATES SUBDIVISION GRANTSVILLE, UT WILLOW STREET

REVISION BLOCK	DATE	DESCRIPTION
1	09/13/22	1
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3	09/13/22	3
4	09/13/22	4
5	09/13/22	5
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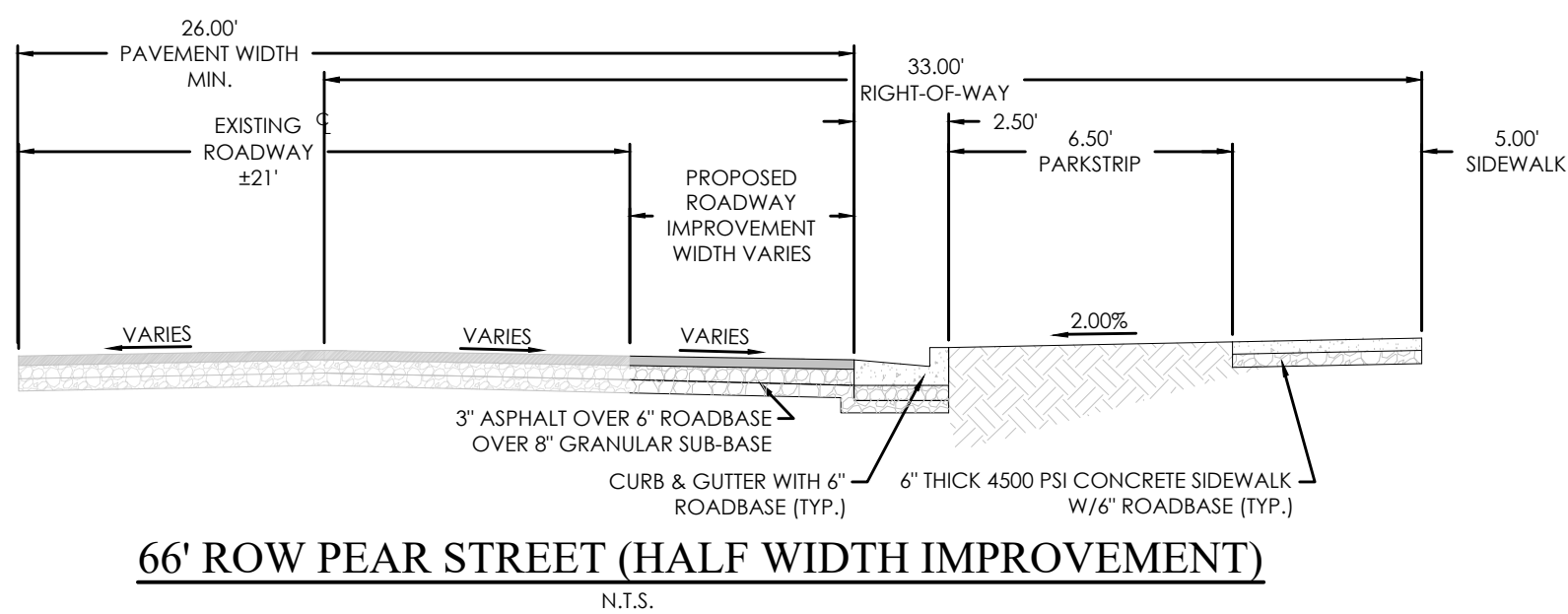




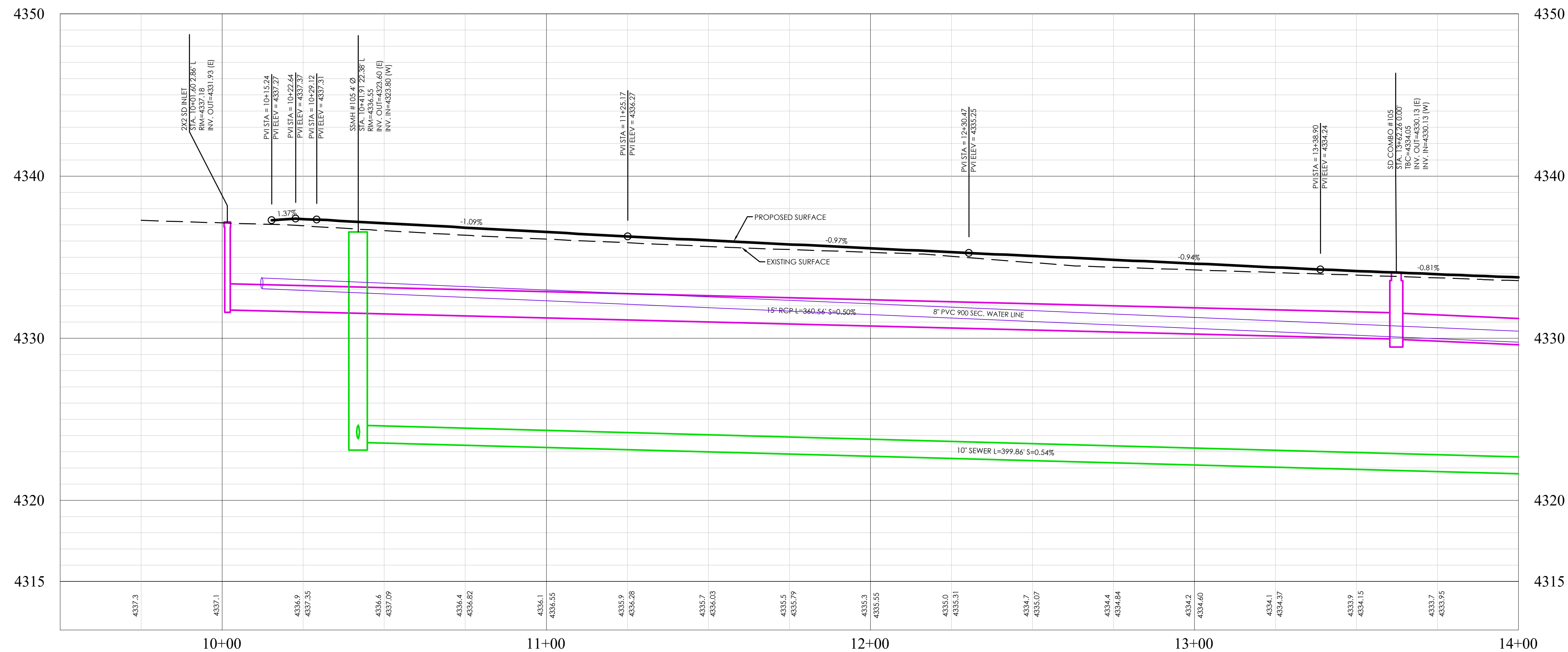




PEAR STREET TBC PLAN

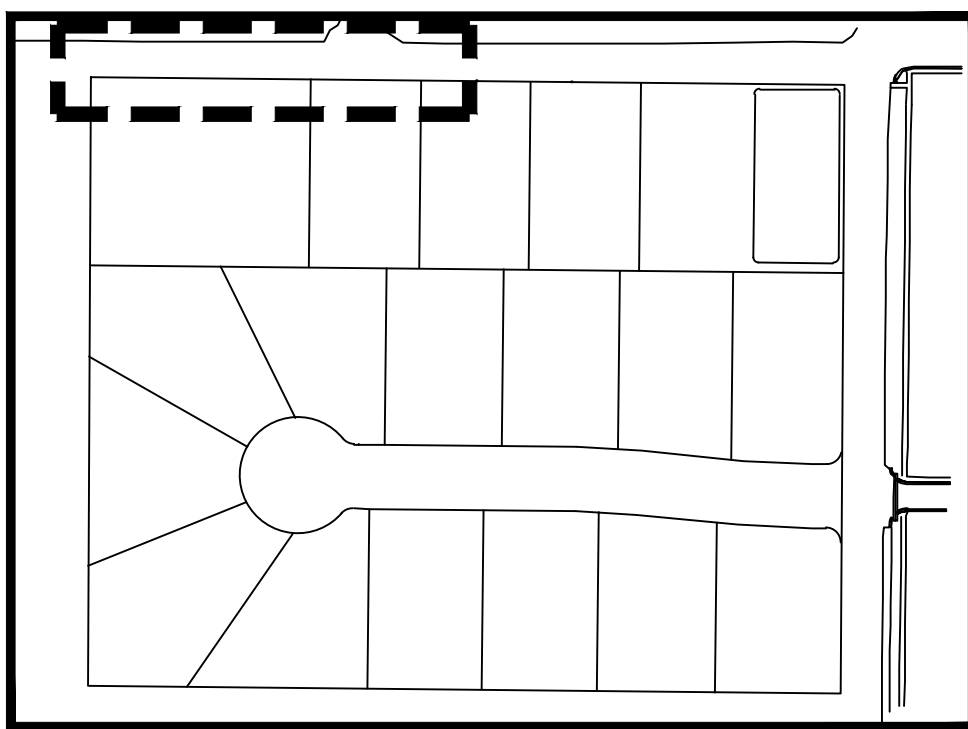


66' ROW PEAR STREET (HALF WIDTH IMPROVEMENT)



PEAR STREET TBC PROFILE

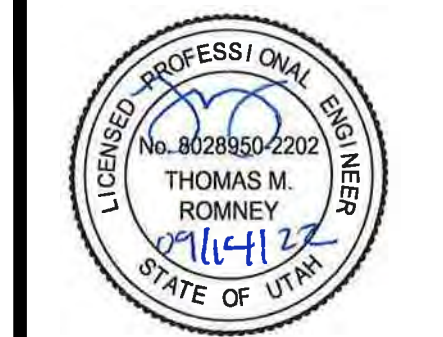
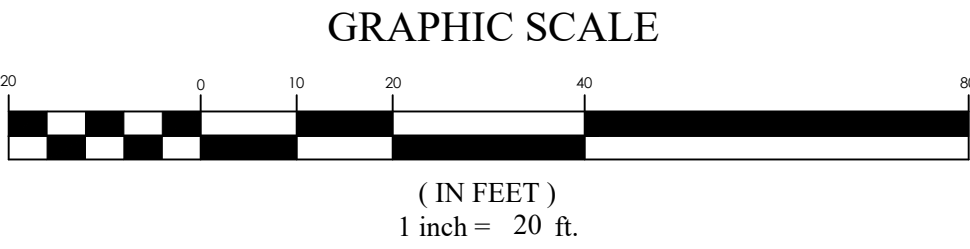
LEGEND	
BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" SD	15" STORM DRAIN
8" SS	8" SANITARY SEWER
8" W	8" CULINARY WATER
8" SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
XXXX	EXIST. STORM DRAIN
XXXX	EXIST. SANITARY SEWER
XXXX	EXIST. CULINARY WATER
XXXX	EXIST. FENCE
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
XXXX	EXIST. FIRE HYDRANT
XXXX	EXIST. VALVE, TEE, & BEND
XXXX	EXIST. FIRE HYDRANT
XXXX	SPOT ELEVATION



KEY MAP

- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
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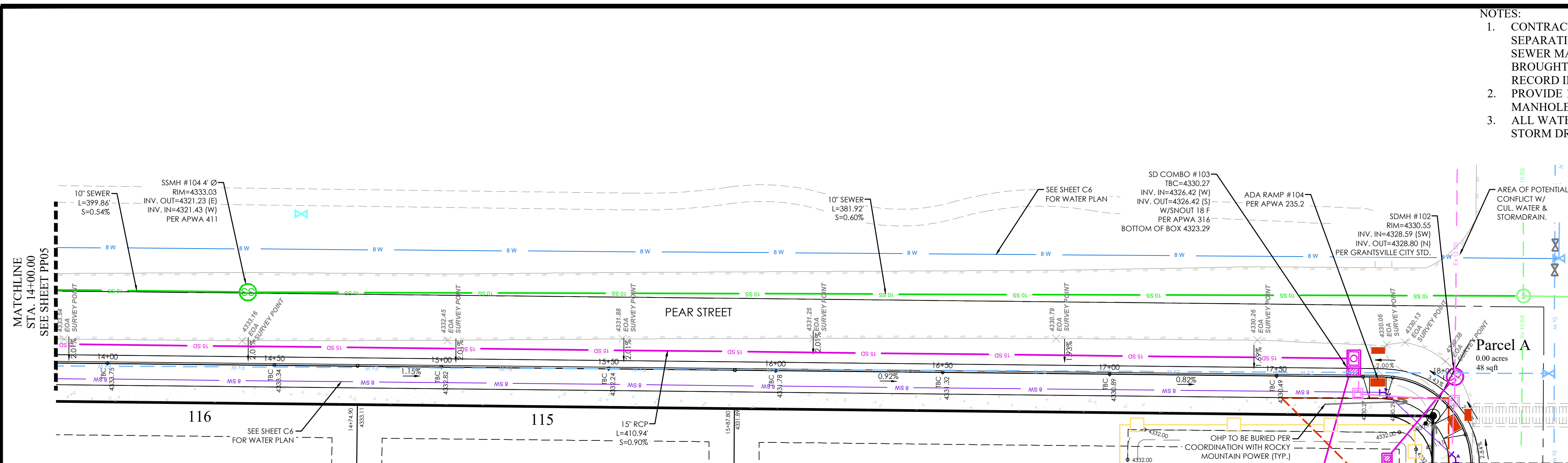
**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88



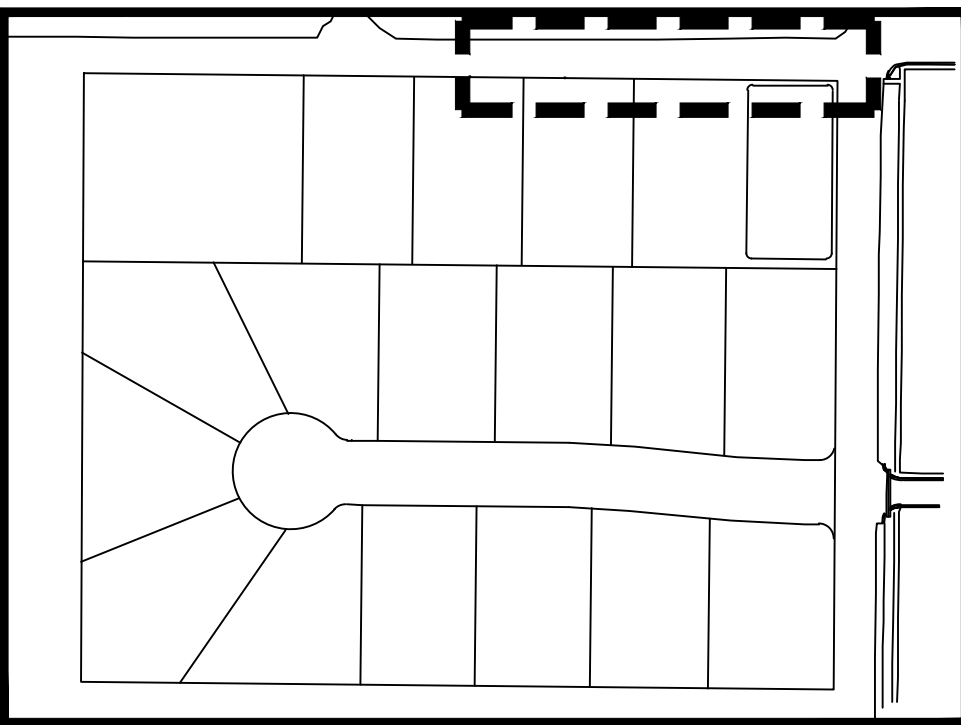
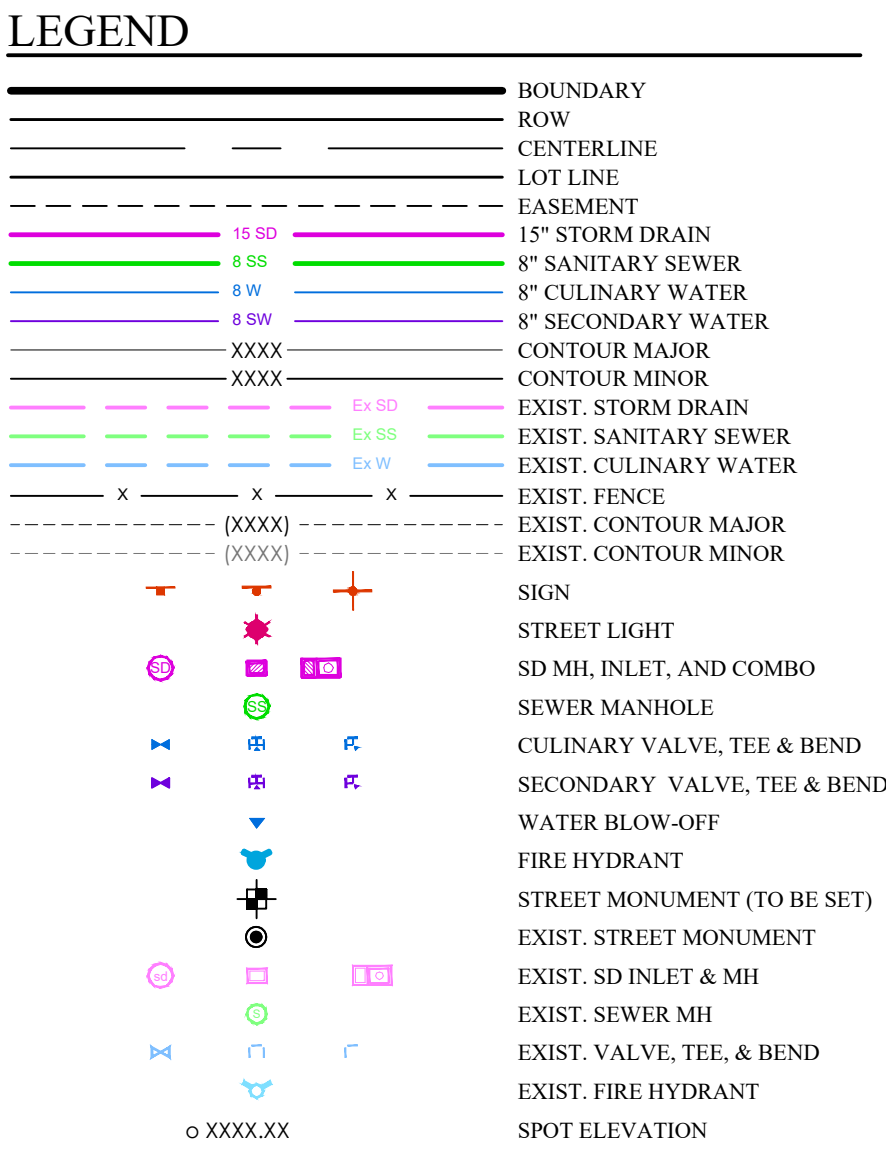
**COWBOY ESTATES SUBDIVISION**  
GRANTSVILLE, UT  
PEAR STREET

REVISION BLOCK	DATE	DESCRIPTION
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5	09/13/22	1.00
6	09/13/22	1.00

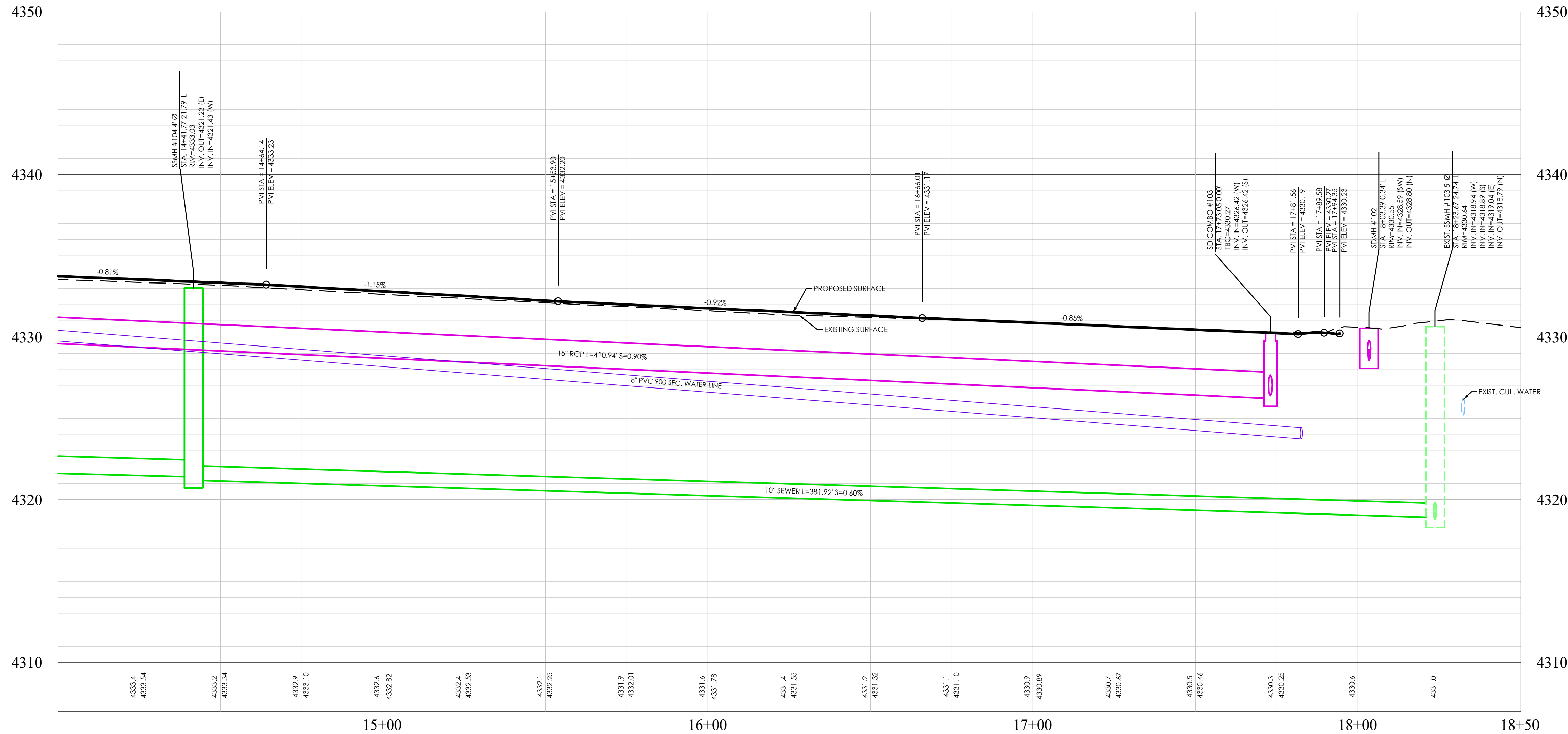




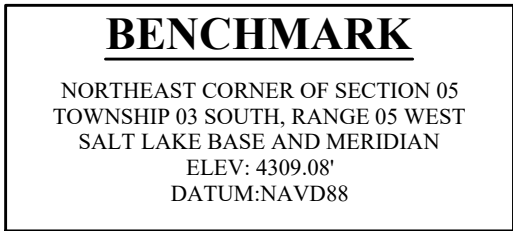
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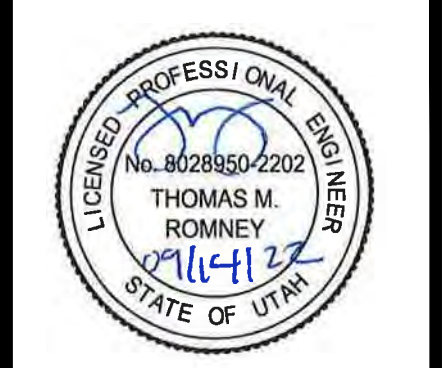
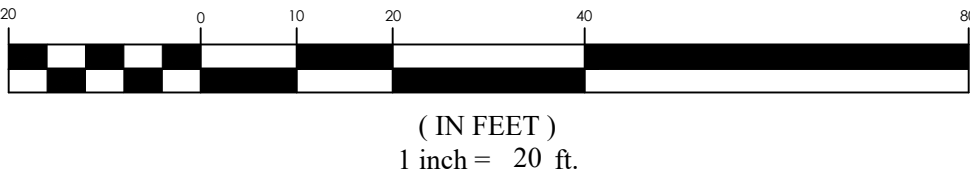
**KEY MAP**  
N.T.S



# PEAR STREET TBC PROFILE



## GRAPHIC SCALE



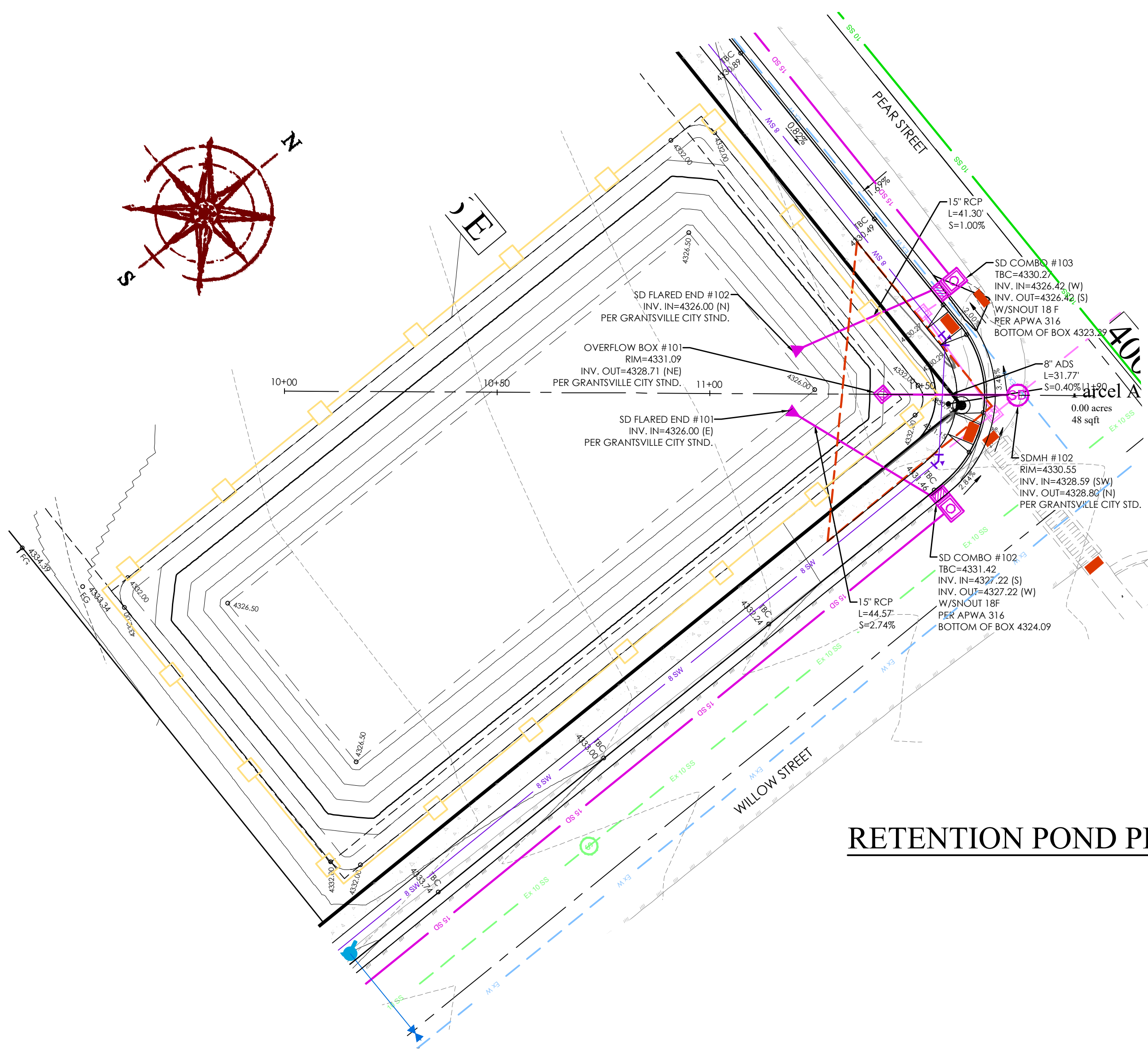
COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
PEAR STREET

REVISION BLOCK		
#	DATE	DESCRIPTION
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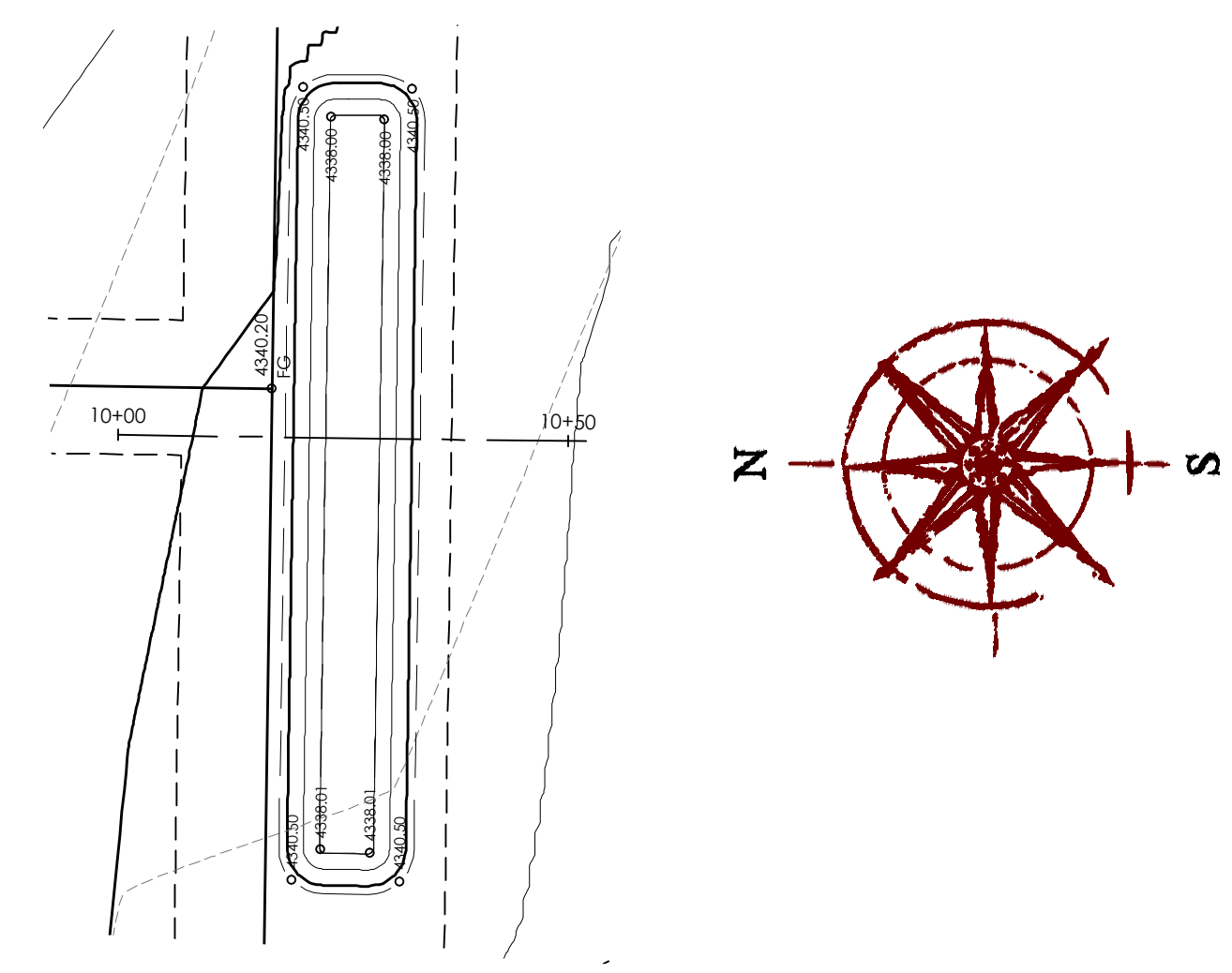
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Sheet:	

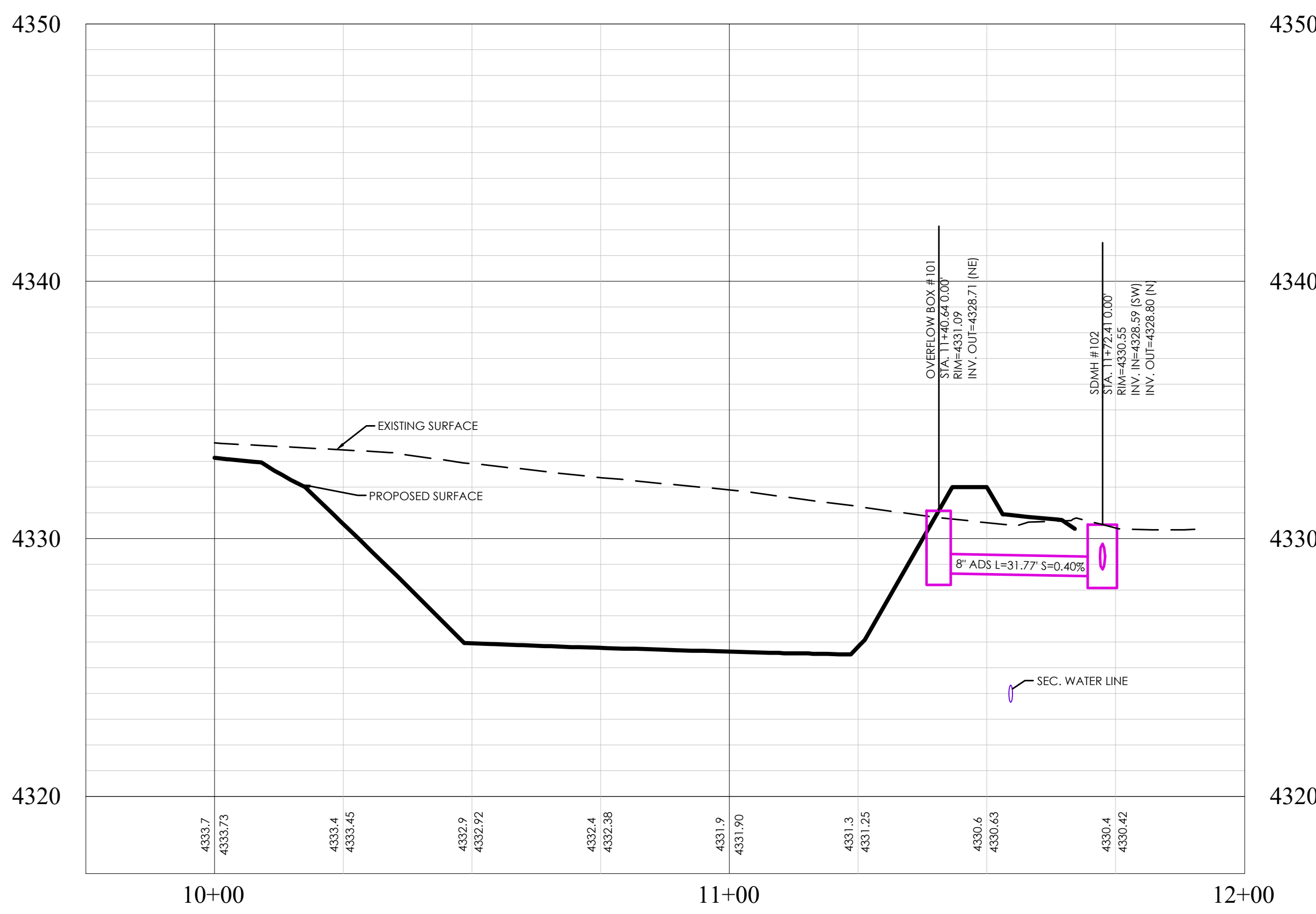




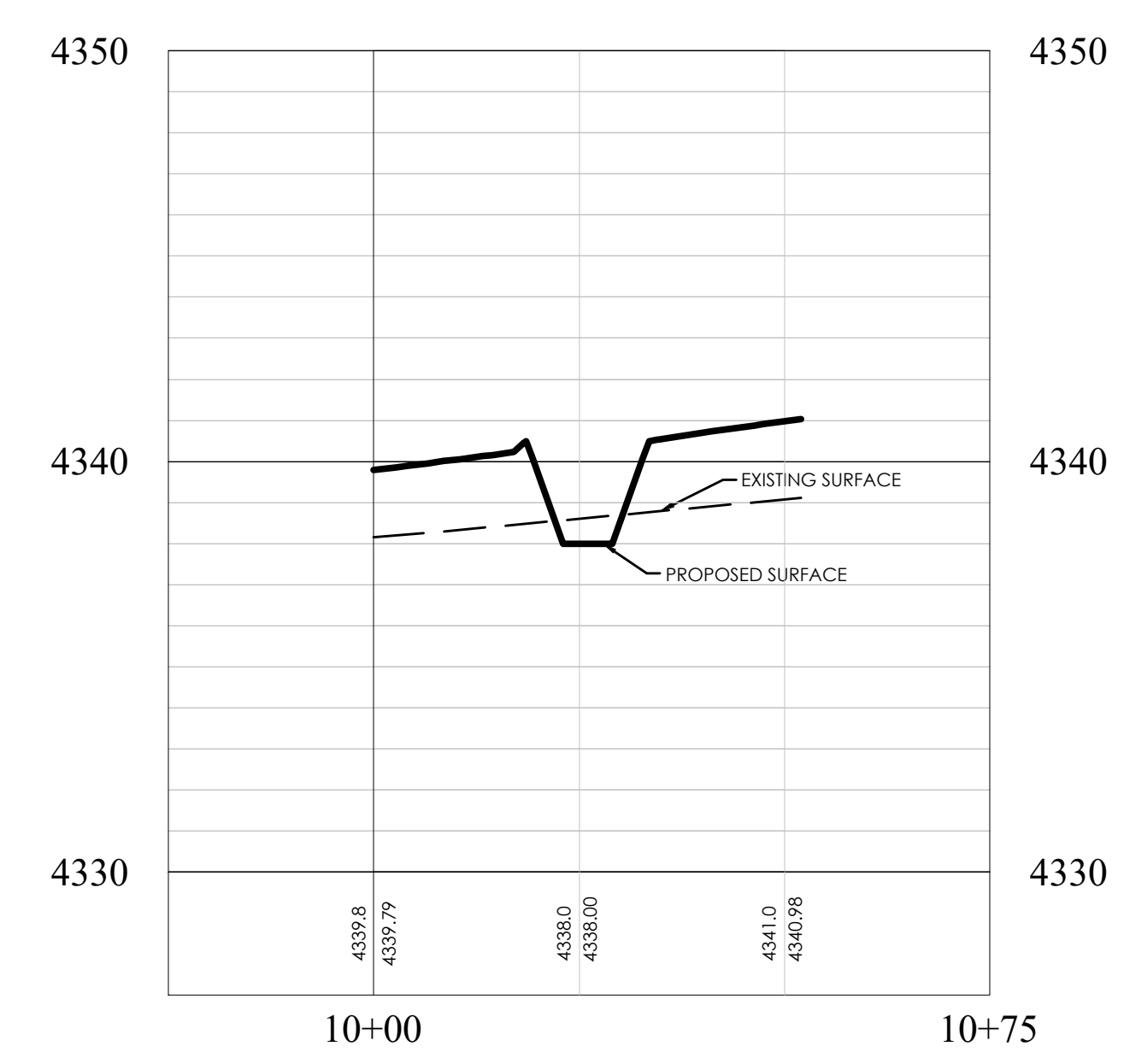
RETENTION POND PLAN



REAR LOT RETENTION POND PLAN

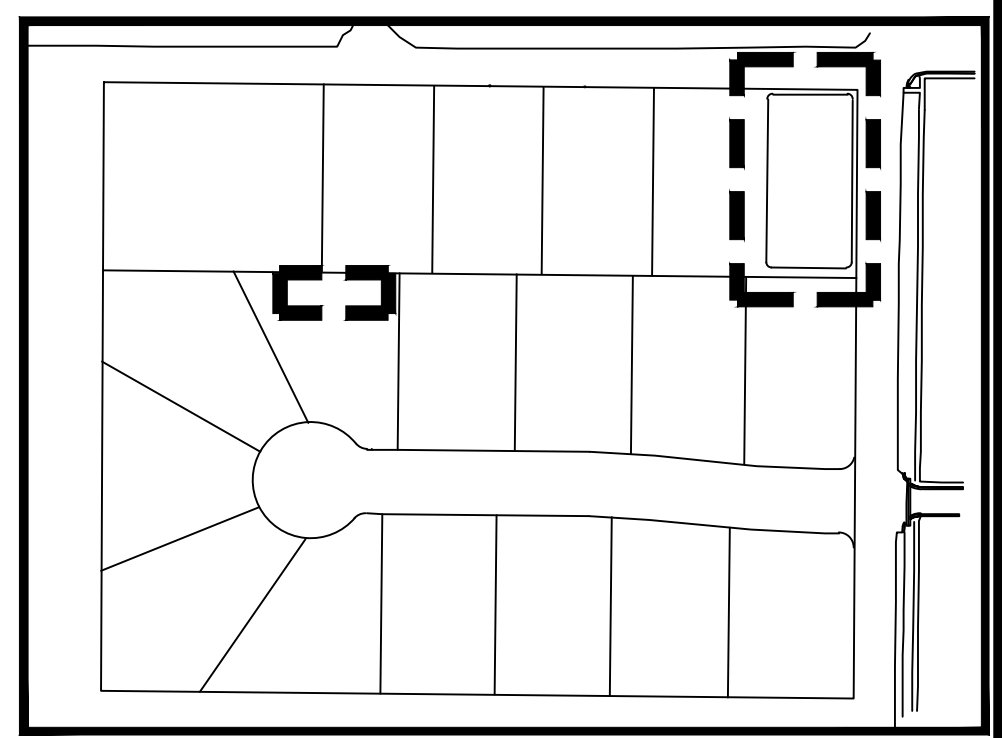


RETENTION POND PROFILE

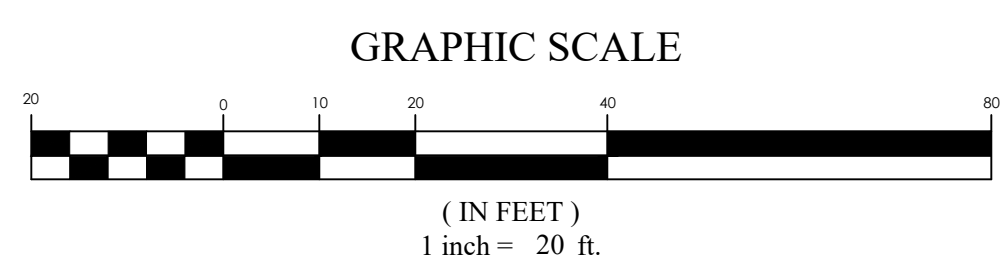


REAR LOT RETENTION POND PROFILE

LEGEND	
BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" SD	15" STORM DRAIN
8" SS	8" SANITARY SEWER
8" W	8" CULINARY WATER
8" SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
XXXX	EXIST. STORM DRAIN
XXXX	EXIST. SANITARY SEWER
XXXX	EXIST. CULINARY WATER
XXXX	EXIST. FENCE
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
XXXX	SIGN
XXXX	STREET LIGHT
XXXX	SD MH, INLET, AND COMBO
XXXX	SEWER MANHOLE
XXXX	CULINARY VALVE, TEE, & BEND
XXXX	SECONDARY VALVE, TEE, & BEND
XXXX	WATER BLOW-OFF
XXXX	FIRE HYDRANT
XXXX	STREET MONUMENT (TO BE SET)
XXXX	EXIST. STREET MONUMENT
XXXX	EXIST. SD INLET & MH
XXXX	EXIST. SEWER MH
XXXX	EXIST. VALVE, TEE, & BEND
XXXX	EXIST. FIRE HYDRANT
XXXX	SPOT ELEVATION



KEY MAP  
N.T.S.



**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08  
DATUM: NAVD88

**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
6949 S. HIGH TECH DRIVE, SUITE 200  
MIDVALE, UTAH 84047 PH: (801) 352-0075  
www.focusnh.com



**COWBOY ESTATES SUBDIVISION**  
GRANTSVILLE, UT  
**RETENTION POND**

REVISION BLOCK	
DATE	DESCRIPTION
1	
2	
3	
4	
5	
6	

**RETENTION POND**

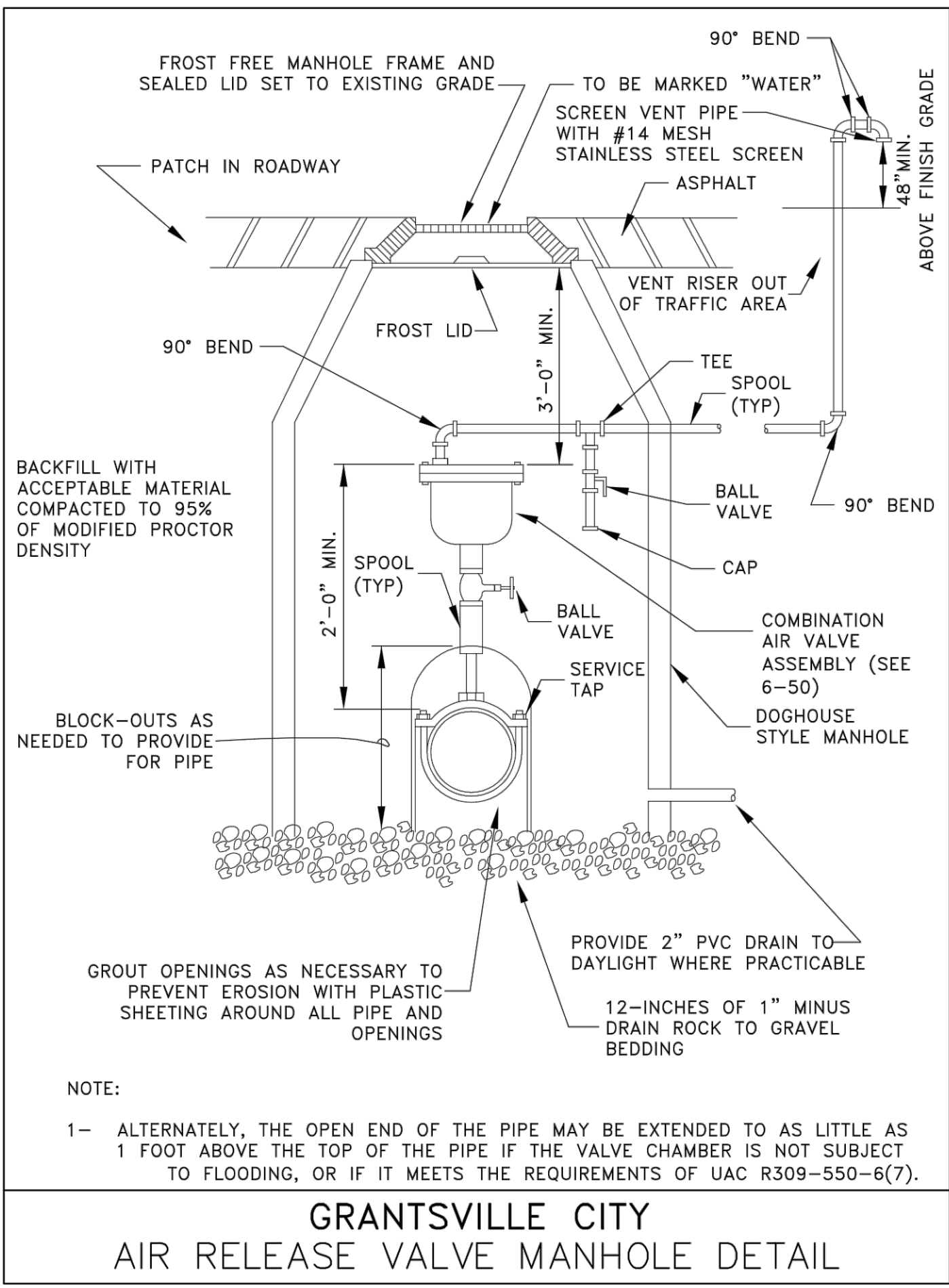
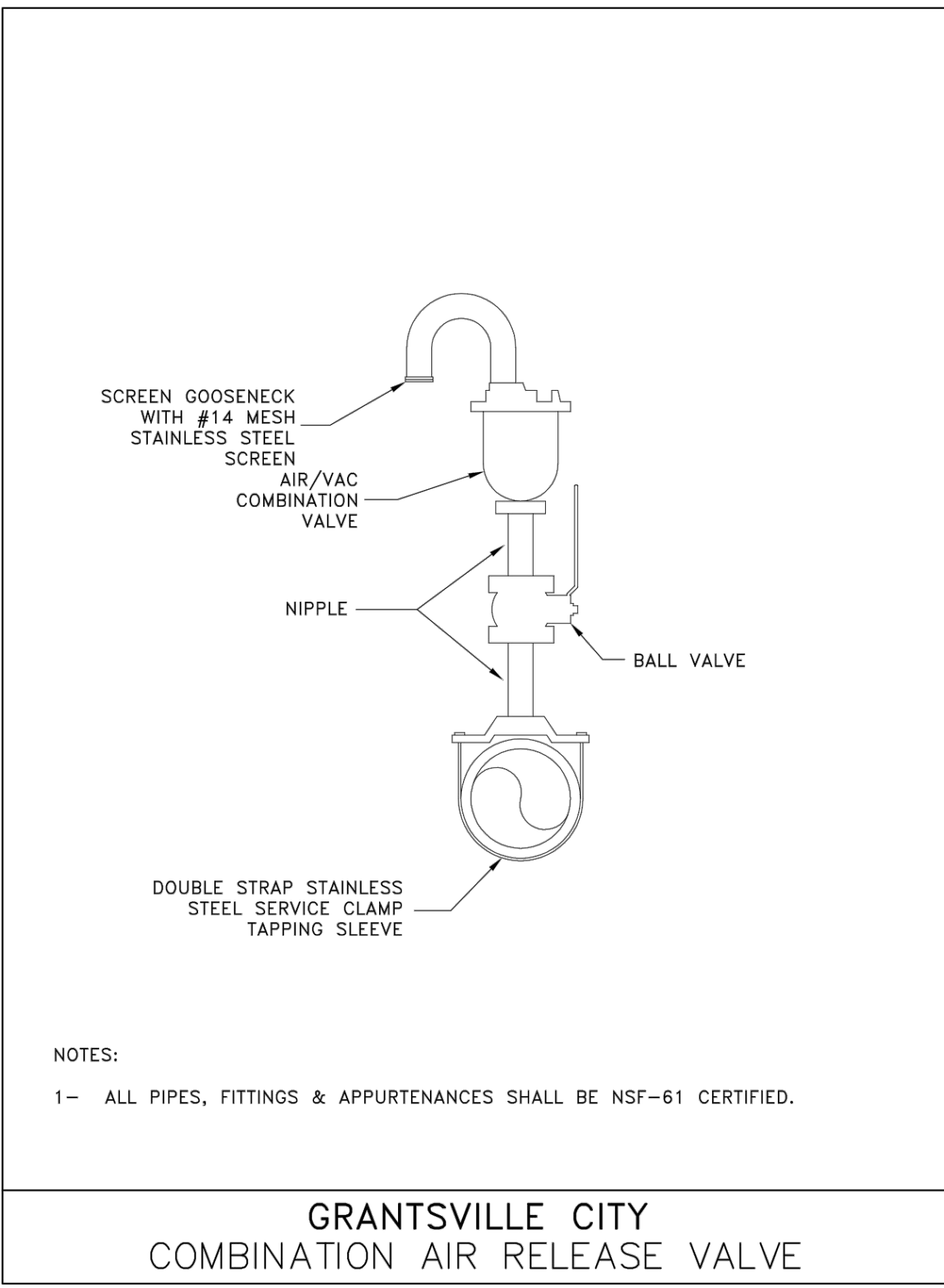
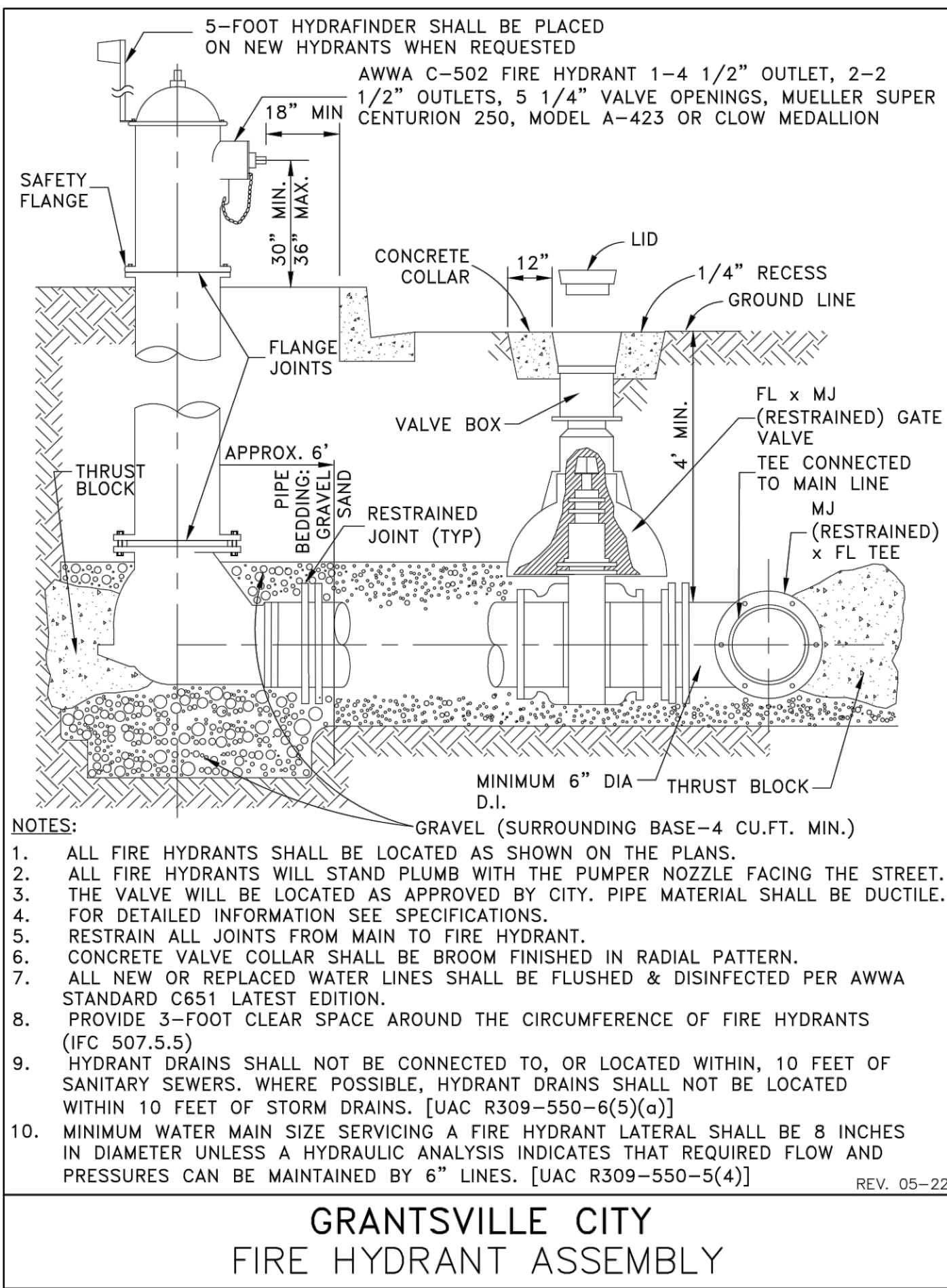
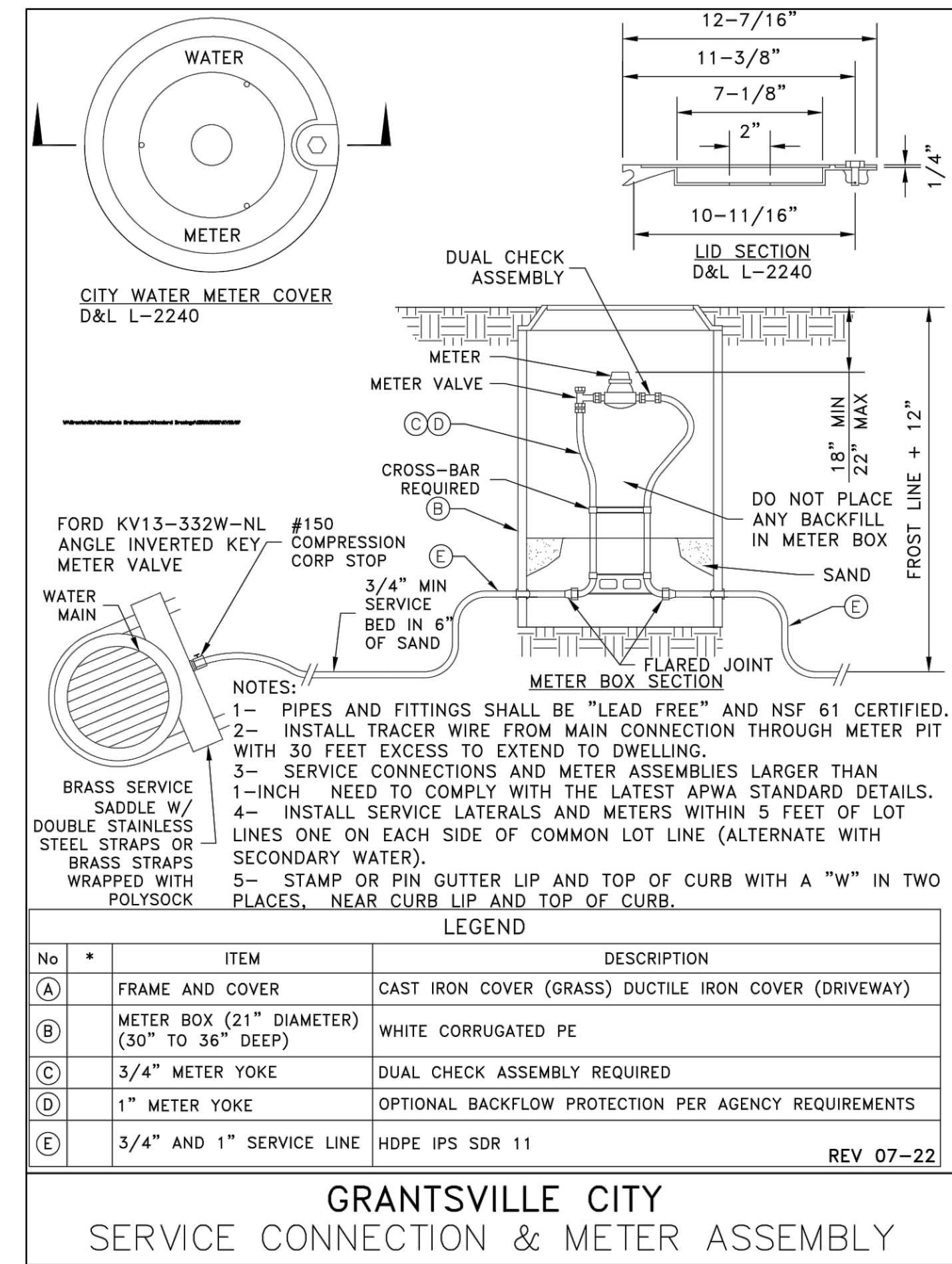
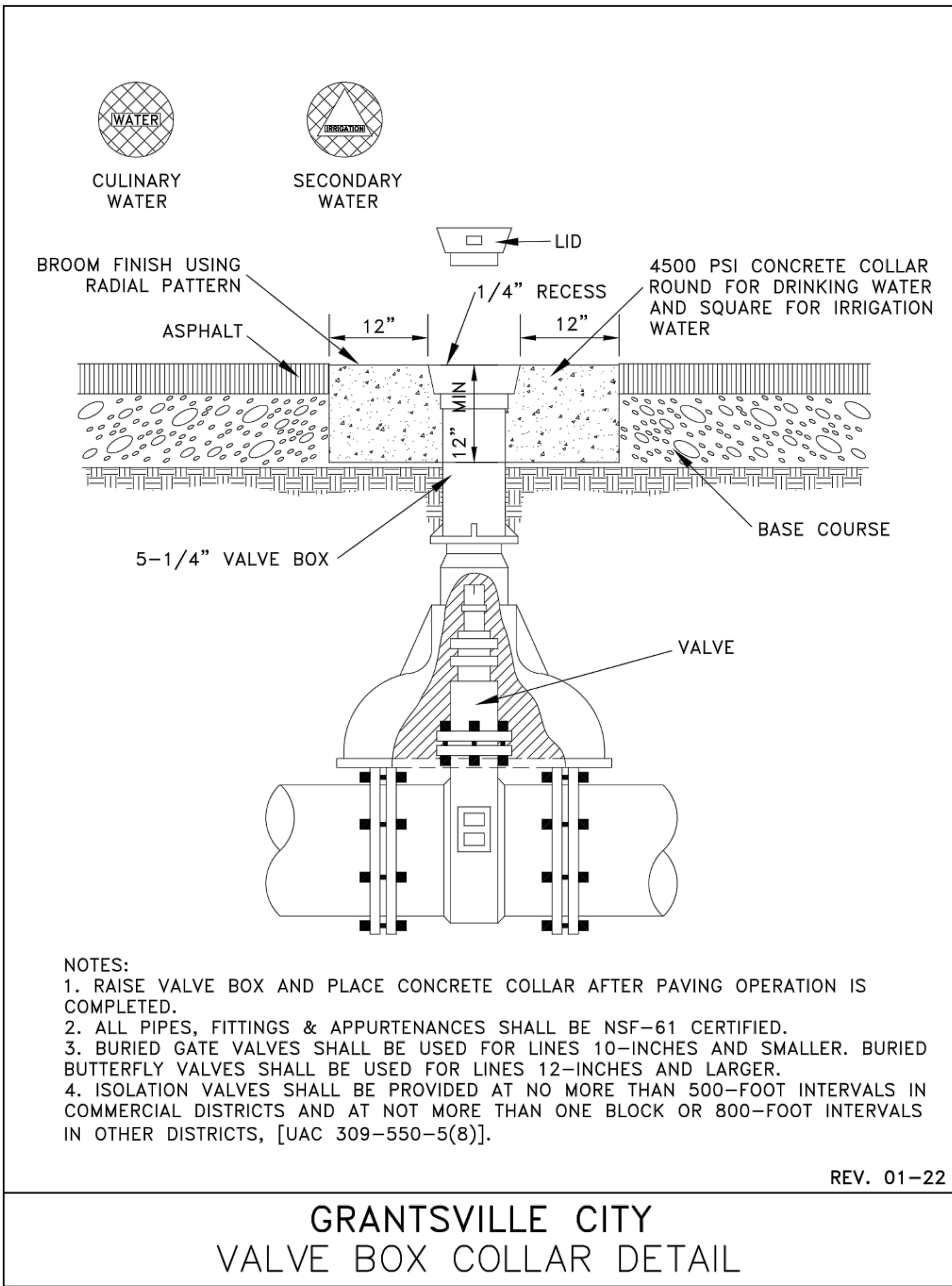
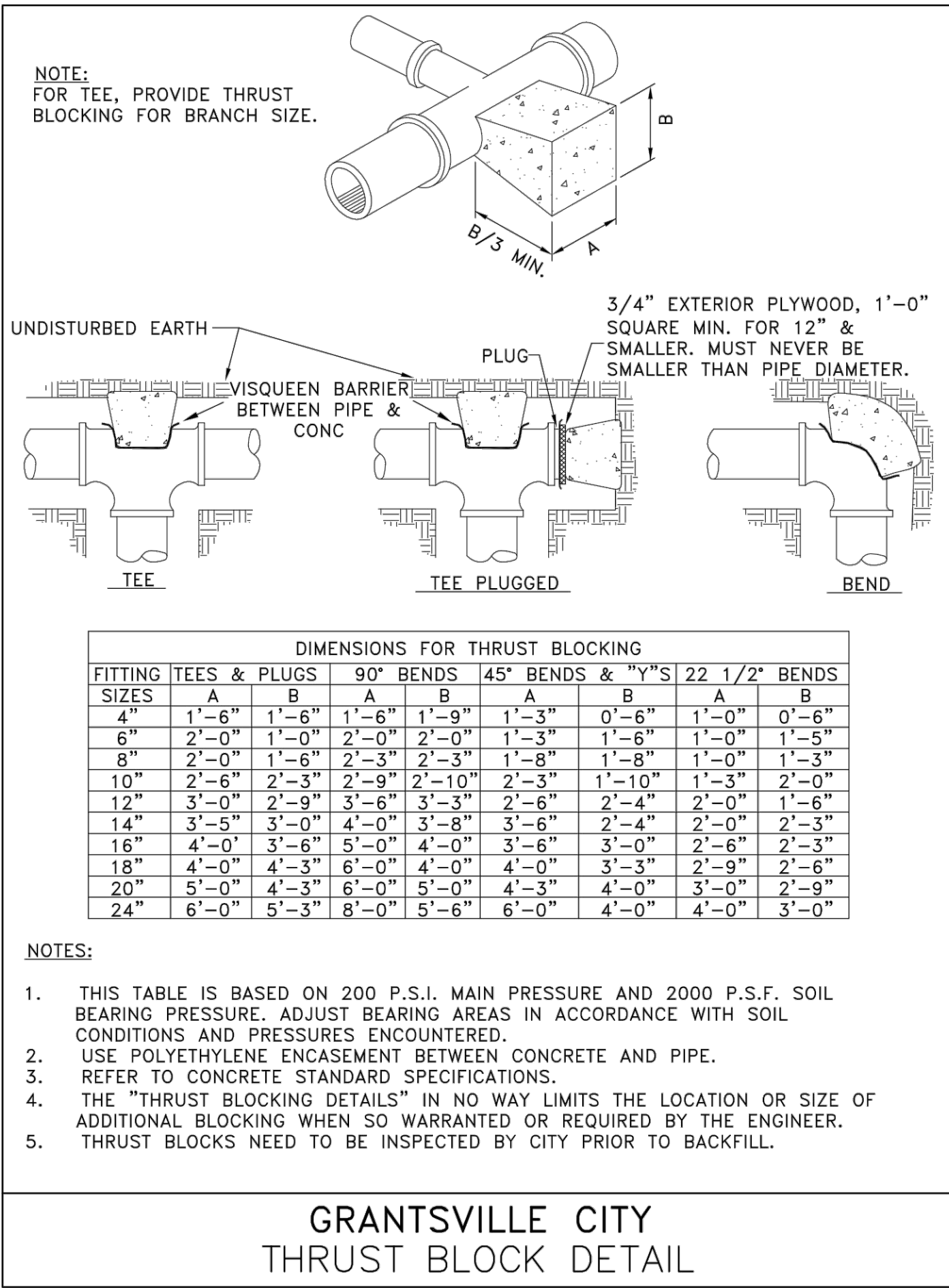
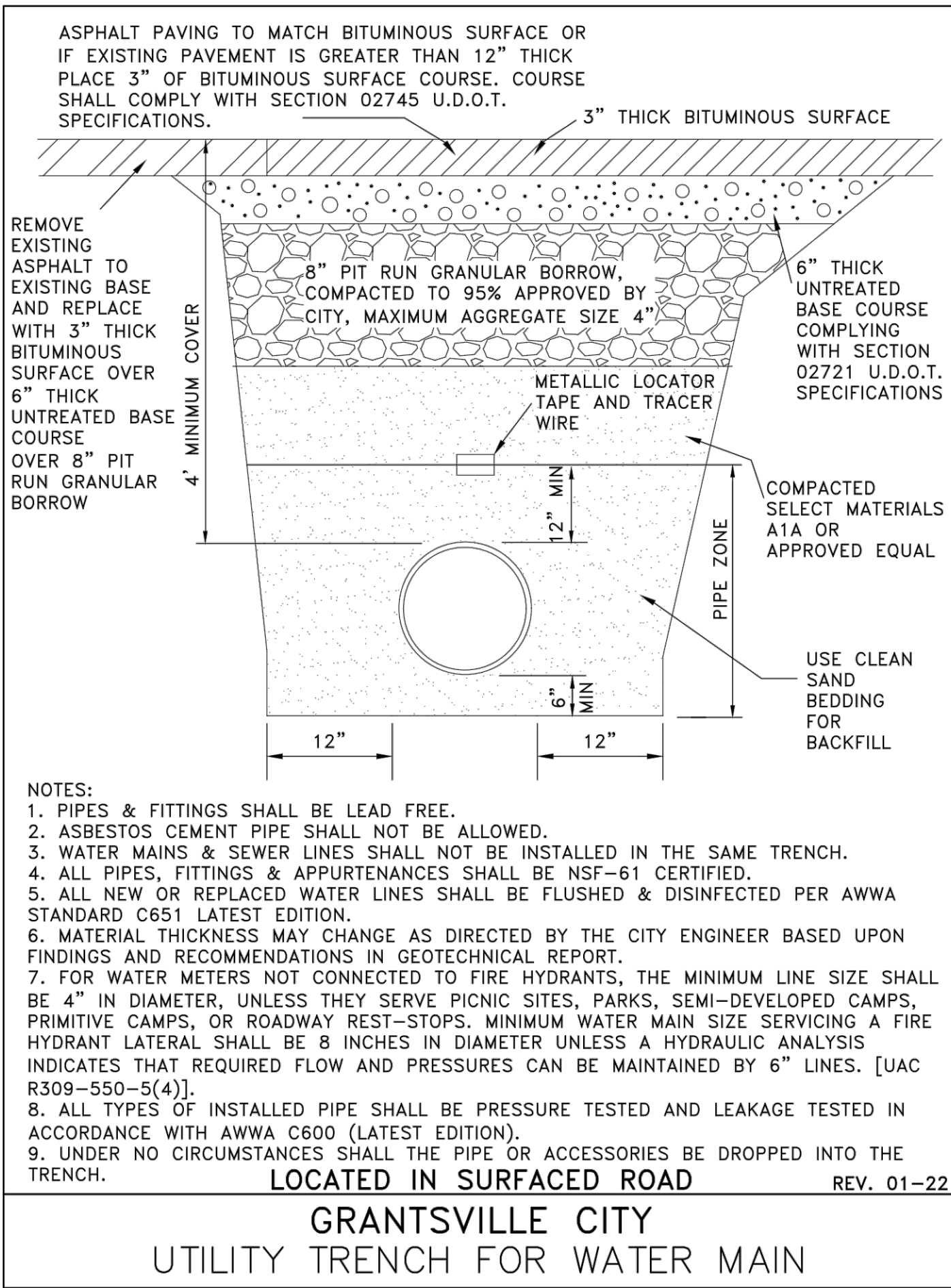
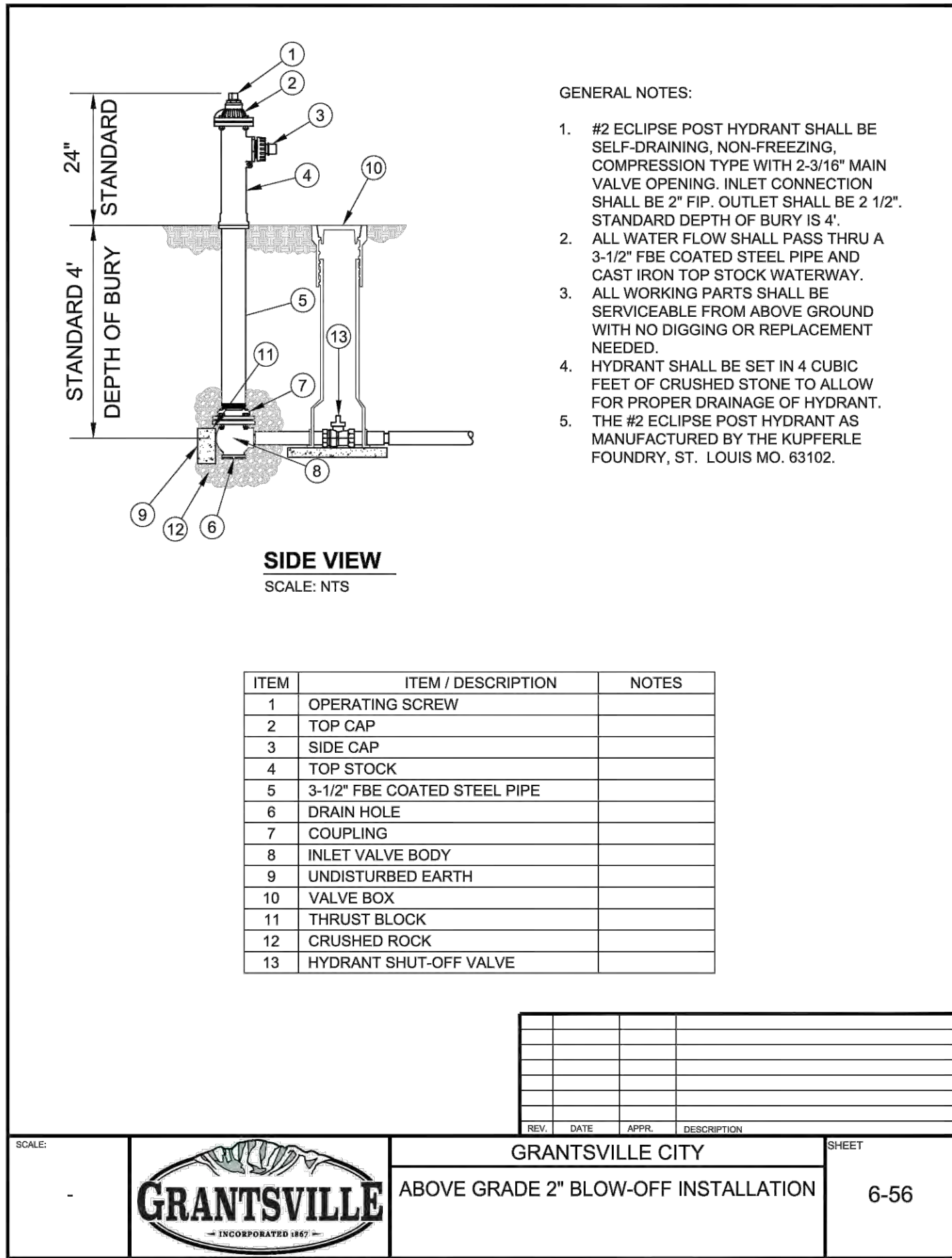
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Job #: 21-0512



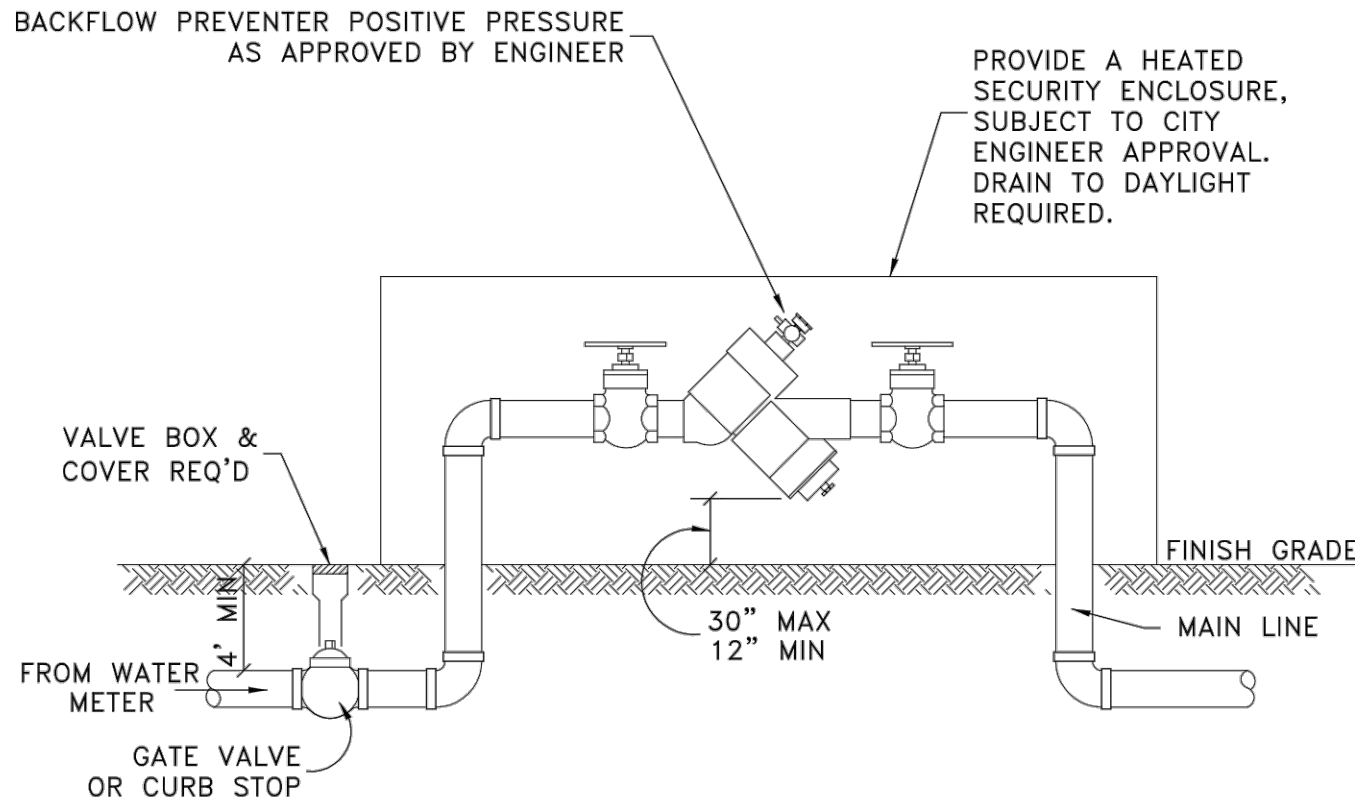
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REVISION BLOCK		DESCRIPTION
#	DATE	
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2		
3		
4		
5		
6		



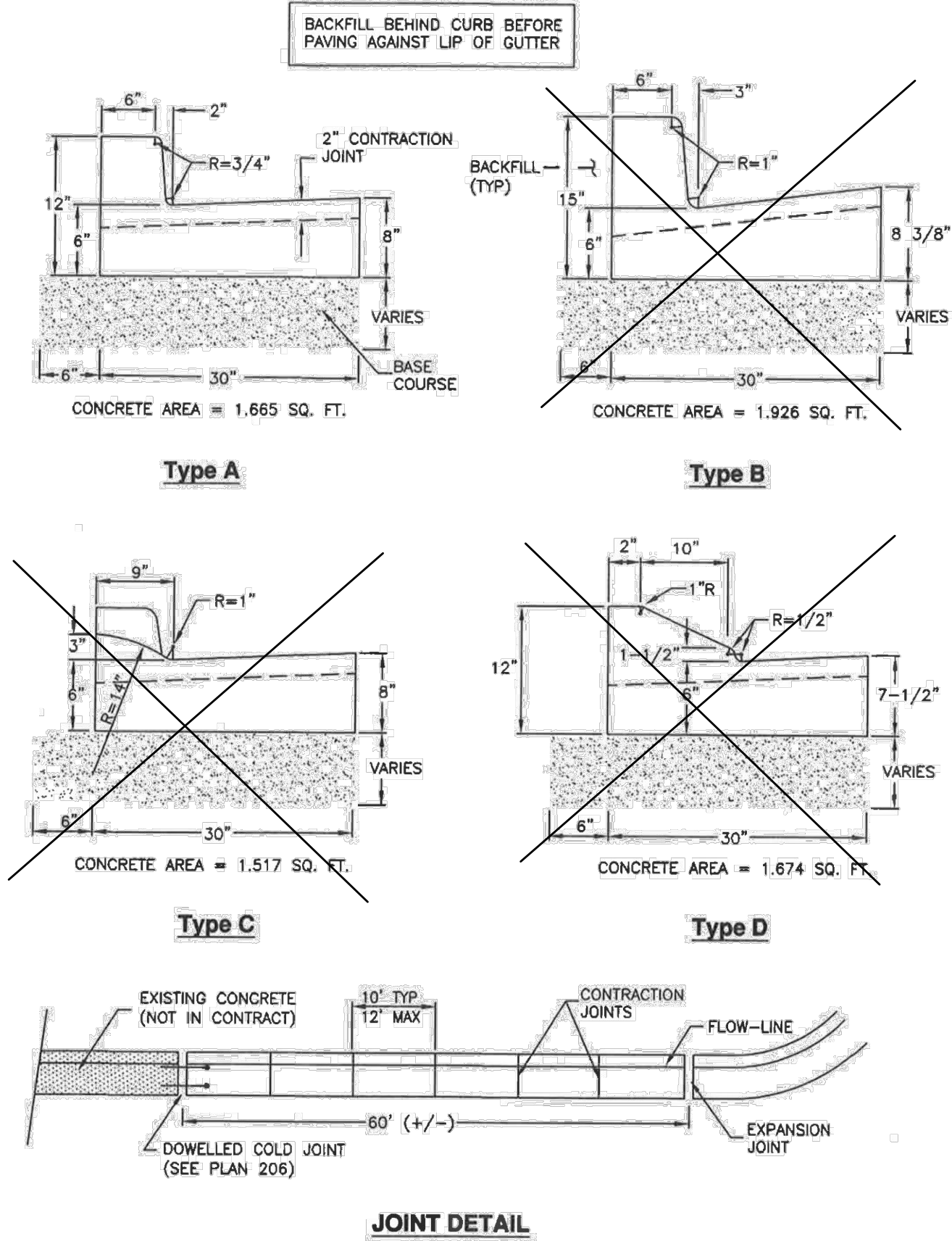


- NOTES:
1. ALL PIPES, FITTING & APPURTENANCES SHALL BE NSF-61 CERTIFIED.
  2. ALL NEW OR REPLACED WATER LINES SHALL BE FLUSHED & DISINFECTED PER AWWA STANDARD C651 LATEST EDITION.

## GRANTSVILLE CITY TYPICAL BACKFLOW PREVENTER INSTALLATION

- Curb and gutter**
1. **GENERAL**
    - A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
    - B. Additional requirements are specified in APWA Section 32 16 13.
  2. **PRODUCTS**
    - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
    - C. Concrete: Class 4500 APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
    - D. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
  3. **EXECUTION**
    - A. Base Course Placement: APWA Section 32 05 10. Thickness is 6-inches if flow-line grade is 0.5 percent (s=0.005) or greater. If slope is less, provide 8-inches. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
    - B. Concrete Placement: APWA Section 03 30 10.
      - 1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install at the start or end of a street intersection curb return. Expansion joints are not required in concrete placement using slip-form construction.
      - 2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.
      - 3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
    - C. Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

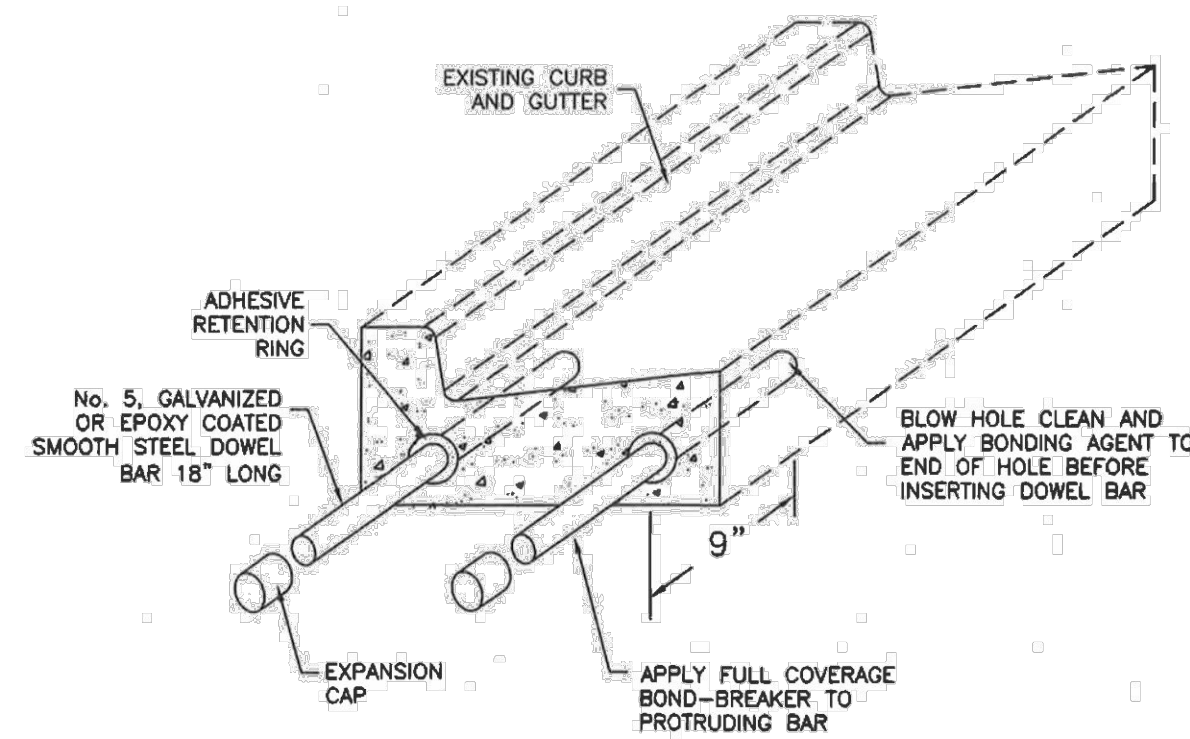
205.1



## Curb and gutter

Plan  
205.1  
December 2008

- Curb and gutter connection**
1. **GENERAL**
    - A. Connect new curb and gutter to existing curb and gutter that has not been placed by CONTRACTOR.
  2. **PRODUCTS**
    - A. Reinforcement: Galvanized or epoxy coated, 60 ksi yield grade steel, ASTM A615.
    - B. Adhesive: Epoxy adhesive grout, APWA Section 03 61 00.
    - C. Bond Breaker: Paraffin wax, lithium grease, or other semi-solid, inert lubricant.
    - D. Expansion Cap: Plastic, with bar movement allowance of 1/2-inch.
  3. **EXECUTION**
    - A. Ensure drill rigs (or jigs) are set at mid-depth of the gutter and horizontal to the surface. Make hole size large enough to account for dowel bar and adhesive.
    - B. Clean holes and dowel bars of dirt, dust and particles. Ensure coating on bars have no surface defects.
    - C. Place bonding agent in the back of each hole so adhesive flows out around each bar fully encasing it. DO NOT apply adhesive to end of the bar and then insert the bar into the hole.
    - D. Insert dowels with at least one full turning motion and if necessary, place a grout retention disk on the dowel after insertion to contain adhesive.
    - E. Apply complete coverage of bond-breaker on the protruding end of each dowel.
    - F. Install expansion caps on protruding dowel bar ends.

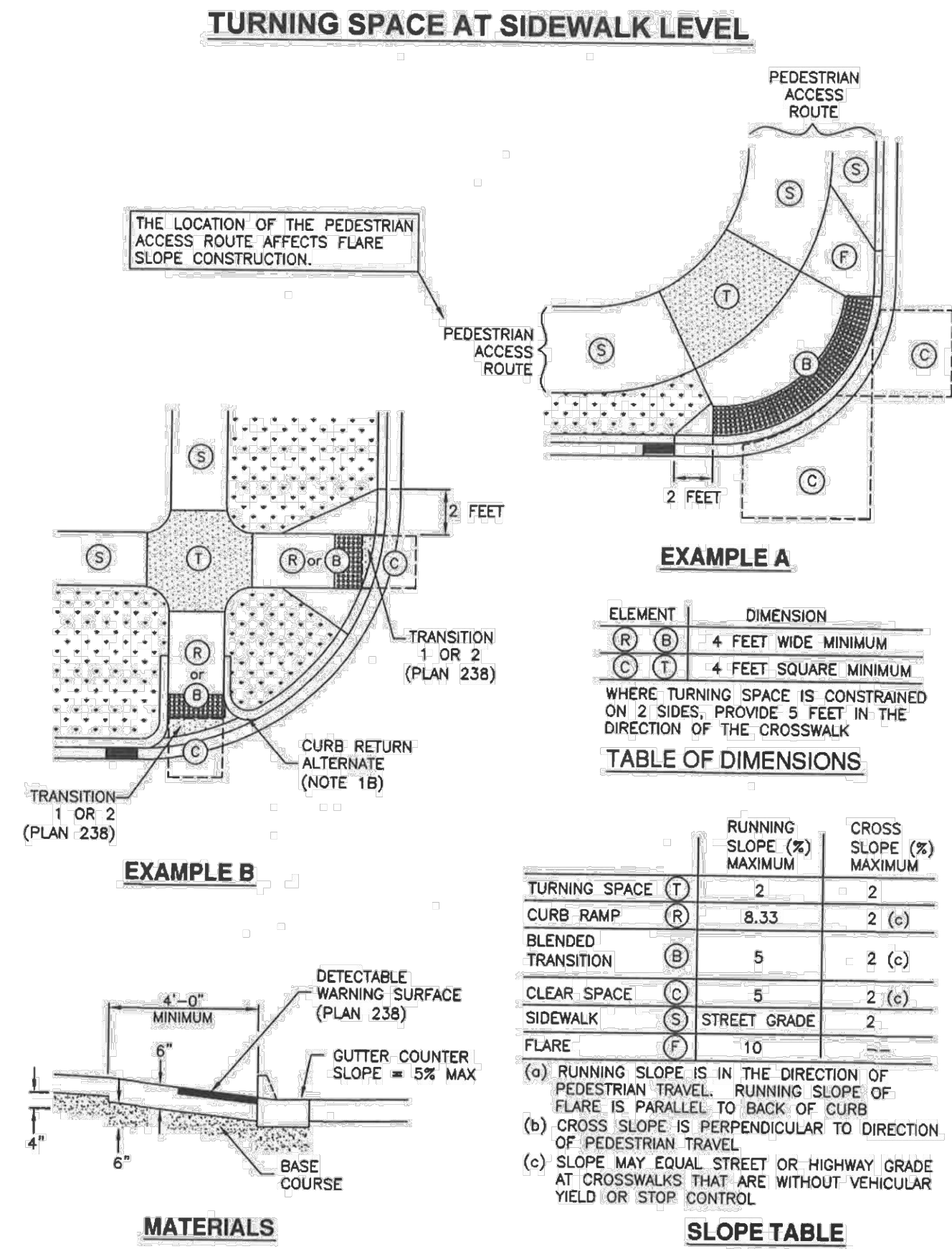


## Curb and gutter connection

Plan  
206  
June 2009

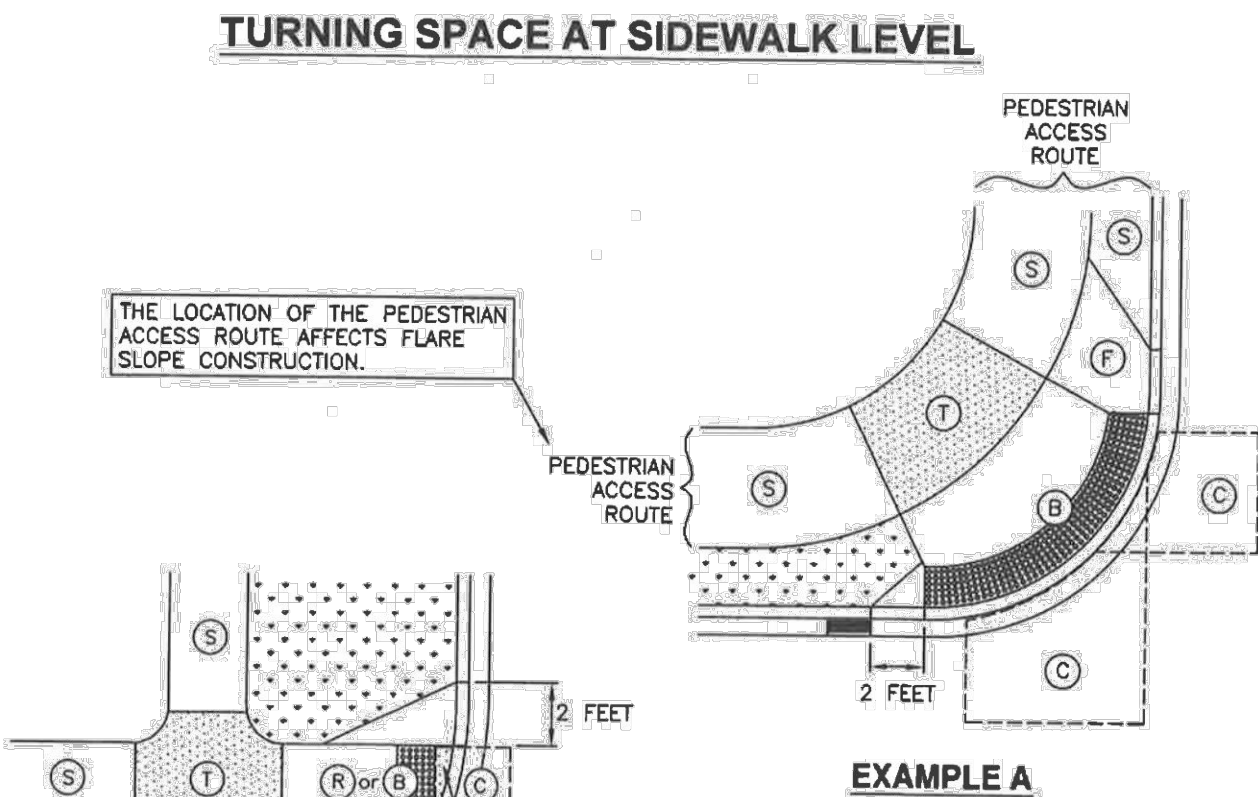
- Corner curb cut assembly**
1. **GENERAL**
    - A. Where existing elements or spaces are altered to receive an assembly; slopes and dimensions shall comply with slopes and dimensions shown on the drawing, or to the maximum extent feasible permitted by the ENGINEER. Final configuration of the assembly may be different than shown. Where physical constraints (e.g. utility covers, poles, vaults, etc.) prevent compliance, a single diagonal curb cut assembly may serve both pedestrian street crossings.
    - B. Installation of flares or curb returns is ENGINEER's choice.
    - C. Definitions and supplemental requirements are specified in APWA Section 32 16 14.
  2. **PRODUCTS**
    - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
    - C. Detectable Warning Surface: Paver, ribbed composite panel, or tile. Provide a color that contrasts with adjacent walking surface, either light-on-dark or dark-on-light. ENGINEER to select type and color unless indicated elsewhere.
    - D. Concrete: Class 4500 APWA Section 03 30 04.
    - E. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
  3. **EXECUTION**
    - A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
    - B. Curb Modifications:
      - 1) The sloped surface created to accommodate a flare area shall be perpendicular to the back of curb.
      - 2) No grade break shall exist between the flow-line and the foot of the curb ramp or blended transition. Length of the curb modification abutting the curb ramp or transition is 4 feet minimum for each crosswalk served.
    - C. Curb Ramp: Length not required to exceed 15 feet. Grade breaks are perpendicular to the direction of ramp run and are not permitted on ramp or turning space surface. Sides are parallel to each other and perpendicular to the ends. At the bottom grade break it may be necessary to install a transition zone, (APWA Plan 238).
    - D. Concrete Placement: APWA Section 03 30 10.
      - 1) Maximum length to width ratio for rectangular panel joints is 1.5 to 1. Joint spacing measured in feet not to exceed twice slab thickness measured in inches or a maximum of 15 feet.
      - 2) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install contraction joints vertical, 1/8-inch wide, and 1/4 of the depth of the concrete flatwork.
      - 3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
    - E. Clear Space: No trip hazards in the clear space.

235.1



## Corner curb cut assembly

Plan  
235.1  
September 2011



ELEMENT		DIMENSION	
(R)	(B)	4 FEET WIDE MINIMUM	
(C)	(T)	4 FEET SQUARE MINIMUM	

WHERE TURNING SPACE IS CONSTRAINED ON 2 SIDES, PROVIDE 5 FEET IN THE DIRECTION OF THE CROSSWALK

TABLE OF DIMENSIONS	
TURNING SPACE (T)	
TURNING SPACE (T)	2
CURB RAMP (R)	8.33
BLENDED TRANSITION (B)	5
CLEAR SPACE (C)	5
SIDEWALK (S)	STREET GRADE
FLARE (F)	10

(a) RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL. RUNNING SLOPE OF FLARE IS PARALLEL TO BACK OF CURB

(b) CROSS SLOPE IS PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAVEL

(c) SLOPE MAY EQUAL STREET OR HIGHWAY GRADE AT CROSSWALKS THAT ARE WITHOUT VEHICULAR YIELD OR STOP CONTROL

SLOPE TABLE	
TURNING SPACE (T)	
TURNING SPACE (T)	2
CURB RAMP (R)	8.33
BLENDED TRANSITION (B)	5
CLEAR SPACE (C)	5
SIDEWALK (S)	STREET GRADE
FLARE (F)	10

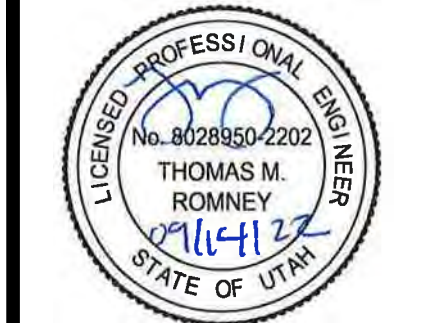
# COWBOY ESTATES SUBDIVISION

## GRANTSVILLE, UT

## DETAILS

REVISION BLOCK	
#	DESCRIPTION
1	
2	
3	
4	
5	
6	

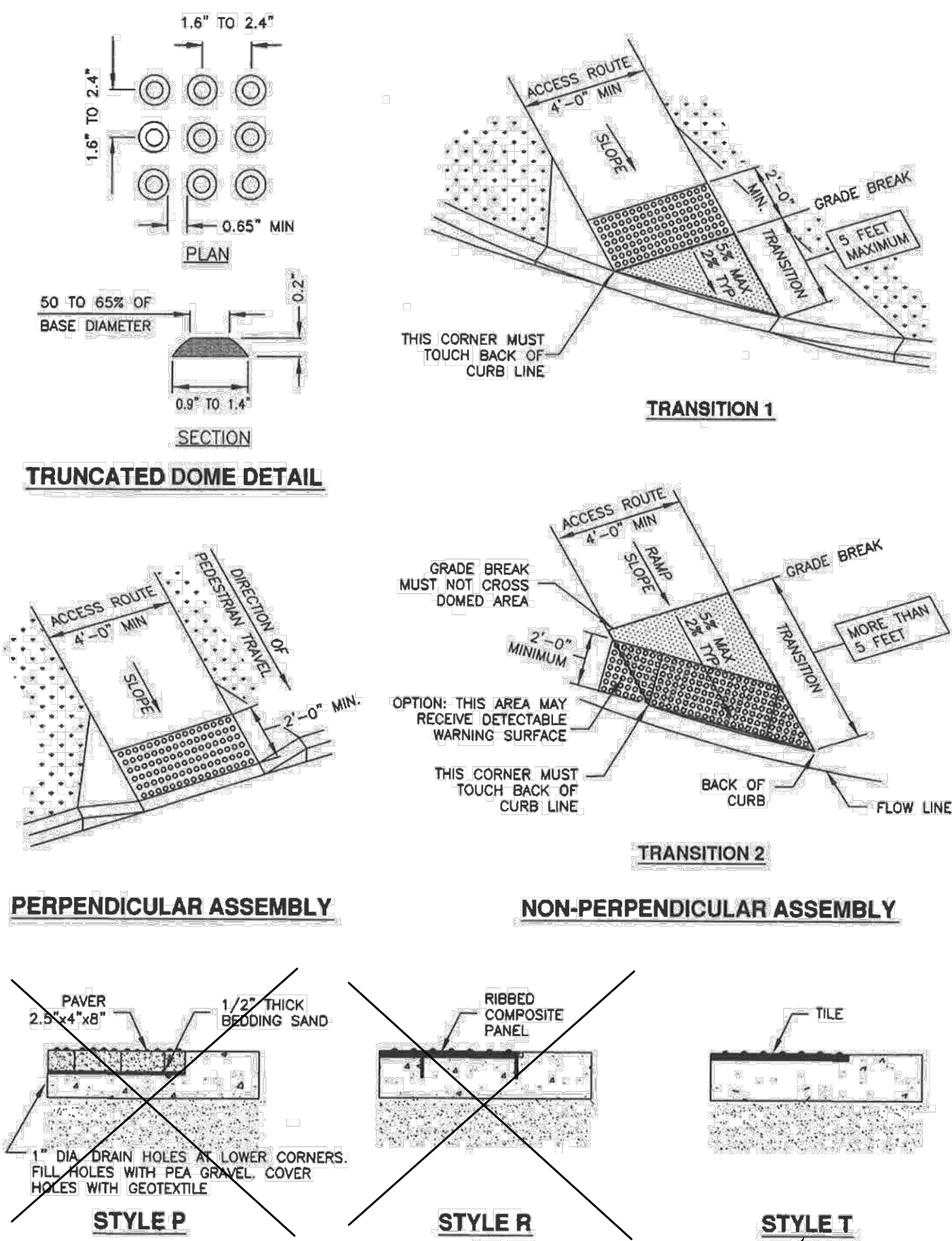
DETAILS	
Scale: N/A	Drawn: MEF
Date: 09/13/22	Job #: 21-0512
Sheet:	D2





- Detectable warning surface**
- GENERAL**
    - Detectable warnings consist of a surface of truncated domes aligned in a square or radial grid pattern with dome size, dome spacing, contrast and panel size as indicated.
    - Definitions and supplemental requirements are specified in APWA Section 32 16 14.
  - PRODUCTS**
    - Pavers:
      - Concrete, APWA Section 32 14 13.
      - Brick and Mortar, APWA Section 32 14 16.
    - Tile: Unless indicated elsewhere, selection is by CONTRACTOR as allowed by ENGINEER.
    - Ribbed Composite Panel: Unless indicated elsewhere, selection is by CONTRACTOR as allowed by ENGINEER.
    - Bedding Sand, Joint Sand, Geotextile: APWA Section 32 14 13.
  - EXECUTION**
    - Layout:
      - Joints Between Units: 3/16 inch maximum or manufacturer's recommendation.
      - Flares: Do not install detectable warning units on flared surfaces.
      - Alignment: Where a ramp, turning space, or blended transition provides access to the street continuously around a corner, align the vertical rows of truncated domes to be perpendicular or radial to the grade break between the ramp and the street for a 4 feet minimum width for each crosswalk served.
      - Transition 1 or 2: Selection is by ENGINEER unless indicated elsewhere.
      - At Rail Crossings: The edge of the detectable warning surface nearest the rail crossing is 6 feet minimum and 15 feet maximum from the centerline of the nearest rail.
    - Paver Installation: APWA Section 32 14 13. If paver must be cut, minimum paver cut length is 3/4 paver, or 1/2 paver length providing the adjacent paver is also reduced no more than 1/2 its original length. Do not cut pavers longitudinally. Remove domes that were cut.
    - Tile Installation: Install according to manufacturer's recommendations. Remove domes that were cut.
    - Ribbed Composite Panel Installation: Install according to manufacturer's recommendation. Remove domes that were cut. Seal cuts to prevent water intrusion.

238



Detectable warning surface

Plan  
238  
July 2011

NOTE:  
ONLY STYLE "T" TO BE USED  
PER GRANTSVILLE CITY

- 30" Frame and cover**
- GENERAL**
    - The frame and cover fits.
      - Cleanout box type B in Plan 331, and
      - Precast manhole in Plan 341.
  - PRODUCTS**
    - Castings: Grey iron class 35 minimum, ASTM A48.
      - Coated with asphalt based paint or better (except on machined surfaces).
      - Cast the heat number on the frame and cover.
      - Give the frame and cover a machine finish so the cover will not rock.
      - √ designates a machine finished surface.
      - Cast the words "STORM DRAIN" on the cover in upper case flush with the surface finish.
  - EXECUTION**
    - Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

- NOTE:**
- ALL CONCRETE TO BE 4500 PSI.

302.1

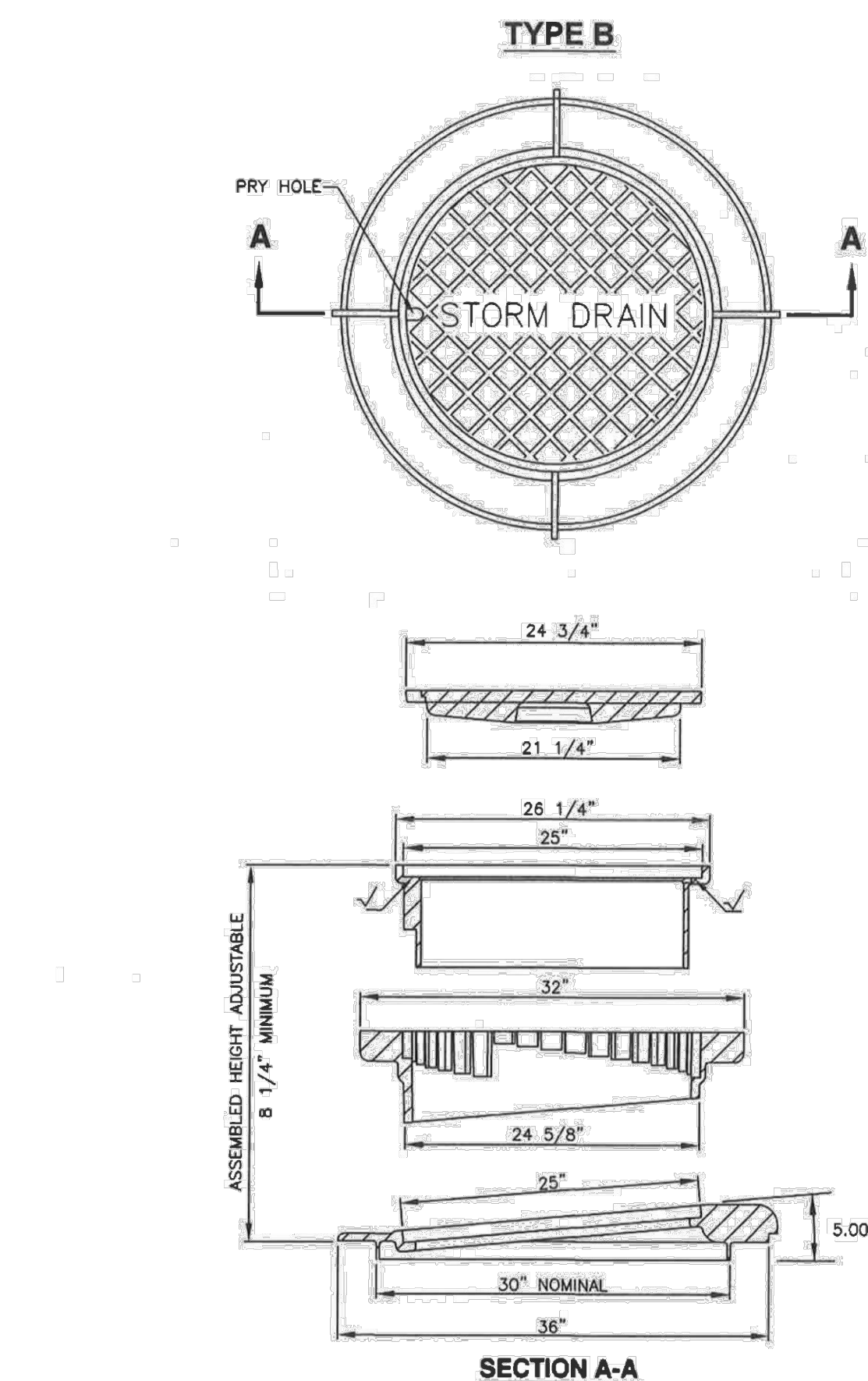


30" Frame and cover

Plan  
302.1  
September 2001

- 30" Frame and cover**
- GENERAL**
    - The frame and cover fits.
      - Cleanout box type B in Plan 331, and
      - Precast manhole in Plan 341.
  - PRODUCTS**
    - Castings: Grey iron class 35 minimum, ASTM A48.
      - Coated with asphalt based paint or better (except on machined surfaces).
      - Cast the heat number on the frame and cover.
      - Give the frame and cover a machine finish so the cover will not rock.
      - √ designates a machine finished surface.
      - Cast the words "STORM DRAIN" on the cover in upper case flush with the surface finish.
  - EXECUTION**
    - Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

302.2

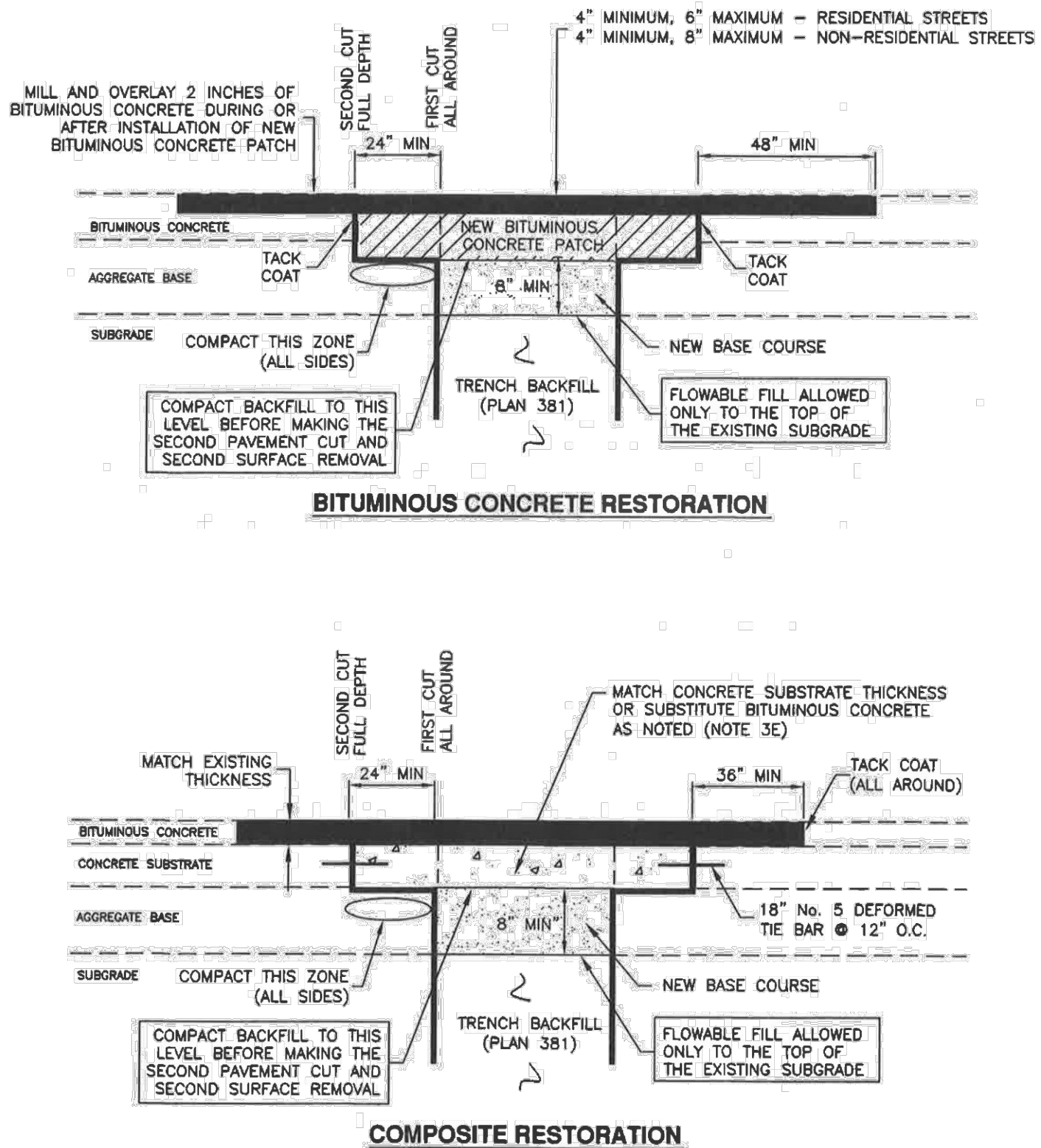


30" Frame and cover

Plan  
302.2  
September 2001

- Bituminous pavement T-patch**
- GENERAL**
    - Vertical cuts in bituminous pavement may be done by saw or pavement zipping. If cuts greater than 6 inches are necessary to prevent pavement "break off" consult ENGINEER for directions on handling additional costs.
    - Repair a T-patch restoration if any of the following conditions occur prior to final payment or at the end of the one year correction period.
      - Pavement surface distortion exceeds 1/4-inch deviation in 10 feet. Repair option - plane off surface distortions. coat planed surface with a cationic or anionic mulson that complies with APWA Section 32 12 03.
      - Separation appears at a connection to an existing pavement or any Street Fixture. Repair option - blow separation clean and apply joint sealant, Plan 265.
      - Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option - blow clean and apply crack seal, Plan 265.
      - Pavement raveling is greater than 1 square foot per 100 square feet. Repair option - Mill and inlay, APWA Sections 32 01 16.71 and 32 12 05.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
    - Reinforcement: No. 5, galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A615.
    - Concrete: Class 4500 APWA Section 03 30 04.
    - Tack Coat: APWA Section 32 12 13.13.
    - Bituminous Concrete: APWA Section 32 12 05.
      - Warm Weather Patch: PG64-22-DM-1/2, unless indicated otherwise.
      - Cold Weather Patch: Modified MC-250-FM-1 as indicated in APWA Section 33 05 25.
  - EXECUTION**
    - Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
    - Flowable Fill: Cure to initial set before placing aggregate base or bituminous pavement. Use in excavations that are too narrow to receive compaction equipment.
    - Tack Coat: Clean all horizontal and vertical surfaces. Apply full coverage all surfaces.
    - Pavement Placement: Follow APWA Section 32 12 16.13. Unless indicated otherwise, lift thickness is 3-inches minimum after compaction. Compact to 94 percent of ASTM D2041 (Rice density) plus or minus 2 percent.
    - Bituminous Concrete Substitution: If bituminous concrete is substituted for Portland cement concrete substrate, omit rebar and provide 1.25 inches of bituminous concrete for each 1 inch of Portland cement concrete. Follow paragraph E requirements.
    - Reinforcement: Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if 1) less than 6-inches thick, 2) if existing concrete is deteriorating, 3) if excavation is less than 3 feet square, or 4) if bituminous pavement is substituted for Portland-cement concrete substrate.
    - Concrete Substrate: Cure to initial set before placing new bituminous concrete patch.

255



Bituminous pavement T-patch

Plan  
255  
November 2015

COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
DETAILS

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
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DETAILS

Scale: N/A Drawn: MEF  
Date: 09/13/22 Job #: 21-0512  
Sheet:

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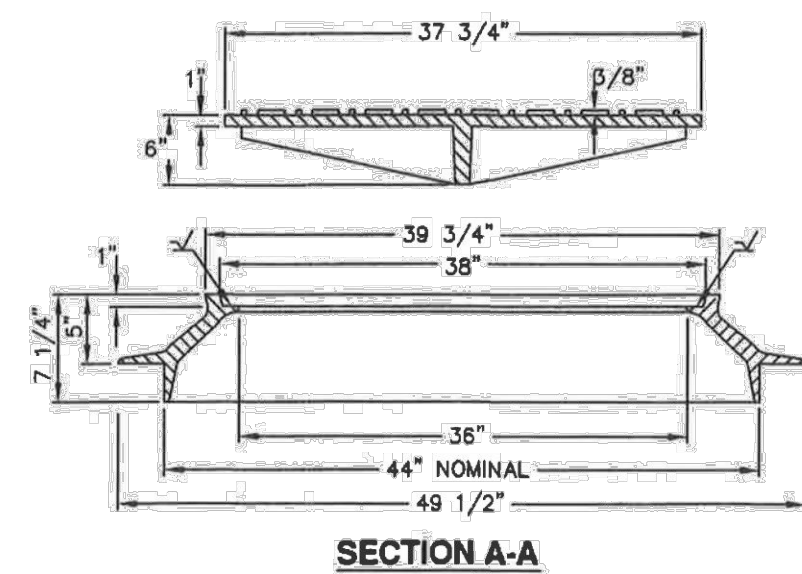
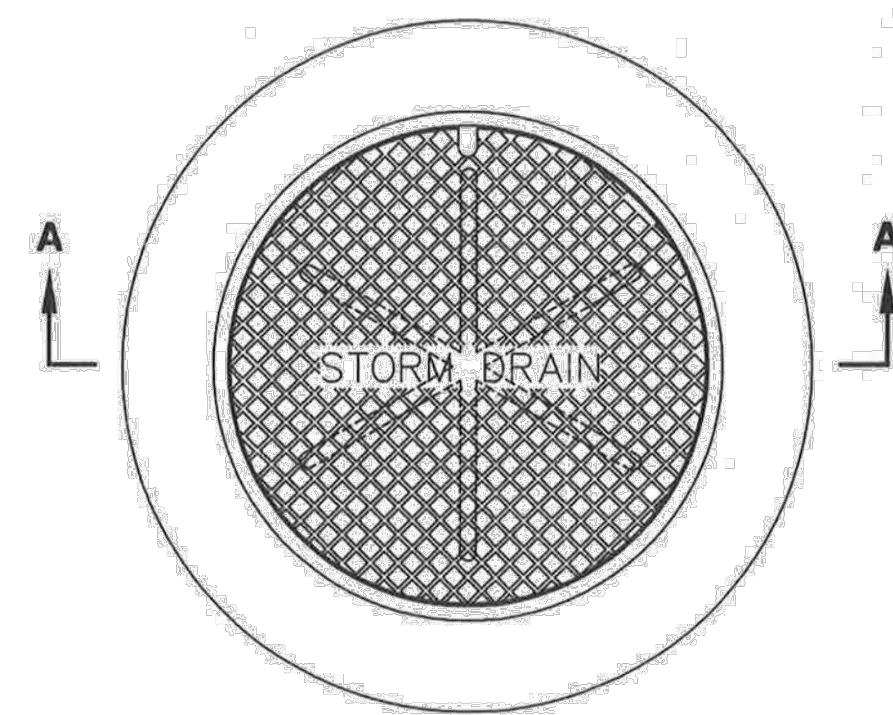


**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
6949 S. HIGH TECH DRIVE SUITE 200  
MIDVALE, UTAH 84047 PH: (801) 552-0075  
www.focusnh.com



**44" Frame and cover**

1. **GENERAL**
  - A. The frame and cover fits.
    - 1) Cleanout box type B in Plan 331; and
    - 2) Precast manhole in Plan 341.
2. **PRODUCTS**
  - A. Castings: Grey iron class 35 minimum, ASTM A48, coated with asphalt based paint or better (except on machined surfaces).
    - 1) Cast the heat number on the frame and cover.
    - 2) Give the frame and cover a machine finish so the cover will not rock.
    - 3) ✓ designates a machine-finished surface.
    - 4) Cast the words "STORM DRAIN" on the cover in upper case flush with the surface finish.
3. **EXECUTION**
  - A. Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.



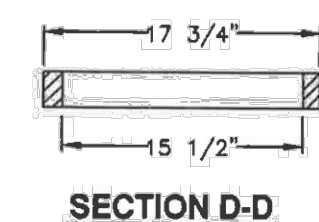
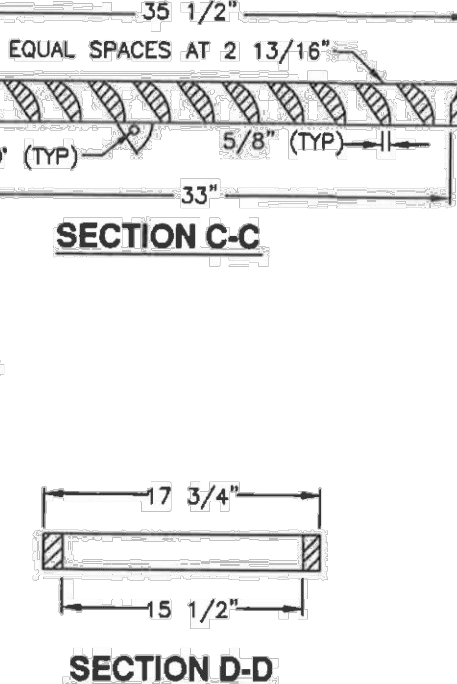
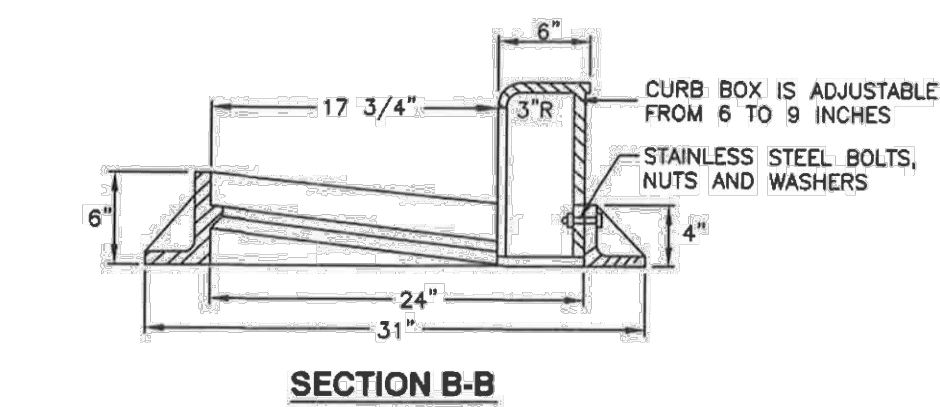
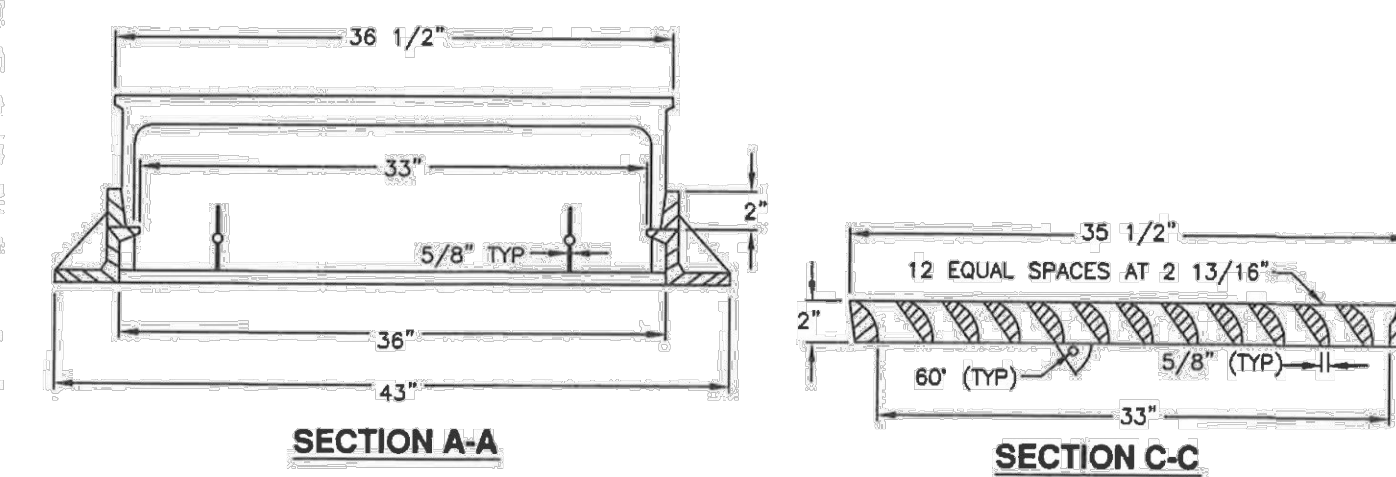
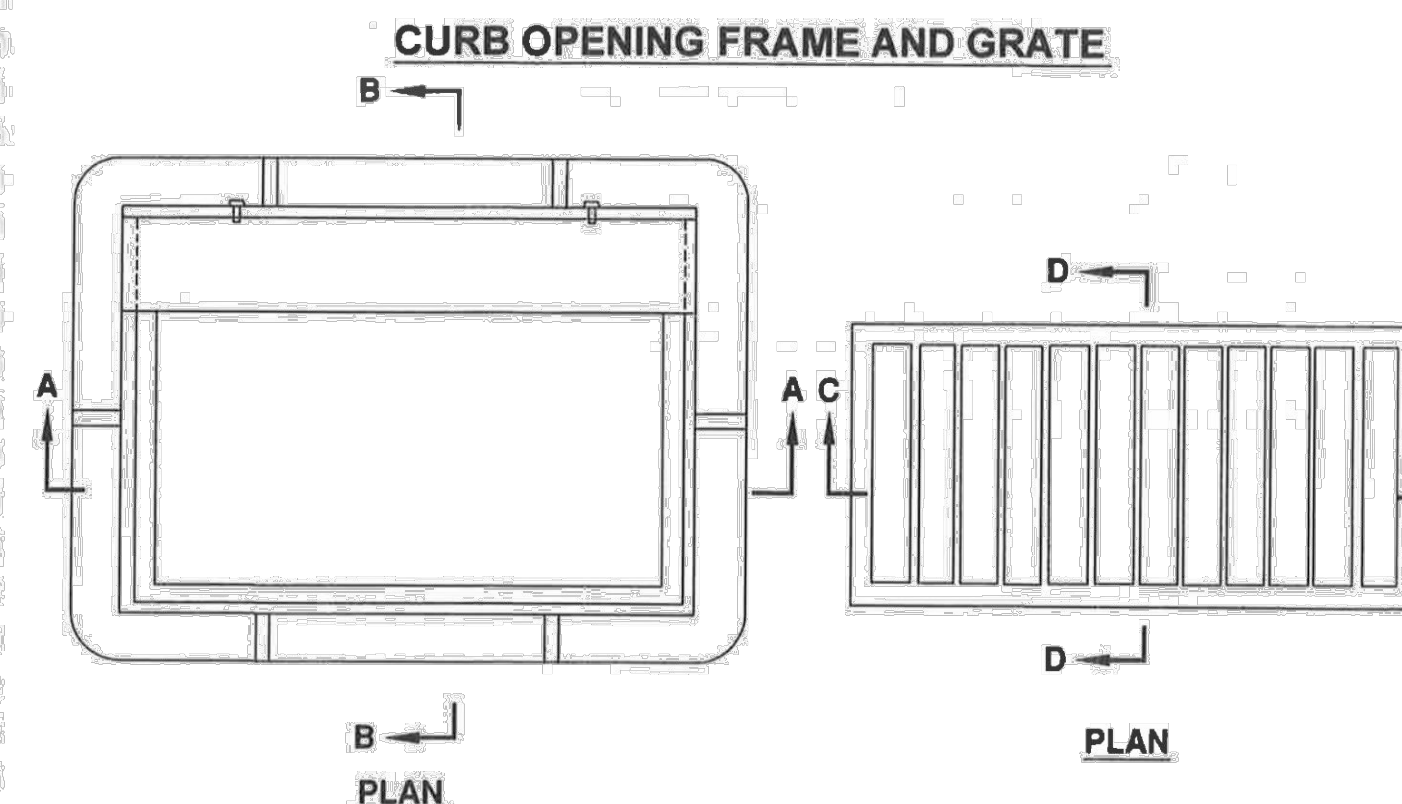
**44" Frame and cover**

Plan  
**303**  
November 2001

303

**35 1/2" Grate and frame**

1. **GENERAL**  
A. The grate and frame fits concrete boxes in Plan 315.
2. **PRODUCTS**  
A. Castings: Grey iron class 35 minimum per ASTM A48, coated with asphalt based paint or better.  
B. Bolts, Nuts, Washers, Accessories: Stainless steel, APWA Section 05 05 23.
3. **EXECUTION** (Not used)



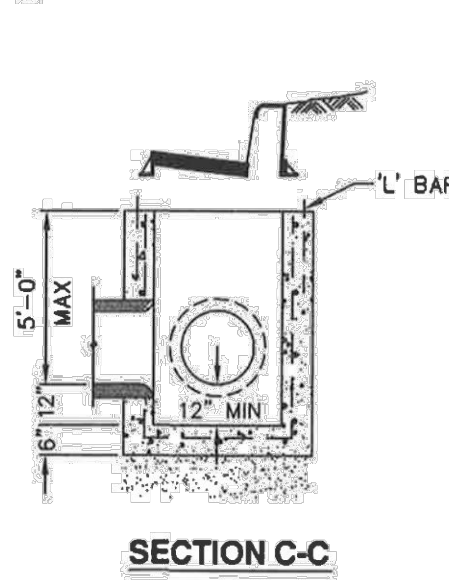
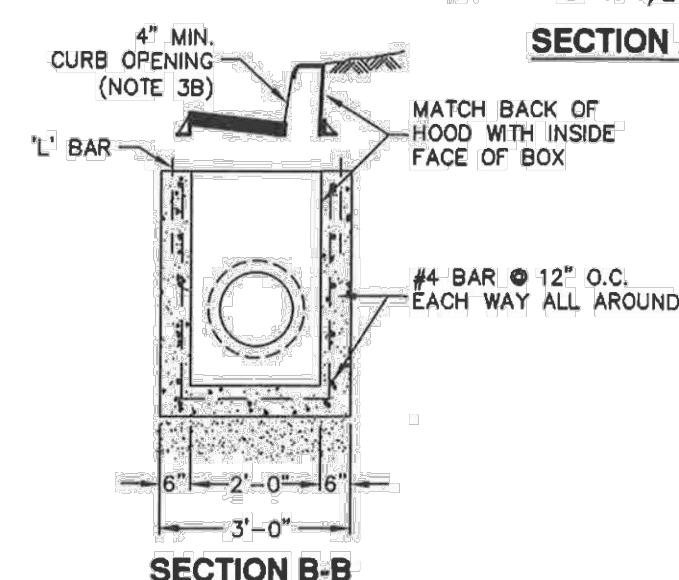
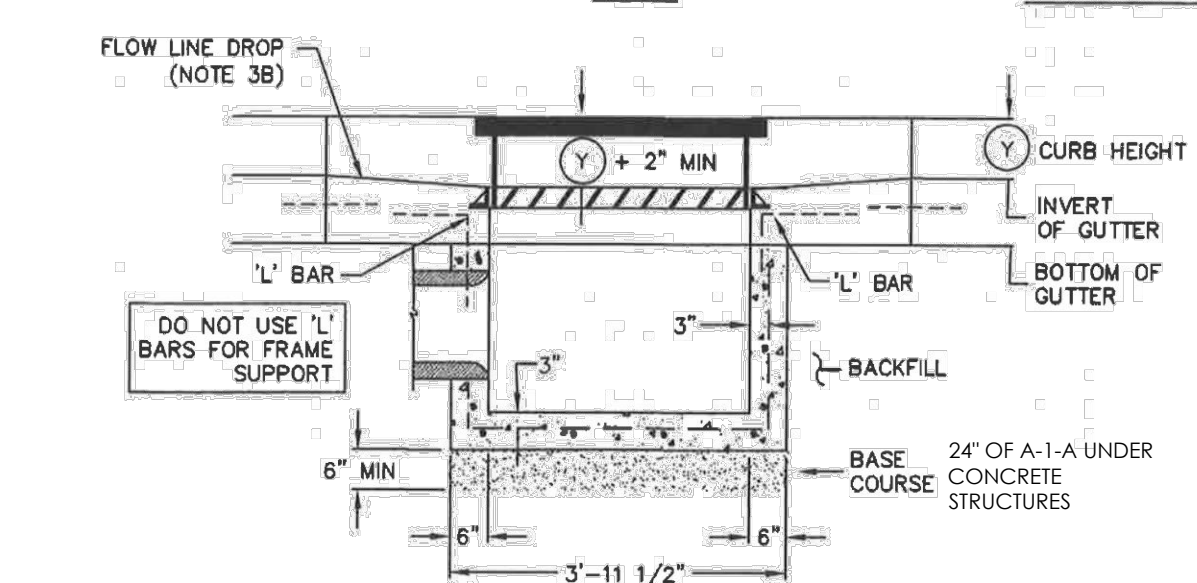
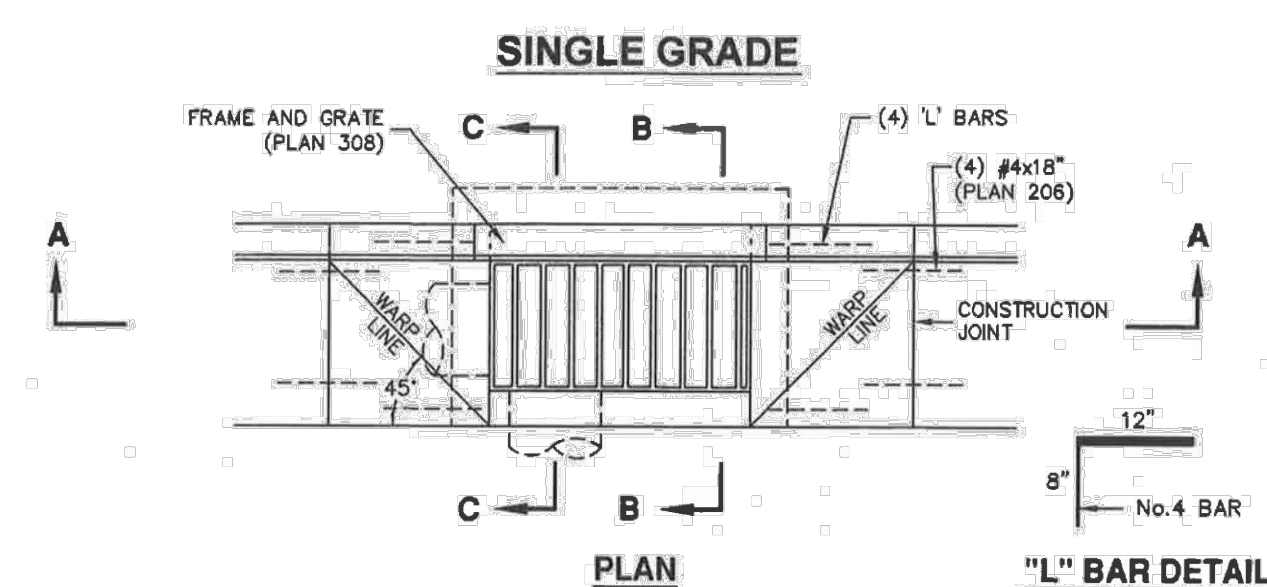
**35 1/2" Grate and frame**

Plan  
**308**  
January 1999

308

### Catch basin

1. **GENERAL**
  - A. The drawing shows typical pipe connections. Refer to construction drawings for pipe connection locations or refer to field location of existing piping when engineering pipe connection to the box.
2. **PRODUCTS**
  - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  - C. Concrete: Class 4500 APWA Section 03 30 04.
  - D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
3. **EXECUTION**
  - A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - B. Curb Face Finishing: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "warp line" in the gutter flow-line and the top of the grate at the curb face opening.
  - C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
  - D. Backfill: Place backfill against the basin wall. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



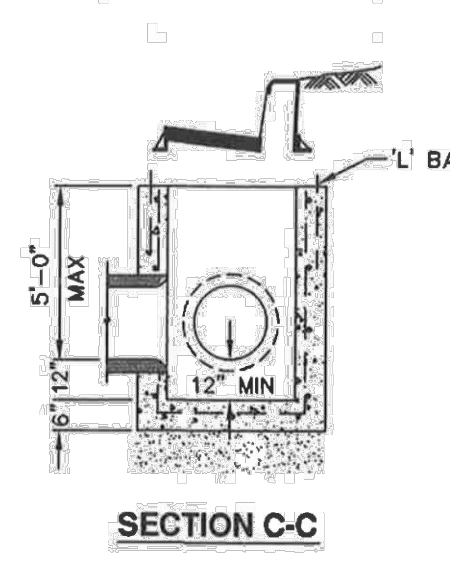
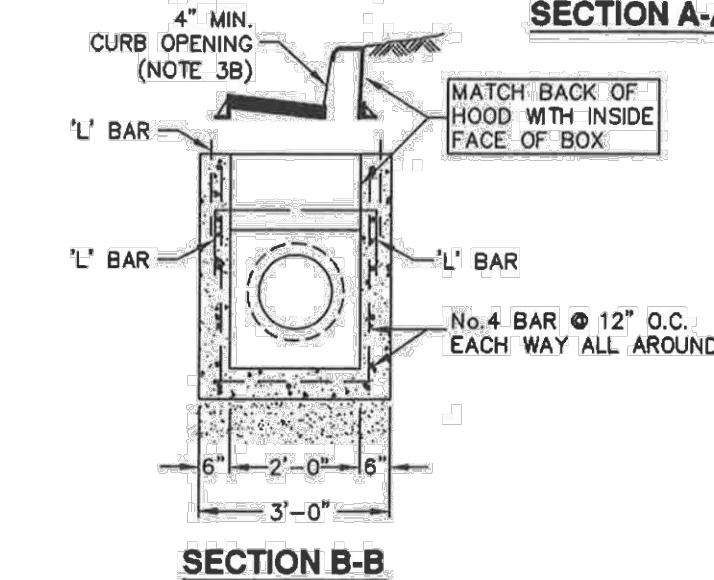
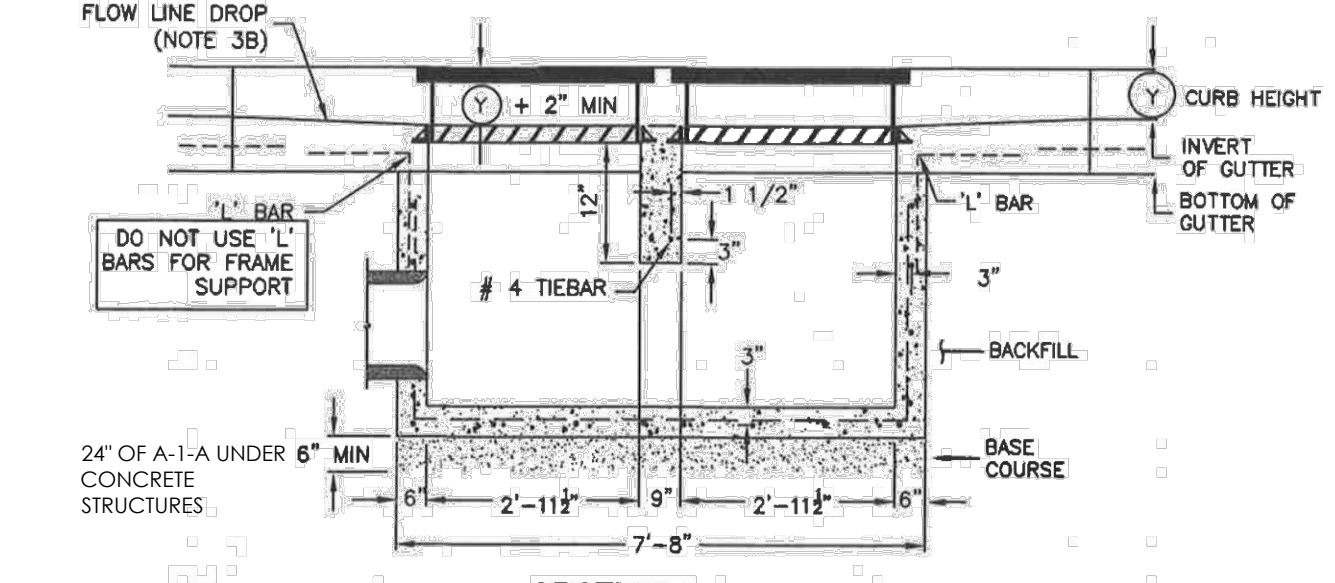
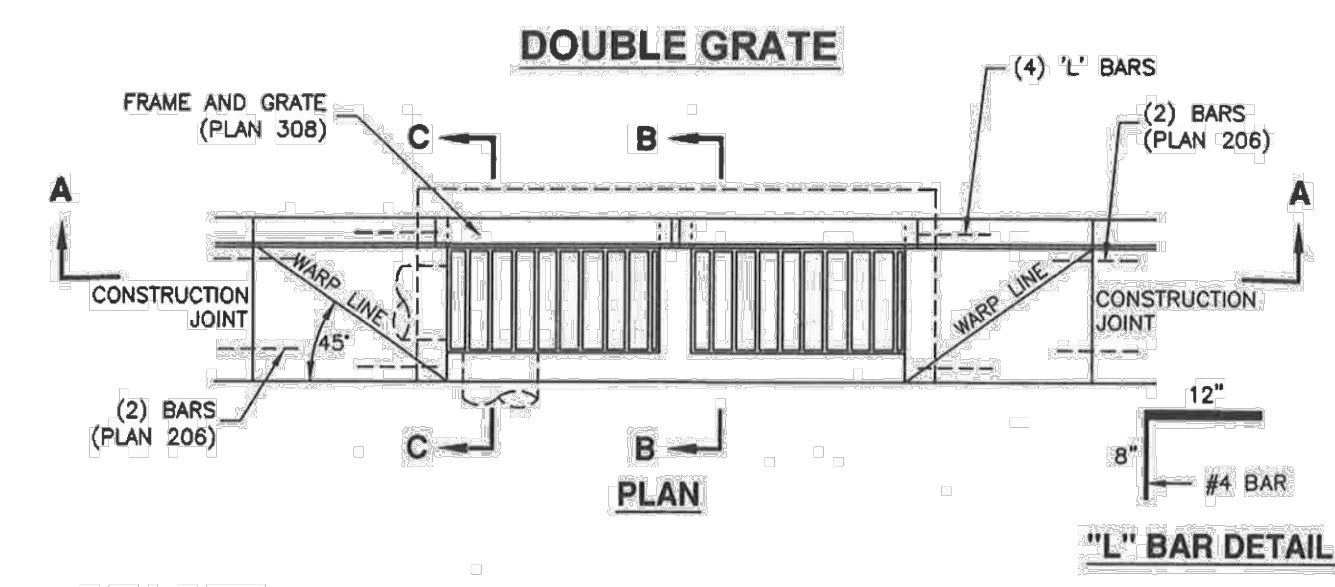
### Catch basin

Plan  
**315.1**  
September 2010

## 315.1

### Catch basin

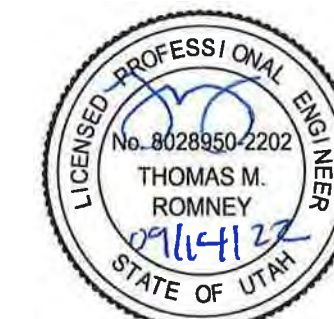
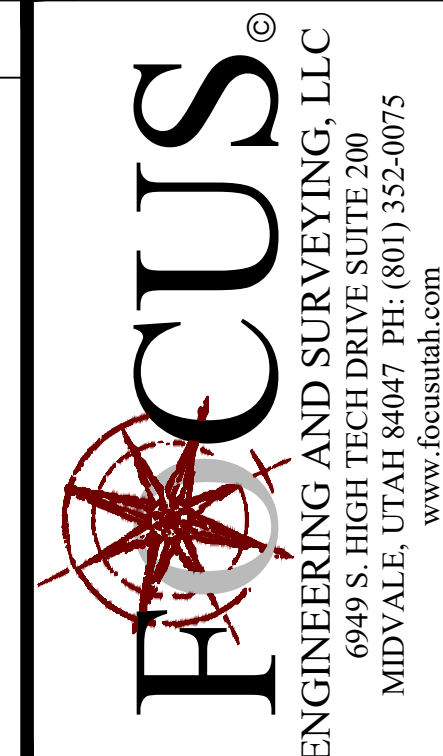
1. **GENERAL**
  - A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.
2. **PRODUCTS**
  - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  - C. Concrete: Class 4500 APWA Section 03 30 04.
  - D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
3. **EXECUTION**
  - A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "warp line" in the gutter flow-line and the top of the grate at the curb face opening.
  - C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
  - D. Backfill: Place backfill against the basin wall. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



### Catch basin

Plan  
**315.2**  
September 2010

## 315.2



# COWBOY ESTATES SUBDIVISION

## GRANTSVILLE, UT

### DETAILS

REVISION BLOCK		
#	DATE	DESCRIPTION
1	04.01.2018	04.01.2018
2	04.01.2018	04.01.2018
3	04.01.2018	04.01.2018
4	04.01.2018	04.01.2018
5	04.01.2018	04.01.2018
6	04.01.2018	04.01.2018

## DETAILS

Scale: N/A	Drawn: MEF
Date: 09/13/22	Job #: 21-0512
Sheet:	

D4



- Combination catch basin and cleanout box**
- GENERAL**

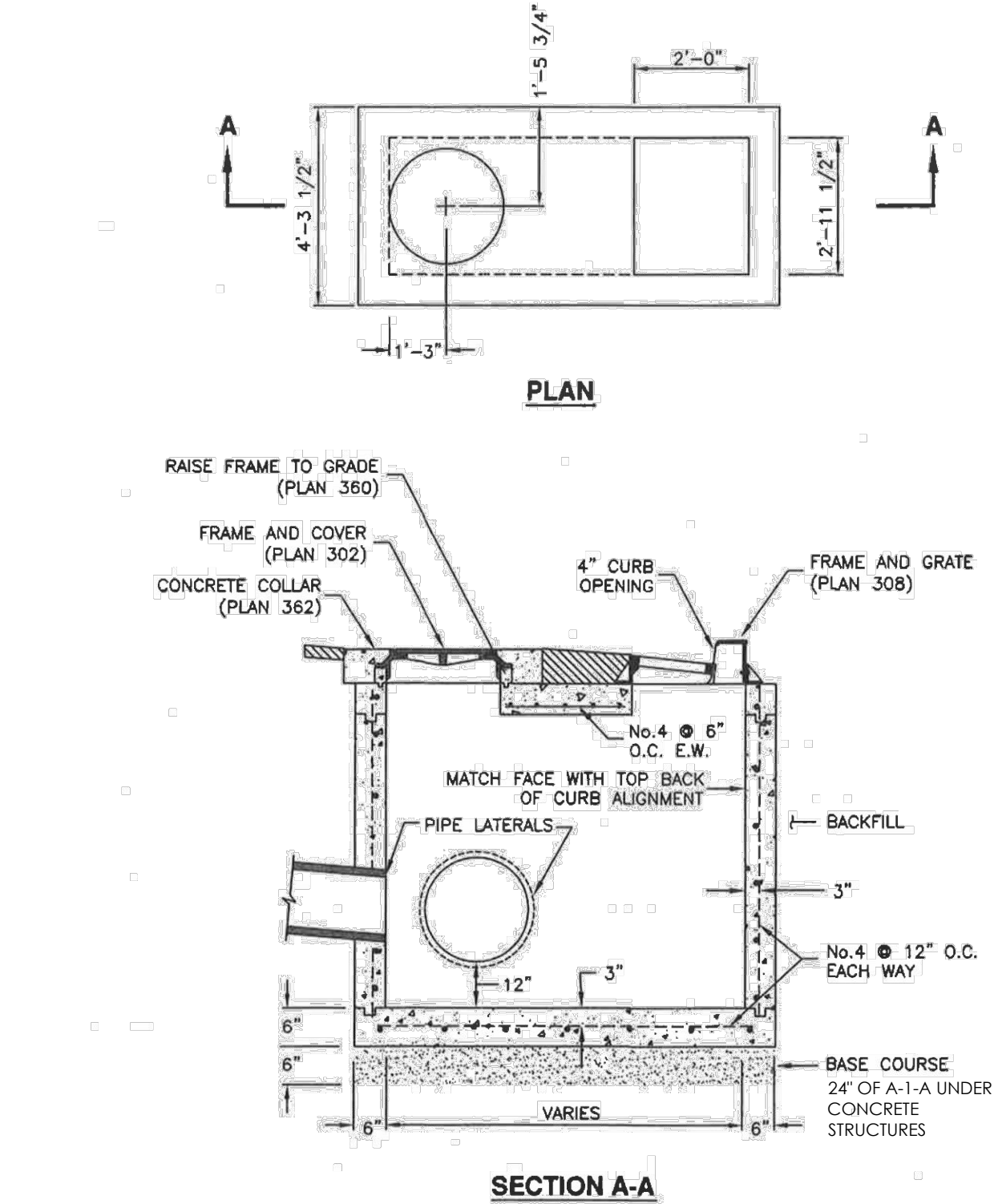
A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.
  - PRODUCTS**

A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Concrete: Class 4500 APWA Section 03 30 04.  
D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.  
E. Ladder Rungs: Plastic, or plastic coated steel typically 8-inches wide.
  - EXECUTION**

A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.  
B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "begin warp" line in the gutter flow-line and the top of the grate at the curb face opening.  
C. Ladder Rungs: Provide rungs in boxes over 6 feet deep. When measured from the floor of the box, place bottom rung the greater distance of 4 feet from the floor of the box or 1 foot above the top of the pipe. Place top rung within 3 feet of bottom of box ceiling.  
D. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.  
E. Backfill: Provide backfill against all sides of the box. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

**NOTE:**  
1. ALL CONCRETE TO BE 4500 PSI.

316



**APWA** **Utah Chapter** **Combination catch basin and cleanout box** Plan **316** March 2011

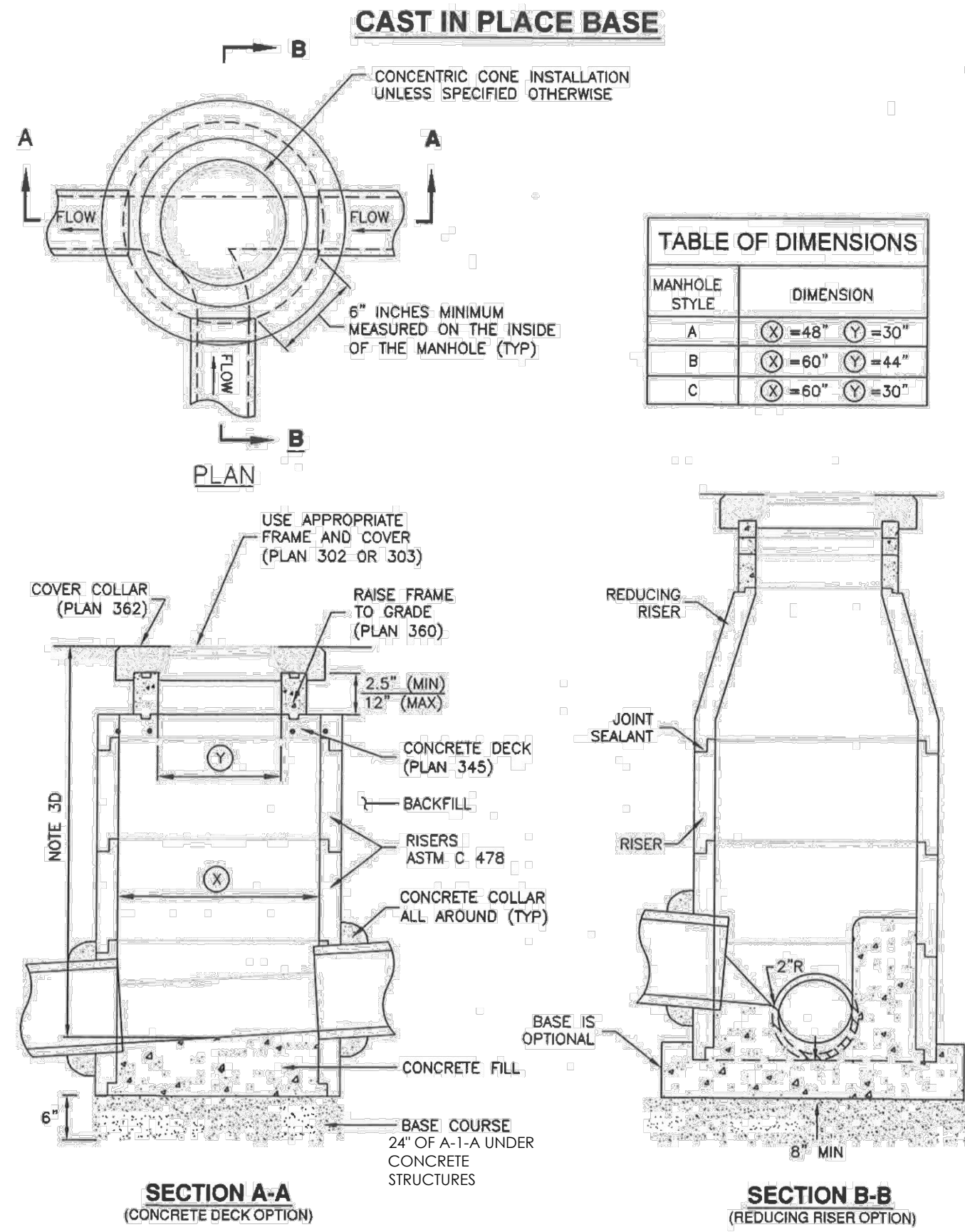
- Precast manhole**
- GENERAL**

A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.  
B. Manhole size:  
1) Diameter is 4-feet: For pipe under 12" diameter.  
2) Diameter is 5-feet: For pipe 12" and larger, or when 3 or more drain pipes intersect the manhole.  
C. Wall thickness:  
1) Precast reinforced concrete walls 4 3/4" minimum.  
2) Cast-in-place concrete to be 8 inches thick minimum.
  - PRODUCTS**

A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Concrete: Class 4500 APWA Section 03 30 04.  
D. Riser and Reducing Riser: ASTM C478.  
E. Joint Sealant: Rubber based, compressible.  
F. Grout: 2 parts sand to 1 part cement mortar, ASTM C1329.  
G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
  - EXECUTION**

A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a sewer rock in a geotextile wrap to stabilize an unstable foundation.  
B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.  
C. Invert cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.  
D. Concrete Deck or Reducing Riser: When depth of manhole from pipe invert to finish grade exceeds 7 feet, use an ASTM C478 reducing riser.  
E. Pipe Connections: Grout around all pipe openings.  
F. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.  
G. Joints: Place flexible sealant in all riser joints. Finish with grout.  
H. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.  
I. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.  
J. Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

341.1



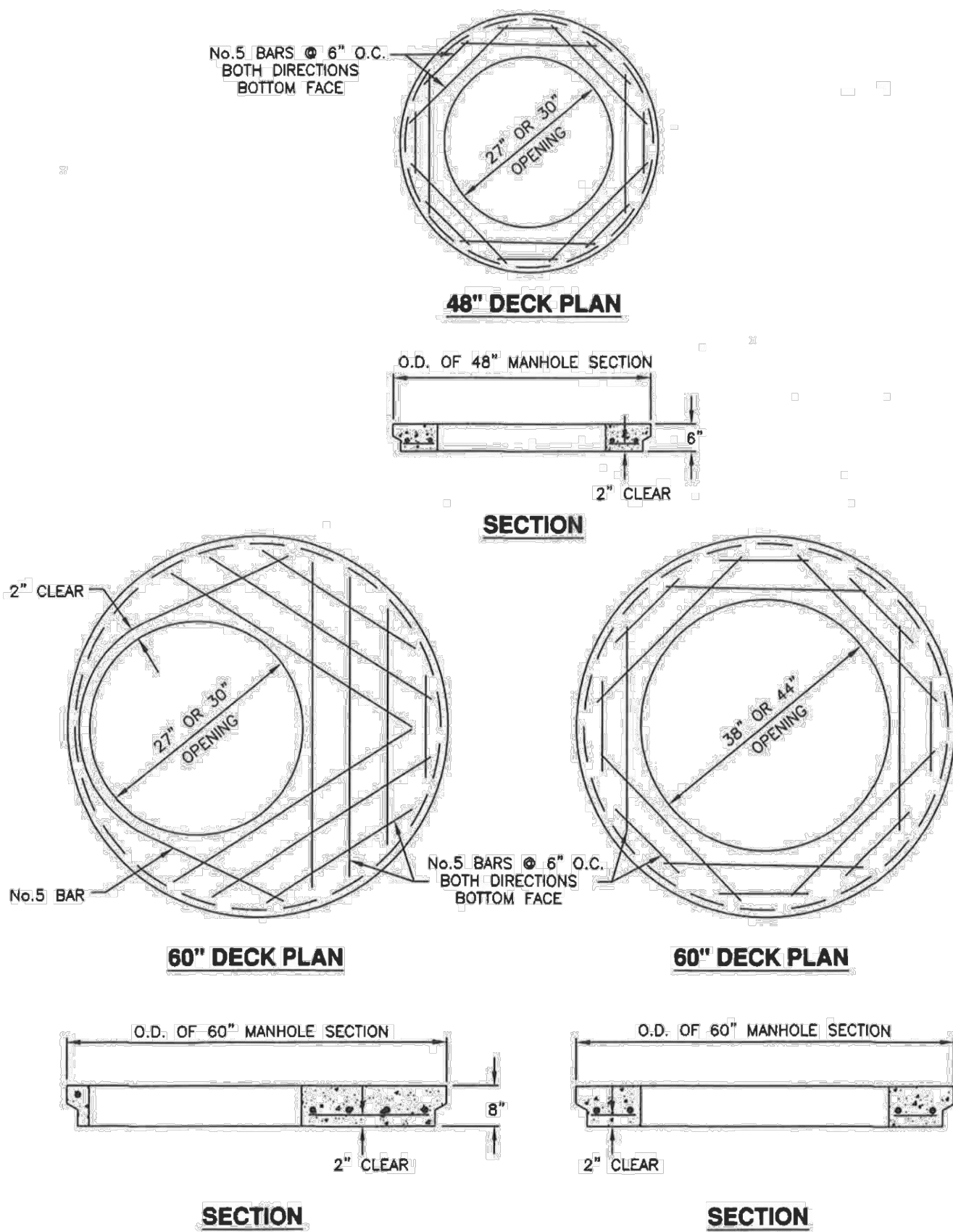
**APWA** **Utah Chapter** **Precast manhole** Plan **341.1** November 2010

- Concrete deck**
- GENERAL**

A. Deck is made for round manhole riser grade rings.
  - PRODUCTS**

A. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.  
B. Concrete: Class 4500 APWA Section 03 40 00
  - EXECUTION**

A. Reinforcement: Placement APWA Section 03 20 00.  
B. Concrete Placement: APWA Section 03 30 10. Apply a curing agent.



**APWA** **Utah Chapter** **Concrete deck** Plan **345** April 1997

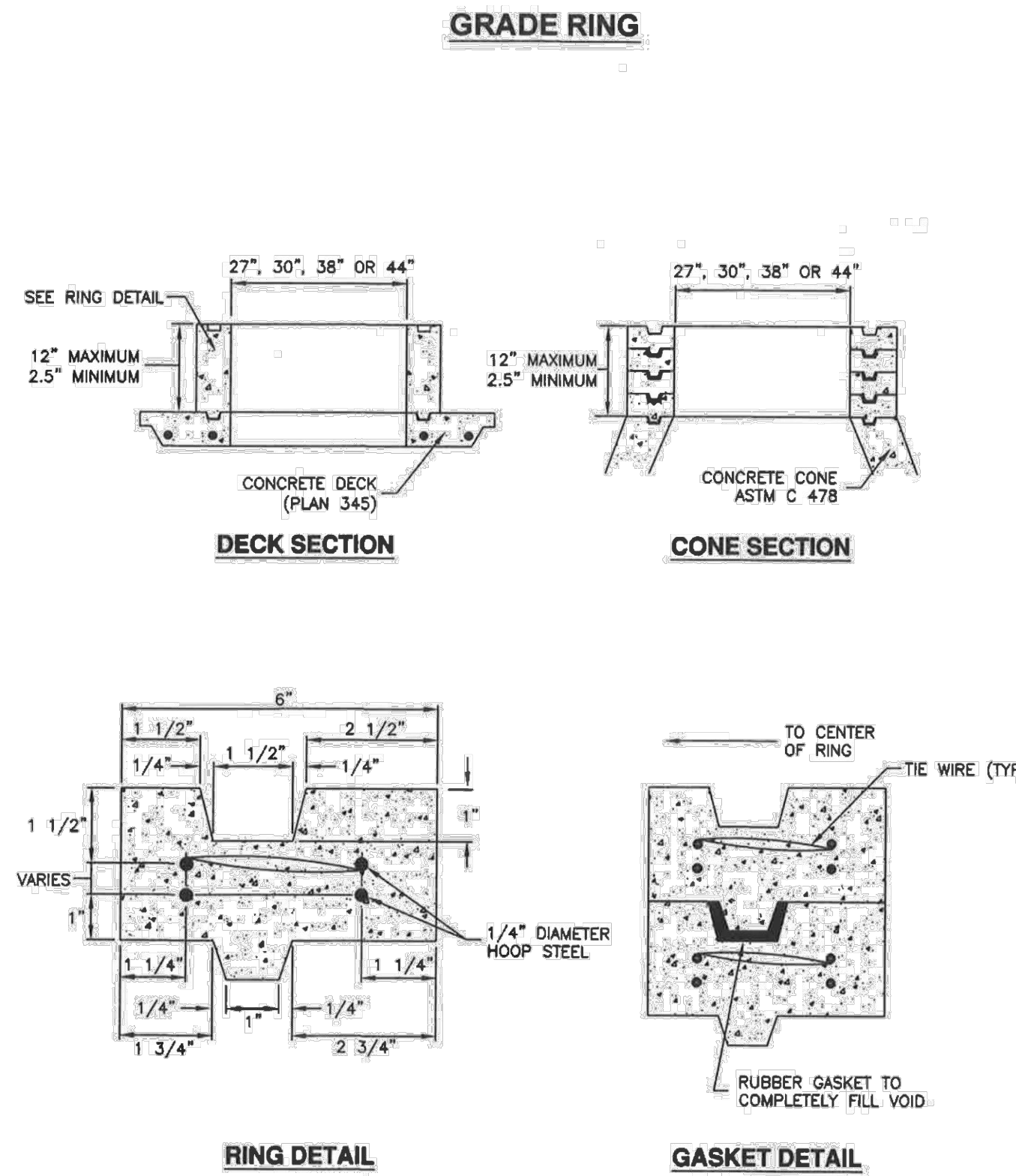
- Raise frame to grade**
- GENERAL**

A. Grade rings are used in non-pressurized applications to adjust frame to grade.
  - PRODUCTS**

A. Concrete: Class 4500 APWA Section 03 30 04.  
B. Reinforcement: Deformed, 60 ksi yield grade hoop steel, ASTM A615.  
1) 2 1/2" High Rings: Provide two 1/4" diameter steel hoops tied with No. 14 AWS gage wire, 8" on center.  
2) 6" and 8" High Rings: Provide four 1/4" diameter steel hoops, tied with No. 14 AWS gage wire, 8" on center.  
C. Gasket: Rubber-based, compressible.
  - EXECUTION**

A. Ring Manufacture:  
1) Fabrication, APWA Section 03 30 10.  
2) Cure, APWA Section 03 39 00.  
B. Field Installation: Seat rings with a compressible gasket.

360.1



**APWA** **Utah Chapter** **Raise frame to grade** Plan **360.1** May 2006

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
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**DETAILS**

Scale: N/A Drawn: MEF  
Date: 09/13/22 Job #: 21-0512  
Sheet:

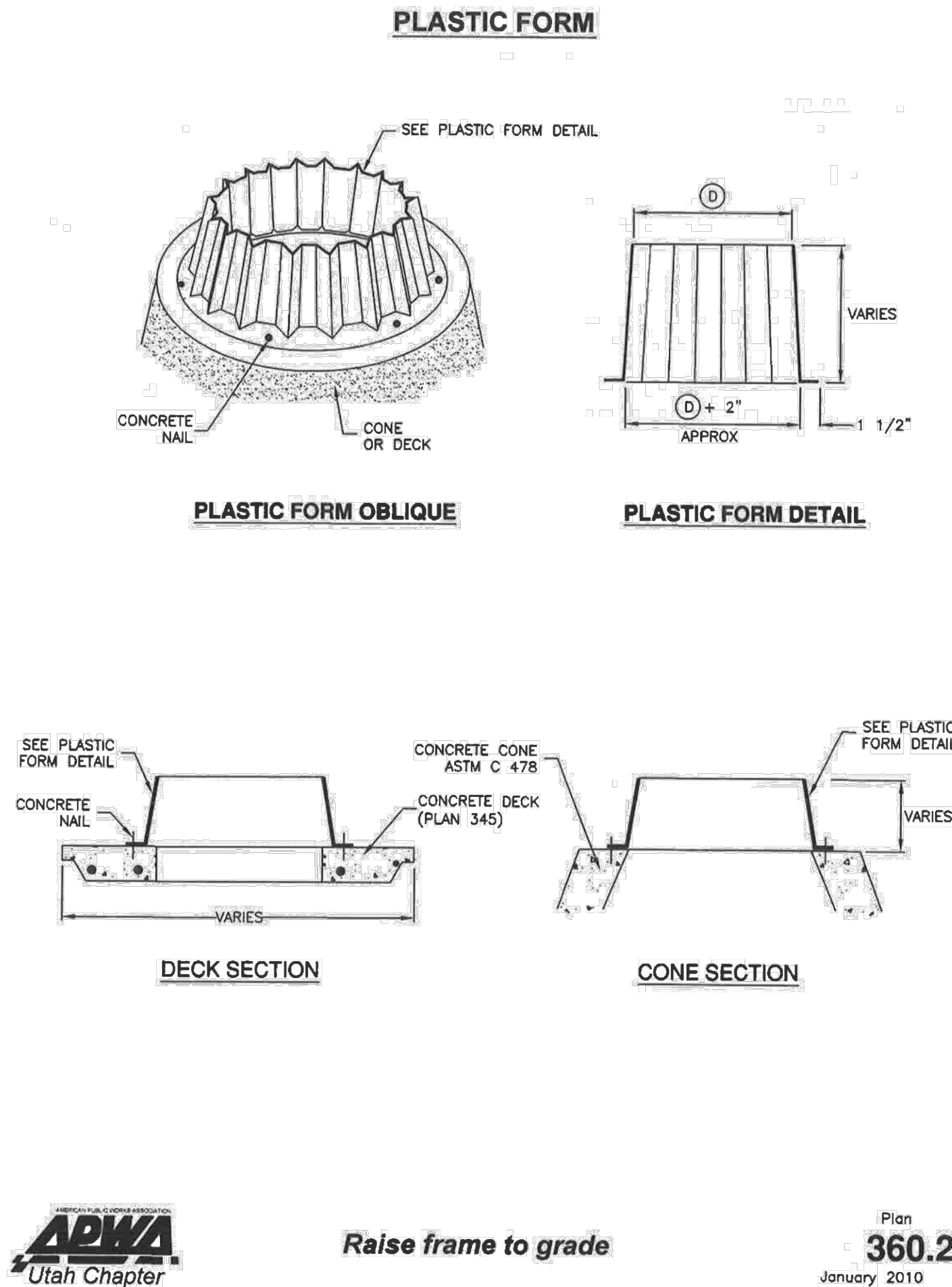
D5



1. **GENERAL**  
A. The plastic form is used to keep concrete in the annular space when fabricating cover collars for storm drain manholes, sanitary sewer manholes or other utilities.
2. **PRODUCTS**  
A. Concrete Nails: CONTRACTOR's choice.
3. **EXECUTION**  
A. Adjust plastic form height so that the top of the manhole frame and cover matches longitudinal slope and cross slope of the pavement surface, and cover is 1/2-inch lower than the pavement surface.

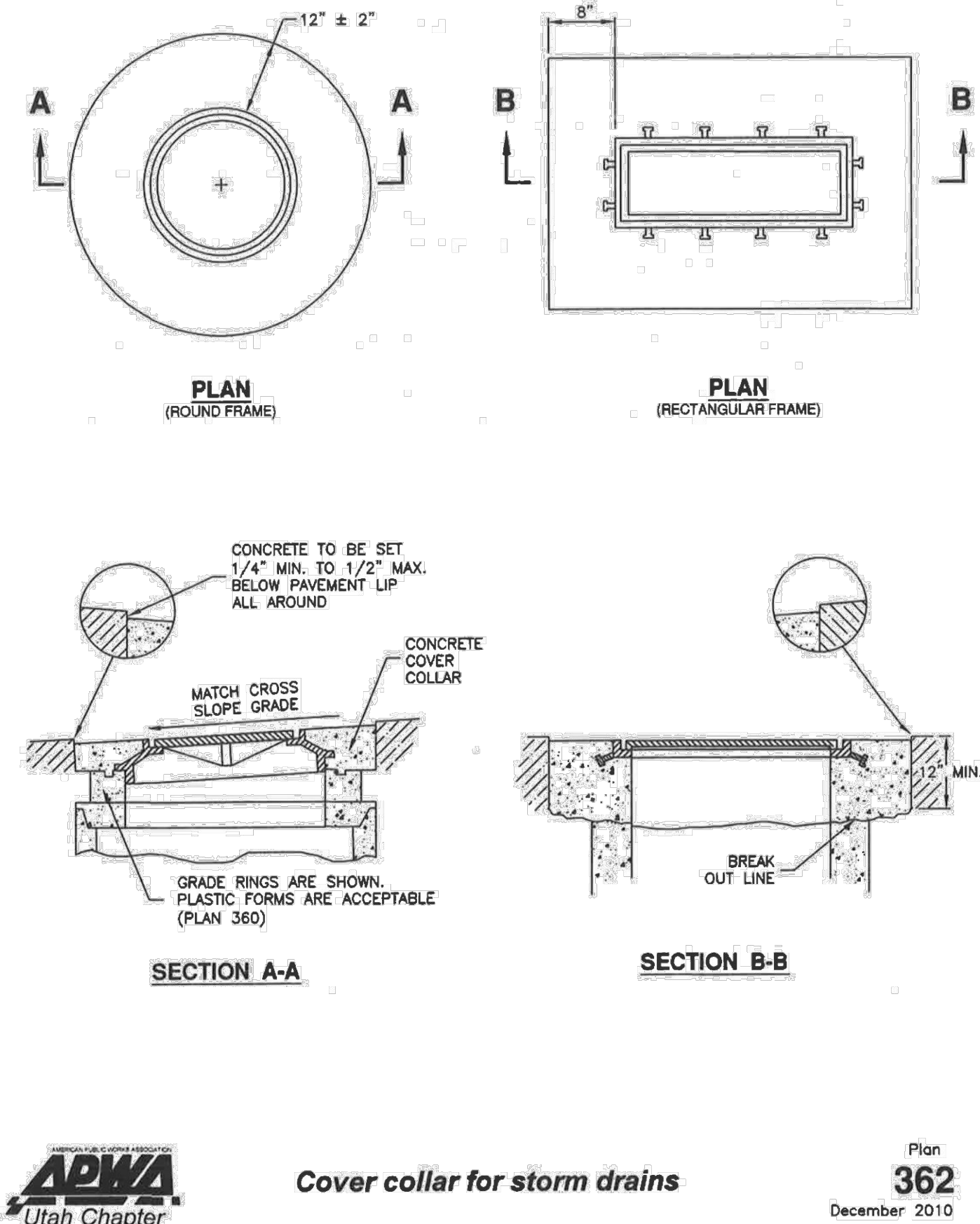
NOTE:  
1. ALL CONCRETE TO BE 4500 PSI.

360.2



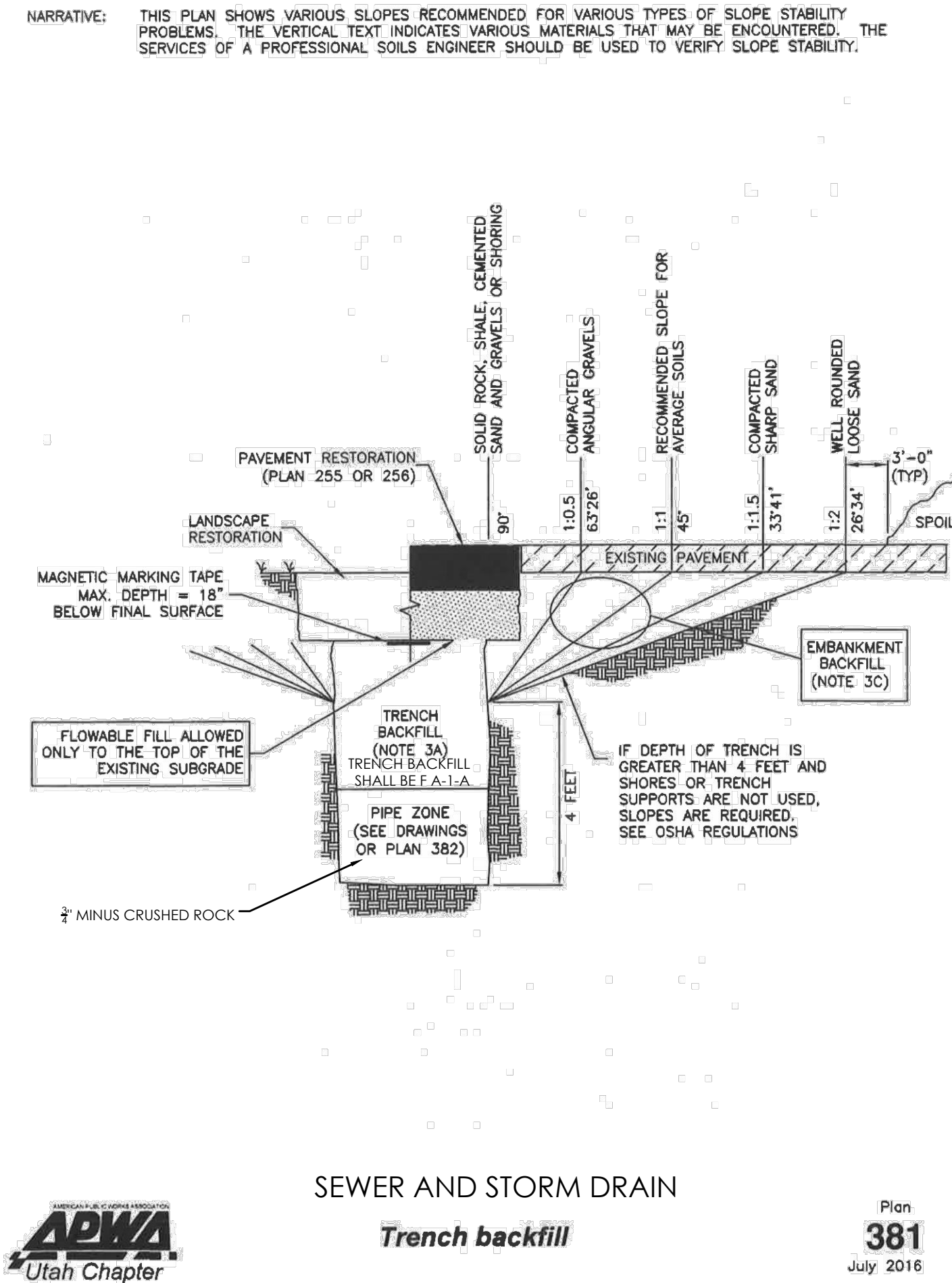
- Cover collar for storm drains**
1. **GENERAL**  
A. In a pavement surface, the concrete will support the frame under traffic loadings.
2. **PRODUCTS**  
A. Concrete: Class 4500 APWA Section 03 30 04.  
B. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
3. **EXECUTION**  
A. Pavement Preparation: Provide a neat vertical and concentric joint between concrete and existing bituminous concrete surfaces. Clean edges of all dirt, oil, and loose debris.  
B. Concrete Placement: APWA Section 03 30 10. Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.

362



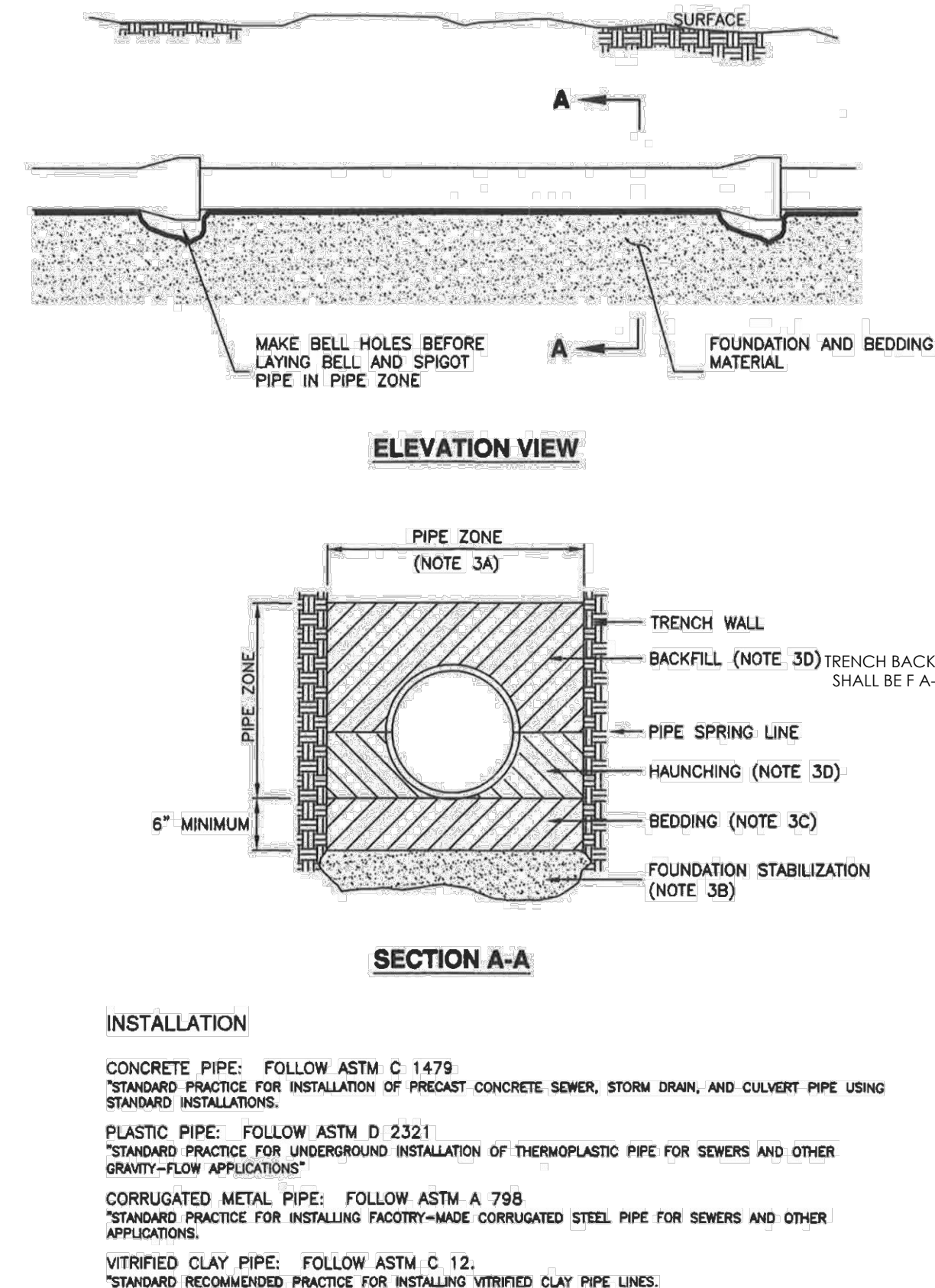
- Trench backfill**
1. **GENERAL**  
A. The drawing applies to backfilling a trench (and embankment) above the pipe zone.
2. **PRODUCTS**  
A. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches.  
B. Flowable Fill: APWA Section 31 05 15. Target is 60 psi in 28 days with 90 psi maximum in 28 days, it must flow easily requiring no vibration for consolidation.
3. **EXECUTION**  
A. Trench Backfill Above the Pipe Zone: Follow requirement indicated in APWA Section 33 05 20 and the following provisions. See Standard Plan 382 for backfilling the pipe zone.  
1) DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench backfill.  
2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.  
3) Water jetting is NOT allowed.  
B. Flowable Fill: If controlled low strength material is placed in the trench. Cure the material before placing surface restorations.  
C. Embankment Backfill: When trench sides are sloped proceed as follows.  
1) Maximum lift thickness is 8-inches before compaction.  
2) Compact per APWA Section 31 23 26 to 95 percent or greater relative to a standard proctor density.  
3) Submission of quality control compaction test result data may be requested by ENGINEER at any time. Provide results of tests immediately upon request.  
D. Surface Restoration:  
1) Landscaped Surface: Follow APWA Section 32 92 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements. Rake to match existing grade. Replace vegetation to match pre-construction conditions.  
2) Paved Surface: Follow APWA Section 33 05 25 (bituminous pavement surfacing), or APWA Section 33 05 25 (concrete pavement surfacing). Do not install surfacing until compaction density is acceptable to ENGINEER.

381



- Pipe zone backfill**
1. **GENERAL**  
A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.
2. **PRODUCTS**  
A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Concrete: APWA Section 03 30 04.  
D. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.  
E. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
3. **EXECUTION**  
A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.  
B. Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.  
C. Bedding: Follow APWA Section 33 05 20 requirements and the following provisions.  
1) Furnish untreated base course material unless specified otherwise by pipe manufacturer.  
2) Maximum lift thickness is 8-inches.  
3) Bedding immediately under the pipe should not be compacted, but loosely placed.  
4) Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.  
5) When using concrete, provide at least Class 2,000, APWA Section 03 30 04.  
D. Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.  
1) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26 unless pipe manufacturer requires more stringent installation.  
2) Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide results of tests immediately upon request.  
E. Flowable Fill (when required and if allowed by pipe manufacturer):  
1) Place the controlled low strength material, APWA Section 31 05 15.  
2) Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.  
3) Reset pipe to line and grade if pipe "floats" out of position.

382



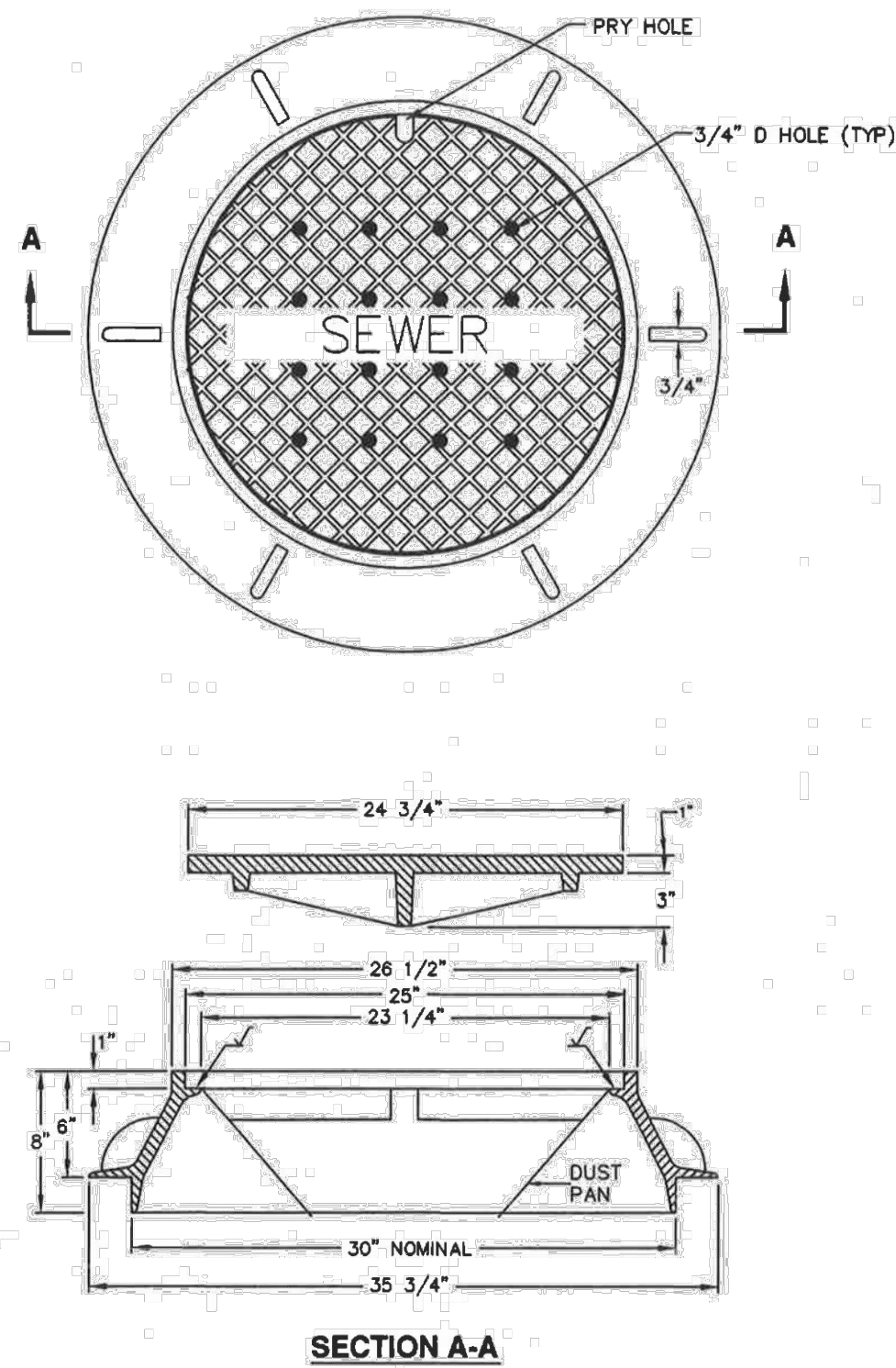
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Date: 09/13/22	Job #: 21-0512
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30" Frame and cover

1. GENERAL  
A. The frame and cover fits the manhole in Plan 411.
2. PRODUCTS  
A. Castings: Grey iron class 35 minimum, ASTM A48, coated with asphalt based paint or better (except on machined surfaces).
  - 1) Cast the heat number on the frame and cover.
  - 2) Give the frame and cover a machine finish so the cover will not rock.
  - 3)  $\sqrt{\phantom{x}}$  designates machined surface.
  - 4) Cast the words "SEWER" on the cover in upper case flush with the surface finish.
3. EXECUTION  
A. Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.



30" Frame and cover

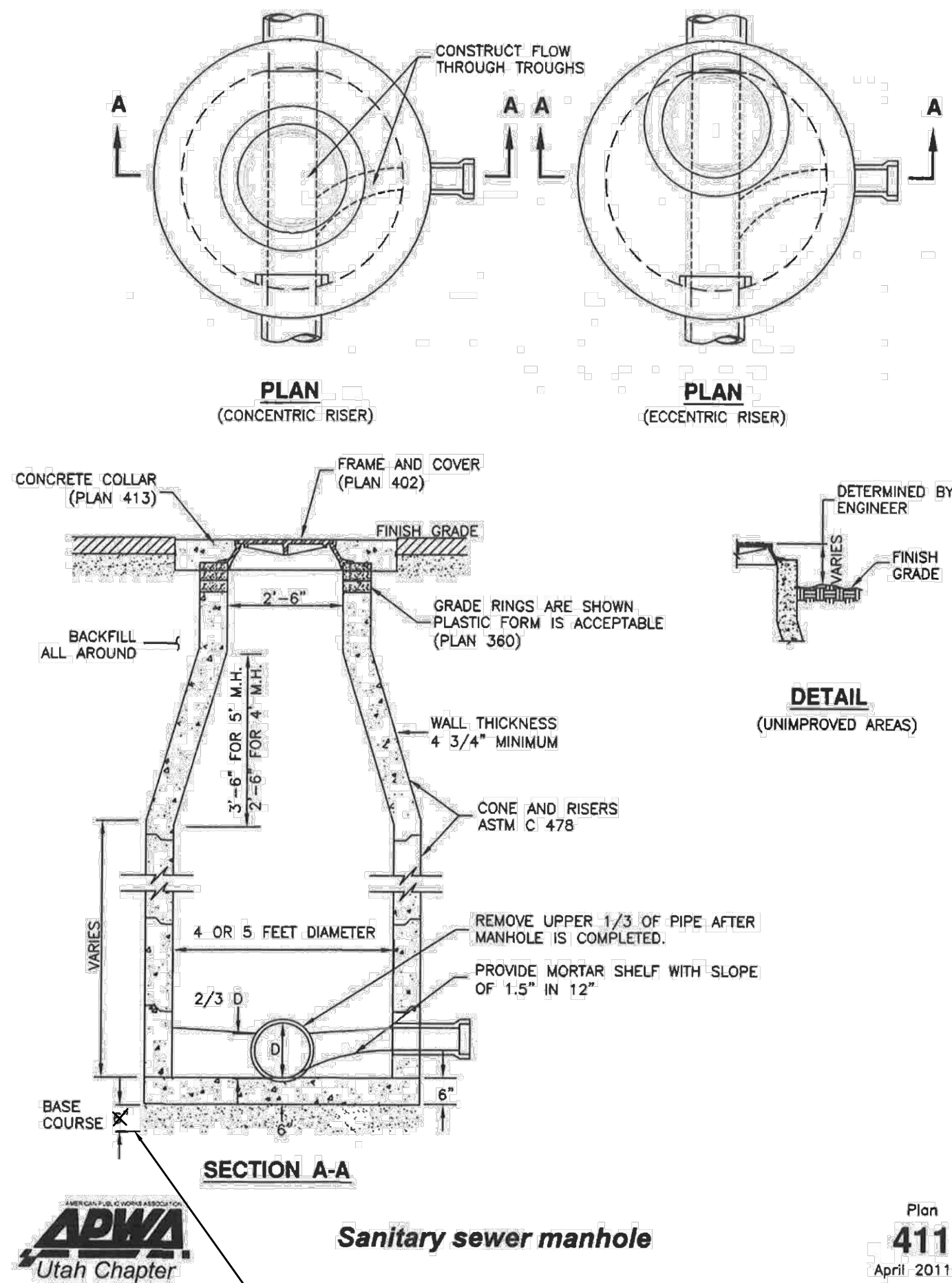
Plan  
402  
April 1997

402

- NOTE:
1. ALL CONCRETE TO BE 4500 PSI.

Sanitary sewer manhole

1. GENERAL  
A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.  
B. Manhole size.
  - 1) Diameter is 4 feet: For sewers under 12" diameter.
  - 2) Diameter is 5 feet: For sewers 12" and larger, or when 3 or more pipes intersect the manhole.
2. PRODUCTS  
A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Concrete: Class 4500 APWA Section 03 30 04.  
D. Riser and Reducing Riser: ASTM C478.  
E. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.  
F. Grout: 2 parts sand to 1 part cement mortar, ASTM C1329.  
G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
3. EXECUTION  
A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a granular backfill borrow in a geotextile wrap to stabilize an unstable foundation.  
B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.  
C. Invert Cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.  
D. Pipe Connections: Grout around all pipe openings.  
E. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.  
F. Joints: Place flexible gasket-type sealant in all riser joints. Finish with grout.  
G. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.  
H. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.  
I. Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



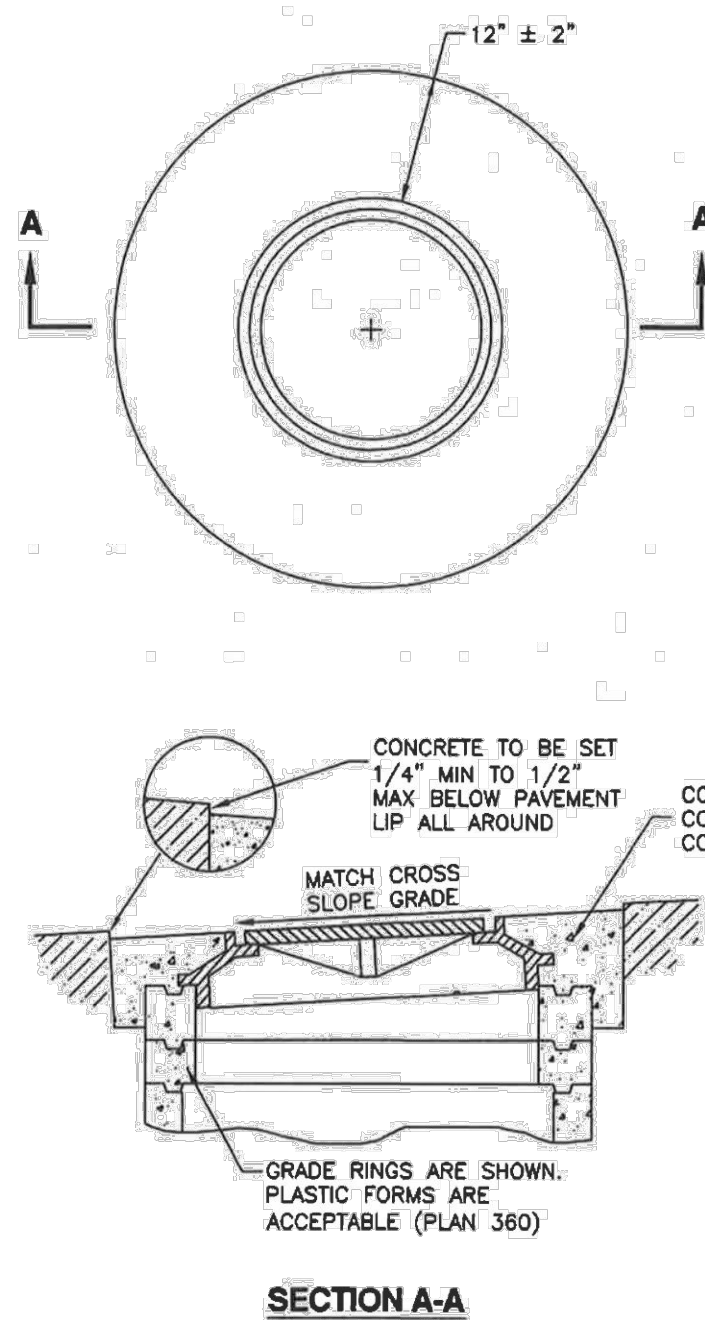
Sanitary sewer manhole

Plan  
411  
April 2011

411

Cover collar for sanitary sewer manhole

1. GENERAL  
A. In a pavement surface, the concrete will support the frame under traffic loadings.
2. PRODUCTS  
A. Concrete: Class 4500 APWA Section 03 30 04.  
B. Concrete Curing Agent: Type ID Class A (clear with fugitive dye), membrane forming compound, APWA Section 03 39 00.
3. EXECUTION  
A. Pavement Preparation: Provide a neat vertical and concentric joint between the concrete collar and the bituminous pavement surface. Clean edges of all dirt, oil, and loose debris.  
B. Concrete Placement: Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.



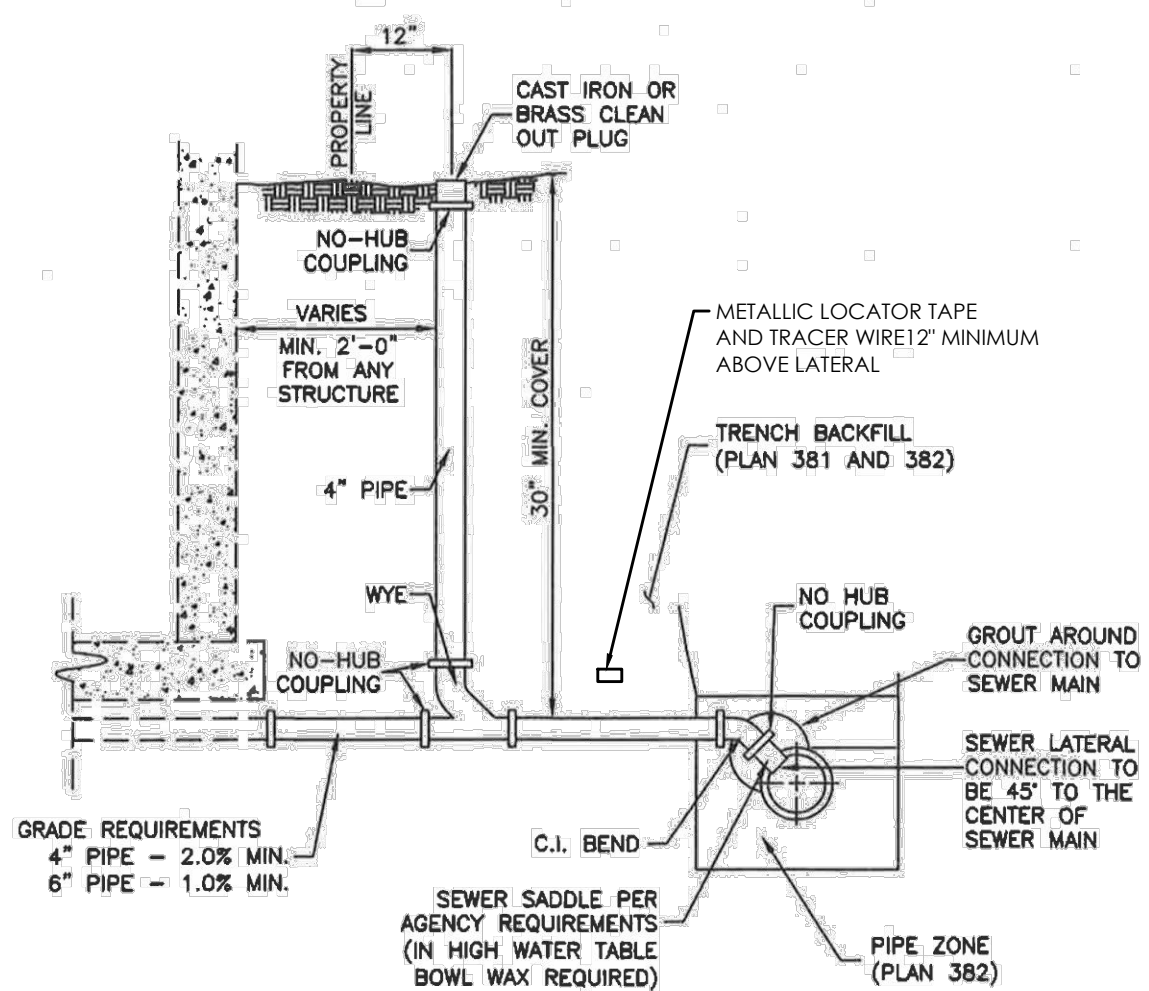
Cover collar for sanitary sewer manhole

Plan  
413  
September 2001

413

Sewer lateral connection

1. GENERAL  
A. Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.  
B. Before backfilling, secure inspection of installation by ENGINEER. Give at least 24 hours notice.  
C. Verify if CONTRACTOR or agency is to install the wye.
2. PRODUCTS  
A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Provide agency approved wye or tee with appropriate donut.  
D. Stainless steel straps required.
3. EXECUTION  
A. Tape wrap pipe as required by soil conditions.  
B. Remove core plug from sewer main. Do not break into sewer main to make connection.  
C. Base Course and Backfill Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



Sewer lateral connection

Plan  
431  
January 2011

431

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Date: 09/13/22 Job #: 21-0512  
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## INSTALLATION SPECIFICATION

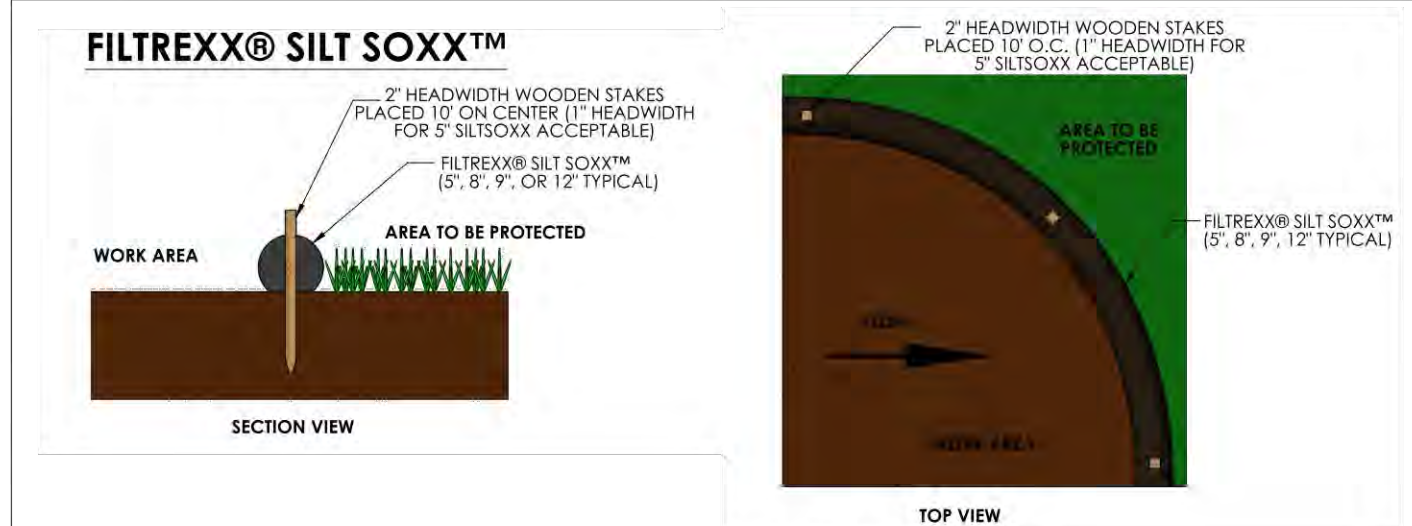
### PERIMETER CONTROL - Compost Filter Sock

#### INSTALLATION

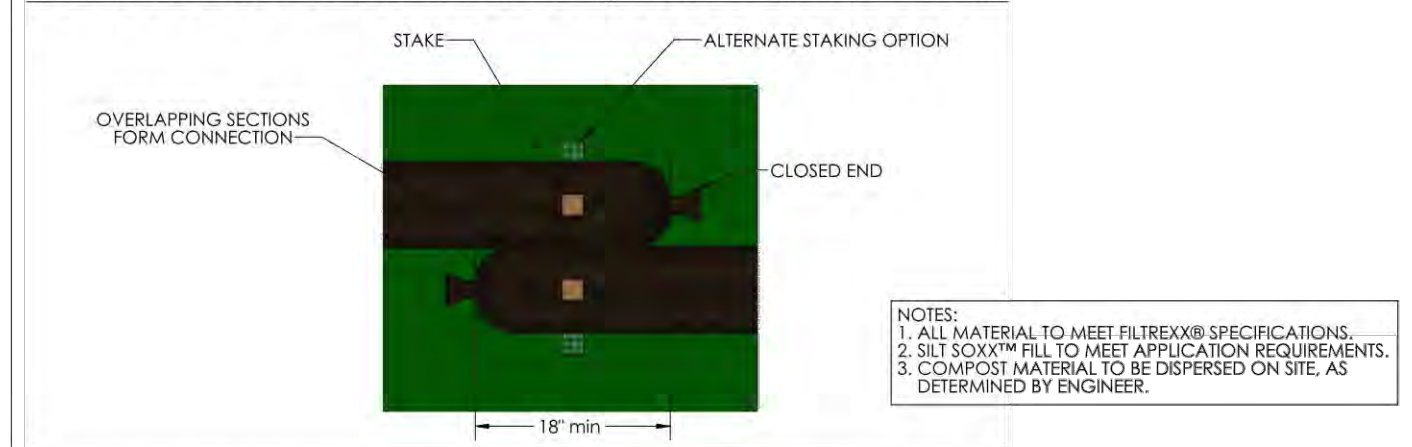
- Perimeter control will be placed at locations indicated on plans and in a manner as directed by the Engineer or Manufacturer.
- Perimeter control should be installed parallel to the base of the slope or other disturbed area. In challenging conditions (i.e., 2:1 slopes), a second perimeter control shall be constructed at the top of the slope, or staking may be increased.
- Effective Sox height in the field should be as follows: 5" diameter Sox = 4" high; 8" diameter Sox = 6.5" high; 12" diameter Sox = 9.5" high; 18" diameter Sox = 14.5" high; 24" diameter Sox = 19" high.
- Stakes should be installed through the middle of the perimeter control on 10 ft (3m) centers, using 2 in (50mm) by 3 ft (1m) wooden stakes. 5" diameter Sox may use 1" (25 mm) x 1" (25 mm) x 18" (0.5 m) wooden stakes. In the event staking is not possible, i.e., when perimeter control is used on pavement, heavy concrete blocks shall be used behind the perimeter control to help stabilize during rainfall/runoff events.
- Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
- Straighten or position the Sox as needed on the ground, ensuring there is good ground contact and no void spaces under the Sox.
- Do not drag Sox across rough surfaces. If dragging across a

#### MAINTENANCE & DISPOSAL

- The contractor shall remove sediment at the base of the upslope side of the perimeter when accumulation has reached 1/2 of the effective height of the sock, or as directed by the Engineer. Alternatively, a new perimeter control sock can be placed on top of and slightly behind the original one creating more sediment storage capacity without soil disturbance.
- Perimeter control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
- The FilterMedia will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.



#### COMPOST SOCK CONNECTION/ATTACHMENT DETAIL



Refer to Design Specification for complete application, design, installation, maintenance, and removal documentation.

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## INSTALLATION SPECIFICATION

### INLET PROTECTION - Compost Filter Sock

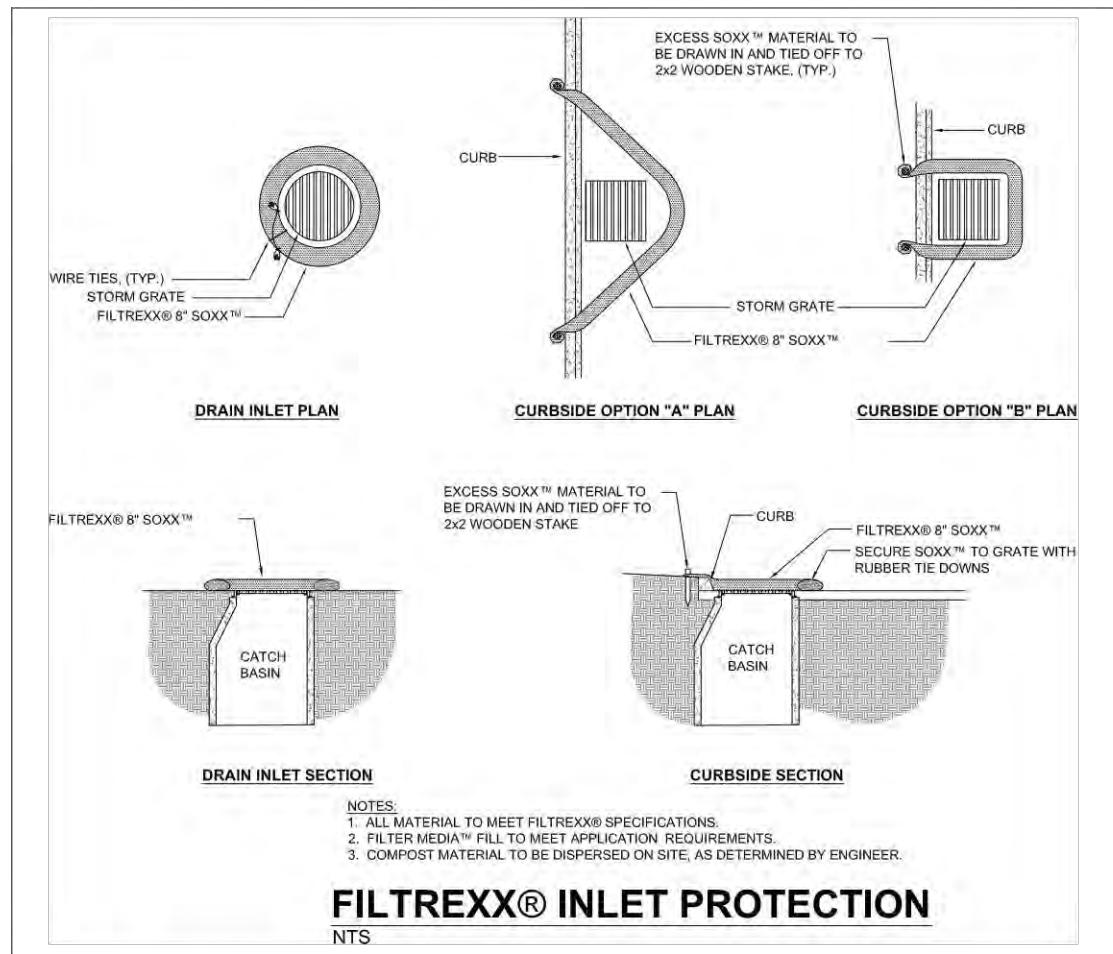
#### INSTALLATION

- Inlet protection shall be placed at locations indicated on plans as directed by the Engineer. Inlet protection should be installed in a pattern that allows complete protection of the inlet area.
- Installation of curb inlet protection will ensure a minimal overlap of at least 1 ft (300mm) on either side of the opening being protected. Inlet protection will be anchored to the soil behind the curb using staples, stakes or other devices capable of holding the inlet protection in place.
- Standard inlet protection for curb inlet protection and curb sediment containment will use 8 in (200mm) diameter inlet protection, and drain inlets on soil will use 12 in (300mm) or 18 in (450mm) diameter inlet protection. In severe flow situations, larger inlet protection may be specified by the Engineer. During curb installation, inlet protection shall be compacted to be slightly shorter than curb height.
- If inlet protection becomes clogged with debris and sediment, they shall be maintained so as to assure proper drainage and water flow into the storm drain. In severe storm events, overflow of the inlet protection may be acceptable in order to keep the area from flooding.
- Curb and drain inlet protection shall be positioned so as to provide a permeable physical barrier to the drain itself, allowing sediment to collect on the outside of the inlet protection.
- For drains and inlets that have only curb cuts, without street grates, a spacer is required in order to keep the inlet protection away from the drain opening. This spacer should be cinder

- blocks or a hog wire screen bent to overlap the grate opening and keep the sock from falling into the opening. Use at least one spacer for every 4 ft (1.2m) of curb drain opening. The wire grid also prevents other floatable waste from passing over the inlet protection.
- Stakes shall be installed through the middle of the drain inlet protection on 5 ft (1.5m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden stakes.
- Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.

#### MAINTENANCE & DISPOSAL

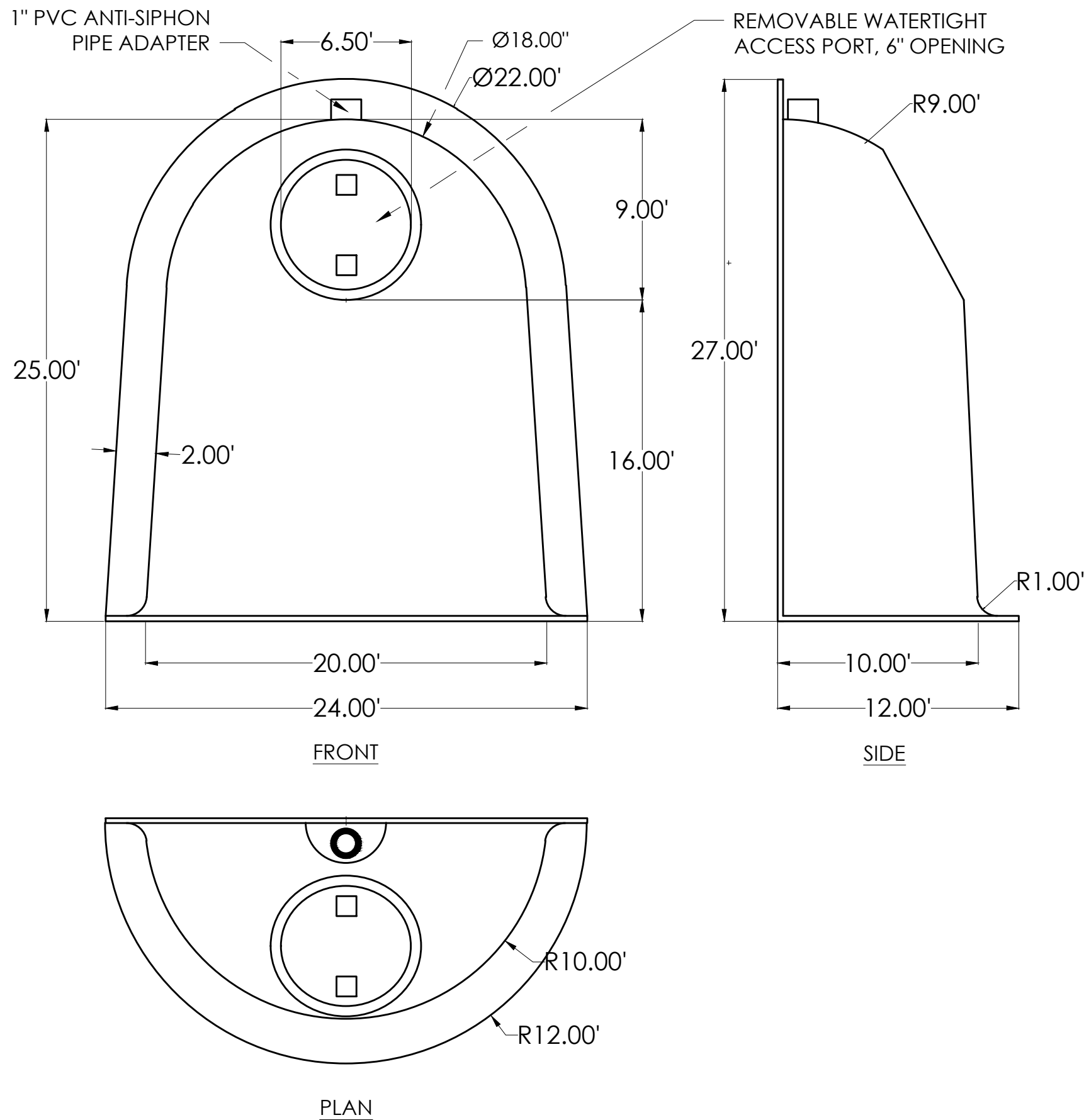
- The Contractor shall remove sediment at the base of the upslope side of the inlet protection when accumulation has reached 1/2 of the effective height of the inlet protection, or as directed by the Engineer. Alternatively, for drain inlet protection, a new Sox may be placed on top of the original increasing the sediment storage capacity without soil disturbance.
- Inlet protection shall be maintained until disturbed area above or around the device has been permanently stabilized and construction activity has ceased. Regular maintenance includes lifting the inlet protection and cleaning around and under them as sediment collects.
- The FilterMedia will be removed from paved areas or dispersed on site soil or behind curb once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.



Refer to Design Specification for complete application, design, installation, maintenance, and removal documentation.

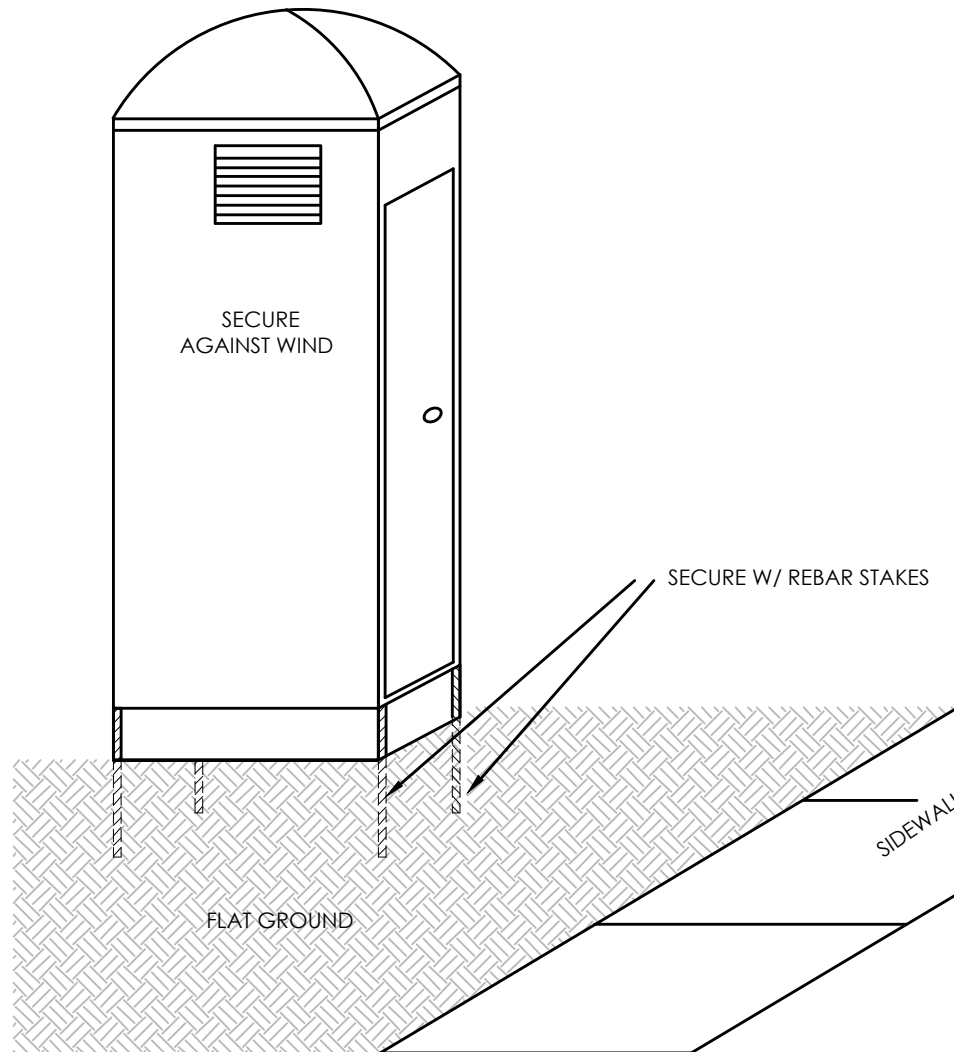
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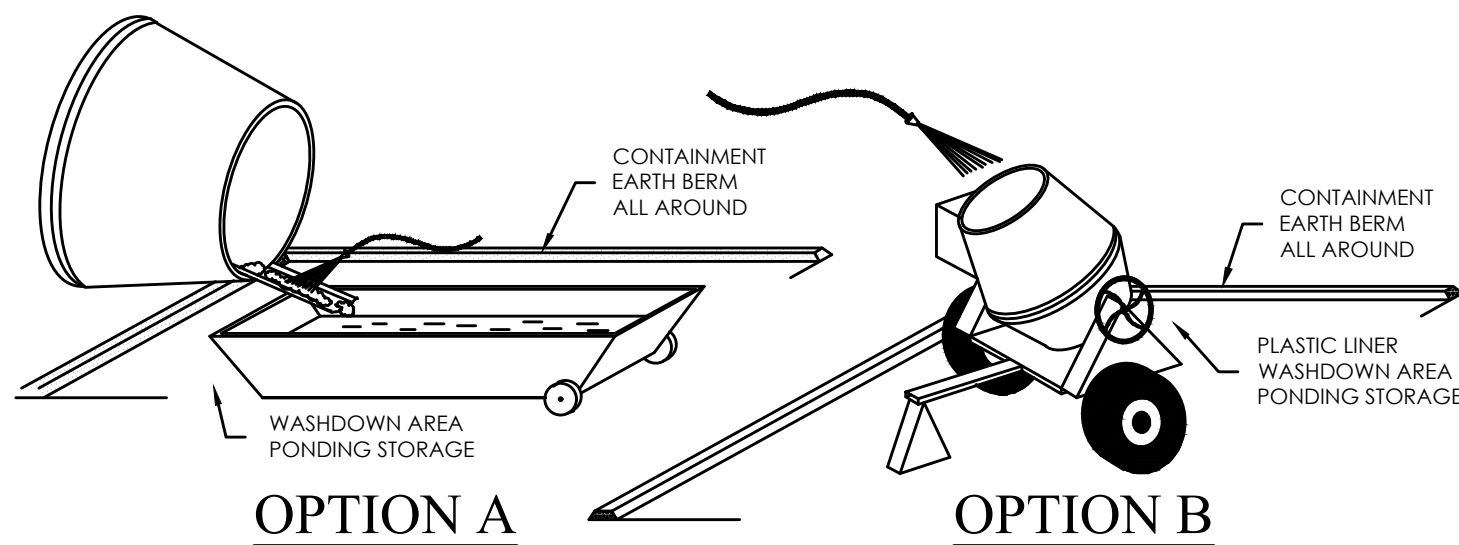
US PATENT #6126817 ADDITIONAL PATENTS PENDING

BMP, INC.		
53 MT. ARCHER ROAD, LYME, CT. 06371		
(800) 504-8008 FAX: (860) 434-3195		
DESCRIPTION	DATE	SCALE
18F SNOUT OIL & DEBRIS STOP	09/14/99	NONE
DRAWING NUMBER		18F



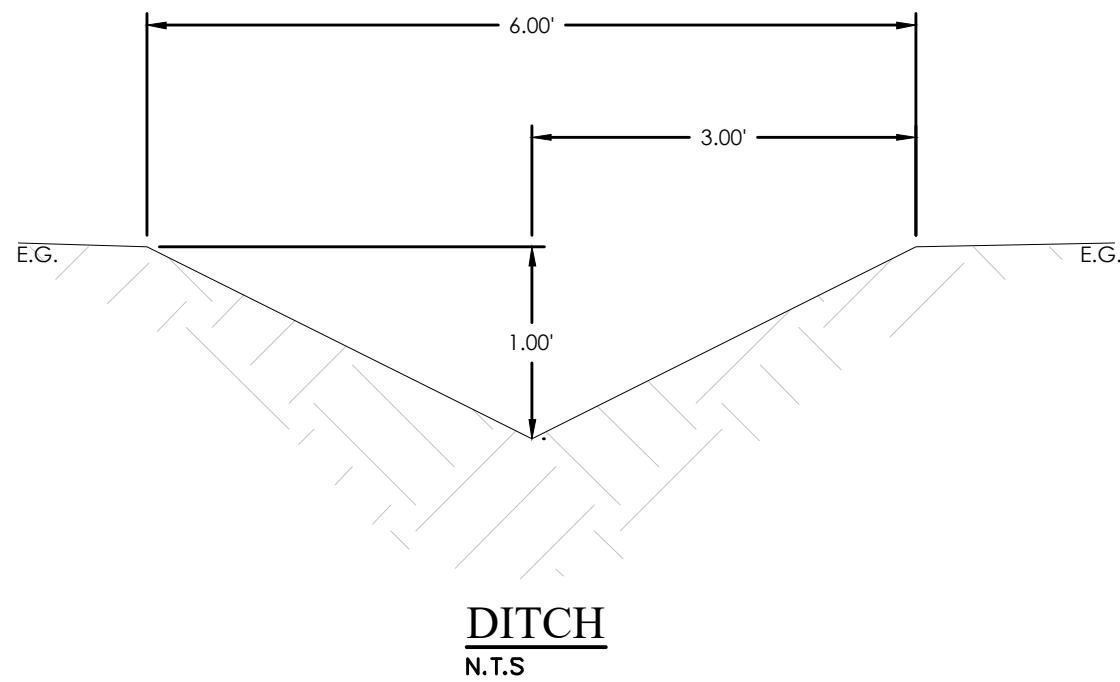
#### PORTABLE TOILET

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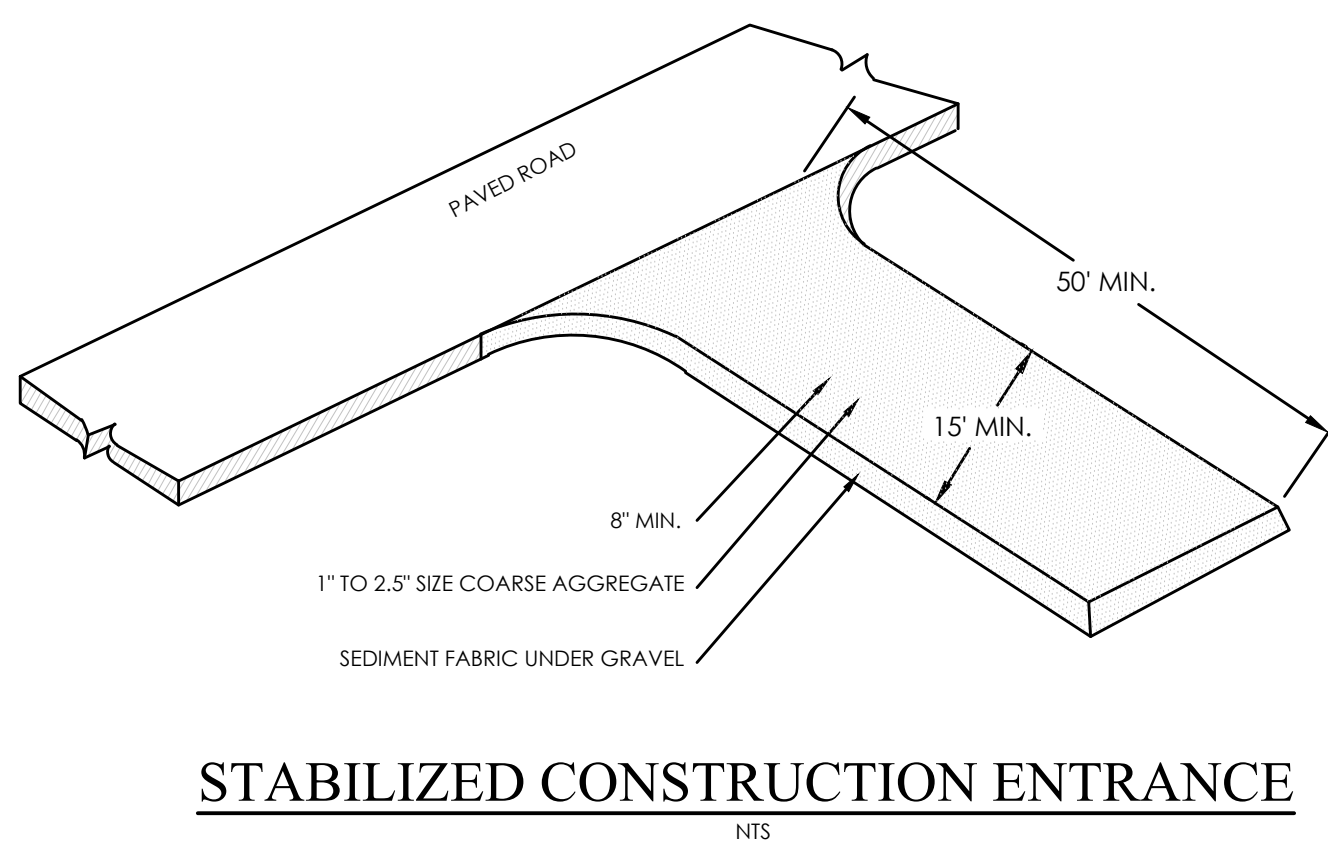
#### CONCRETE WASTE MANAGEMENT

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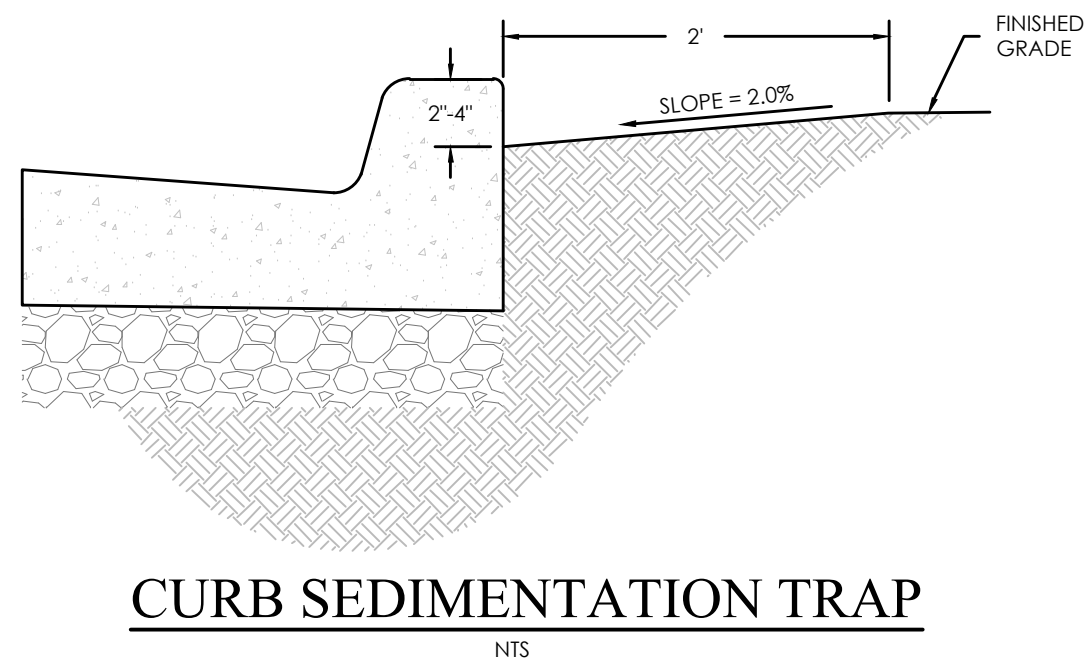
#### DITCH

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#### STABILIZED CONSTRUCTION ENTRANCE

NTS



#### CURB SEDIMENTATION TRAP

NTS



## COWBOY ESTATES SUBDIVISION

### GRANTSVILLE, UT

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GRANTSVILLE CITY GENERAL NOTES

- ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO: EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES, SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CURB, GUTTER, AND SIDEWALK, REQUIRED TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TPOOLE COUNTY SURVEYORS REQUIREMENTS.
- ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SPOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
- REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR MORE DETAILS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- ALL CITY MAINTAINED UTILITIES INCLUDING; WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATERLINES, IRRIGATION, STREET LIGHTING, AND POWER. AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS, NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1 .DXF COPY, 1 .PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPs WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOUT SEPARATOR.
- ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE, TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORICULTURE.
- WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET FENCING ALONG THE BACK OF SIDEWALK, THE DEVELOPMENT SHALL ALSO BE REQUIRED PUT IN A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
- CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO; SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATER WAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
- CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND LIP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

GRANTSVILLE CITY TRAFFIC NOTES

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC onto THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 108 (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A "Z" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE 1/2 INCH FOR RESIDENTIAL AND COLLECTOR ROADS. NO MORE THAN 15% RAP (RECLAIMED ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3% AIR VOIDS.
- POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
- ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPLING, GRANULAR AND FLOWABLE, 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS PCMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS PCMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
- ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

GRANTSVILLE CITY GRADING NOTES

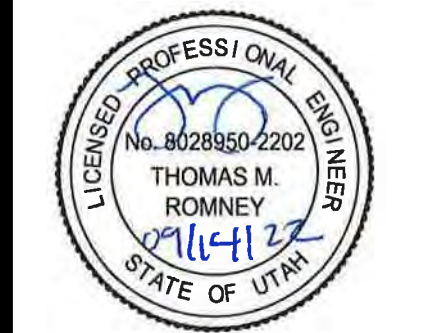
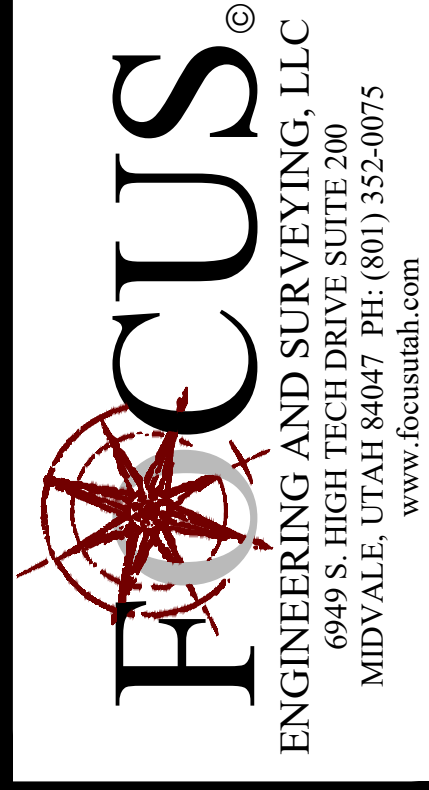
- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

GRANTSVILLE CITY FIRE DEPARTMENT NOTES

- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5', MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT. WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR, THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV ISN'T FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF ITS CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON. (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
- POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- ROADS AND ACCESSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

GRANTSVILLE CITY WATER NOTES

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
- ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPER'S EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
- FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPER'S EXPENSE) AND INSTALLED BY DEVELOPER.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY, REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER): IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPER'S EXPENSE.
- ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
- ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE.
- ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIRES STAINLESS STEEL TIE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL TIE DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.



COWBOY ESTATES SUBDIVISION

GRANTSVILLE, UT

CITY NOTES

REVISION BLOCK		DESCRIPTION	
#	DATE	1	2
1	----	----	----
2	----	----	----
3	----	----	----
4	----	----	----
5	----	----	----
6	----	----	----

CITY NOTES	
Scale: N/A	Drawn: MEF
Date: 09/13/22	Job #: 21-0512
Sheet:	
D10	



GRANTSVILLE CITY  
PRE-CONSTRUCTION NOTES

CHAIN OF COMMUNICATION

- FIRST CONTACT: BRAD PACE PUBLIC WORKS INSPECTOR
- SECOND CONTACT: GLEN MILLWARD (WATER), MARKUS SEAT (SEWER), TRAVIS DANIELS (FIRE CHIEF), JASON SMITH (ASSISTANT FIRE CHIEF).

PLEASE COMMUNICATE THROUGH E-MAIL TO MAINTAIN A WRITTEN RECORD.

MAIN CONSTRUCTION CONTACT

- PROJECT FOREMAN:

CONSTRUCTION SCHEDULE

- CONSTRUCTION STARTS:
- PLEASE PROVIDE A CONSTRUCTION SCHEDULE. HELPS CITY TO PLAN FOR WHAT IS HAPPENING. PROVIDE TO JAMES AND HE WILL DISSEMINATE TO OTHERS.

PERMITTING

CONSTRUCTION STAKING

- SURVEYING & STAKING:
- WE ARE HAVING SOME ALIGNMENT ISSUES ON CITY UTILITIES PLEASE MAKE SURE YOU GET ADEQUATE STAKING.

GEOTECHNICAL

- DOES THE CONTRACTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS?
- DOES THE CITY INSPECTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS? THE CITY INSPECTORS WILL BE GIVEN A COPY.
- GEO-TECH SHALL MONITOR THE EXCAVATION AND DETERMINE THE LOCATIONS THAT REQUIRE ADDITIONAL GRANULAR SUB-BASE AND SPECIFY THE DEPTH REQUIRED. CITY WOULD LIKE A DRAWINGS SHOWING THE AREAS THAT REQUIRE ADDITIONAL WORK.
- WHO WILL DO SOILS, COMPACTION TESTING?

SUBMITTALS:

- THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR MATERIAL TO THE CITY FOR APPROVAL PRIOR TO PURCHASE OF MATERIALS AND INSTALLATION. THE CITY WANTS TO CHECK THAT THE MATERIALS MEET SPEC BEFORE THEY ARE ORDERED SO THEY DONT GET REJECTED WHEN THEY HAVE BEEN INSTALLED. SUBMIT TO CHRISTY MONTIERTH IN PUBLIC WORKS.
- THE CITY IS FINE WITH THE MATERIALS THAT HAVE PREVIOUSLY BEEN USED.

SEWER

- PIPE MATERIAL: PVC ASTM D-3034 SDR-35
- FOLLOW OSHA REQUIREMENTS FOR TRENCHING (4' VERTICAL WITH 1:1 SLOPING OR STEPPING OR USE TRENCH BOXES).
- SEWER LATERALS PER CITY STANDARD. (APWA 431).
- UTAH REQUIREMENT OF 10' HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LATERALS.
- 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- CRUSHED ROCK ¾-INCH MINUS IN PIPE ZONE (¾-INCH ROUNDED PEA GRAVEL IS NOT ALLOWED BY THE CITY).
- SEWER LATERALS. GRAVEL BEDDING TO BE EXTENDED TO DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED).
- OFFSET TEES FOR SEWER LATERALS; GASKET TYPE.
- COMPACTION - 95% IN ROADS, 90% OFF-ROAD (ASTM D-1557, MODIFIED PROCTOR)
- INSTALLATION AS PER ASTM D-2321
- ALL PRECAST MANHOLES TO BE PROVIDED WITH RUBBER BOOTS AND STAINLESS-STEEL BANDS AT PIPE PENETRATIONS.
- INTERIOR PIPE PENETRATIONS IN ALL SEWER MANHOLES SHALL BE GROUTED.
- TRACER WIRE EXTENDING FROM MAIN TO LATERAL STUB ON ALL LATERALS AND EXTENDED TO SURFACE AT STUB MARKER. INCLUDE AN EXTRA 30-FEET TO EXTEND ALONG THE SERVICE TO THE DWELLING.
- STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB AN "S" AT ALL SERVICE LATERALS (TWO PLACES FOR EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE LATERALS IN THE PROPER LOCATIONS.
- EXTEND UTILITY LATERAL STUB MARKERS BEYOND THE 15-FOOT PU&DE (15-FEET BEHIND BACK OF WALK).
- END OF SEWER LATERALS SHALL BE PLUGGED.

TESTING:

- AIR TEST MANDATORY - CERTIFICATION REQUIRED.
- VACUUM TEST REQUIRED FOR THE MANHOLES.
- VIDEO INSPECTION AFTER FLUSHING - THE CITY DOES NOT NEED TO OBSERVE THE VIDEO INSPECTION. VIDEO RECORD TO BE PROVIDED FOR CITY REVIEW.
- PLEASE PROVIDE THE CITY 48 HOURS' NOTICE PRIOR TO TESTING.

EMERGENCY SERVICES

- INSTALL A SILT FENCE FIVE FEET OUT AROUND LIVE FIRE HYDRANTS AND ELECTRICAL TRANSFORMERS. THIS HELPS MAINTAIN A CLEAR SPACE AROUND THEM AND MAKES THEM VISIBLE IF EMERGENCY SERVICES ARE NEEDED TO FIND THEM DURING CONSTRUCTION.
- INSTALL TEMPORARY SIGNAGE AT THE BEGINNING OF WORK ON THE SITE.
- PARK ONLY ON ONE SIDE OF ACCESS ROADS SO EMERGENCY ACCESS IS CLEAR.
- COORDINATE WITH FIRE CHIEF FOR HIS INSPECTIONS. ROADS: FACE OF CURB TO FACE OF CURB IS PROPER DISTANCE AND HYDRANTS ARE PROPERLY PLACED. THE HEIGHT OF THE HYDRANTS WILL ALSO BE INSPECTED. 18" ABOVE GROUND FROM THE PUMPER NOZZLE.
- PAINT RED CURB TEN FEET EITHER DIRECTION FIRE HYDRANTS.

CULINARY WATER

- PIPE MATERIAL: PVC C900 DR18
- USE BEDDING SAND FOR BACKFILL IN THE PIPE ZONE (CITY NEEDS TO PREAPPROVE SAND BEDDING.) CITY WANTS CLEANED WASHED SAND. THE CITY WANTS A BUCKET AHEAD OF TIME SO THE CITY CAN WET IT AND SEE IF IT SETS UP LIKE CONCRETE OR NOT. IT CANT SET UP LIKE CONCRETE. THEY CAN PULL FROM THE STAKER PIT BUT THE SAND NEEDS TO BE WASHED. THE CITY CAN PROVIDE AN EXAMPLE FOR WHAT THEY ARE LOOKING FOR.
- WATER LATERALS SAND BEDDING NEEDS TO GO TO THE DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED)
- VALVES SHALL BE CLUSTERED IN INTERSECTIONS
- VALVES & TEMP. BLOW-OFF ARE LOCATED AT THE DEAD-END MAIN OF PHASE LINES TO ALLOW FOR FLUSHING. ISOLATION AND CONTINUED SERVICE TO EXISTING CONNECTIONS WHEN FUTURE PHASES ARE CONSTRUCTED.
- METER AND SERVICES SHALL BE ¾-INCH POLYETHYLENE SDR11 IPS. INSTALL SERVICE LATERALS AND METERS WITHIN 5 FEET OF LOT LINES (AS CLOSE TO LOT LINE AS PRACTICABLE), ONE ON EACH SIDE OF COMMON LOT LINE (ALTERNATE WITH SECONDARY WATER).
- USE 150# CORP STOPS.
- 10' HORIZONTAL SEPARATION OF WATER AND SEWER LATERAL PER STATE REQUIREMENTS. WATER LATERAL TO BE LOCATED UPSLOPE OF SEWER LATERAL TO THE EXTENT PRACTICABLE.
- 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- 10' HORIZONTAL SEPARATION OF WATER AND STORMWATER.
- METER BARRELS SHALL BE 21-INCH DIAMETER WHITE CORRUGATED POLYETHYLENE
- METER TO BE INSTALLED 18 TO 22 INCHES BELOW THE LID.
- PLACE SAND AROUND THE WATER SERVICE SETTER BASES AND ABOVE TO STABILIZE SETTER AND PROVIDE INSULATION. GRAVEL IS NOT ALLOWED.
- TAPPING SADDLES SHALL BE BRASS WITH DOUBLE STAINLESS STEEL OR BRASS STRAPS WRAPPED WITH POLY SOCK.
- USE DUAL CHECK AND HEAVY-DUTY ANGLE VALVES FOR ALL SERVICES.
- INSTALL TRACER WIRE AND LOCATING TAPE ABOVE WATER MAIN.
- INSTALL TRACER WIRE FROM MAIN CONNECTION THROUGH METER PIT TO STUB MARKER WITH 30' EXCESS TO EXTEND TO THE DWELLING.
- STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB WITH A "W" AT ALL SERVICE LATERALS (2 PLACES EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE LATERALS IN THE PROPER LOCATIONS.
- THRUST BLOCKS NEED TO BE INSPECTED BY THE CITY PRIOR TO BACKFILL. SIZE BASED ON TEST PRESSURES
- MAKE SURE FIRE HYDRANTS NEED TO BE INSTALLED TO THE PROPER HEIGHT TO HELP THE BREAK A WAY FUNCTION WORKS.
- HYDRO FINDERS MUST BE INSTALLED.

TESTING:

- HYDROSTATIC PRESSURE TEST: 200 PSI FOR A MINIMUM OF 2 HOURS FOR MAIN ONLY AND 150 PSI IF TESTING WITH TAPPING SADDLES AND CORPORATIONS IN PLACE - INSPECTOR (GLEN MILLWARD OR ASSIGNED CITY INSPECTOR) MUST BE PRESENT FOR THE ENTIRE DURATION OF THE TEST.

DISINFECTION:

- HYPOCHLORITE POWDER
- CHLORINE RESIDUALS WILL BE TESTED ONCE BY THE CITY, BUT ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER
- ONLY ONE SERIES OF BAC-T TESTING WILL BE PERFORMED BY THE CITY TO ACCEPT WATER LINES AND ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER (PRELIMINARY INVESTIGATIVE TESTS BY THE CONTRACTOR/DEVELOPER ARE ENCOURAGED) THE CITY NEEDS TO DO THE GRAB ON ANY SAMPLES.

PER AWWA C651, BAC-T TESTING SHALL BE COMPLETED FOR EVERY 1,200 FEET OF NEW WATER MAIN, AT THE END OF THE LINE, AND AT EACH BRANCH. TWO CONSECUTIVE SAMPLE SETS SHALL BE COLLECTED AT THE AFOREMENTIONED LOCATIONS AT LEAST 24 HOURS APART.

THE CITY WILL NOT SWING METER BOXES TO ACCOMMODATE THE DRIVEWAY. THINK ABOUT THE LATERAL LOCATIONS BEFORE LOCATING THE DWELLING.

STORM WATER

PIPE MATERIAL:

- REINFORCED CONCRETE (RCP) AND/OR ADS N-12-WT
- INSTALLATION AND COMPACTION TO FOLLOW MANUFACTURERS RECOMMENDATIONS.
- ALL CATCH BASIN BOXES INCLUDE A SUMP. FOR BOXES WITH SNOTS THE SUMP DEPTH IS BASED UPON THE SNOT MODEL MANUFACTURES RECOMMENDATION. FOR ALL OTHER BOXES THE DEPTH IS 12" BELOW THE FLOW LINE OF THE PIPES.

FRANCHISE UTILITIES

- GAS: DOMINION
- POWER: ROCKY MOUNTAIN POWER
- CABLE: COMCAST
- PHONE: CENTURY LINK
- PLEASE INSTALL STUBS FOR FUTURE PHASES FOR FRANCHISED UTILITIES SO THAT NEW STREETS AND CONCRETE DONT HAVE TO BE CUT TO EXTEND TO A FUTURE PHASE.

SURFACE IMPROVEMENTS

PAVEMENT:

- ½" OR ¾-INCH ASPHALT AGGREGATE (1/2" IS THE CITY PREFERENCE). THE CITY STANDARD PAVEMENT SECTION IS 3-INCH ASPHALT ON 6-INCH UBC ON 8-INCH GRANULAR BORROW. (FABRIC)
- MARSHALL MIX REQUIRED PRIOR TO PAVING
- ROAD BASE AND CROSS-SECTION PER APPROVED DRAWINGS.
- PROVIDE PROPER SIGNAGE PER UTAH MUTCD.
- PROVIDE STOPS BARS AT STOP SIGNS.
- ADA TRUNCATED DOME INSERTS NEED TO BE YELLOW IN PED RAMPS. THE SPACING IS REQUIRED TO BE 2" TO FRONT OF RAMP AND NO MORE THAN 2" OFF THE SIDES OF THE WALKING PATH.
- INSTALL "NO PARKING" SIGNS IN TEMPORARY TURNAROUNDS. HOMEOWNERS ARE PARKING VEHICLES IN THEM.

CONCRETE:

- AIR TEST EVERY 50 YARDS UNLESS RESULTS ARE OUT OF SPEC (5% - 7%)
- 3 CYLINDERS EVERY 50 YARDS
- 4,500 PSI CONCRETE FOR ALL SURFACE IMPROVEMENTS.
- SIDEWALK SECTION IS 6" PCC ON 6" UBC.

EARTHWORK:

- PROVIDE COMPACTION AND SIEVE ANALYSIS ON ALL INITIAL PROCTORS AND NEW MATERIAL.
- COMPACTION TESTS EVERY 100 FEET OF PIPE TRENCH. VARY DEPTHS TO PROVIDE RESULTS THROUGHOUT STRATA.
- ROAD WORK AND BASE - BOTH SHOULDERS AND CENTERLINE WITH A MAXIMUM OF 200' BETWEEN TESTS.
- PROOF ROLL TRENCHES, SUBGRADE, AND BASE
- MINIMUM OF FOUR COMPACTION TESTS AROUND EACH MANHOLE AND CLEANOUT.
- USE APWA DETAIL 255 FOR PIPE TRENCH PATCHING.

TESTING AND QA/QC

- 48-HOUR NOTICE IS REQUIRED PRIOR TO ANY TESTING. MAKE SURE THE TEST IS SCHEDULED.
- INSPECTOR(S) REPRESENTING THE CITY MUST BE PRESENT FOR ALL TESTING INCLUDING THOSE PERFORMED BY AN INDEPENDENT AGENCY.
- PUBLIC WORKS HOURS ARE 7 AM TO 3:30 PM MONDAY THROUGH FRIDAY. HOWEVER, THE CITY WILL WORK WITH CONTRACTOR IF CONTRACTOR IS WORKING OUTSIDE THESE HOURS.
- COMPACT FILL IN 8' LIFT'S.

CONSTRUCTION WATER

- CONTRACTOR SHALL OBTAIN WATER FOR CONSTRUCTION FROM A CITY APPROVED FIRE HYDRANT USING A HYDRANT METER RENTED FROM THE CITY. THERE IS A \$1600 REFUNDABLE DEPOSIT FOR HYDRANT METERS AND A CHARGE OF \$6 PER 1000 GALLONS FOR ALL WATER USED. \$75 A MONTH RENTAL CHARGE.
- PLEASE DONT DAMAGE THE METERS AND DONT TAKE ANYTHING OFF THE METER.

EROSION CONTROL / STORM WATER SYSTEM PROTECTION

- MINIMIZE POTENTIAL FOR OFF-SITE RUN-OFF
- MINIMIZE DISTURBED AREAS.
- KEEP WORKING AREA WETTED TO MINIMIZE DUST
- PROVIDE SILT FENCE TO PREVENT SEDIMENT TRANSPORT DOWNSTREAM.
- CONTAIN ALL SEDIMENT ON SITE.
- MAINTAIN BMPS AS PER SWPPP.
- SWPPP TO BE ON-SITE AT ALL TIMES.
- PROOF OF COVERAGE UNDER UPDATES REQUIRED
- CITY WILL NEED A COPY OF THE NOI
- THE CITY IS ON COMPLIANCE GO. MAKE SURE UPDATES ARE LOADED IN COMPLIANCE GO. ADD THE CITY PUBLIC WORKS E-MAIL CONTACT. HAVE A RSI AND PTOE ON SITE.
- THE CITY WILL CHECK WITH THE CONTRACTOR AFTER AN EVENT.
- THE CITY WILL SHARE INSPECTION REPORTS WITH THE CONTRACTOR.
- INSPECT AFTER RAINFALL AND OTHER EVENTS (WEATHER, AND CONSTRUCTION AROUND BMPS) THAT MAY AFFECT BMPS.
- MAKE SURE TO FOLLOW THE SWPPP AS SHOWN ON THE PLANS.
- PROVIDE VEGETATIVE COVER ON COMPLETED OR LONG-TERM TEMPORARY GRADING WITHIN 14 DAYS.
- PUT THE SWPPP SIGN ON SITE AND VISIBLE SO THE STATE CAN SEE IT ON A DRIVE BY.

CONSTRUCTION DEBRIS DISPOSAL

- MAINTAIN A WORK SITE THAT IS CLEAN AS POSSIBLE AND PROPERLY DISPOSE OF DEBRIS AND TRASH.
- NO GARBAGE PITTS ALLOWED
- NO ON-SITE CONCRETE WASHOUT ALLOWED UNLESS HAULED FROM SITE AT END OF PROJECT OR OTHER PROVISIONS ARE MADE.

SITE SAFETY

- CONFORM TO OSHA STANDARDS.
- CLOSE TRENCHES AT NIGHT.
- SECURE OPEN TRENCHES AND PLUG LINES.

SECURITY

- SECURE CONSTRUCTION EQUIPMENT WHEN NOT IN USE.

SANITATION

- CLEAN AND PROPERLY MAINTAINED PORT-A-JOHN(S) ON SITE AT ALL TIMES.

HAZARDOUS MATERIAL STORAGE ON SITE

- IF THERE ARE HAZARDOUS MATERIALS ON SITE, MAKE SURE THE CITY HAS APPROVED IT AND THAT IT HAS SECONDARY CONTAINMENT. THE FIRE CHIEF NEEDS TO KNOW WHAT IS ON SITE, HOW IT IS SECURED AND WERE IT IS LOCATED.

SITE ACCESS

AS SHOWN ON THE SWPPP DONT DEVIATE FROM IT.

CONSTRUCTION OBSERVATION

- CITY PERSONNEL WILL INSPECT REGULARLY AS NEEDED.

CONSTRUCTION DRAWINGS

- KEEP AN ACCURATE SET OF AS-BUILTS.
- PROVIDE COPIES OF AS-BUILTS AT COMPLETION OF PROJECT PRIOR TO OCCUPANCY.
- MAKE SURE CHANGES IN AS-BUILTS ARE BUBBLED AND CLEAR AS WHAT CHANGES HAVE OCCURRED.
- CITY HAS STORM BASIN PLAN CERTIFICATION THE DESIGNING ENGINEER NEEDS TO SIGN AND STAMP.
- PROVIDE DIGITAL SET OF AS-BUILTS (PDF, DWG AND SHAPE FILES ARE REQUIRED.) FOR CITY PRIOR TO OCCUPANCY.
- CITY WILL PROVIDE A LIST OF ITEMS REQUIRED IN THE SHAPE FILE.
- KRISTY WILL PROVIDE HER REQUIREMENTS FOR THE CONSTRUCTION DRAWINGS.
- IF THERE ARE QUESTIONS ABOUT THE PLANS AND CONDITIONS ON THE GROUND FIRST REQUEST THE DESIGN ENGINEER'S INTERPRETATION AND BRING THAT INTERPRETATION TO THE CITY WHEN QUESTIONS COME UP. THE ONSITE INSPECTORS CANNOT MAKE APPROVALS TO CHANGES. DOCUMENT CHANGES.

CONSTRUCTION DRAWINGS:

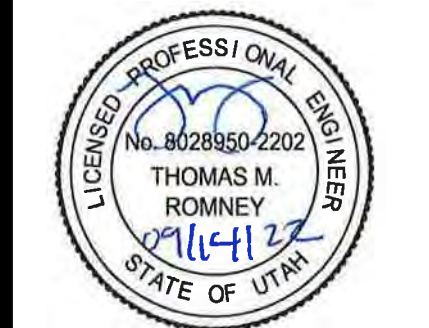
DONT PRINT ANY PLANS UNTIL ALL OF THE CHANGES HAVE BEEN MADE AND YOU HAVE RECEIVED A COPY OF THE SIGNED PLANS FROM KRISTY CLARK.

- PROVIDE KRISTY CLARK WITH ONE 24X36 AND FOUR 11X17'S.

PROJECT CONCERNS OR QUESTIONS:

SHARE THIS DOCUMENT WITH THOSE ON SITE TO USE AS CONSTRUCTION STANDARDS.

END



COWBOY ESTATES SUBDIVISION  
GRANTSVILLE, UT  
PRE CONSTRUCTION NOTES

REVISION BLOCK		DESCRIPTION
#	DATE	
1	----	----
2	----	----
3	----	----
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6	----	----

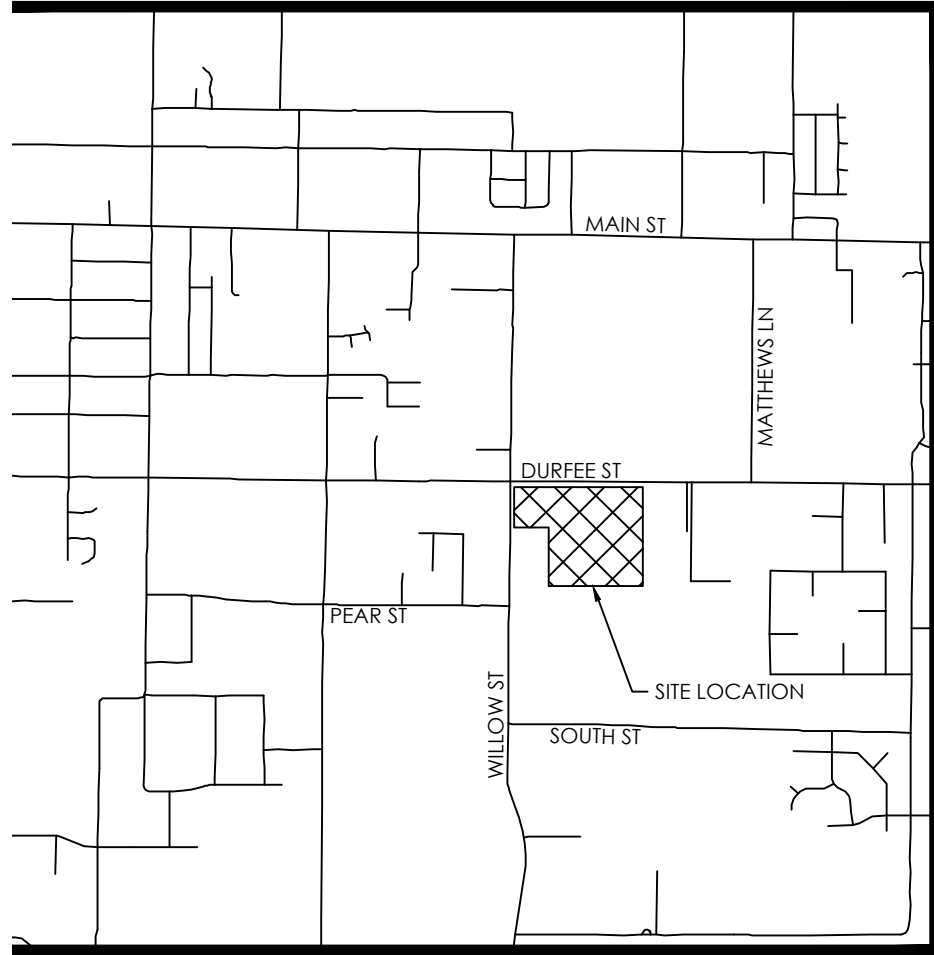
PRE CONSTRUCTION NOTES	
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Date: 09/13/22	Job #: 21-0512
Sheet: D11	



# AGENDA ITEM #3

Consideration to recommend  
approval of the Final Plat  
Matthews Meadows Subdivision.





VICINITY MAP

GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
- ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL ADHERE TO GRANTSVILLE CITY STANDARD PLANS AND SPECIFICATIONS.
- ALL UTILITIES AND ROAD IMPROVEMENTS SHOWN ON THE PLANS HEREIN SHALL BE CONSTRUCTED USING REFERENCE TO SURVEY CONSTRUCTION STAKES PLACED UNDER THE SUPERVISION OF A PROFESSIONAL LICENSED SURVEYOR WITH A CURRENT LICENSE ISSUED BY THE STATE OF UTAH. ANY IMPROVEMENTS INSTALLED BY ANY OTHER VERTICAL OR HORIZONTAL REFERENCE WILL NOT BE ACCEPTED OR CERTIFIED BY THE ENGINEER OF RECORD.
- THIS DRAWING SET IS SCALED TO BE PRINTED ON A 24" X 36" SIZE OF PAPER (ARCH. D). IF PRINTED ON A SMALLER PAPER SIZE, THE DRAWING WILL NOT BE TO SCALE AND SHOULD NOT BE USED TO SCALE MEASUREMENTS FROM THE PAPER DRAWING. ALSO USE CAUTION, AS THERE MAY BE TEXT OR DETAIL THAT MAY BE OVERLOOKED DUE TO THE SMALL SIZE OF THE DRAWING.

NOTICE

BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.

CONTACTS

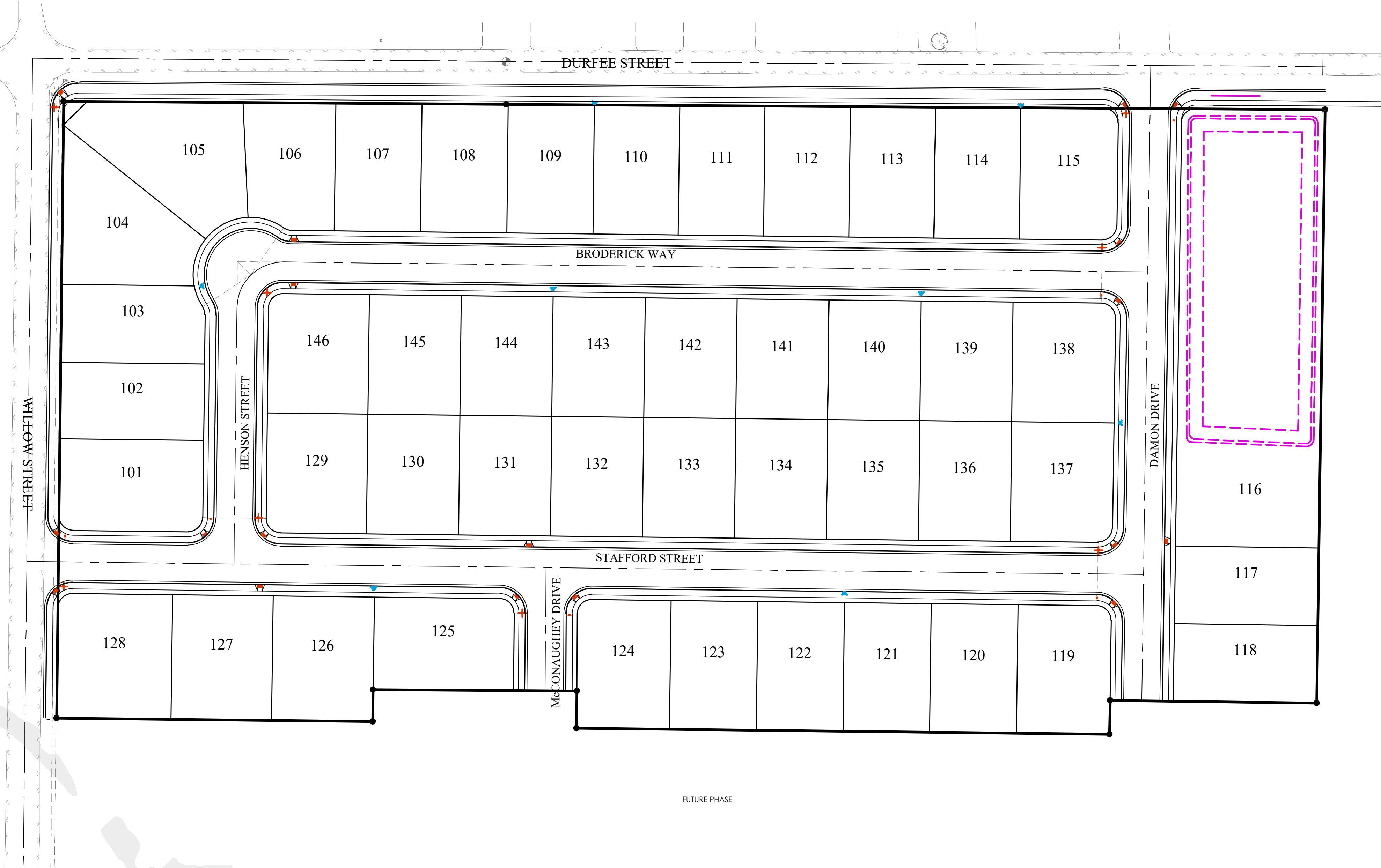
ENGINEER & SURVEYOR  
FOCUS ENGINEERING & SURVEYING, LLC  
6949 S. HIGH TECH DRIVE SUITE 200  
MIDVALE, UTAH 84047  
(801) 352-0075  
PROJECT MANAGER: RYAN HOPKINS  
SURVEY MANAGER: EVAN WOOD

OWNER/DEVELOPER  
GRANTSVILLE'S NEW TEAM LLC  
1676 PROGRESS WAY  
TOOELE, UTAH 84074  
(801) 301-8591  
CONTACT: SHAWN HOLSTE

BENCHMARK

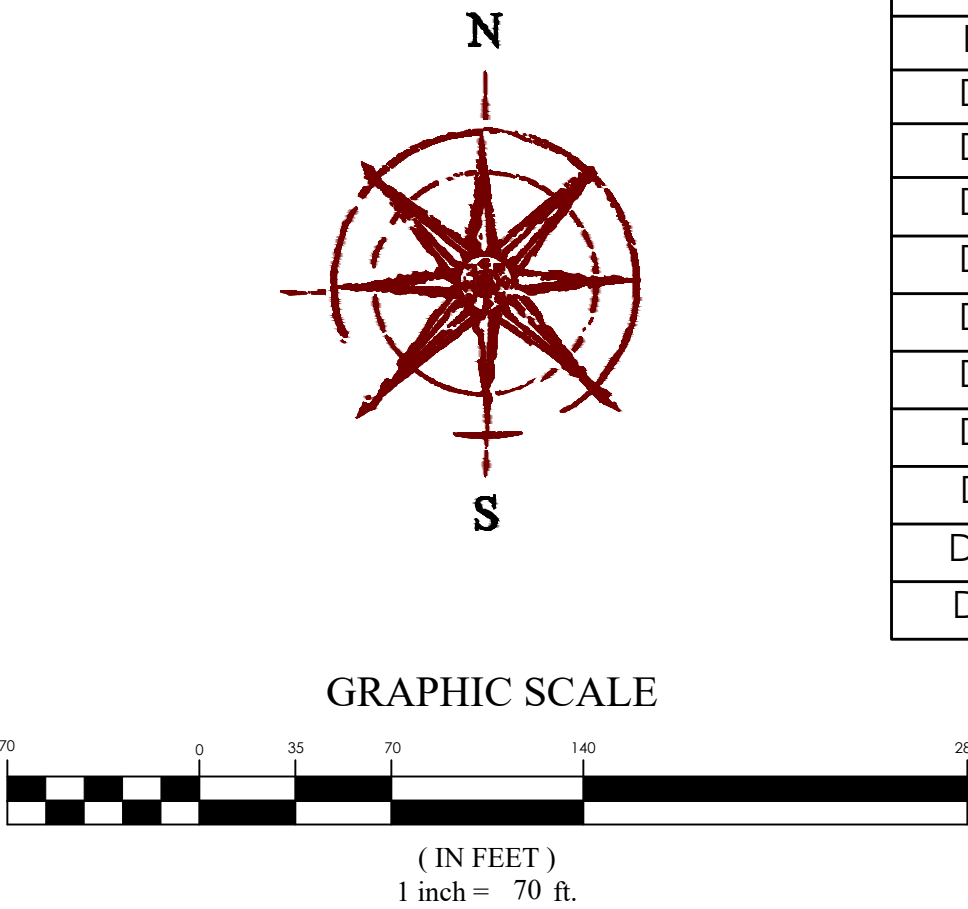
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 06 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88

PRELIMINARY PLANS  
PREPARED FOR:  
GRANTSVILLE'S NEW TEAM LLC  
LOCATED IN:  
GRANTSVILLE, UT



SITE MAP

GRANTSVILLE CITY ENGINEER  
APPROVED BY CITY ENGINEER:  
GRANTSVILLE CITY, UTAH  
FOR PUBLIC IMPROVEMENTS ONLY  
(SHEETS \_\_\_\_\_)  
BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER FROM RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OR A DEPARTURE FROM THE CITY SPECIFICATIONS, OR THE APPROVED PLANS, THE CITY SHALL HAVE THE AUTHORITY TO REQUIRE SUCH A MODIFICATION OR A DEPARTURE, AND TO SPECIFY THE MANNER WHICH THE SAME IS MADE.



Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	FINAL PLAT
C2.1	FINAL PLAT
C3	EXISTING CONDITIONS
C4	OVERALL SITE PLAN
C4.1	SITE PLAN
C4.2	SITE PLAN
C4.3	SITE PLAN
C4.4	SITE PLAN
C5	OVERALL GRADING PLAN
C5.1	GRADING AND DRAINAGE PLAN
C5.2	GRADING AND DRAINAGE PLAN
C5.3	GRADING AND DRAINAGE PLAN
C5.4	GRADING AND DRAINAGE PLAN
C5.5	GRADING AND DRAINAGE PLAN
C5.6	GRADING AND DRAINAGE PLAN
C5.7	STORMWATER REPORT
C6	SEWER PLAN
C6.1	SEWER PLAN
C6.2	SEWER PLAN
C6.3	SEWER PLAN
C7	WATER PLAN
C7.1	WATER PLAN
C7.2	WATER PLAN
C7.3	WATER PLAN
C8	EROSION CONTROL PLAN
C9	OVERALL SIGNAGE & STRIPING PLAN
PP01	DAMON DRIVE
PP02	DAMON DRIVE
PP03	BRODERICK WAY
PP04	BRODERICK WAY
PP05	BRODERICK WAY
PP06	HENSON STREET
PP07	HENSON STREET
PP08	STAFFORD STREET
PP09	STAFFORD STREET
PP10	STAFFORD STREET
PP11	STAFFORD STREET
PP12	MCCONAUGHEY DRIVE
PP13	DAMON DRIVE OFFSITE SEWER
PP14	DURFEE STREET TBC
PP15	DURFEE STREET TBC
PP16	DURFEE STREET TBC
PP17	DURFEE STREET TBC
PP18	WILLOW STREET TBC
PP19	WILLOW STREET TBC
D1	DETAILS
D2	DETAILS
D3	DETAILS
D4	DETAILS
D5	DETAILS
D6	DETAILS
D7	DETAILS
D8	DETAILS
D9	DETAILS
D10	NOTES
D11	PRE-CON NOTES

MATTHEWS MEADOWS SUBDIVISION PHASE 1

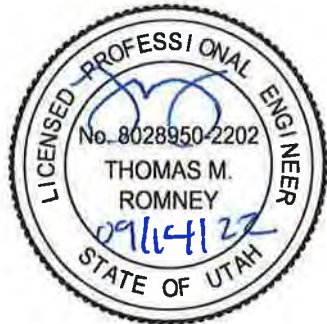
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COVER SHEET

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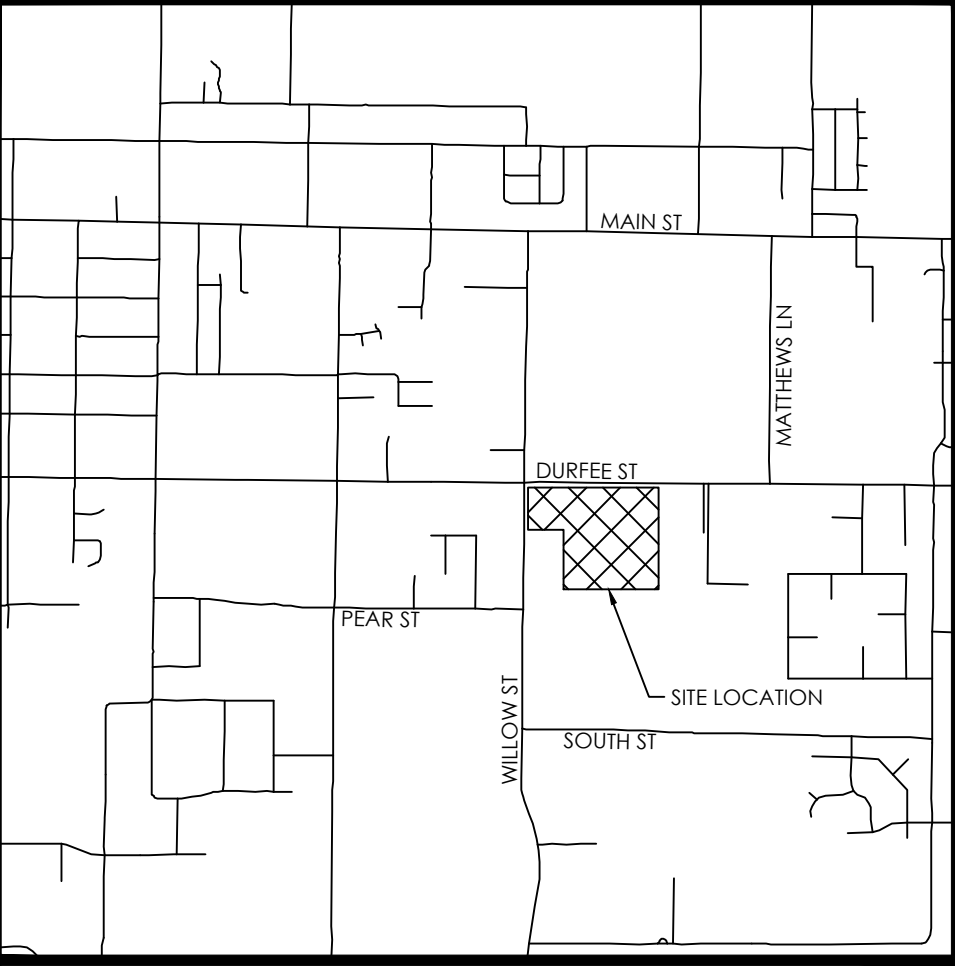
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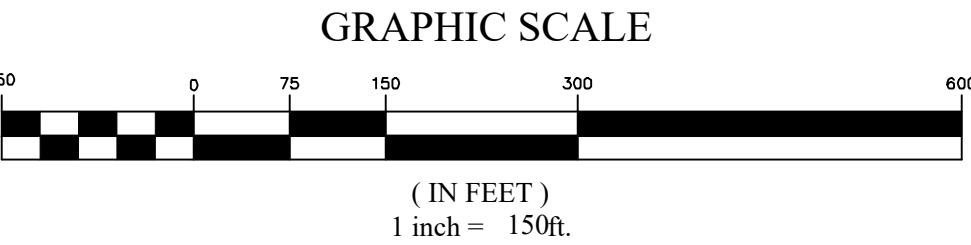
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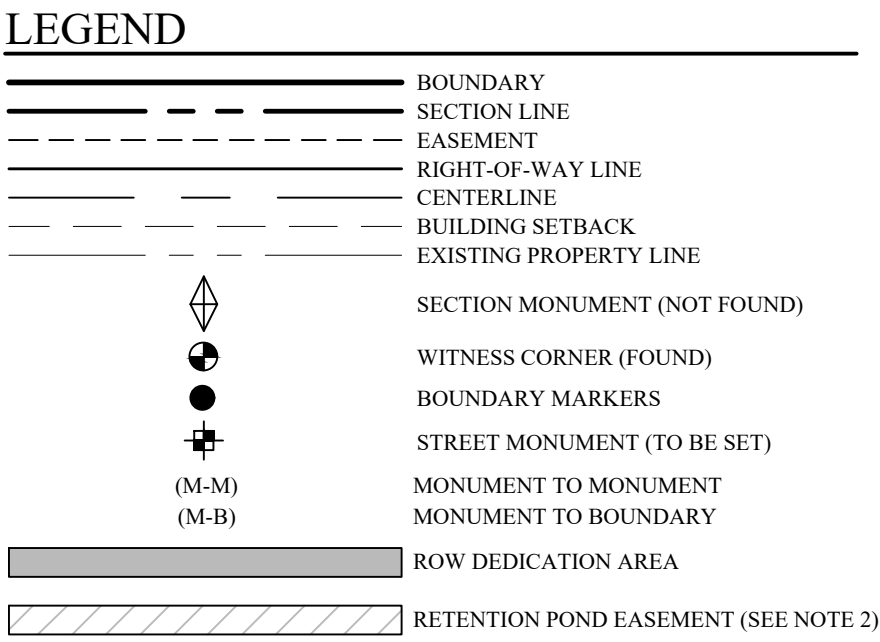




VICINITY MAP  
N.T.S.



**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88



Tooele County Coordinate Table		
Point #	Northing	Easting
1	822994.2003	737493.5802
2	824340.3041	739891.1429
3	824360.9100	737252.9200
4	824622.7699	737253.1549
5	821977.4610	737250.7823
6	824316.5848	737252.8802
7	823671.9666	737113.6252
8	823675.5223	736783.5256
9	824319.6212	736791.0191

# MATTHEWS MEADOWS SUBDIVISION

PHASE 1 FINAL PLAT  
LOCATED IN THE NE1/4 OF SECTION 6, T3S, R5W,  
SALT LAKE BASE & MERIDIAN  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH

## NOTES

- #5 X 24" REBAR & CAP (FOCUS ENG) TO BE SET AT ALL LOT CORNERS, NAILS OR PLUGS TO BE SET IN TOP BACK OF CURB AT EXTENSION OF SIDE LOT LINES, IN LIEU OF REBAR AND CAPS AT FRONT LOT CORNERS.
- LOT 116 PROPERTY OWNER AGREES TO MAINTAIN THE RETENTION AREA AS APPROVED BY THE CITY ENGINEER, AND CONSTRUCTED BY THE DEVELOPER/BUILDER, AND THAT THEY WILL NOT ALTER THE GRADING, NOR ALLOW ANY DRAINAGE TO DISCHARGE ON THE NEIGHBORING PROPERTIES, OR PUT ANY IMPERVIOUS SURFACES IN THE AREA SHOWN ON THE PLAT. THIS REQUIREMENT WILL RUN WITH THE PROPERTY AND APPLY TO ALL FUTURE PROPERTY OWNERS.
- PARCEL A IS HEREBY DEDICATED TO GRANTSVILLE CITY AS A PUBLIC RIGHT OF WAY.
- FOR LOTS 101-115 & 128, NEITHER PRIMARY NOR SECONDARY ACCESS ALONG WILLOW OR DURFEE STREETS WILL BE ALLOWED.

## SURVEYOR'S CERTIFICATE

I, Evan J. Wood, do hereby certify that I am a Professional Land Surveyor, and that I hold License No. 183395 in accordance with Title 58, Chapter 22 of Utah State Code. I further certify by authority of the owners(s) that I have completed a Survey of the property described on this Plat in accordance with Section 17-23-17 of said Code, and have subdivided said tract of land into lots, parcels, streets, and easements, and the same has, or will be correctly surveyed, staked and monumented on the ground as shown on this Plat, and that this Plat is true and correct.

**For Review**  
09/16/2022 3:29:31 PM

EVAN J. WOOD  
PROFESSIONAL LAND SURVEYOR  
LICENSE NO. 183395

DATE

## BOUNDARY DESCRIPTION

A part of the Northeast Quarter of Section 6 and the Northwest Quarter of Section 5, Township 3 South, Range 5 West, Salt Lake Base and Meridian, being located in Grantsville City, Tooele County, Utah, being more particularly described as follows:

Beginning at a point on the southerly line of Durfee Street known as Project Number F-R299(400), said point being S00°03'05"W 44.33 feet along the Tooele County Dependent Resurvey Section line from a monument in Durfee Street being the Witness Corner to the Northwest Corner of Section 5, T3S, R5W, SLB&M. Said Northwest Corner is an unmarked point which lies N0°03'05"E 261.86 feet (Note: Previous surveys and descriptions which have relied on Tooele County Dependent data show this distance to be 262.72 feet.) from said Witness Corner. (Basis of Bearing: N89°33'09"W between said Witness Corner and the Witness Corner to the North Quarter Corner of said Section 5.); running thence along said southerly line of Durfee Street, S89°37'24"E 854.60 feet to the westerly line of LEAVITT MINOR SUBDIVISION, according to the official plat thereof recorded as Entry Number 275987 in the Office of the Tooele County Recorder; thence along said westerly line and a line established by that certain Boundary Line Agreement recorded as Entry Number 274951 in the Office of the Tooele County Recorder, S00°48'00"W 619.98 feet; thence N89°12'00"W 149.65 feet; thence S0°48'00"W 35.28 feet; thence N89°20'15"W 688.45 feet; thence N0°22'36"E 38.27 feet; thence N89°37'24"W 146.52 feet to an existing fence; thence along said existing fence the following two (2) courses: (1) S00°40'00"W 33.09 feet; thence (2) N89°23'00"W 330.12 feet to a point on the easterly line of South Willow Street; thence along said easterly line, N00°40'00"E 644.15 feet to a point on said southerly line of Durfee Street; thence along said southerly line, S89°37'24"E 461.87 feet to the point of beginning.

Contains: 19.40 acres +/-

## OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED ARE THE OWNERS OF THE HEREON DESCRIBED TRACT OF LAND AND HEREBY CAUSE THE SAME TO BE DIVIDED TO LOTS, PARCELS AND STREETS TOGETHER WITH EASEMENTS AS SET FORTH HEREAFTER TO BE KNOWN AS

## MATTHEWS MEADOWS SUBDIVISION

THE UNDERSIGNED OWNERS HEREBY DEDICATE TO GRANTSVILLE CITY ALL THOSE TRACTS OF LAND DESIGNATED ON THIS PLAT AS STREETS, THE SAME TO BE USED AS PUBLIC THOROUGHFARES. HOWEVER, THE UNDERSIGNED OWNERS ALSO HEREBY CONVEY TO GRANTSVILLE CITY AND TO ANY AND ALL PUBLIC UTILITY COMPANIES A PERPETUAL, NON-EXCLUSIVE EASEMENT OVER THE PUBLIC UTILITY AND DRAINAGE EASEMENTS SHOWN ON THIS PLAT, THE SAME TO BE USED FOR DRAINAGE AND THE INSTALLATION, MAINTENANCE AND OPERATION OF UTILITY SERVICE LINES AND FACILITIES. THE UNDERSIGNED OWNERS ALSO HEREBY CONVEY ANY OTHER EASEMENTS AS SHOWN AND/OR NOTED ON THIS PLAT TO THE PARTIES INDICATED AND FOR THE PURPOSES SHOWN HEREON.

IN WITNESS WHEREOF \_\_\_\_\_ HAVE HEREUNTO SET

HAND THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_

## CORPORATE ACKNOWLEDGMENT

STATE OF UTAH  
S.S.  
COUNTY OF \_\_\_\_\_

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR THE COUNTY OF \_\_\_\_\_, IN SAID STATE OF UTAH, \_\_\_\_\_, WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT HE/SHE IS THE \_\_\_\_\_ OF DRP MANAGEMENT INC., A UTAH INC. AND THAT HE SIGNED THE OWNERS DEDICATION FREELY AND VOLUNTARILY FOR AND IN BEHALF OF SAID COMPANY FOR THE PURPOSES THEREIN MENTIONED.

MY COMMISSION EXPIRES: \_\_\_\_\_

A NOTARY PUBLIC COMMISSIONED IN  
UTAH RESIDING IN \_\_\_\_\_ COUNTY

MY COMMISSION No. \_\_\_\_\_

PRINTED FULL NAME OF NOTARY

## LIMITED PARTNERSHIP ACKNOWLEDGMENT

STATE OF UTAH  
S.S.  
COUNTY OF \_\_\_\_\_

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR THE COUNTY OF \_\_\_\_\_, IN SAID STATE OF UTAH, \_\_\_\_\_, WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT HE/SHE IS A PARTNER OF THE FIRM OF A.W. HARDY FAMILY INVESTMENTS, L.P., A UTAH LIMITED PARTNERSHIP, AND THAT HE/SHE SIGNED THE OWNERS DEDICATION FREELY AND VOLUNTARILY FOR AND IN BEHALF OF SAID COMPANY FOR THE PURPOSES THEREIN MENTIONED.

MY COMMISSION EXPIRES: \_\_\_\_\_

A NOTARY PUBLIC COMMISSIONED IN  
UTAH RESIDING IN \_\_\_\_\_ COUNTY

MY COMMISSION No. \_\_\_\_\_

PRINTED FULL NAME OF NOTARY

## DOMINION ENERGY

QUESTAR GAS COMPANY dba DOMINION ENERGY UTAH, HEREBY APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS. DOMINION ENERGY UTAH MAY REQUIRE ADDITIONAL EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT CONSTITUTE ABROGATION OR WAIVER OF ANY OTHER EXISTING RIGHTS, OBLIGATIONS OR LIABILITIES INCLUDING PRESCRIPTIVE RIGHTS AND OTHER RIGHTS, OBLIGATIONS OR LIABILITIES PROVIDED BY LAW OR EQUITY. THIS APPROVAL DOES NOT CONSTITUTE ACCEPTANCE, APPROVAL OR ACKNOWLEDGEMENT OF ANY TERMS CONTAINED IN THE PLAT, INCLUDING THOSE SET FORTH IN THE OWNERS DEDICATION OR THE NOTES, AND DOES NOT CONSTITUTE A GUARANTEE OF PARTICULAR TERMS OR CONDITIONS OF NATURAL GAS SERVICE. FOR FURTHER INFORMATION PLEASE CONTACT DOMINION ENERGY UTAH'S RIGHT-OF-WAY DEPARTMENT AT 800-366-8532.

QUESTAR GAS COMPANY  
dba DOMINION ENERGY UTAH

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

SHEET 1 OF 3

DATE: 05/04/2022

## CITY ATTORNEY

APPROVED AS TO FORM ON THIS \_\_\_\_\_  
DAY OF \_\_\_\_\_ A.D. 20\_\_

GRANTSVILLE CITY ATTORNEY

## TOOELE COUNTY TREASURER

I HEREBY CERTIFY THAT PROPERTY TAXES DUE AND OWNING HAVE BEEN PAID IN FULL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_.

TOOELE COUNTY TREASURER

## CITY MAYOR

PRESENTED TO THE GRANTSVILLE CITY COUNCIL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_, AT WHICH TIME THIS SUBDIVISION WAS APPROVED AND ACCEPTED.

GRANTSVILLE CITY MAYOR

ATTEST: CITY RECORDER

## RECORD OF SURVEY

PER STATE STATUTE 17-23-17, A SURVEY THAT INCLUDES THE LANDS SHOWN HEREON HAS BEEN COMPLETED AND FILED IN THE OFFICE OF THE TOOELE COUNTY SURVEYOR AND ASSIGNED FILE NO. 2018-0082.

## PREPARED FOR

GRANTSVILLE'S NEW TEAM LLC  
1676 PROGRESS WAY  
TOOELE, UTAH 84074  
(801) 301-8591  
CONTACT: SHAWN HOLSTE

## PREPARED BY

**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
6049 SOUTH TRICITY DRIVE  
MIDVALE, UTAH 84047 TEL: (801) 352-0075  
www.focusutah.com

## GRANTSVILLE CITY PUBLIC WORKS

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_  
BY THE GRANTSVILLE CITY PUBLIC WORKS  
DEPARTMENT.

GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

## GRANTSVILLE CITY FIRE DEPARTMENT

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_  
BY THE GRANTSVILLE CITY FIRE DEPARTMENT

GRANTSVILLE CITY FIRE DEPARTMENT

## GRANTSVILLE CITY PLANNING COMMISSION

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_ BY  
THE GRANTSVILLE CITY PLANNING COMMISSION.

CHAIR, GRANTSVILLE CITY PLANNING COMMISSION

## TOOELE COUNTY SURVEYOR

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_

TOOELE COUNTY SURVEY DIRECTOR

## GRANTSVILLE CITY ENGINEER OR DESIGNEE

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20\_\_ BY THE GRANTSVILLE  
CITY ENGINEERING DEPARTMENT.

GRANTSVILLE CITY ENGINEER

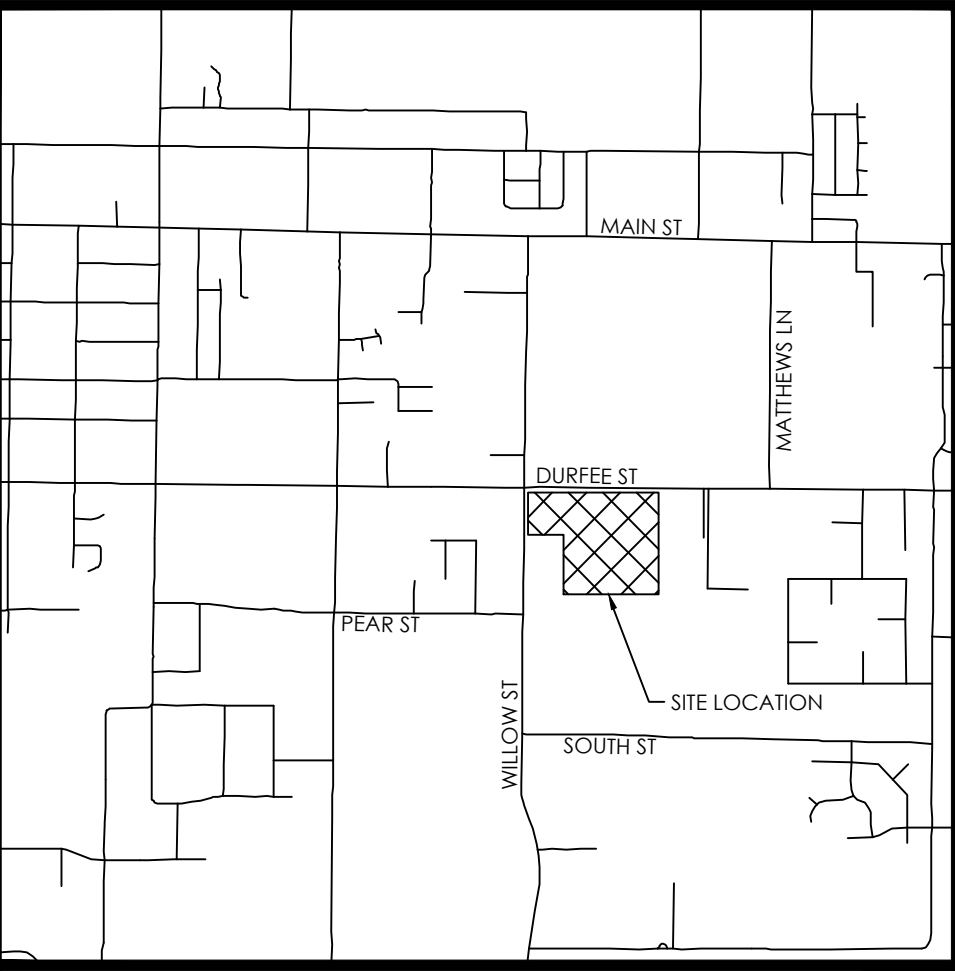
## TOOELE COUNTY RECORDER

NO. \_\_\_\_\_  
STATE OF UTAH, COUNTY OF TOOELE, RECORDED & FILED AT THE  
REQUEST OF \_\_\_\_\_  
DATE \_\_\_\_\_ TIME \_\_\_\_\_ BOOK \_\_\_\_\_ PAGE \_\_\_\_\_

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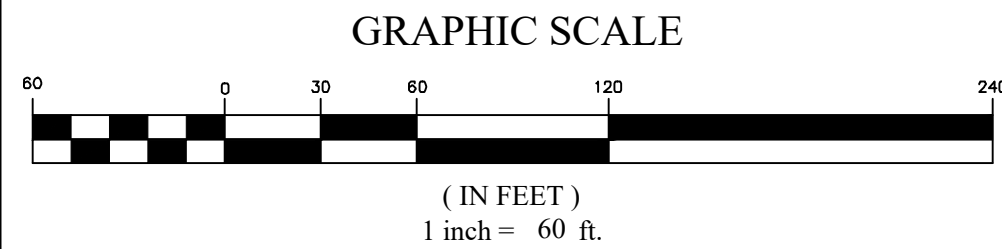
TOOELE COUNTY RECORDER





VICINITY MAP  
N.T.S.

- LEGEND
- BOUNDARY
  - SECTION LINE
  - EASEMENT
  - RIGHT-OF-WAY LINE
  - CENTERLINE
  - BUILDING SETBACK
  - EXISTING PROPERTY LINE
  - SECTION MONUMENT (NOT FOUND)
  - WITNESS CORNER (FOUND)
  - BOUNDARY MARKERS
  - STREET MONUMENT (TO BE SET)
  - MONUMENT TO MONUMENT
  - MONUMENT TO BOUNDARY
  - ROW DEDICATION AREA
  - RETENTION POND EASEMENT (SEE NOTE 2)



NOTES

- #5 X 24" REBAR & CAP (FOCUS ENG) TO BE SET AT ALL LOT CORNERS, NAILS OR PLUGS TO BE SET IN TOP BACK OF CURB AT EXTENSION OF SIDE LOT LINES, IN LIEU OF REBAR AND CAPS AT FRONT LOT CORNERS.
- LOT 116 PROPERTY OWNERS AGREE TO MAINTAIN THE RETENTION AREAS AS APPROVED BY THE CITY ENGINEER, AND CONSTRUCTED BY THE DEVELOPER/BUILDER, AND THAT THEY WILL NOT ALTER THE GRADING, NOR ALLOW ANY DRAINAGE TO DISCHARGE ON THE NEIGHBORING PROPERTIES, OR PUT ANY IMPERVIOUS SURFACES IN THE AREA SHOWN ON THE PLAT. THIS REQUIREMENT WILL RUN WITH THE PROPERTY AND APPLY TO ALL FUTURE PROPERTY OWNERS.
- PARCEL A IS HEREBY CONVEYED TO GRANTSVILLE CITY AS A PUBLIC RIGHT OF WAY.

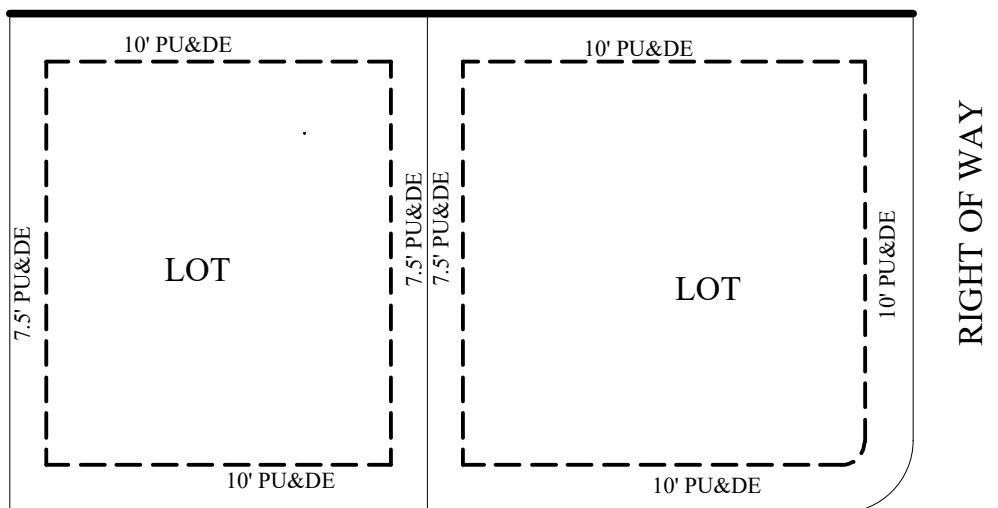
PREPARED FOR

GRANTSVILLE'S NEW TEAM LLC  
1676 PROGRESS WAY  
TOOELE, UTAH 84074  
(801) 301-8591  
CONTACT: SHAWN HOLSTE

PREPARED BY

**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
6999 FORD TRAIL DRIVE  
MIDVALE, UTAH 84047 TEL: (801) 352-0075  
WWW.FOCUSUTAH.COM

Curve Table					
CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	15.00	90°00'00"	23.56	N45°40'00"E	21.21
C2	15.00	90°00'00"	23.56	N44°20'00"W	21.21
C3	15.00	90°00'00"	23.56	S45°40'00"W	21.21
C4	15.00	90°00'00"	23.56	N44°20'00"W	21.21
C5	15.00	89°42'36"	23.49	N44°28'42"W	21.16
C6	15.00	90°17'24"	23.64	N45°31'18"E	21.27
C7	15.00	90°08'00"	23.60	S44°16'00"E	21.24
C8	15.00	89°52'00"	23.53	S45°44'00"W	21.19
C9	15.00	90°08'00"	23.60	S44°16'00"E	21.24
C10	15.00	89°52'00"	23.53	S45°44'00"W	21.19
C11	15.00	34°09'44"	8.94	N72°15'08"W	8.81
C12	60.00	158°19'28"	165.80	S45°40'00"W	117.86
C13	15.00	89°34'36"	23.45	N45°35'18"E	21.13
C14	15.00	90°00'00"	23.56	N45°40'00"E	21.21
C15	60.00	37°21'57"	39.13	N73°51'15"W	38.44
C16	60.00	48°45'43"	51.06	N63°04'55"E	49.54
C17	60.00	49°30'50"	51.85	S13°56'39"W	50.25
C18	60.00	22°40'57"	23.75	S22°09'15"E	23.60
C19	15.00	34°09'44"	8.94	S16°24'52"E	8.81
C20	48.00	90°00'00"	75.40	N45°40'00"E	67.88
C21	15.00	90°25'24"	23.67	S44°24'42"E	21.29



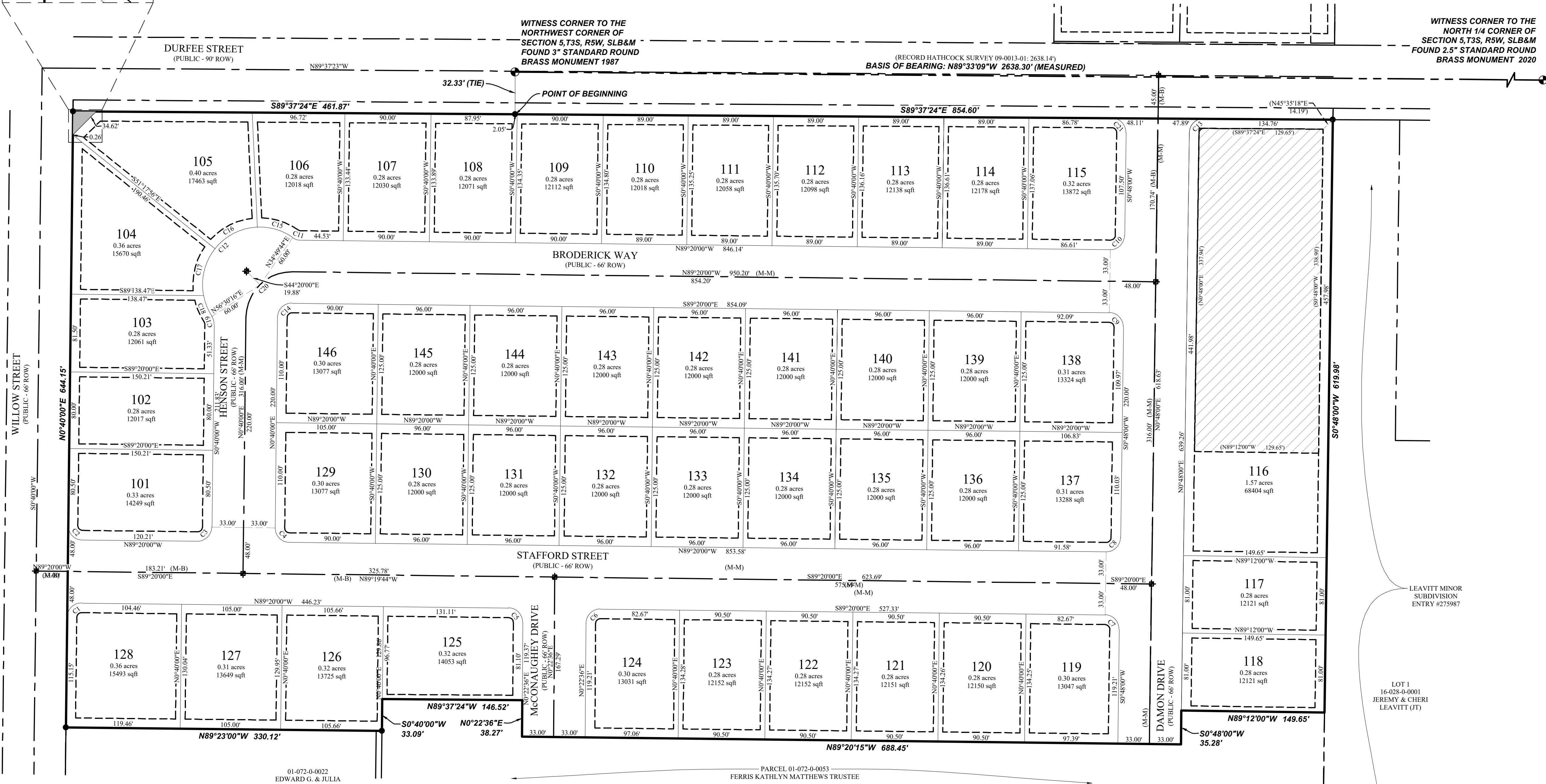
RIGHT OF WAY

TYPICAL LOT PU&DE

N.T.S.

# MATTHEWS MEADOWS SUBDIVISION

PHASE 1 FINAL PLAT  
LOCATED IN THE NE1/4 OF SECTION 6, T3S, R5W,  
SALT LAKE BASE & MERIDIAN  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH



## MATTHEWS MEADOWS SUBDIVISION

LOCATED IN THE NE1/4 OF SECTION 6, T3S, R5W,  
SALT LAKE BASE & MERIDIAN  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH

### TOOELE COUNTY RECORDER

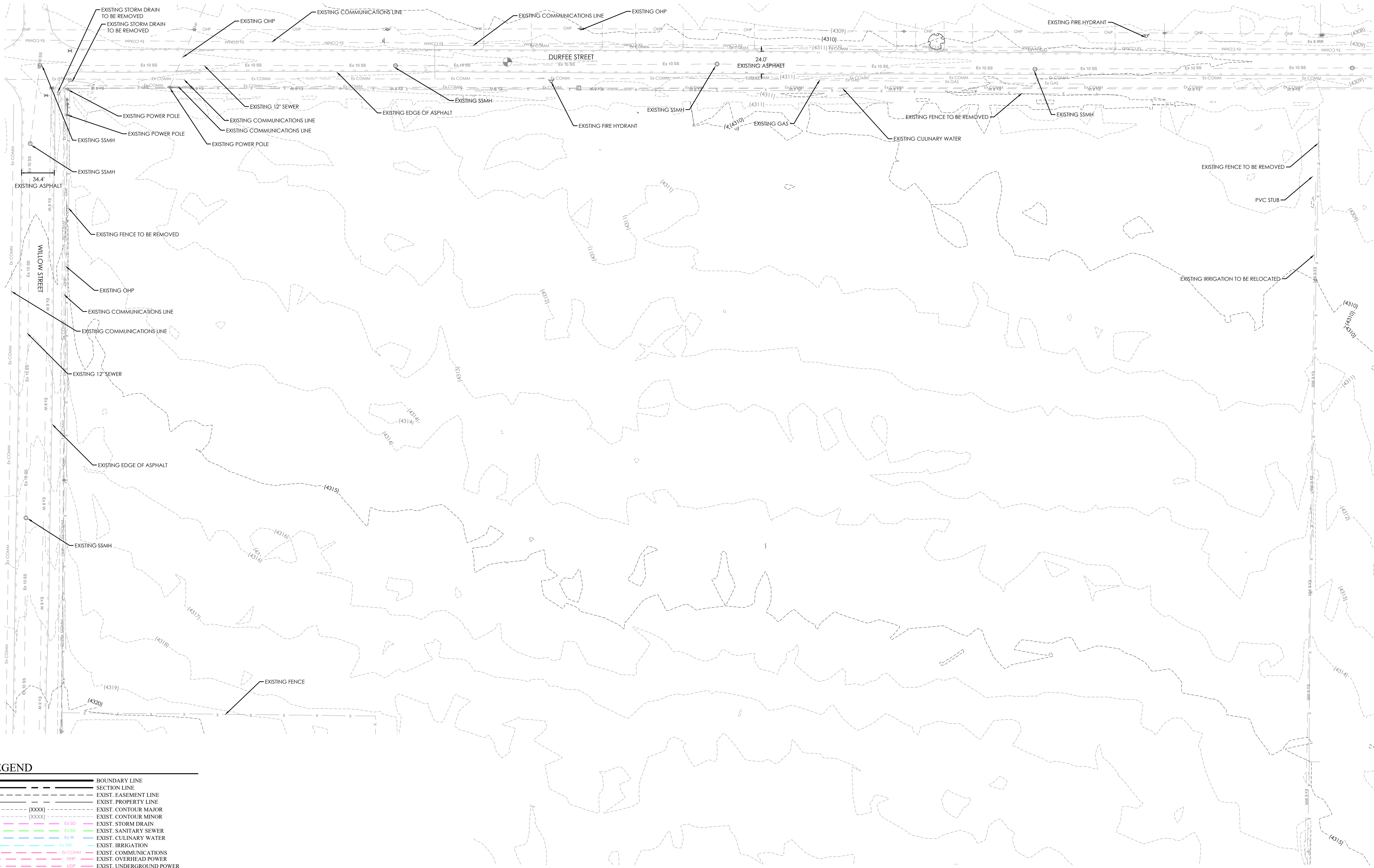
NO. \_\_\_\_\_  
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REQUEST OF  
DATE \_\_\_\_\_ TIME \_\_\_\_\_ BOOK \_\_\_\_\_ PAGE \_\_\_\_\_

FEE \$ \_\_\_\_\_

TOOELE COUNTY RECORDER

SHEET 2 OF 3  
DATE: 05/04/2022





LEGEND

BOUNDARY LINE

SECTION LINE

EXIST. EASEMENT LINE

EXIST. PROPERTY LINE

EXIST. CONTOUR MAJOR

EXIST. CONTOUR MINOR

EXIST. STORM DRAIN

EXIST. SANITARY SEWER

EXIST. CULINARY WATER

EXIST. IRRIGATION

EXIST. COMMUNICATIONS

EXIST. OVERHEAD POWER

EXIST. UNDERGROUND POWER

EXIST. FENCE

EXIST. EDGE OF ASPHALT

SECTION MONUMENT (FOUND)

SECTION MONUMENT (NOT FOUND)

WITNESS MONUMENT (FOUND)

BOUNDARY MARKER

EXIST. SD INLET, MANHOLE & COMBO BOX

EXIST. SEWER MANHOLE

EXIST. WATER VALVE & WATER METER

EXIST. FIRE HYDRANT

EXIST. POWER POLE

EXIST. ELECTRICAL BOX

EXIST. COMMUNICATIONS BOX

EXIST. SPOT ELEVATION

TOOELE COUNTY PARCEL No.

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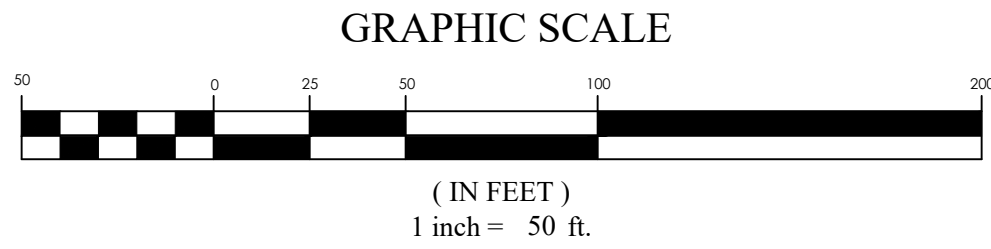
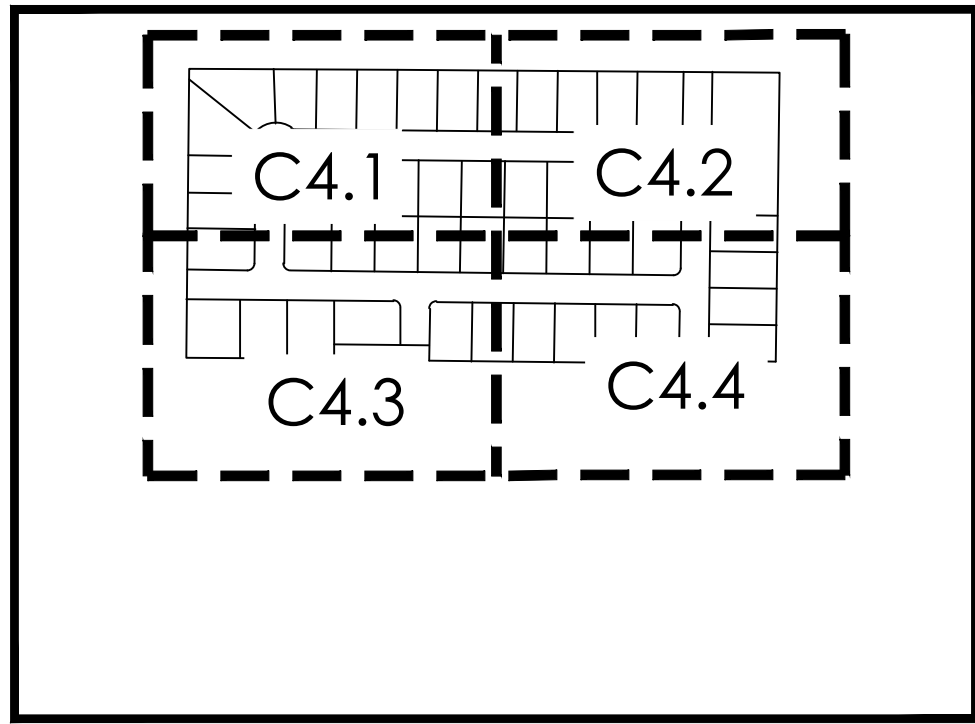
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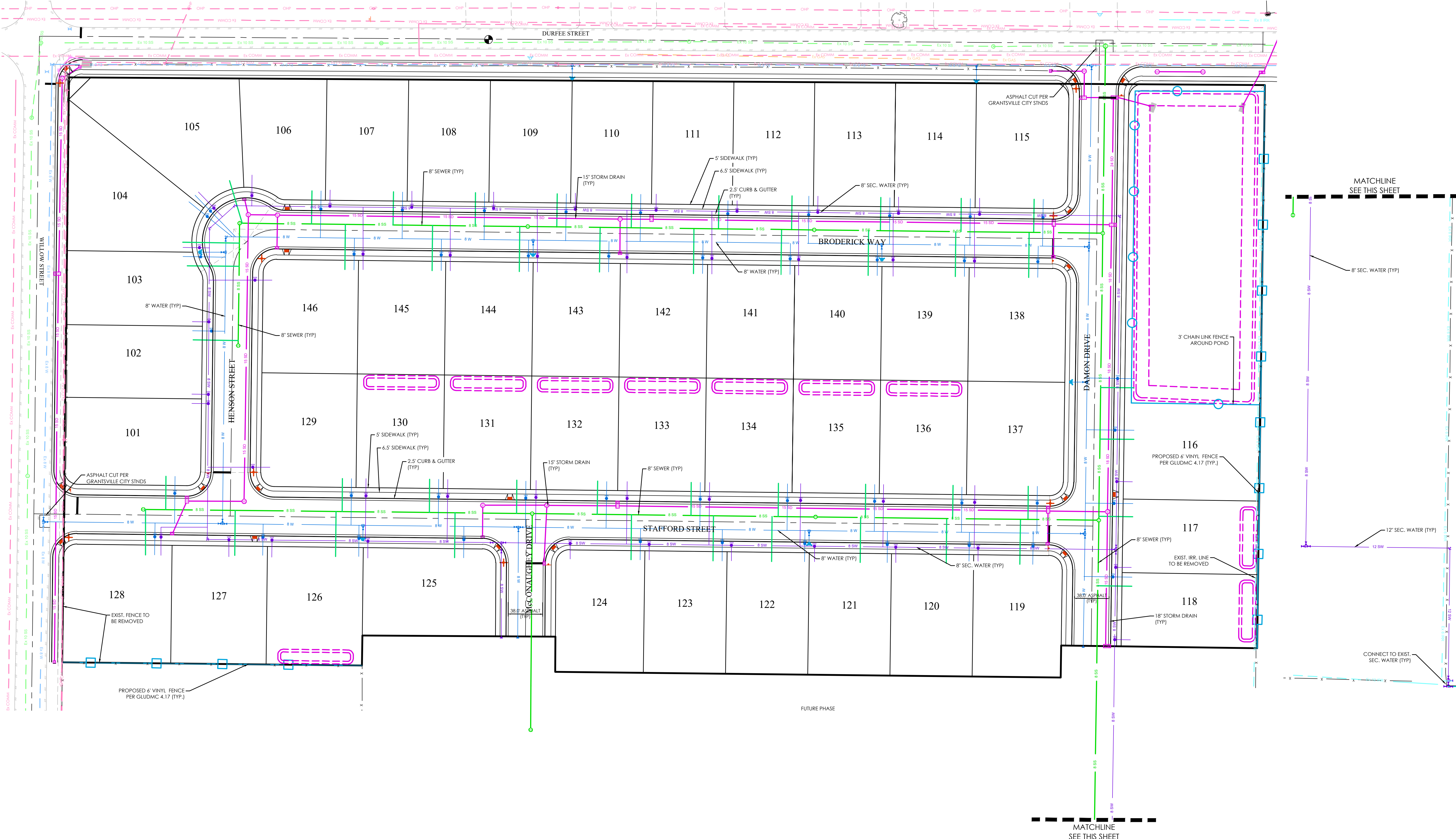


LEGEND

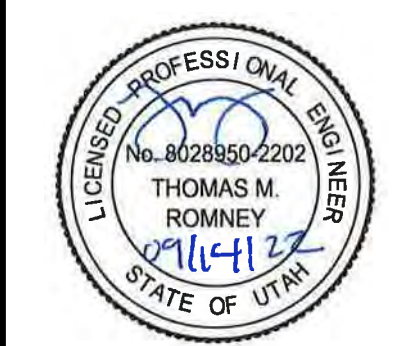
---	BOUNDARY
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---	LOT LINE
---	EASEMENT
---	15" STORM DRAIN
---	8" SANITARY SEWER
---	8" CULINARY WATER
---	8" SECONDARY WATER
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
---	EXIST. CONTOUR MAJOR
---	EXIST. CONTOUR MINOR

LEGEND

+	SIGN
+	STREET LIGHT
+	SD MH, INLET, AND COMBO
+	SEWER MANHOLE
+	CULINARY VALVE, TEE & BEND
+	SECONDARY VALVE, TEE & BEND
+	WATER BLOW-OFF
+	FIRE HYDRANT
+	STREET MONUMENT (TO BE SET)
+	EXIST. STREET MONUMENT
+	EXIST. SD INLET & MH
+	EXIST. SEWER MH
+	EXIST. VALVE, TEE, & BEND
+	EXIST. FIRE HYDRANT
+	SPOT ELEVATION



**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
6949 S. HIGH TECH DRIVE, SUITE 200  
MIDVALE, UTAH 84047 PH: (801) 552-0075  
www.focusnh.com



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
OVERALL SITE PLAN

REVISION BLOCK

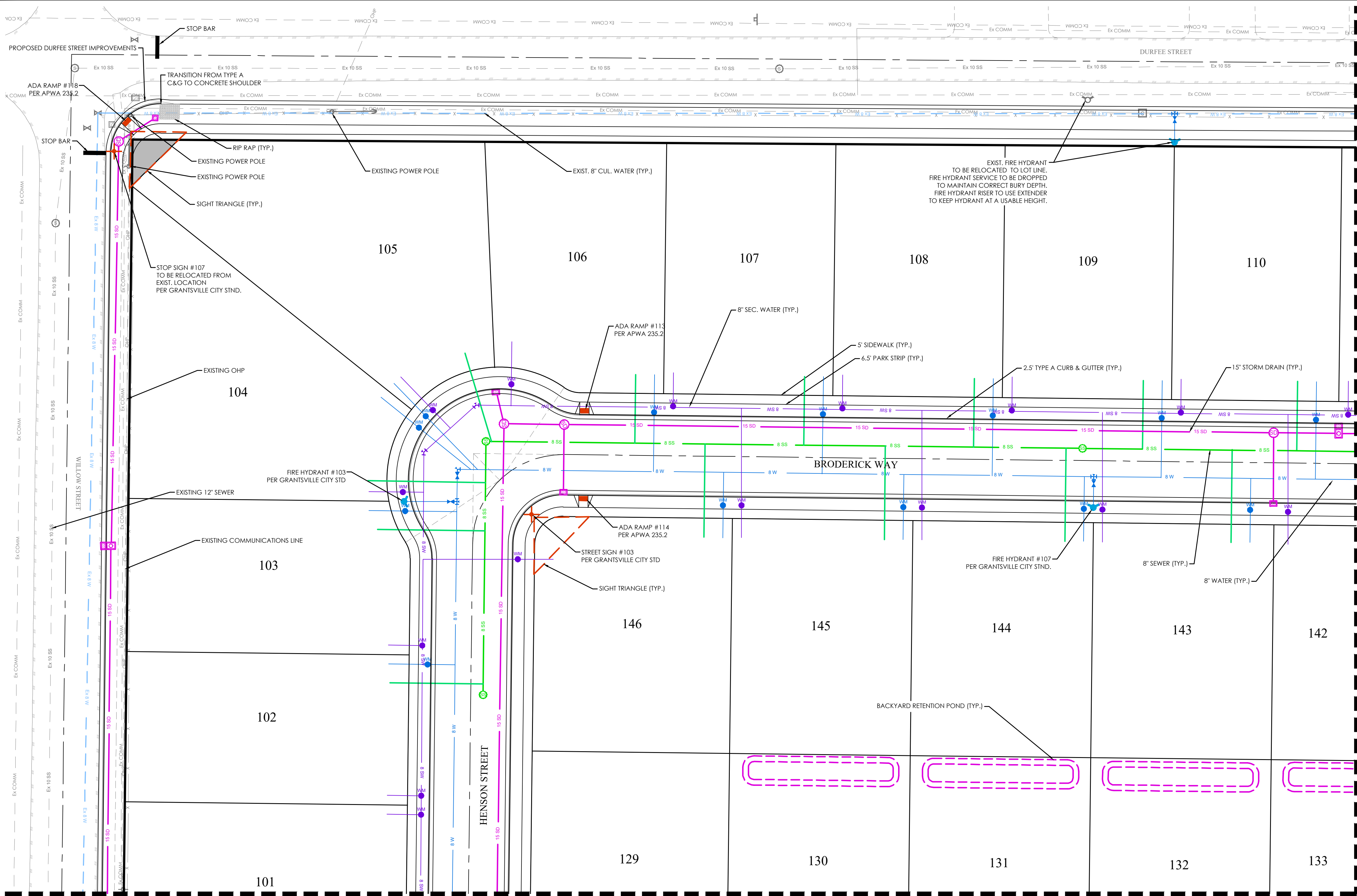
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OVERALL SITE PLAN

Scale: 1"=50'  
Date: 09/14/22  
Sheet: C4

Drawn: DCJ  
Job #: 21-0377





**LEGEND**

BOUNDARY	15" STORM DRAIN
ROW	8" SANITARY SEWER
CENTERLINE	8" CULINARY WATER
LOT LINE	8" SECONDARY WATER
EASEMENT	CONTOUR MAJOR
15' SD	CONTOUR MINOR
8 SS	EXIST. STORM DRAIN
8 W	EXIST. SANITARY SEWER
8 SW	EXIST. CULINARY WATER
XXXX	EXIST. FENCE
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
XXXX	SIGN
XXXX	STREET LIGHT
XXXX	SD MH, INLET, AND COMBO
XXXX	SEWER MANHOLE
XXXX	CULINARY VALVE, TEE & BEND
XXXX	SECONDARY VALVE, TEE & BEND
XXXX	WATER BLOW-OFF
XXXX	FIRE HYDRANT
XXXX	STREET MONUMENT (TO BE SET)
XXXX	EXIST. STREET MONUMENT
XXXX	EXIST. SD INLET & MH
XXXX	EXIST. SEWER MH
XXXX	EXIST. VALVE, TEE, & BEND
XXXX	EXIST. FIRE HYDRANT
XXXX	SPOT ELEVATION

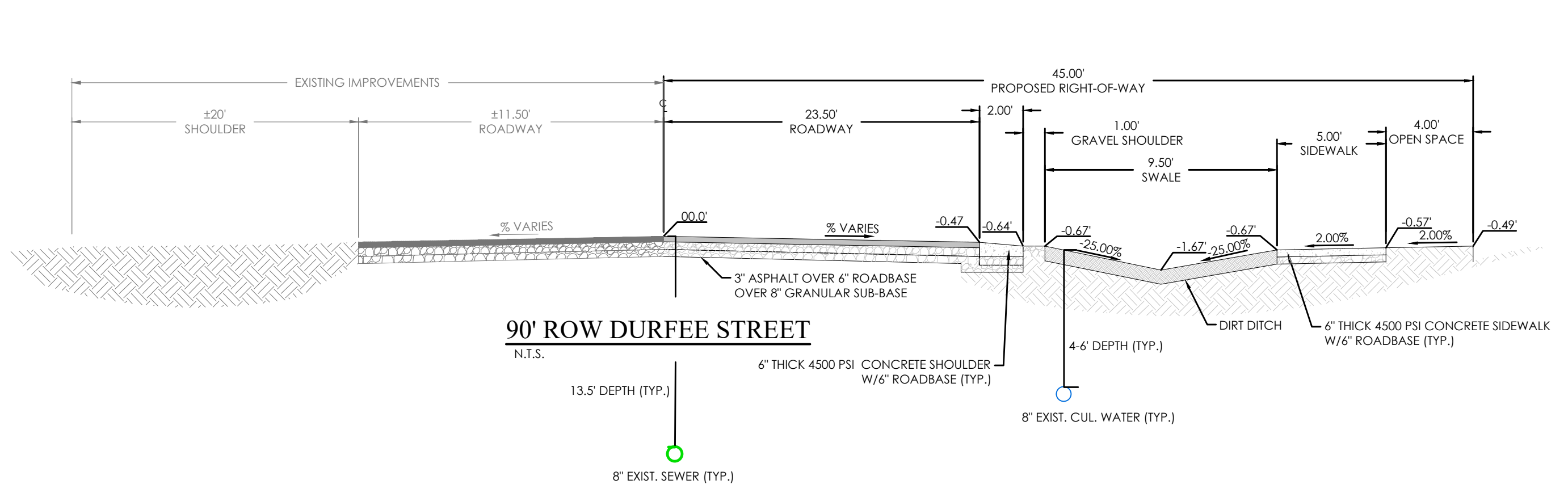
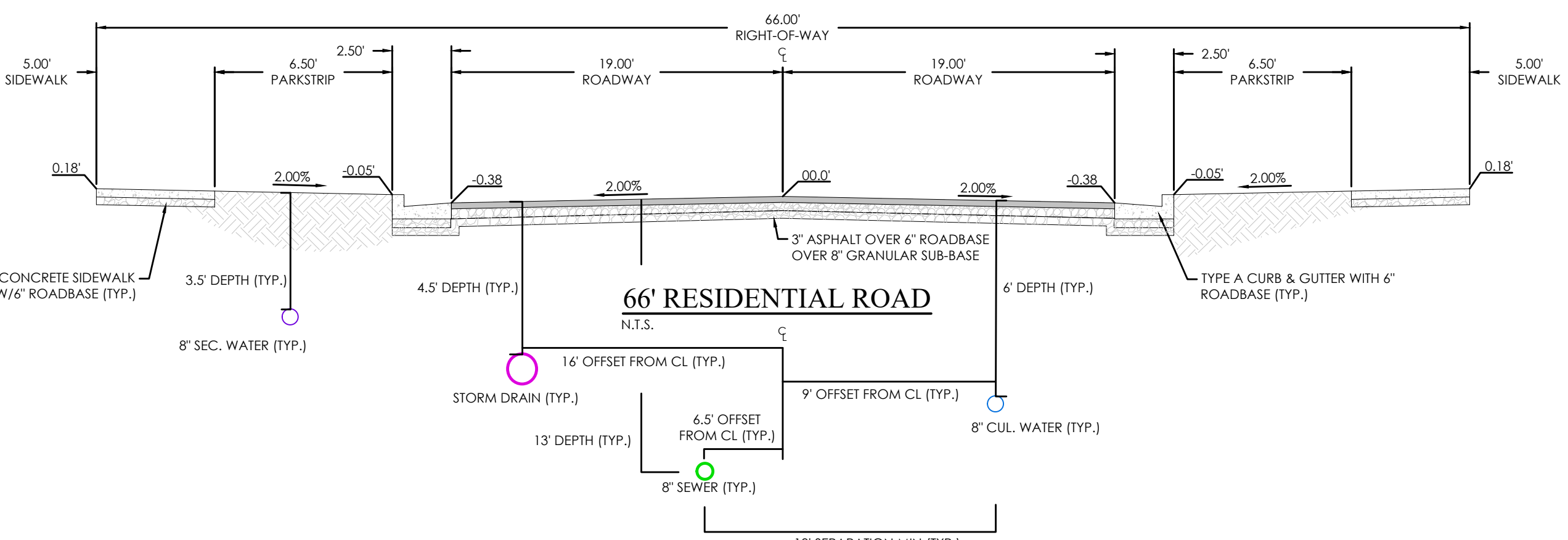
MATCHLINE  
SEE SHEET C4.2

**GRAPHIC SCALE**

(IN FEET)  
1 inch = 30 ft.

**KEY MAP**

**66' ROW WILLOW STREET (HALF WIDTH)**  
N.T.S.



ENGINEERING AND SURVEYING, LLC  
6949 S. HIGH TECH DRIVE, SUITE 200  
MIDVALE, UTAH 84047 PH: (801) 352-0075  
www.focusnh.com

THOMAS M. ROMNEY  
07/14/22  
STATE OF UTAH

MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
SITE PLAN

REVISION BLOCK		DESCRIPTION
1	DATE	
2	DATE	
3	DATE	
4	DATE	
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6	DATE	

**SITE PLAN**

Scale: 1"=30'  
Date: 09/14/22  
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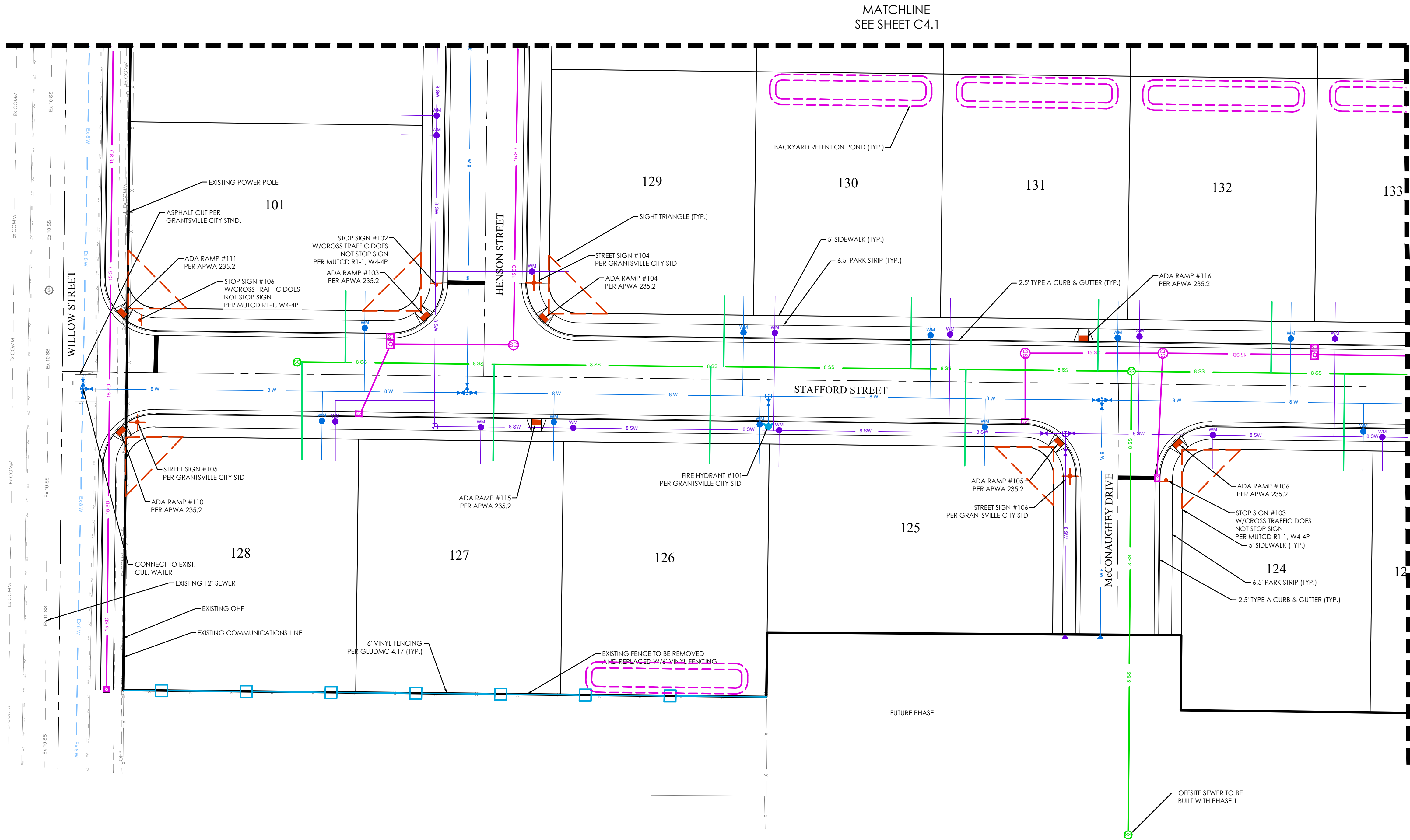
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**C4.1**

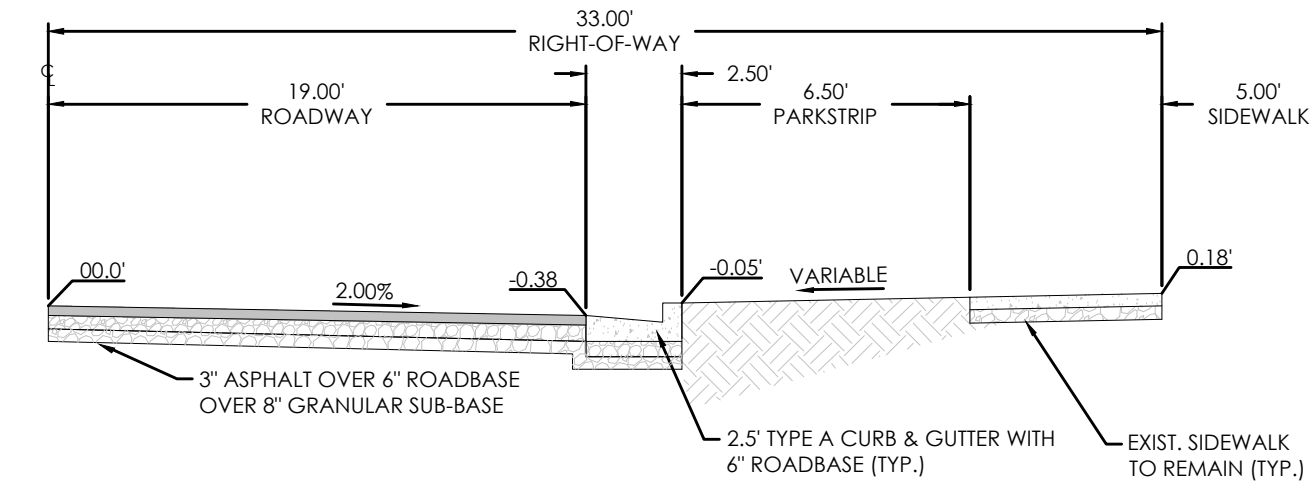
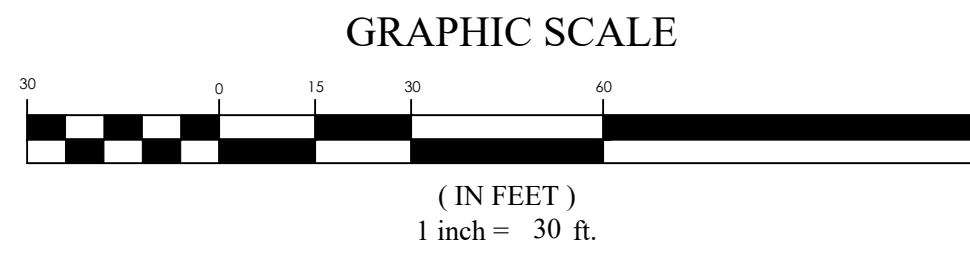




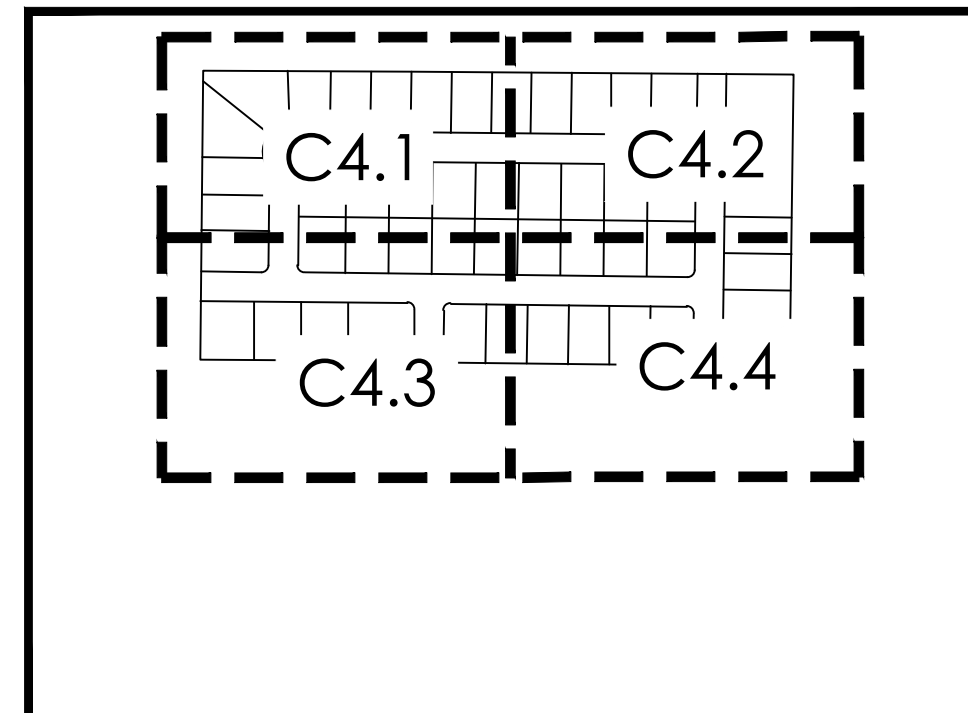
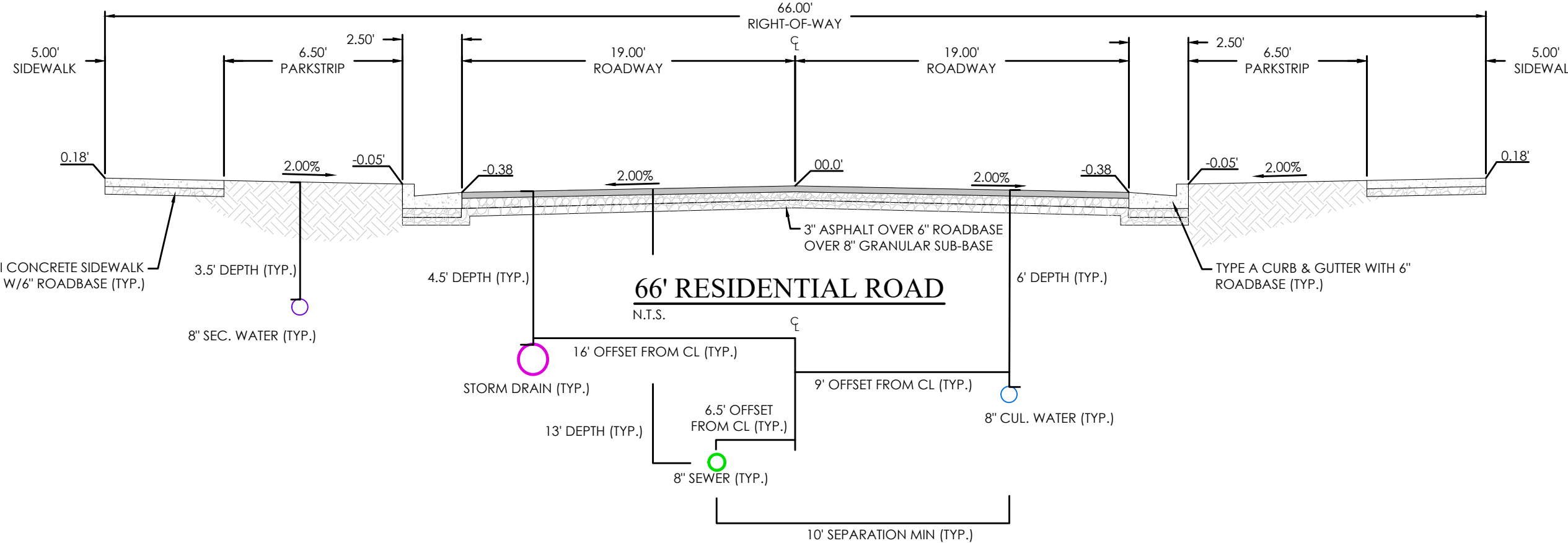




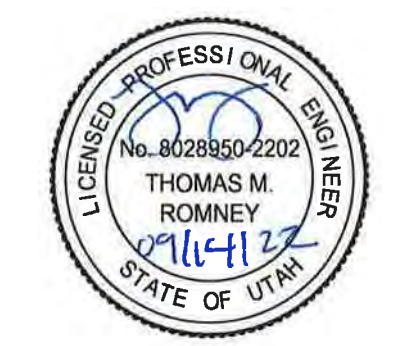
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[Symbol]	BOUNDARY
[Symbol]	ROW
[Symbol]	CENTERLINE
[Symbol]	LOT LINE
[Symbol]	EASEMENT
[Symbol]	15" STORM DRAIN
[Symbol]	8" SANITARY SEWER
[Symbol]	8" CULINARY WATER
[Symbol]	8" SECONDARY WATER
[Symbol]	CONTOUR MAJOR
[Symbol]	CONTOUR MINOR
[Symbol]	EXIST. STORM DRAIN
[Symbol]	EXIST. SANITARY SEWER
[Symbol]	EXIST. CULINARY WATER
[Symbol]	EXIST. SECONDARY WATER
[Symbol]	EXIST. FENCE
[Symbol]	EXIST. CONTOUR MAJOR
[Symbol]	EXIST. CONTOUR MINOR
[Symbol]	SIGN
[Symbol]	STREET LIGHT
[Symbol]	SD MH, INLET, AND COMBO
[Symbol]	SEWER MANHOLE
[Symbol]	CULINARY VALVE, TEE & BEND
[Symbol]	SECONDARY VALVE, TEE & BEND
[Symbol]	WATER BLOW-OFF
[Symbol]	FIRE HYDRANT
[Symbol]	STREET MONUMENT (TO BE SET)
[Symbol]	EXIST. STREET MONUMENT
[Symbol]	EXIST. SD INLET & MH
[Symbol]	EXIST. SEWER MH
[Symbol]	EXIST. VALVE, TEE, & BEND
[Symbol]	EXIST. FIRE HYDRANT
[Symbol]	SPOT ELEVATION



66' ROW WILLOW STREET (HALF WIDTH)  
N.T.S.



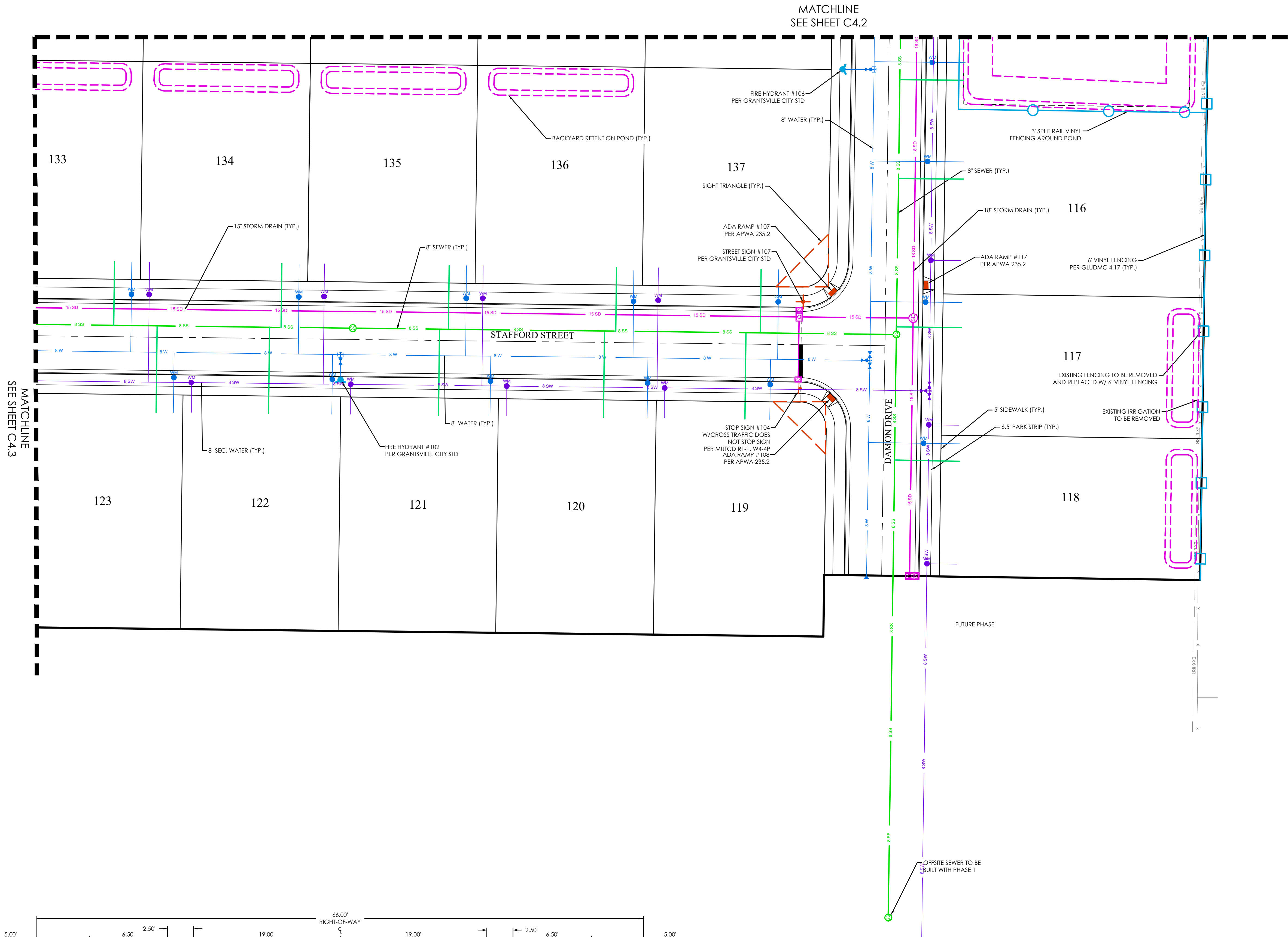
KEY MAP



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
SITE PLAN

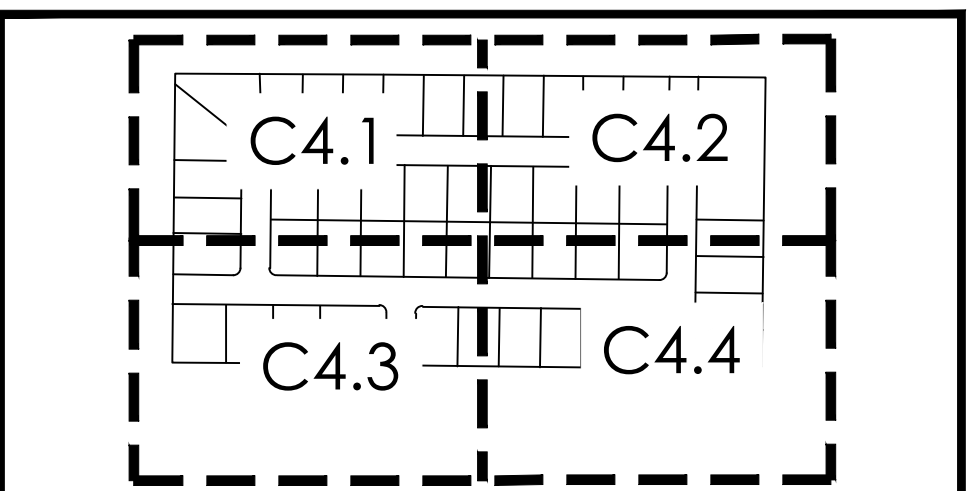
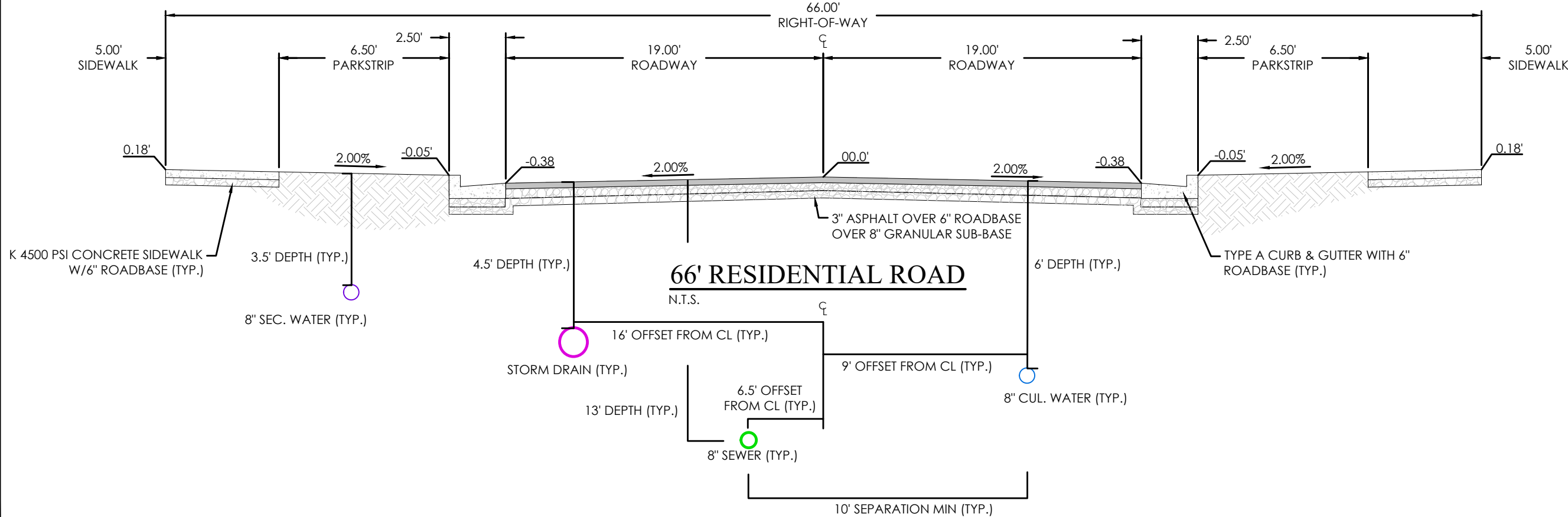
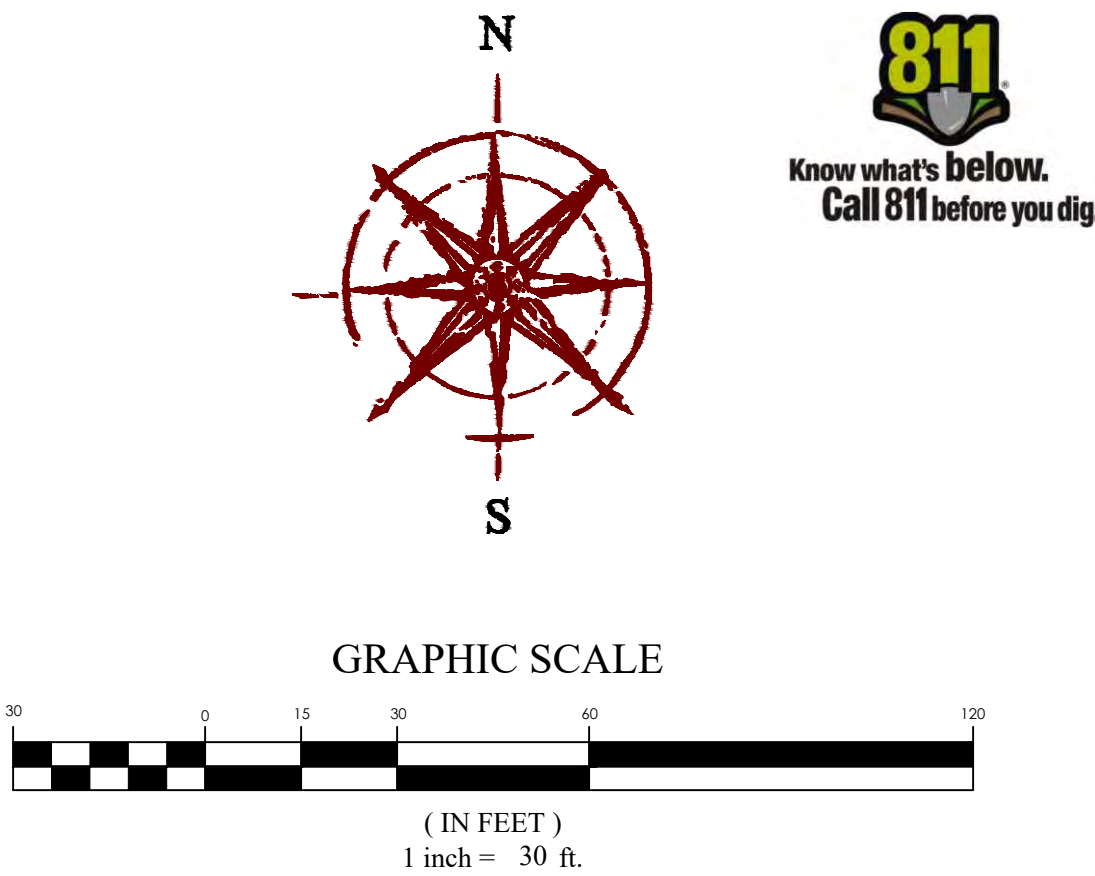
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LEGEND

BOUNDARY	BOUNDARY
ROW	ROW
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" SD	15" STORM DRAIN
8" SS	8" SANITARY SEWER
8" W	8" CULINARY WATER
8" SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
XXXX	EXIST. STORM DRAIN
XXXX	EXIST. SANITARY SEWER
XXXX	EXIST. CULINARY WATER
XXXX	EXIST. FENCE
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
XXXX	SIGN
XXXX	STREET LIGHT
XXXX	SD MH, INLET, AND COMBO
XXXX	SEWER MANHOLE
XXXX	CULINARY VALVE, TEE & BEND
XXXX	SECONDARY VALVE, TEE & BEND
XXXX	WATER BLOW-OFF
XXXX	FIRE HYDRANT
XXXX	STREET MONUMENT (TO BE SET)
XXXX	EXIST. STREET MONUMENT
XXXX	EXIST. SD INLET & MH
XXXX	EXIST. SEWER MH
XXXX	EXIST. VALVE, TEE, & BEND
XXXX	EXIST. FIRE HYDRANT
XXXX	SPOT ELEVATION



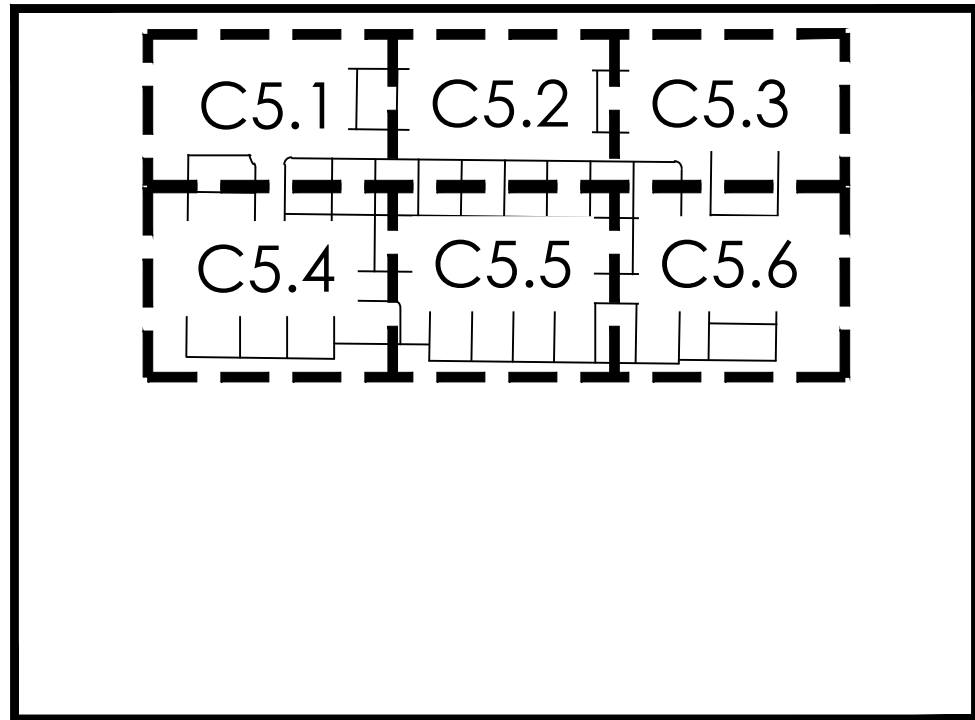
KEY MAP



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
SITE PLAN

REVISION BLOCK	DATE	DESCRIPTION
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KEY MAP



GRAPHIC SCALE



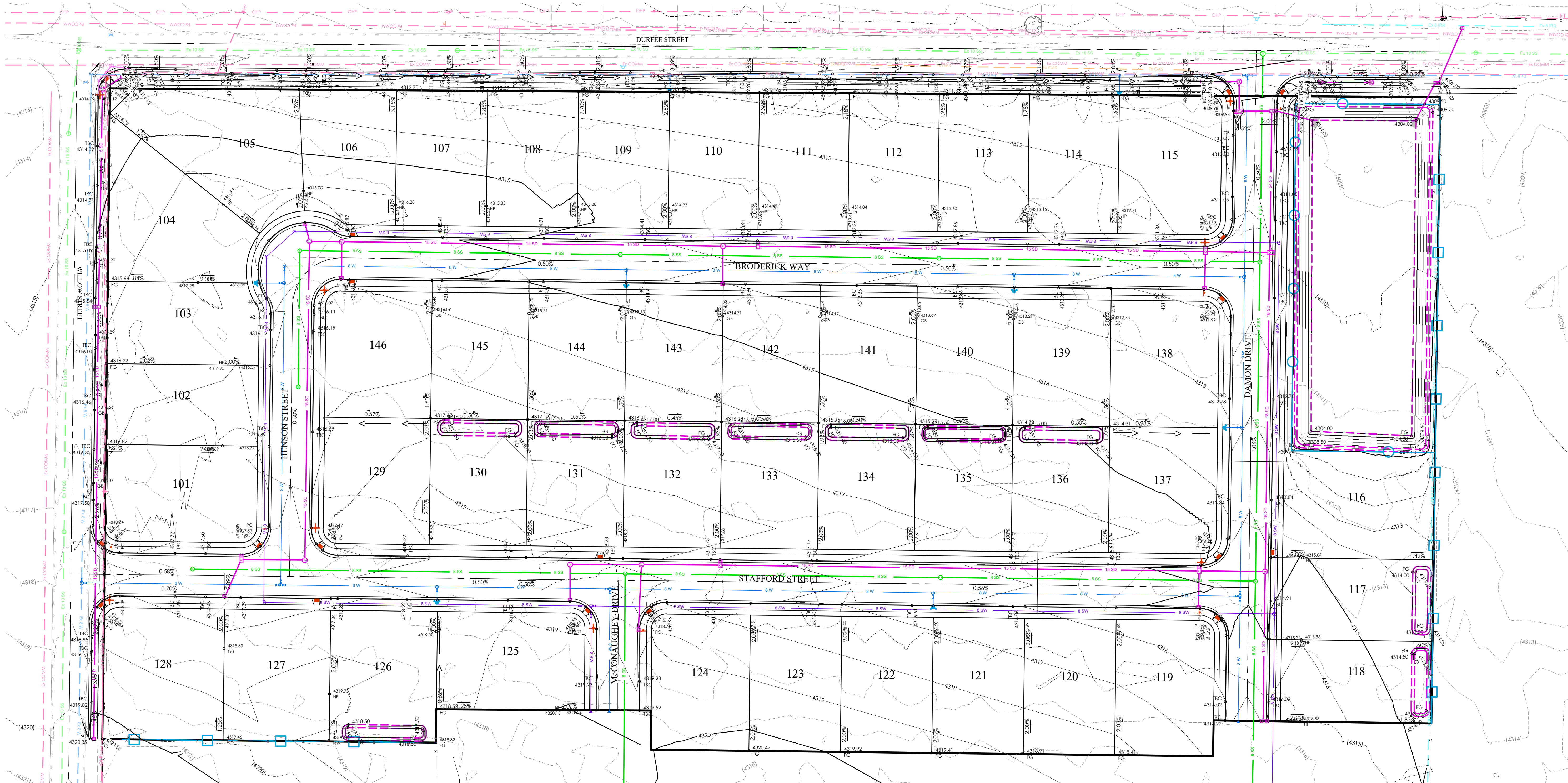
(IN FEET)  
1 inch = 50 ft.



NOTE:  
AFTER REMOVING TOP SOIL, ALL FILL IN THE ROADWAY AREA MUST BE A-1-A MATERIAL OR AS  
APPROVED BY THE GEOTECHNICAL REPORT. COMPACTION TO BE INSPECTED UP TO THE ELEVATION OF  
THE ROAD SUB-GRADE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
OVERALL GRADING PLAN

REVISION BLOCK		DESCRIPTION
#	DATE	
1	09/14/22	INITIAL DESIGN
2	09/14/22	REVISED DESIGN
3	09/14/22	REVISED DESIGN
4	09/14/22	REVISED DESIGN
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6	09/14/22	REVISED DESIGN

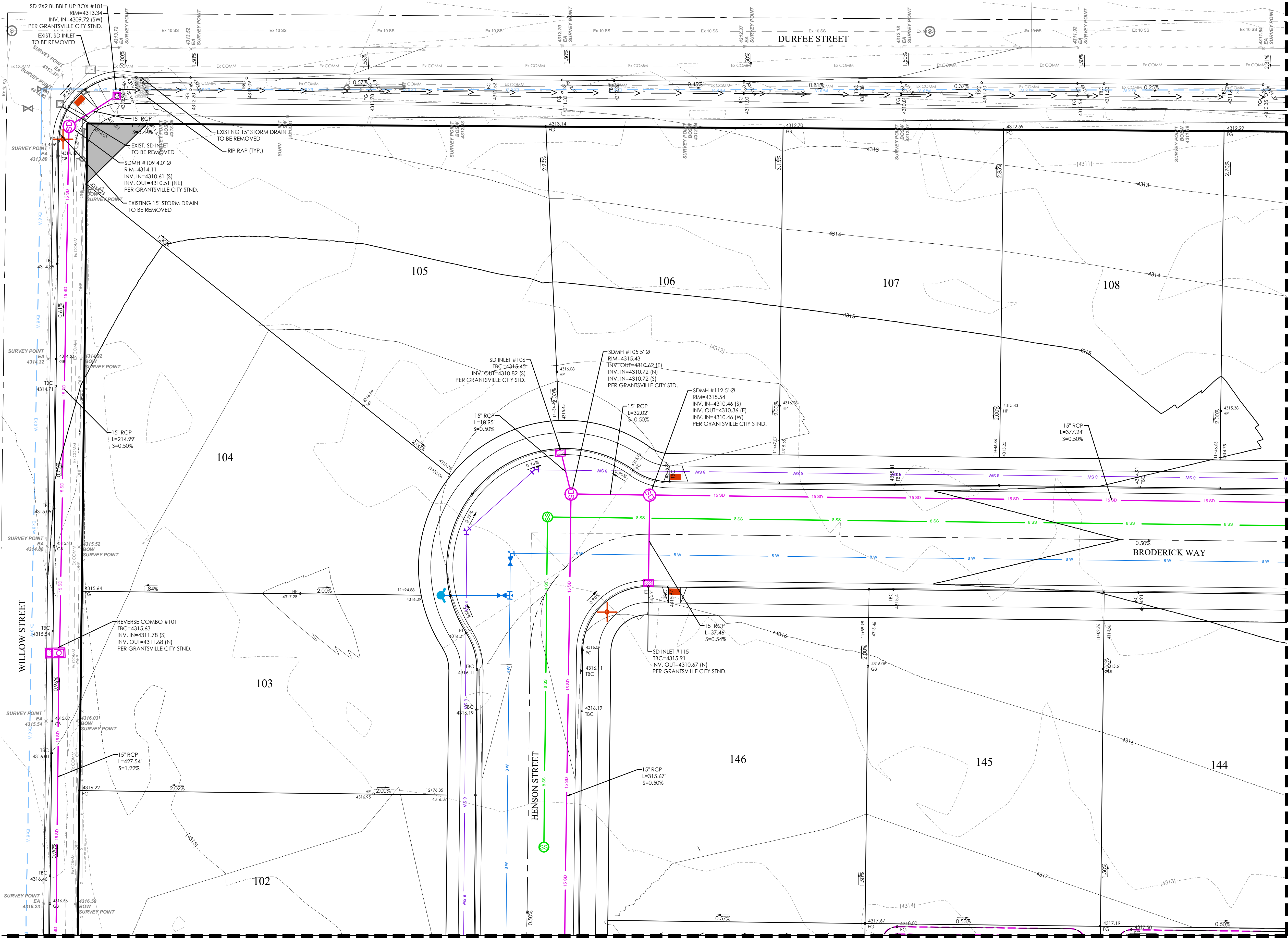
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Scale: 1"=50'	Drawn: DCJ
Date: 09/14/22	Job #: 21-0377
Sheet:	

C5



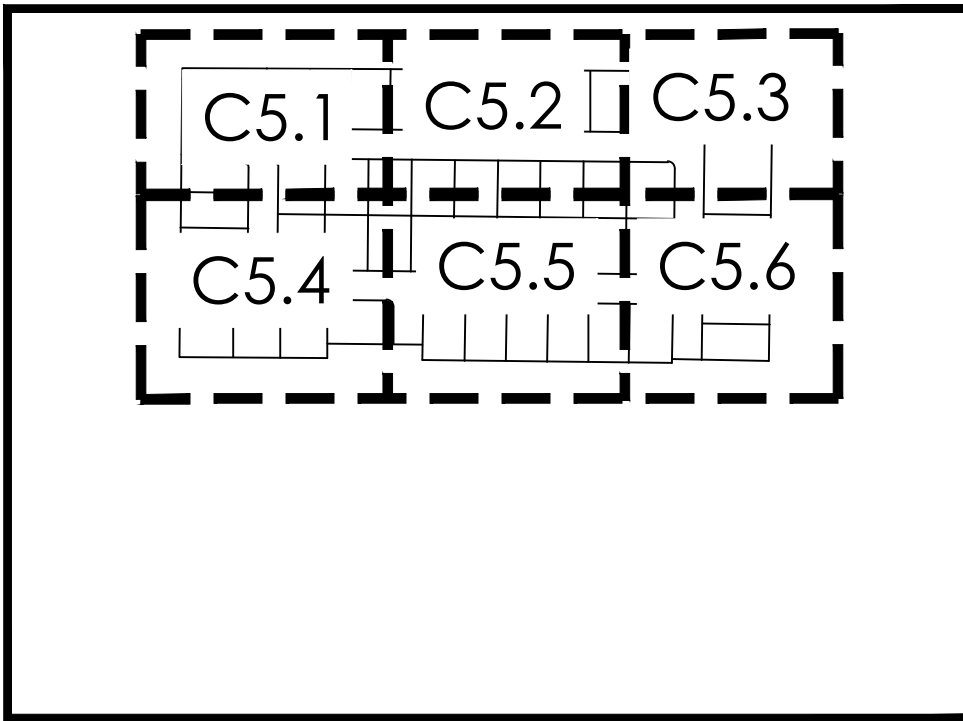
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**LEGEND**

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" STORM DRAIN	15" STORM DRAIN
8" SANITARY SEWER	8" SANITARY SEWER
8" CULINARY WATER	8" CULINARY WATER
8" SECONDARY WATER	8" SECONDARY WATER
CONTOUR MAJOR	CONTOUR MAJOR
CONTOUR MINOR	CONTOUR MINOR
EXIST. STORM DRAIN	EXIST. STORM DRAIN
EXIST. SANITARY SEWER	EXIST. SANITARY SEWER
EXIST. CULINARY WATER	EXIST. CULINARY WATER
EXIST. FENCE	EXIST. FENCE
EXIST. CONTOUR MAJOR	EXIST. CONTOUR MAJOR
EXIST. CONTOUR MINOR	EXIST. CONTOUR MINOR
SIGN	SIGN
STREET LIGHT	STREET LIGHT
SD MH, INLET, AND COMBO	SD MH, INLET, AND COMBO
SEWER MANHOLE	SEWER MANHOLE
CULINARY VALVE, TEE & BEND	CULINARY VALVE, TEE & BEND
SECONDARY VALVE, TEE & BEND	SECONDARY VALVE, TEE & BEND
WATER BLOW-OFF	WATER BLOW-OFF
FIRE HYDRANT	FIRE HYDRANT
STREET MONUMENT (TO BE SET)	STREET MONUMENT (TO BE SET)
EXIST. STREET MONUMENT	EXIST. STREET MONUMENT
EXIST. SD INLET & MH	EXIST. SD INLET & MH
EXIST. SEWER MH	EXIST. SEWER MH
EXIST. VALVE, TEE, & BEND	EXIST. VALVE, TEE, & BEND
EXIST. FIRE HYDRANT	EXIST. FIRE HYDRANT
SPOT ELEVATION	SPOT ELEVATION



**KEY MAP**

- NOTES:**
- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS PER LOT RETENTION BASIN SHOWN
  - HOMEOWNER/CONTRACTOR/BUILDER TO ADHERE TO APPROVED GRADING PLAN. ANY DEVIATION TO PLAN SHOULD IMMEDIATELY CONTACT CITY ENGINEER
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  - AFTER REMOVING TOP SOIL, ALL FILL IN THE ROADWAY AREA MUST BE A-1-A MATERIAL OR AS APPROVED BY THE GEOTECHNICAL REPORT. COMPACTION TO BE INSPECTED UP TO THE ELEVATION OF THE ROAD SUB-GRADE

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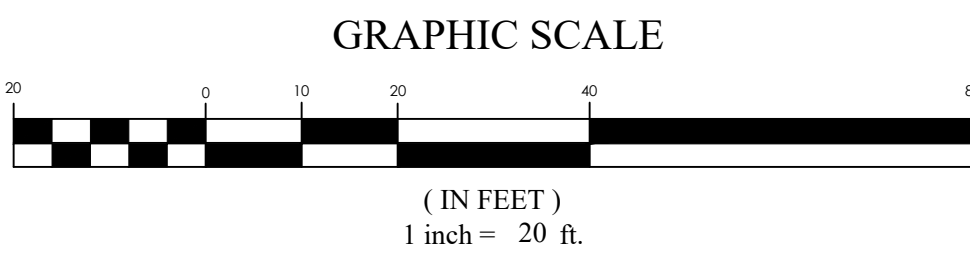
**MATTHEWS MEADOWS SUBDIVISION PHASE 1**  
**GRANTSVILLE, UT**  
**GRADING AND DRAINAGE PLAN**

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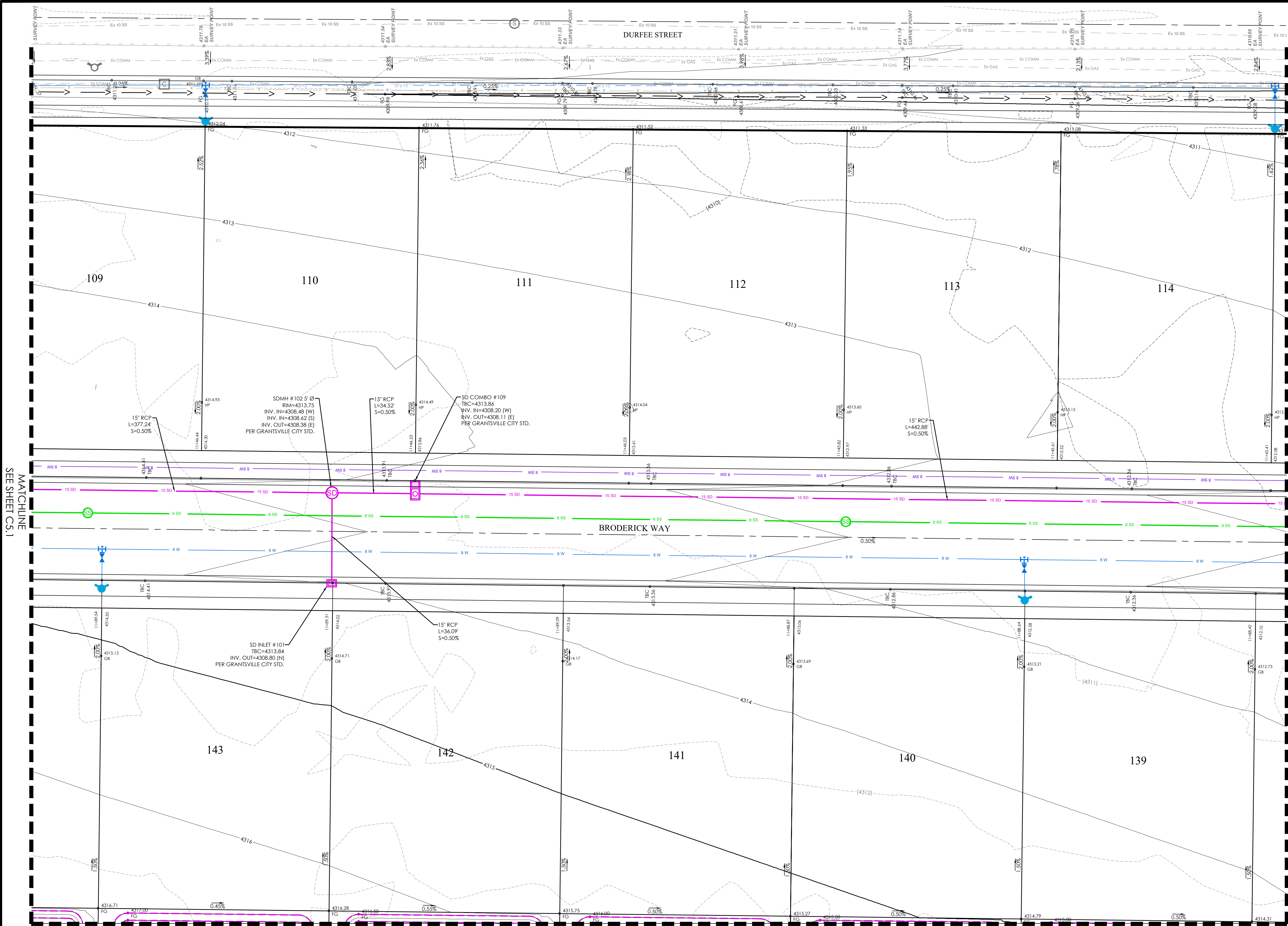
**GRADING AND DRAINAGE PLAN**

Scale: 1"=20'  
Date: 09/14/22  
Sheet: C5.1

Drawn: DCJ  
Job #: 21-0377

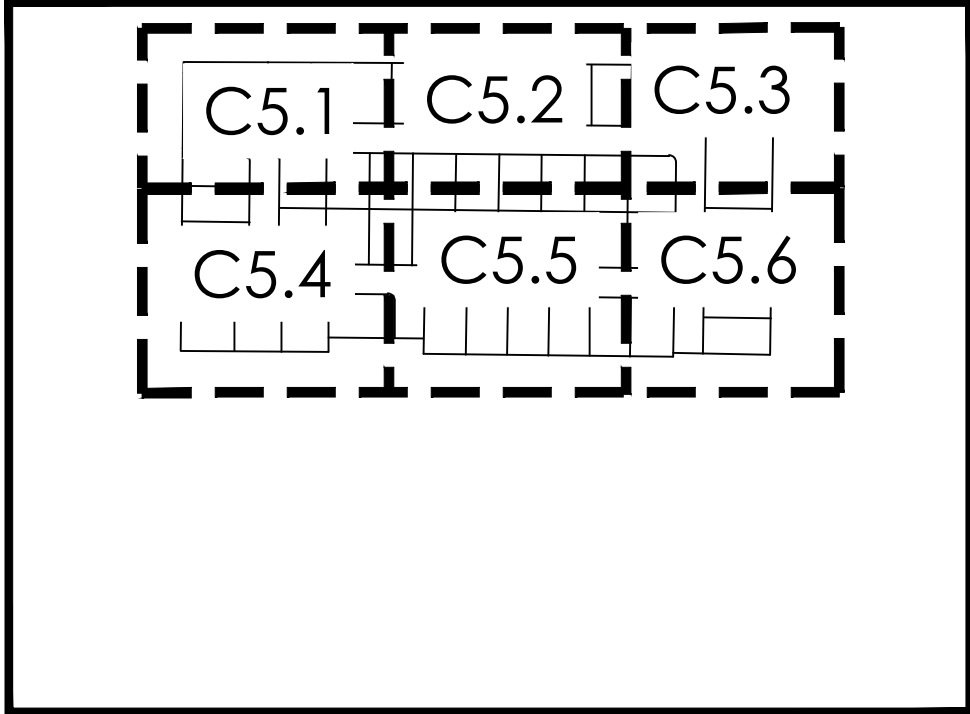






**LEGEND**

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" STORM DRAIN	15" STORM DRAIN
8" SANITARY SEWER	8" SANITARY SEWER
8" CULINARY WATER	8" CULINARY WATER
8" SECONDARY WATER	8" SECONDARY WATER
CONTOUR MAJOR	CONTOUR MAJOR
CONTOUR MINOR	CONTOUR MINOR
EXIST. STORM DRAIN	EXIST. STORM DRAIN
EXIST. SANITARY SEWER	EXIST. SANITARY SEWER
EXIST. CULINARY WATER	EXIST. CULINARY WATER
EXIST. FENCE	EXIST. FENCE
EXIST. CONTOUR MAJOR	EXIST. CONTOUR MAJOR
EXIST. CONTOUR MINOR	EXIST. CONTOUR MINOR
SIGN	SIGN
STREET LIGHT	STREET LIGHT
SD MH, INLET, AND COMBO	SD MH, INLET, AND COMBO
SEWER MANHOLE	SEWER MANHOLE
CULINARY VALVE, TEE & BEND	CULINARY VALVE, TEE & BEND
SECONDARY VALVE, TEE & BEND	SECONDARY VALVE, TEE & BEND
WATER BLOW-OFF	WATER BLOW-OFF
FIRE HYDRANT	FIRE HYDRANT
STREET MONUMENT (TO BE SET)	STREET MONUMENT (TO BE SET)
EXIST. STREET MONUMENT	EXIST. STREET MONUMENT
EXIST. SD INLET & MH	EXIST. SD INLET & MH
EXIST. SEWER MH	EXIST. SEWER MH
EXIST. VALVE, TEE, & BEND	EXIST. VALVE, TEE, & BEND
EXIST. FIRE HYDRANT	EXIST. FIRE HYDRANT
SPOT ELEVATION	SPOT ELEVATION

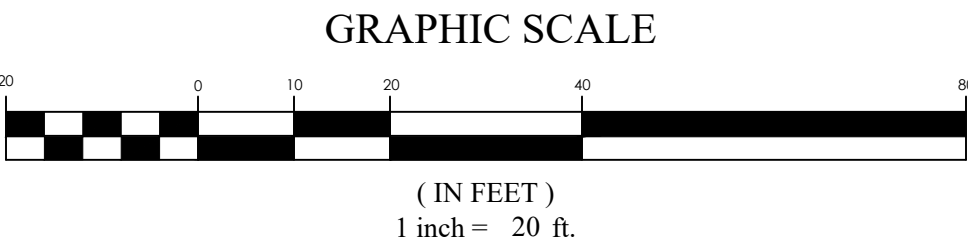


- NOTES:**
- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS PER LOT RETENTION BASIN SHOWN
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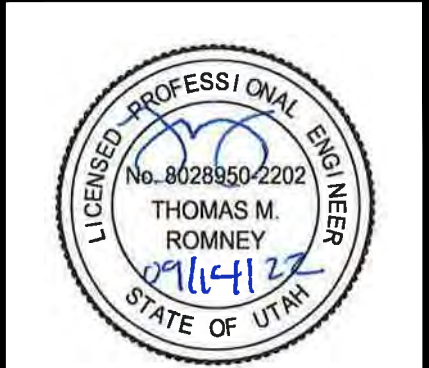
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SEE SHEET C5.1

MATCHLINE SEE SHEET C5.3

MATCHLINE  
SEE SHEET C5.5



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**MATTHEWS MEADOWS SUBDIVISION PHASE 1**  
**GRANTSVILLE, UT**  
**GRADING AND DRAINAGE PLAN**

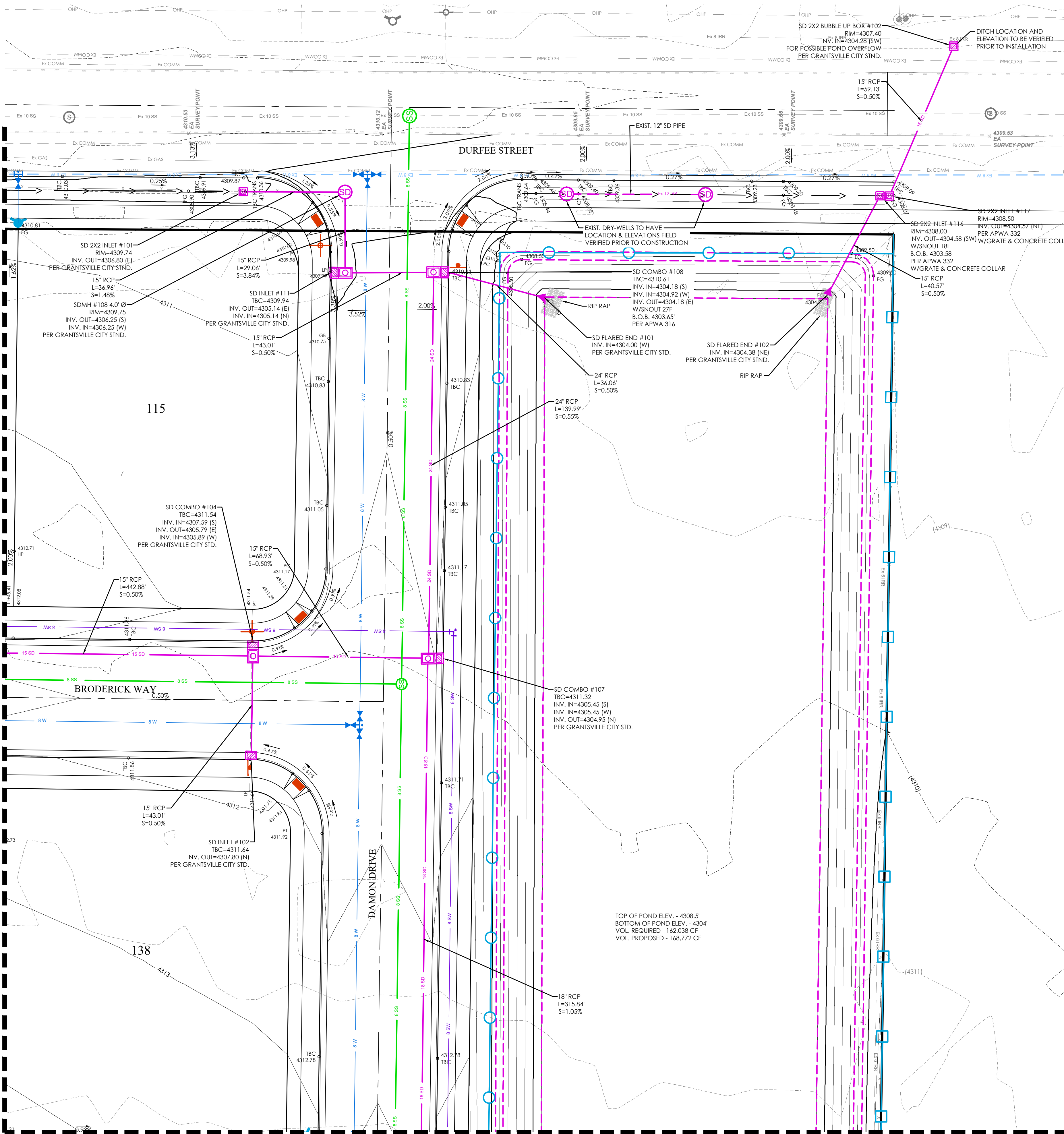
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**GRADING AND DRAINAGE PLAN**

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Date: 09/14/22  
Sheet: C5.2

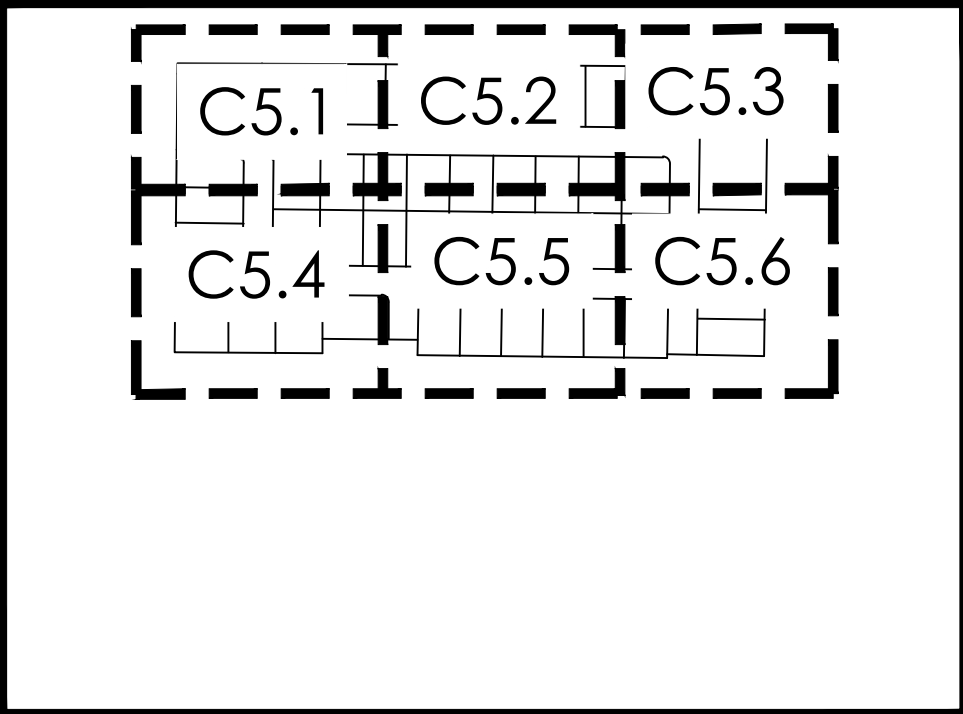
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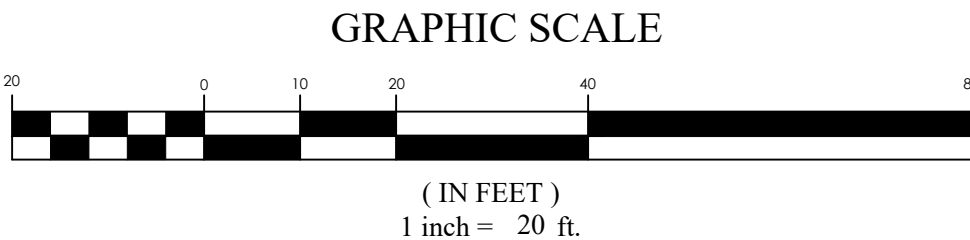


**LEGEND**

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" SD	15" SD
8" SS	8" SS
8" SW	8" SW
8" CULINARY WATER	8" CULINARY WATER
8" SANITARY SEWER	8" SANITARY SEWER
8" CULINARY WATER	8" CULINARY WATER
8" SANITARY SEWER	8" SANITARY SEWER
CONTOUR MAJOR	CONTOUR MAJOR
CONTOUR MINOR	CONTOUR MINOR
EXIST. STORM DRAIN	EXIST. STORM DRAIN
EXIST. SANITARY SEWER	EXIST. SANITARY SEWER
EXIST. CULINARY WATER	EXIST. CULINARY WATER
EXIST. FENCE	EXIST. FENCE
EXIST. CONTOUR MAJOR	EXIST. CONTOUR MAJOR
EXIST. CONTOUR MINOR	EXIST. CONTOUR MINOR
SIGN	SIGN
STREET LIGHT	STREET LIGHT
SD MH, INLET, AND COMBO	SD MH, INLET, AND COMBO
SEWER MANHOLE	SEWER MANHOLE
CULINARY VALVE, TEE & BEND	CULINARY VALVE, TEE & BEND
SECONDARY VALVE, TEE & BEND	SECONDARY VALVE, TEE & BEND
WATER BLOW-OFF	WATER BLOW-OFF
FIRE HYDRANT	FIRE HYDRANT
STREET MONUMENT (TO BE SET)	STREET MONUMENT (TO BE SET)
EXIST. STREET MONUMENT	EXIST. STREET MONUMENT
EXIST. SD INLET & MH	EXIST. SD INLET & MH
EXIST. SEWER MH	EXIST. SEWER MH
EXIST. VALVE, TEE, & BEND	EXIST. VALVE, TEE, & BEND
EXIST. FIRE HYDRANT	EXIST. FIRE HYDRANT
SPOT ELEVATION	SPOT ELEVATION



- NOTES:**
- ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS PER LOT RETENTION BASIN SHOWN.
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**MATTHEWS MEADOWS SUBDIVISION PHASE 1**  
**GRANTSVILLE, UT**  
**GRADING AND DRAINAGE PLAN**

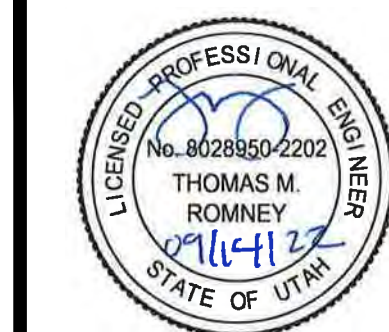
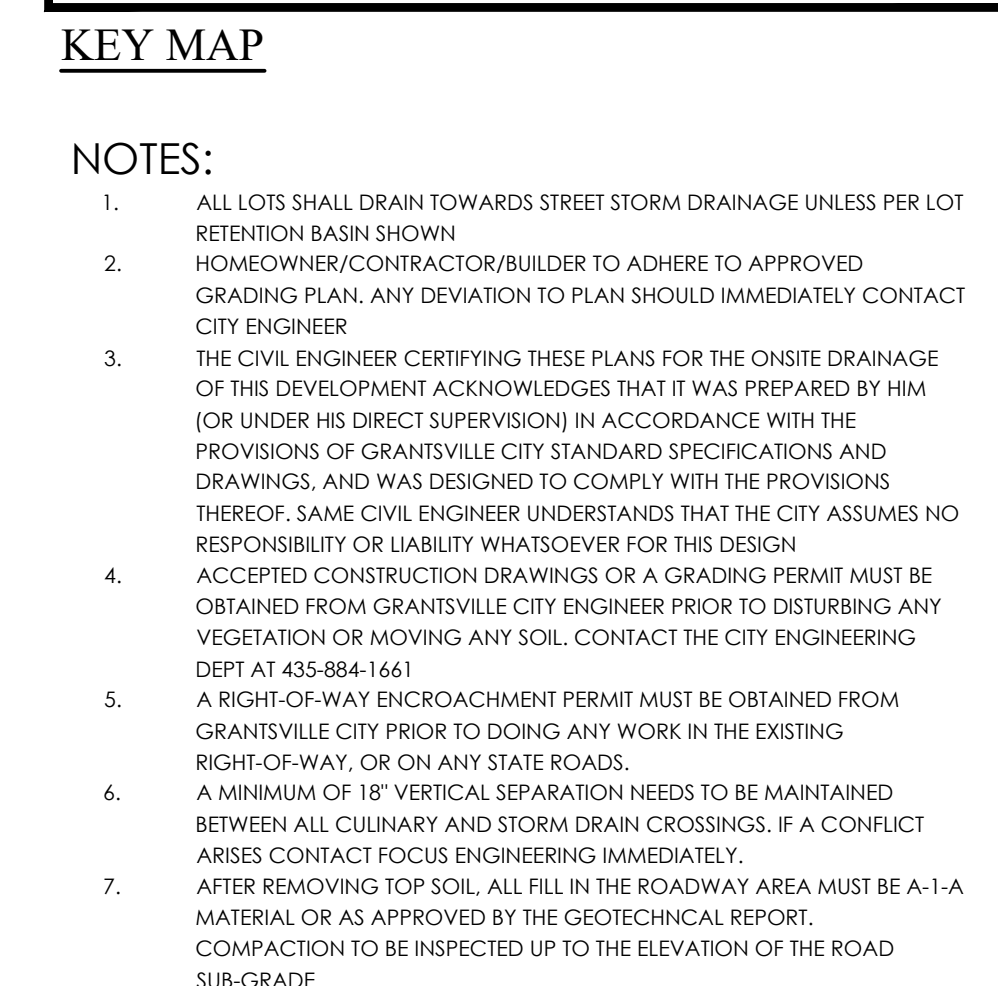
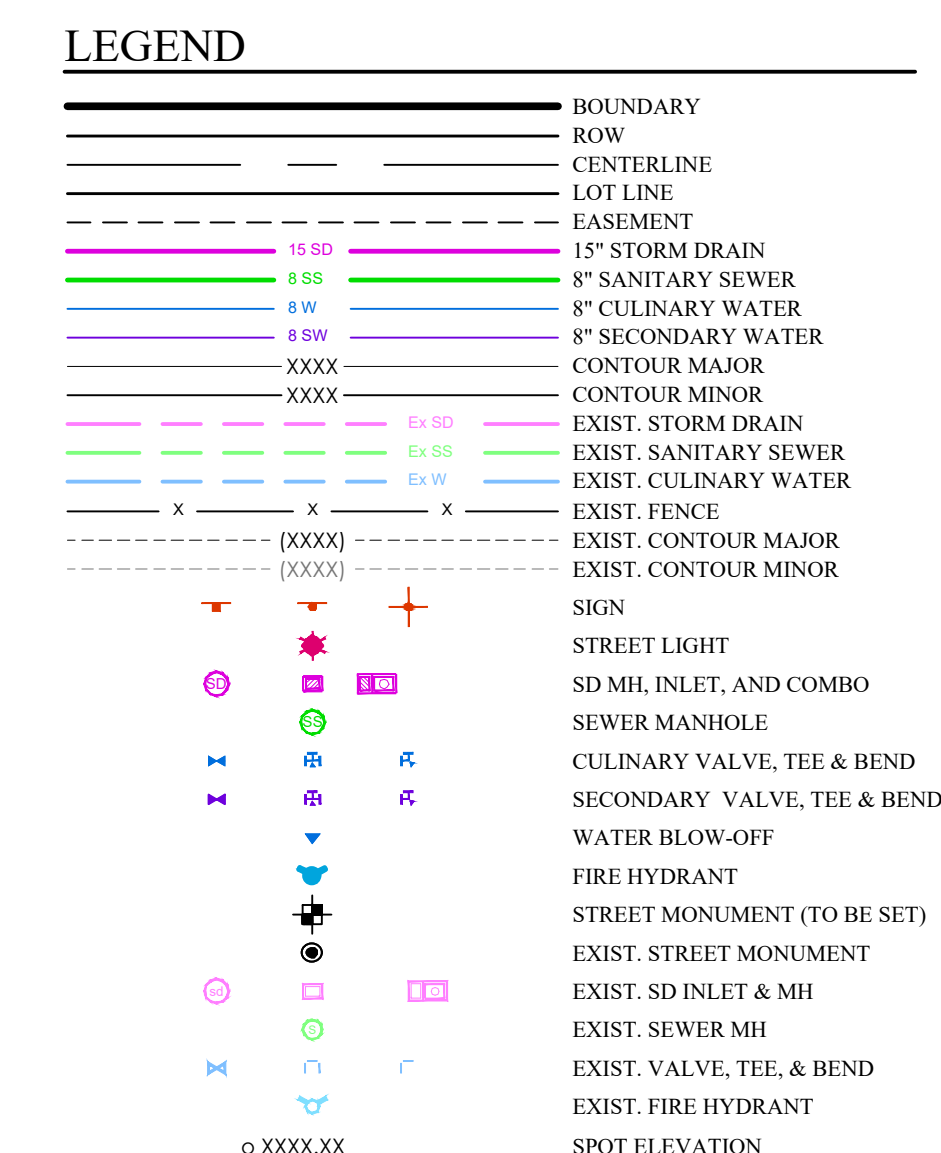
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**GRADING AND DRAINAGE PLAN**

Scale: 1"=20'  
Date: 09/14/22  
Sheet: C5.3

Drawn: DCJ  
Job #: 21-0377





MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
GRADING AND DRAINAGE PLAN

REVISION BLOCK		
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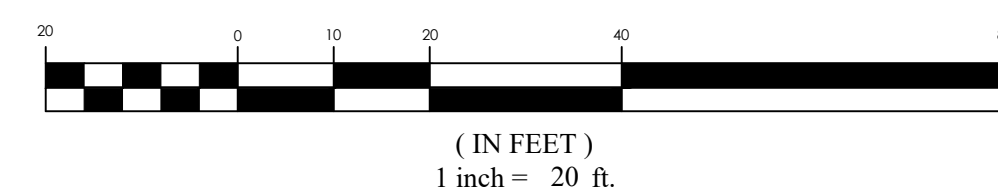
# GRADING AND DRAINAGE PLAN

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Date: 09/14/22	Job #: 21-0377

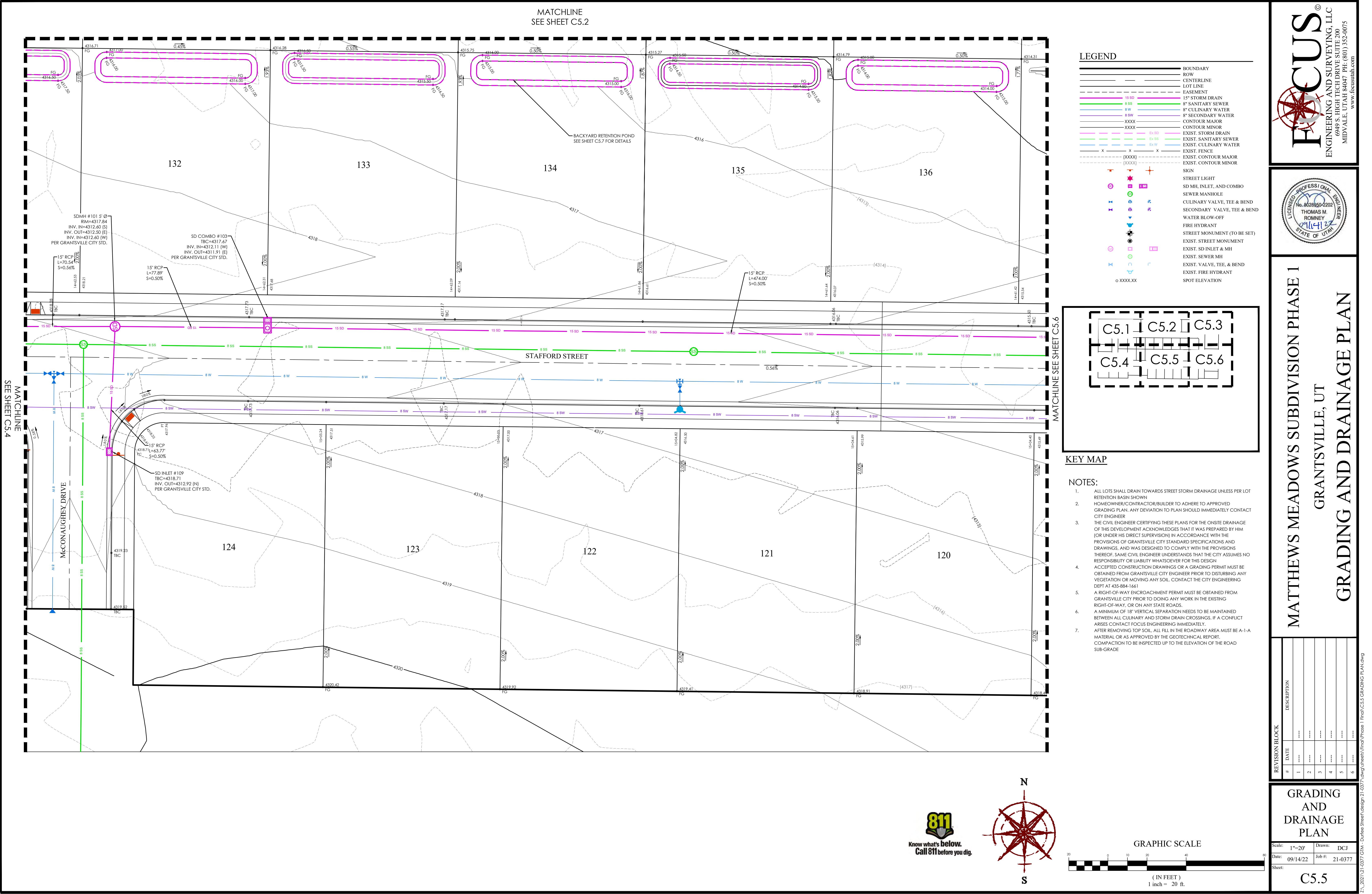
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GRAPHIC SCALE



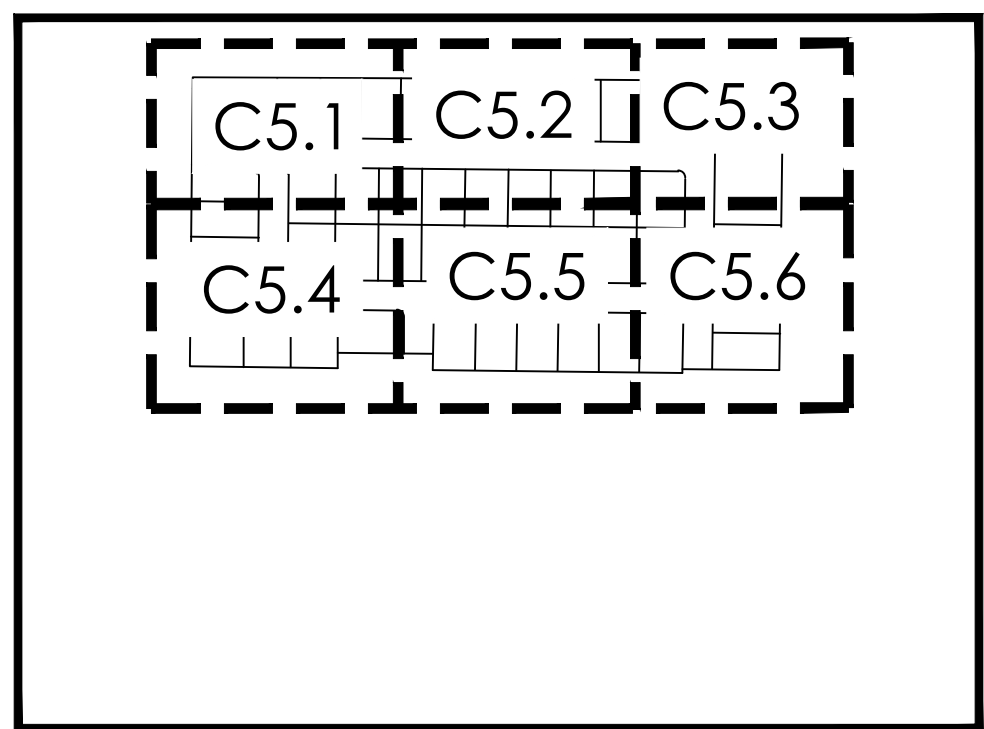






# LEGEND

—————	BOUNDARY
_____	ROW
- - - - -	CENTERLINE
.....	LOT LINE
- - - - -	EASEMENT
-----	15" SD
-----	8" SS
-----	8" W
-----	8" SW
XXXXX	CONTOUR MAJOR
XXXXX	CONTOUR MINOR
----- Ex SD	EXIST. STORM DRAIN
----- Ex SS	EXIST. SANITARY SEWER
----- Ex W	EXIST. CULINARY WATER
----- Ex SW	EXIST. FENCE
(XXXXX)	EXIST. CONTOUR MAJOR
(XXXXX)	EXIST. CONTOUR MINOR
+ + + + +	SIGN
STREET LIGHT	
SD MH, INLET, AND COMBO	
SEWER MANHOLE	
CULINARY VALVE, TEE & BEND	
SECONDARY VALVE, TEE & BEND	
WATER BLOW-OFF	
FIRE HYDRANT	
STREET MONUMENT (TO BE SET)	
EXIST. STREET MONUMENT	
EXIST. SD INLET & MH	
EXIST. SEWER MH	
EXIST. VALVE, TEE, & BEND	
EXIST. FIRE HYDRANT	
SPOT ELEVATION	



## NOTES:

1. ALL LOTS SHALL DRAIN TOWARDS STREET STORM DRAINAGE UNLESS PER LOT DETENTION BASIN SUITS.
2. HOMEOWNER/CONTRACTOR/BUILDER TO ADHERE TO APPROVED GRADING PLAN. ANY DEVIATION TO PLAN SHOULD IMMEDIATELY CONTACT CITY ENGINEER.
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5. AT RIGHT-OF-WAY OR ROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
6. A MINIMUM OF 18" VERTICAL SEPARATION NEEDS TO BE MAINTAINED BETWEEN ALL CULINARY AND STORM DRAIN CROSSINGS. IF A CONFLICT ARISES CONTACT FOCUS ENGINEERING IMMEDIATELY.
7. AFTER REMOVING TOP SOIL, ALL FILL IN THE ROADWAY AREA MUST BE A-1 MATERIAL OR AS APPROVED BY THE GEOTECHNICAL RESORT. COMPACTION TO BE INSPECTED UP TO THE ELEVATION OF THE ROAD SUB-GRADE



20 0 10 20 40

( IN FEET )  
1 inch = 20 ft.



**MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
GRADING AND DRAINAGE PLAN**

REVISION BLOCK		DESCRIPTION
#	DATE	
1	10-1-2000	10-1-2000
2	10-1-2000	10-1-2000
3	10-1-2000	10-1-2000
4	10-1-2000	10-1-2000
5	10-1-2000	10-1-2000
6	10-1-2000	10-1-2000

# GRADING AND DRAINAGE PLAN

Scale: 1"=20'	Drawn: DCJ
Date: 09/14/22	Job #: 21-0377

C5.6



Project: Matthews Meadows Subdivision

Location: Grantsville City, Utah

Date: 4/20/2022

Designer: DCJ

FOCUS

ENGINEERING & SURVEYING

100-Year Retention Sizing

Design Criteria

Intensity Table: Per NOAA Atlas 14

Return Period: 100 year

Allowable Discharge: 0.00 cfs/acre Per Grantsville City Standards

Allowable Discharges

Storm Drain Discharge: 0.00 cfs

Other Discharge: 0.00 cfs

Total Discharge: 0 cfs

Source:

Weighted "C" Value

Surface Type	Area (sf)	"C" Value	C*A
Homes (rooftops)	2,662	0.85	2,263
Drives	0	0.85	0
Roadway and Sidewalk	0	0.85	0
Landscape	7,419	0.15	1,113
Totals	10,081		3,375.55

Weighted "C" Value: 0.33

Drainage Calculations

Duration	Intensity	Runoff C	Area	Rainfall	accumulate Flow	Allowable Discharge	Discharge	Required Storage
min	in/hr		Ac	cfs	cf	cfs	cf	cf
15.0	4.56	0.33	0.23	0.35	318	0.00	0	318
30.0	3.07	0.33	0.23	0.24	428	0.00	0	428
60.0	1.90	0.33	0.23	0.15	530	0.00	0	530
120.0	1.11	0.33	0.23	0.09	619	0.00	0	619
180.0	0.76	0.33	0.23	0.06	636	0.00	0	636
360.0	0.41	0.33	0.23	0.03	686	0.00	0	686
720.0	0.24	0.33	0.23	0.02	803	0.00	0	803
1440.0	0.14	0.33	0.23	0.01	937	0.00	0	937

Maximum Storage Requirement: 937

Maximum Storage Requirement (ac-ft): 0.02

Retention Basin Design

Storage Requirement: 937 cf

Allowable Depth: 2.0 ft

Retention Pond Volume: 990 cf

Roadway Sump Storage: 0 cf

Retention Calculated Using Basic Geometry of a Trapezoidal Trench

Total Storage: 990

RETENTION ADEQUATE

Project: Matthews Meadows Subdivision

Location: Grantsville City, Utah

Date: 12/7/2021

Designer: MEC

FOCUS

ENGINEERING & SURVEYING

100-Year Retention Sizing

Design Criteria

Intensity Table: Per NOAA Atlas 14

Return Period: 100 year

Allowable Discharge: 0.00 cfs/acre Per Grantsville City Standards

Allowable Discharges

Storm Drain Discharge: 0.00 cfs

Other Discharge: 0.00 cfs

Total Discharge: 0 cfs

Source:

Weighted "C" Value

Surface Type	Area (sf)	"C" Value	C*A
Homes (rooftops)	220,000	0.85	187,000
Drives	35,200	0.85	29,920
Roadway and Sidewalk	279,064	0.85	237,204
Landscape	862,713	0.15	129,407
Totals	1,396,977		583,531.35

Weighted "C" Value: 0.42

Drainage Calculations

Duration	Intensity	Runoff C	Area	Rainfall	accumulate Flow	Allowable Discharge	Discharge	Required Storage
min	in/hr		Ac	cfs	cf	cfs	cf	cf
15.0	4.56	0.42	32.07	61.09	54,977	0.00	0	54,977
30.0	3.07	0.42	32.07	41.13	74,026	0.00	0	74,026
60.0	1.90	0.42	32.07	25.45	91,629	0.00	0	91,629
120.0	1.11	0.42	32.07	14.87	107,061	0.00	0	107,061
180.0	0.76	0.42	32.07	10.18	109,955	0.00	0	109,955
360.0	0.41	0.42	32.07	5.49	118,635	0.00	0	118,635
720.0	0.24	0.42	32.07	3.22	138,890	0.00	0	138,890
1440.0	0.14	0.42	32.07	1.88	162,038	0.00	0	162,038

Maximum Storage Requirement: 162,038

Maximum Storage Requirement (ac-ft): 3.72

Retention Basin Design

Storage Requirement: 162,038 cf

Allowable Depth: 4.5 ft

Retention Pond Volume: 168,772 cf

Roadway Sump Storage: 0 cf

Retention Calculated Using Basic Geometry of a Trapezoidal Trench

Total Storage: 168,772

RETENTION ADEQUATE

LOT RETENTION POND DETAIL  
N.T.S.

LOT RETENTION POND DETAIL  
N.T.S.

RETENTION POND DETAIL  
N.T.S.

PIPE CAPACITY TABLE (BASED ON MANNING'S EQUATION)									
Pipe Name	Size (Inches)	Length (Feet)	Slope (%)	C-VALUE	Intensity (In/Hr)	Tc (Min.)	Qcap (CFS)	Q10 (CFS)	
Pipe - (141)	15	37	1.48%	0.42	1.55	30	7.9	0.000	
Pipe - (142)	15	29	3.84%	0.42	1.55	30	12.7	0.000	
Pipe - (143)	15	428	1.22%	0.42	1.55	30	7.1	0.000	
Pipe - (143) (1)	15	215	0.50%	0.42	1.55	30	4.6	0.000	
Pipe - (144)	15	23	3.44%	0.42	1.55	30	12.0	0.000	
Pipe - (145)	12	50	0.29%	0.42	1.55	30	1.9	0.000	
REACH - (1)	24	36	0.50%	0.42	1.55	30	16.0	14.920	
REACH - (2)	15	43	0.50%	0.42	1.55	30	4.6	3.510	
REACH - (3)	24	140	0.55%	0.42	1.55	30	16.8	11.340	
REACH - (4)	15	69	0.50%	0.42	1.55	30	4.6	3.600	
REACH - (5)	15	43	0.50%	0.42	1.55	30	4.6	1.080	
REACH - (6)	15	443	0.50%	0.42	1.55	30	4.6	2.520	
REACH - (7)	15	35	0.50%	0.42	1.55	30	4.6	2.140	
REACH - (8)	15	36	0.50%	0.42	1.55	30	4.6	0.850	
REACH - (9)	15	377	0.50%	0.42	1.55	30	4.6	1.290	
REACH - (10)	15	37	0.54%	0.42	1.55	30	4.8	0.490	
REACH - (11)	15	32	0.50%	0.42	1.55	30	4.6	0.800	
REACH - (12)	15	316	0.50%	0.42	1.55	30	4.6	0.490	
REACH - (13)	15	19	0.50%	0.42	1.55	30	4.6	0.310	
REACH - (14)	15	63	0.50%	0.42	1.55	30	4.6	0.490	

PIPE CAPACITY TABLE (BASED ON MANNING'S EQUATION)									
Pipe Name	Size (Inches)	Length (Feet)	Slope (%)	C-VALUE	Intensity (In/Hr)	Tc (Min.)	Qcap (CFS)	Q10 (CFS)	
REACH - (15)	15	41	1.47%	0.42	1.55	30	7.9	0.370	
REACH - (16)	18	316	1.05%	0.42	1.55	30	10.8	7.440	
REACH - (17)	15	65	0.57%	0.42	1.55	30	4.9	2.310	
REACH - (18)	15	43	0.50%	0.42	1.55	30	4.6	1.470	
REACH - (19)	15	474	0.50%	0.42	1.55	30	4.6	0.840	
REACH - (20)	15	78	0.50%	0.42	1.55	30	4.6	0.680	
REACH - (21)	15	64	0.50%	0.42	1.55	30	4.6	0.330	
REACH - (22)	15	71	0.56%	0.42	1.55	30	4.8	0.350	
REACH - (23)	15	37	0.51%	0.42	1.55	30	4.6	0.350	
REACH - (24)	15	148	0.97%	0.42	1.55	30	6.4	5.130	
REACH - (25)	15	41	0.50%	0.42	1.55	30	4.6	0.110	
REACH - (26)	15	59	0.50%	0.42	1.55	30	4.6	0.000	
REACH - (27)	15	183	0.45%	0.42	1.55	30	4.3	0.000	

MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
STORMWATER REPORT

REVISION BLOCK		DESCRIPTION					
#	DATE	1	2	3	4	5	6

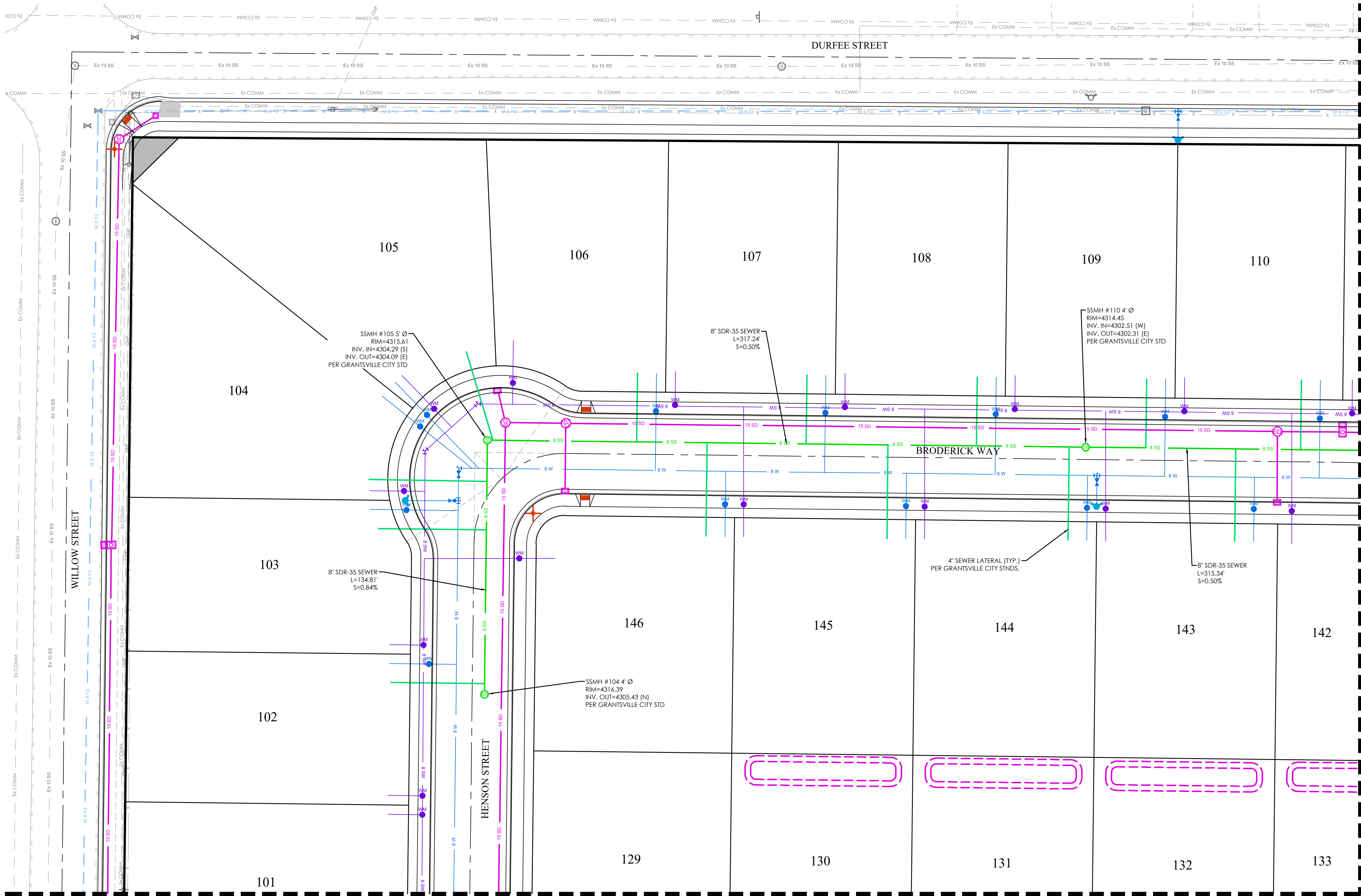
STORMWATER  
REPORT

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Date: 09/14/22	Job #: 21-0377
Sheet:	

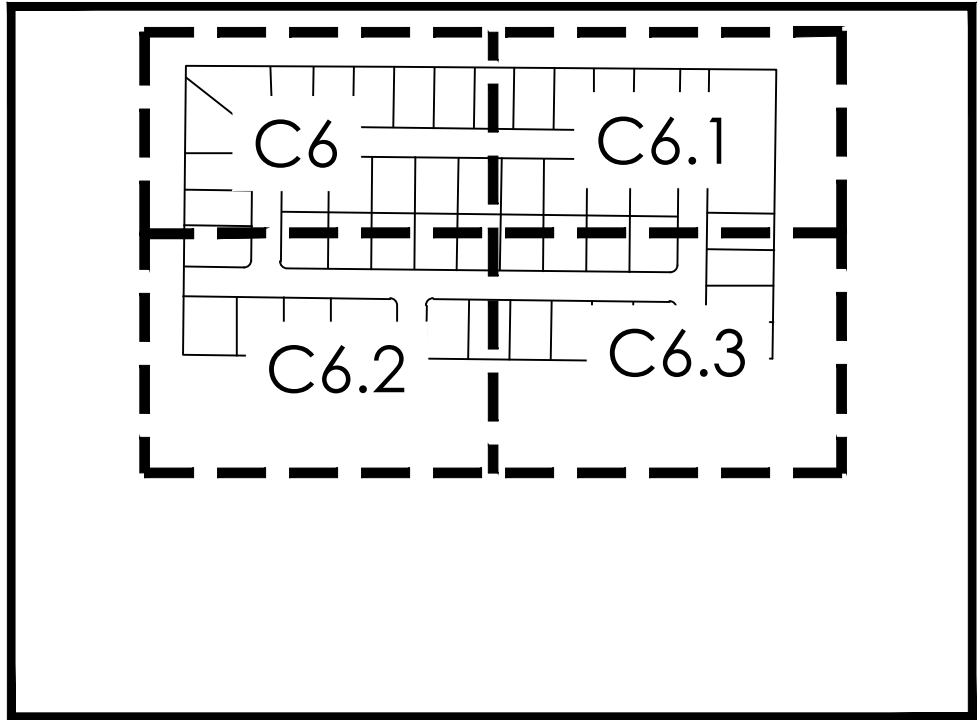
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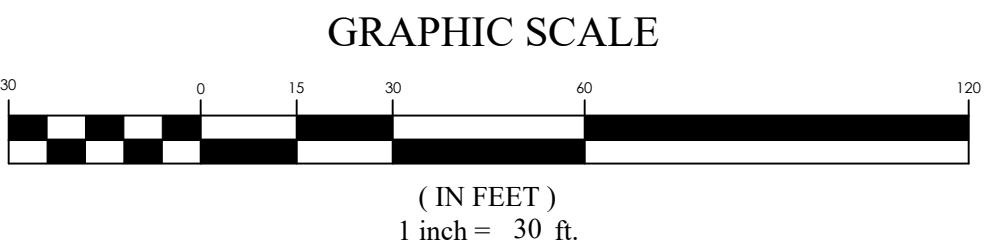




LEGEND	
	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
	15" STORM DRAIN
	8" SANITARY SEWER
	8" CULINARY WATER
	8" SECONDARY WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	EXIST. SECONDARY WATER
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION



- NOTES:
1. CONTRACTOR TO ENSURE THAT THERE IS 18" MIN. OF VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. WHEN SEPARATION CAN NOT BE OBTAINED, AN EXCEPTION CAN BE APPLIED FOR WITH ADDITIONAL MEASURES TO PROTECT PUBLIC HEALTH, IN ACCORDANCE WITH UAC R309-105-6(2)(B). IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  2. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED BY GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING CITY RIGHT-OF-WAY.
  3. 10' MIN. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
SEWER PLAN

REVISION BLOCK	
#	DESCRIPTION
1	
2	
3	
4	
5	
6	

SEWER PLAN

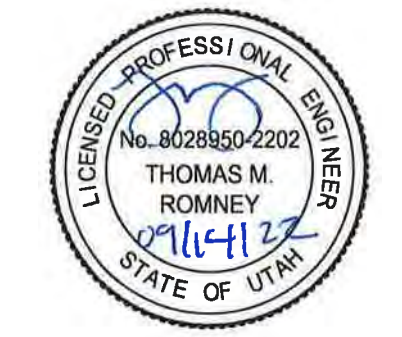
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Drawn: DCJ  
Job #: 21-0377

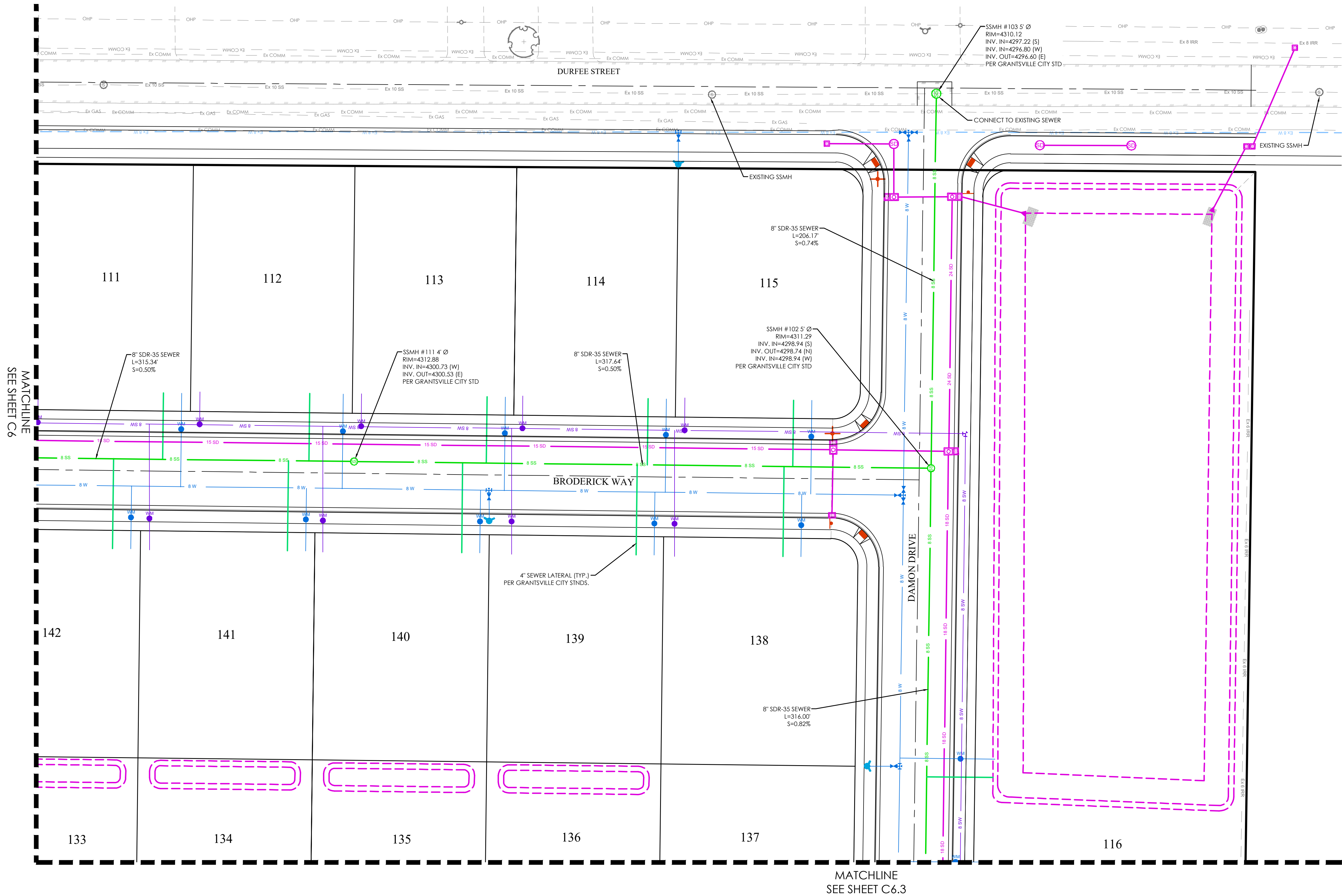
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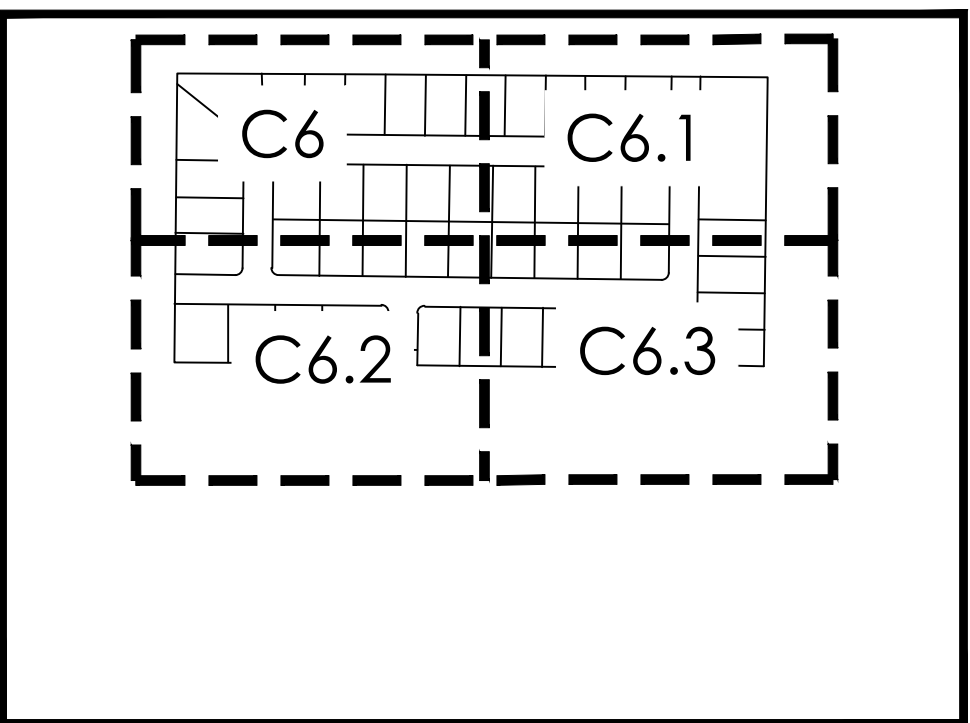






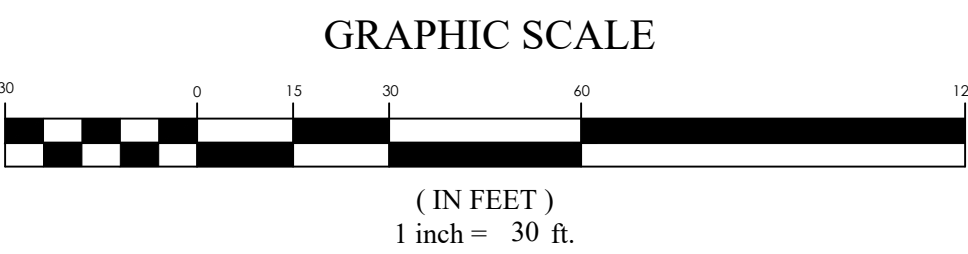
**LEGEND**

---	BOUNDARY
---	ROW
---	CENTERLINE
---	LOT LINE
---	EASEMENT
---	15" STORM DRAIN
---	8" SS
---	8" W
---	8" SW
---	8" SANITARY SEWER
---	8" CULINARY WATER
---	8" SECONDARY WATER
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
---	EXIST. CONTOUR MAJOR
---	EXIST. CONTOUR MINOR
---	SIGN
---	STREET LIGHT
---	SD MH, INLET, AND COMBO
---	SEWER MANHOLE
---	CULINARY VALVE, TEE & BEND
---	SECONDARY VALVE, TEE & BEND
---	WATER BLOW-OFF
---	FIRE HYDRANT
---	STREET MONUMENT (TO BE SET)
---	EXIST. STREET MONUMENT
---	EXIST. SD INLET & MH
---	EXIST. SEWER MH
---	EXIST. VALVE, TEE, & BEND
---	EXIST. FIRE HYDRANT
---	SPOT ELEVATION



KEY MAP

- NOTES:
1. CONTRACTOR TO ENSURE THAT THERE IS 18" MIN. OF VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. WHEN SEPARATION CAN NOT BE OBTAINED, AN EXCEPTION CAN BE APPLIED FOR WITH ADDITIONAL MEASURES TO PROTECT PUBLIC HEALTH, IN ACCORDANCE WITH UAC R309-105-6(2)(B). IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  2. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED BY GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING CITY RIGHT-OF-WAY.
  3. 10' MIN. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.



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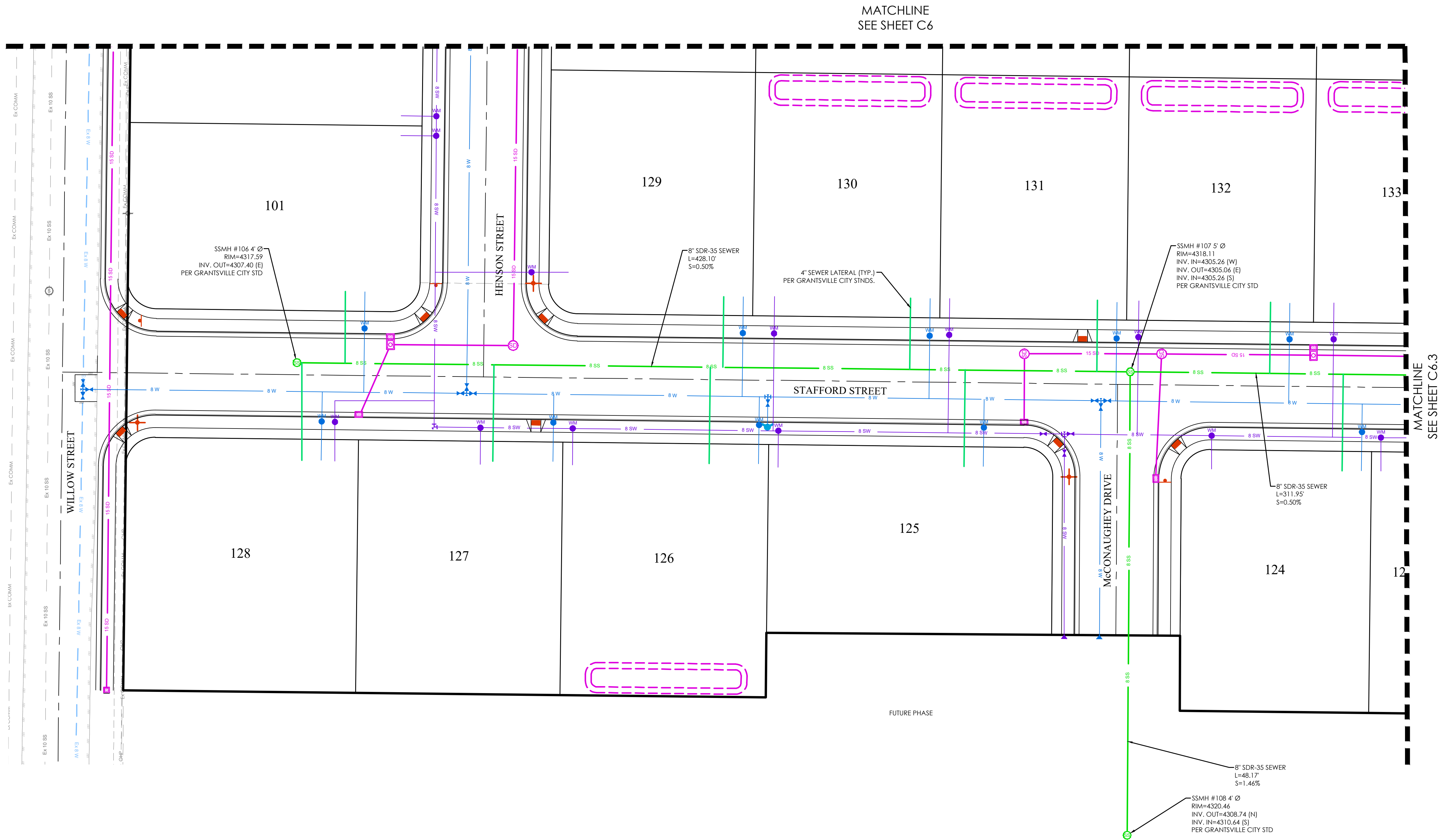
MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
SEWER PLAN

REVISION BLOCK	
#	DESCRIPTION
1	
2	
3	
4	
5	
6	

SEWER PLAN

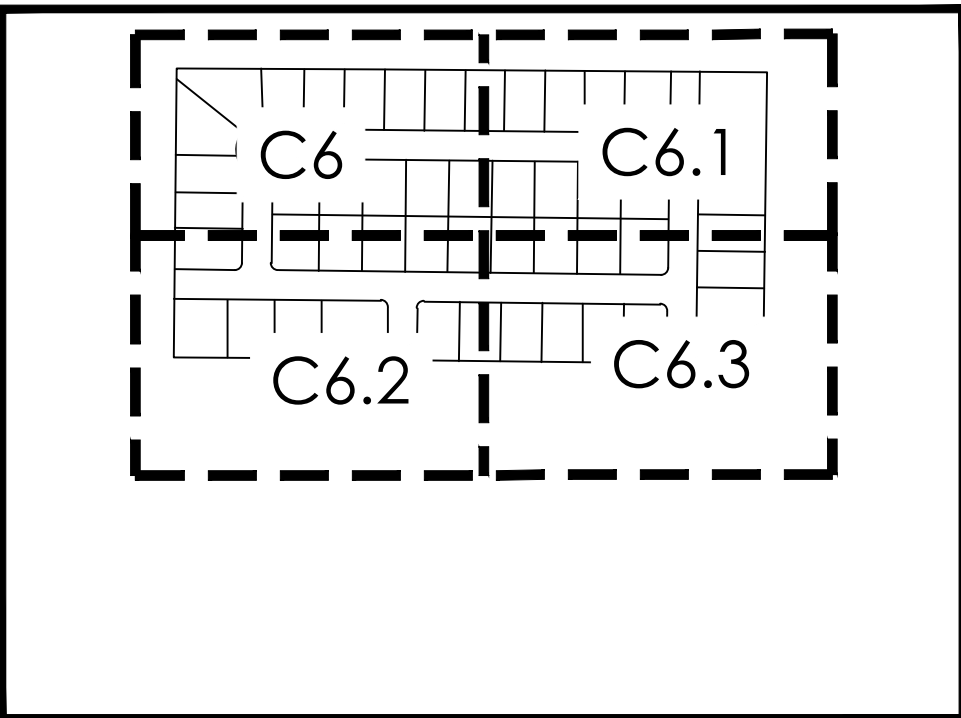
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Date: 09/14/22	Job #: 21-0377
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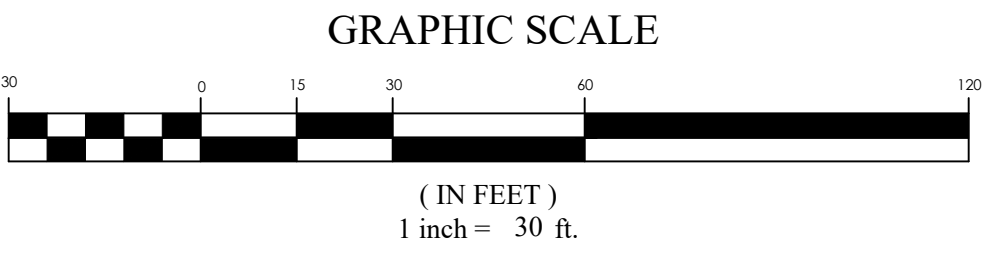


LEGEND

BOUNDARY	15" STORM DRAIN
ROW	8" SS
CENTERLINE	8" W
LOT LINE	8" SW
EASEMENT	XXXX
CONTOUR MAJOR	XXXX
CONTOUR MINOR	XXXX
EXIST. STORM DRAIN	XXXX
EXIST. SANITARY SEWER	XXXX
EXIST. CULINARY WATER	XXXX
EXIST. SECONDARY WATER	XXXX
EXIST. FENCE	XXXX
EXIST. CONTOUR MAJOR	XXXX
EXIST. CONTOUR MINOR	XXXX
SIGN	XXXX
STREET LIGHT	XXXX
SEWER MANHOLE	XXXX
CULINARY VALVE, TEE & BEND	XXXX
SECONDARY VALVE, TEE & BEND	XXXX
WATER BLOW-OFF	XXXX
FIRE HYDRANT	XXXX
STREET MONUMENT (TO BE SET)	XXXX
EXIST. STREET MONUMENT	XXXX
EXIST. SD INLET & MH	XXXX
EXIST. SEWER MH	XXXX
EXIST. VALVE, TEE, & BEND	XXXX
EXIST. FIRE HYDRANT	XXXX
SPOT ELEVATION	XXXX



- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS 18" MIN. OF VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. WHEN SEPARATION CAN NOT BE OBTAINED, AN EXCEPTION CAN BE APPLIED FOR WITH ADDITIONAL MEASURES TO PROTECT PUBLIC HEALTH, IN ACCORDANCE WITH UAC R309-105-6(2)(B). IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  - A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED BY GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING CITY RIGHT-OF-WAY.
  - 10' MIN. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.

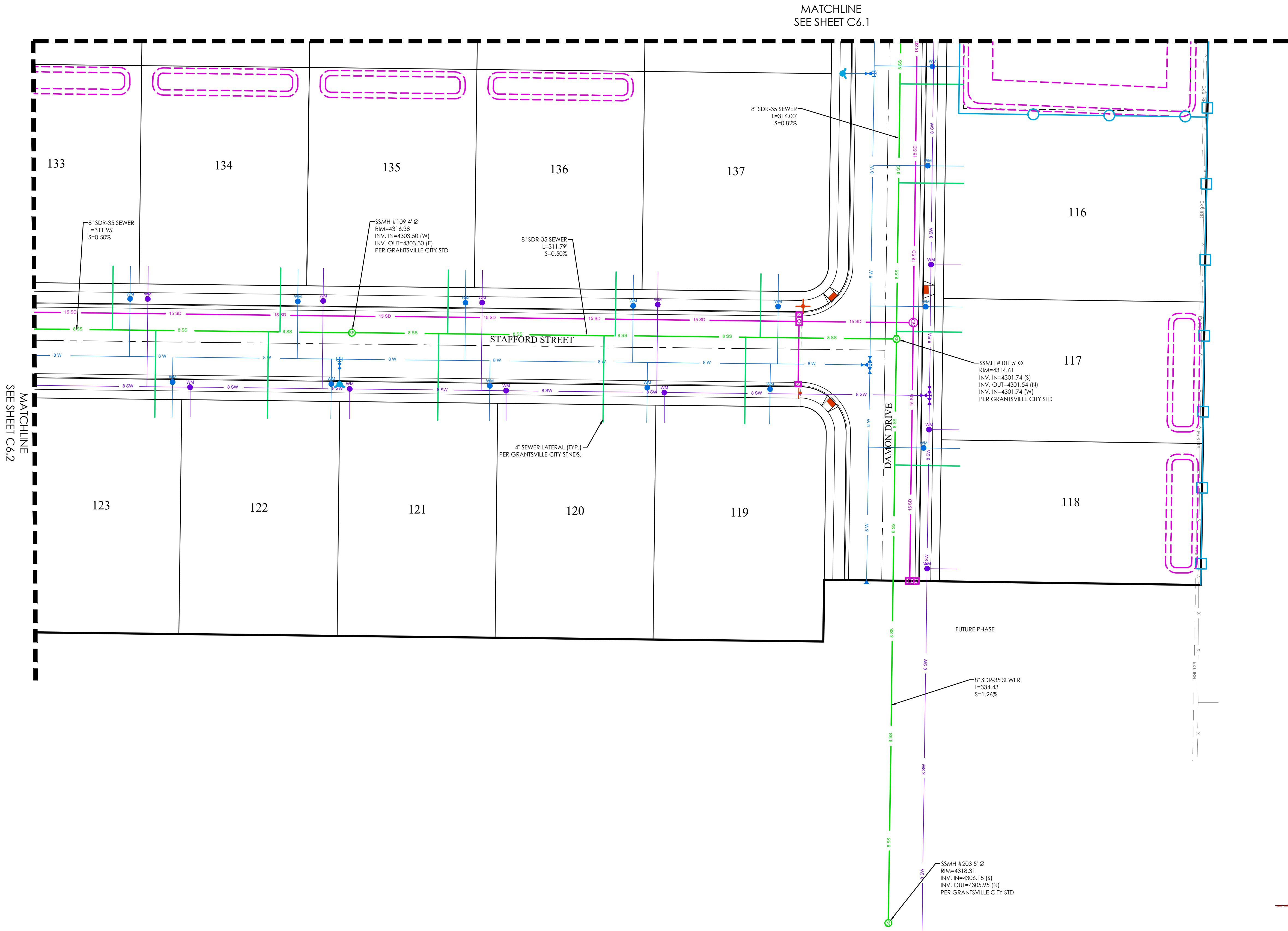


**MATTHEW'S MEADOWS SUBDIVISION PHASE 1**  
**GRANTSVILLE, UT**  
**SEWER PLAN**

REVISION BLOCK

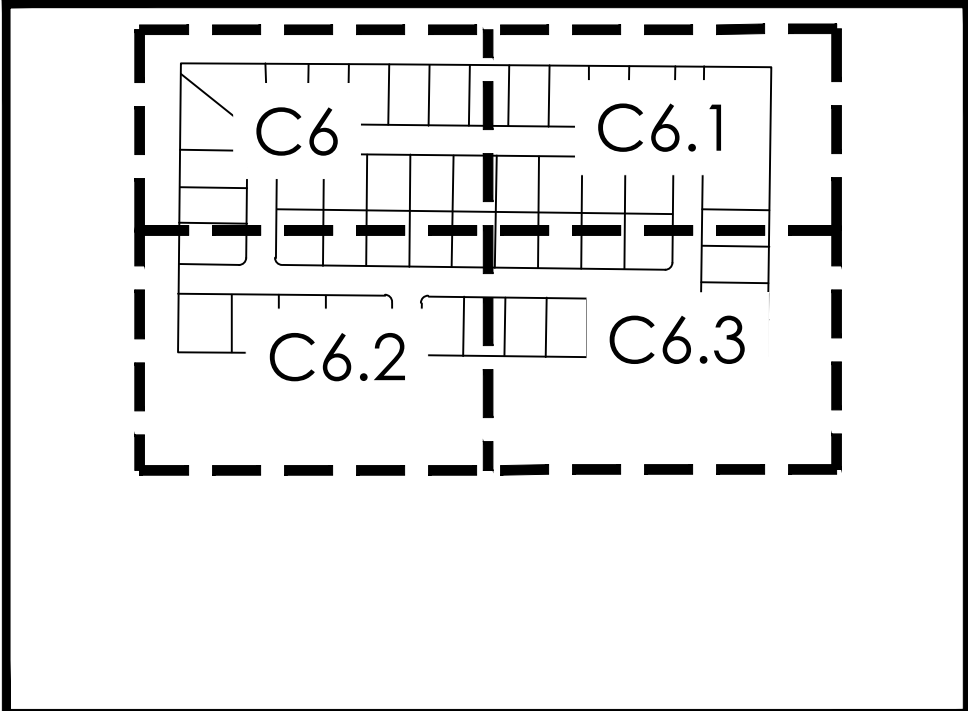
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2	09/14/22	Final Design
3	09/14/22	Final Design
4	09/14/22	Final Design
5	09/14/22	Final Design
6	09/14/22	Final Design





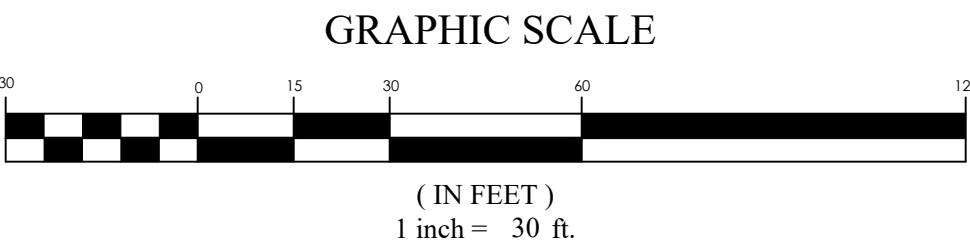
**LEGEND**

---	BOUNDARY
---	ROW
---	CENTERLINE
---	LOT LINE
---	EASEMENT
---	15" STORM DRAIN
---	8" SS
---	8" W
---	8" SW
---	8" CULINARY WATER
---	8" SECONDARY WATER
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
---	EXIST. CONTOUR MAJOR
---	EXIST. CONTOUR MINOR
+	SIGN
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+	SEWER MANHOLE
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+	SECONDARY VALVE, TEE & BEND
+	WATER BLOW-OFF
+	FIRE HYDRANT
+	STREET MONUMENT (TO BE SET)
+	EXIST. STREET MONUMENT
+	EXIST. SD INLET & MH
+	EXIST. SEWER MH
+	EXIST. VALVE, TEE, & BEND
+	EXIST. FIRE HYDRANT
+	SPOT ELEVATION

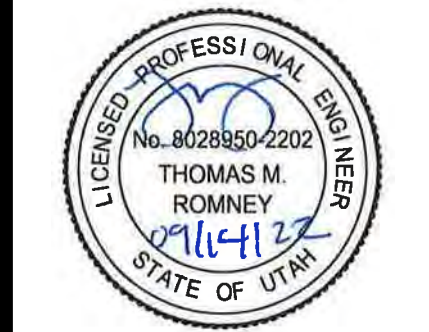


KEY MAP

- NOTES:
1. CONTRACTOR TO ENSURE THAT THERE IS 18" MIN. OF VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. WHEN SEPARATION CAN NOT BE OBTAINED, AN EXCEPTION CAN BE APPLIED FOR WITH ADDITIONAL MEASURES TO PROTECT PUBLIC HEALTH, IN ACCORDANCE WITH UAC R309-105-6(2)(B). IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
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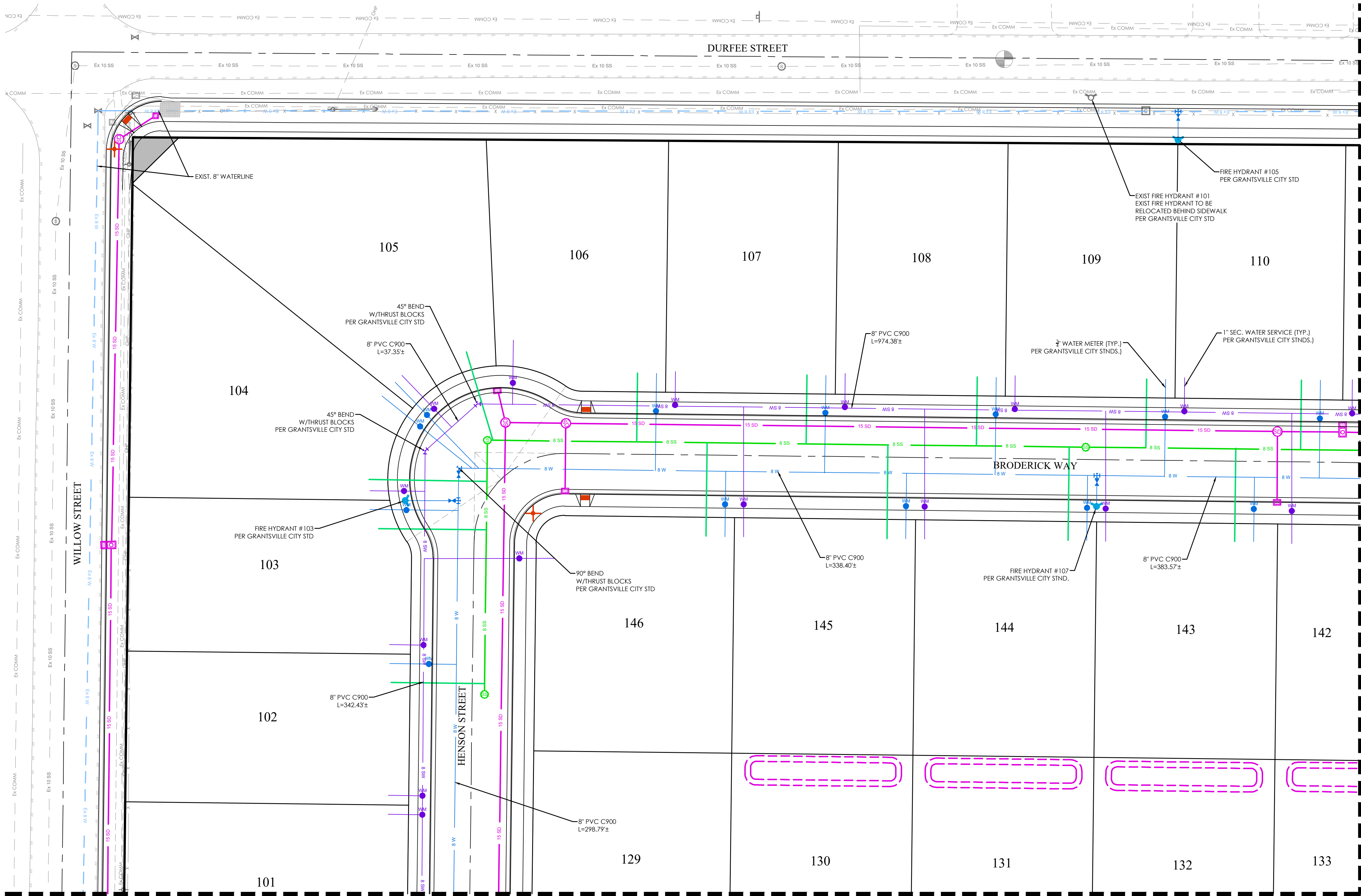
MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
SEWER PLAN

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
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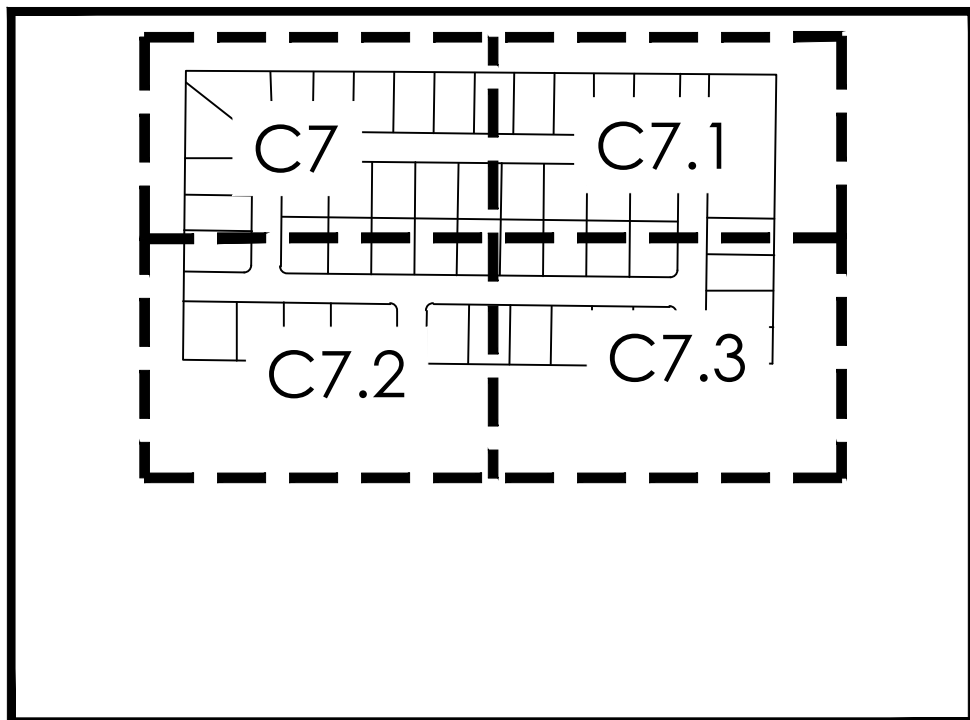
**SEWER PLAN**

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Sheet:	C6.3



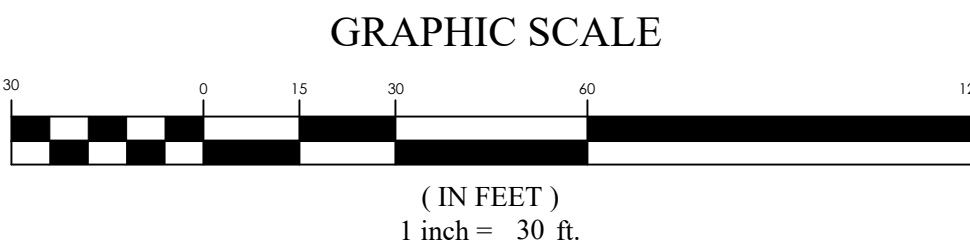


LEGEND	
	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
	15" STORM DRAIN
	8" SANITARY SEWER
	8" CULINARY WATER
	8" SECONDARY WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	EXIST. SECONDARY WATER
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION



KEY MAP

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1. CONTRACTOR TO ENSURE THAT THERE IS 18" MIN. OF VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES. WHEN SEPARATION CAN NOT BE OBTAINED, AN EXCEPTION CAN BE APPLIED FOR WITH ADDITIONAL MEASURES TO PROTECT PUBLIC HEALTH, IN ACCORDANCE WITH UAC R309-105-6(2)(B). IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  2. A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED BY GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING CITY RIGHT-OF-WAY.
  3. 10' MIN. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.



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MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
WATER PLAN

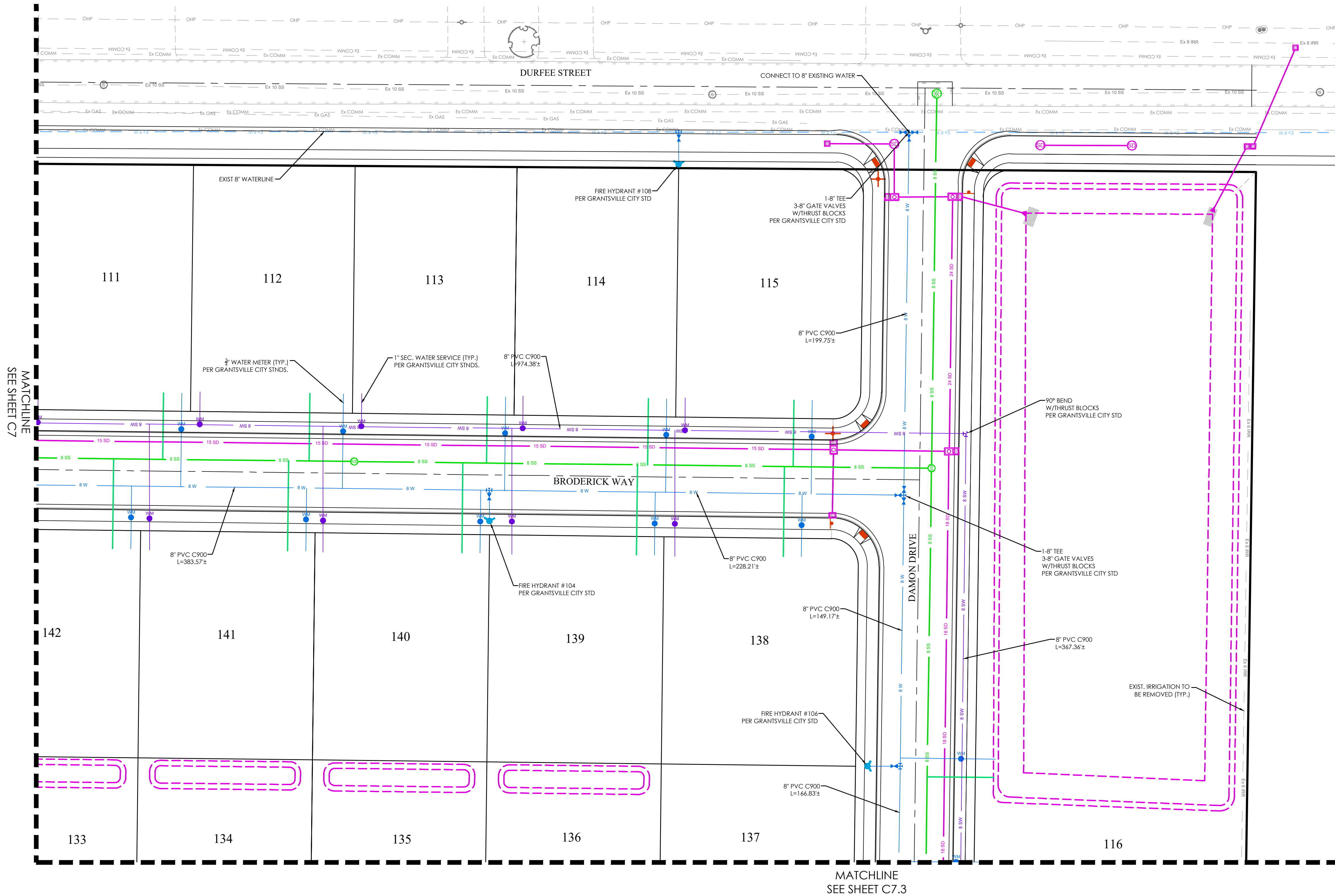
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WATER PLAN

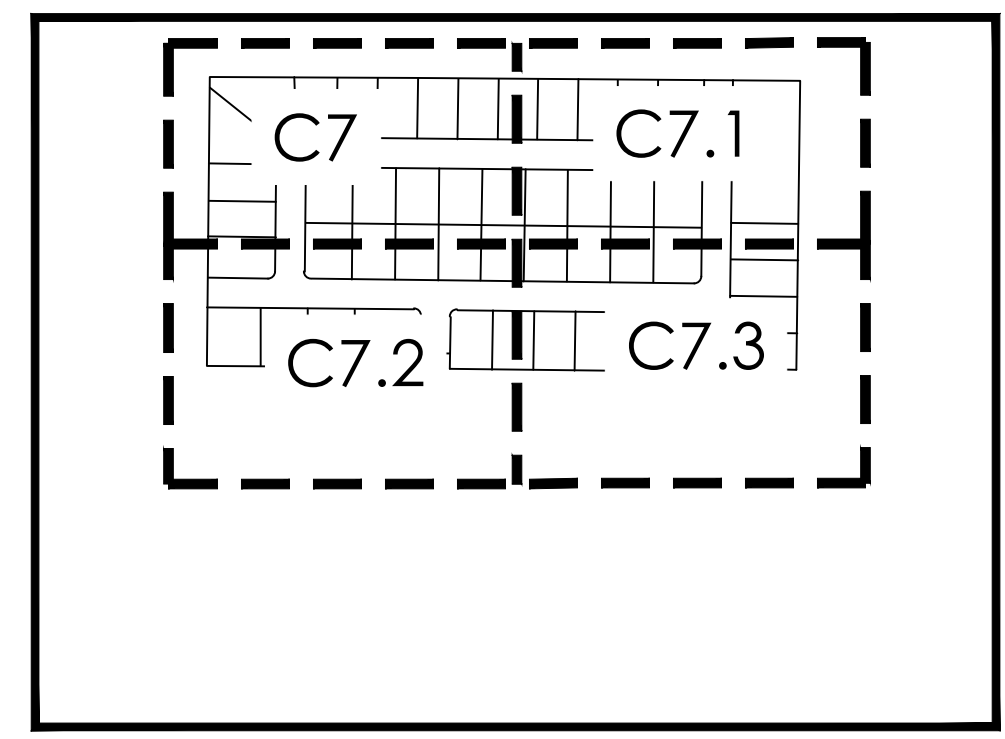
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Date: 09/14/22  
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Drawn: DCJ  
Job #: 21-0377



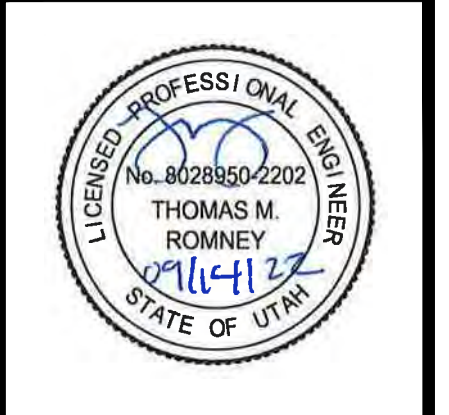
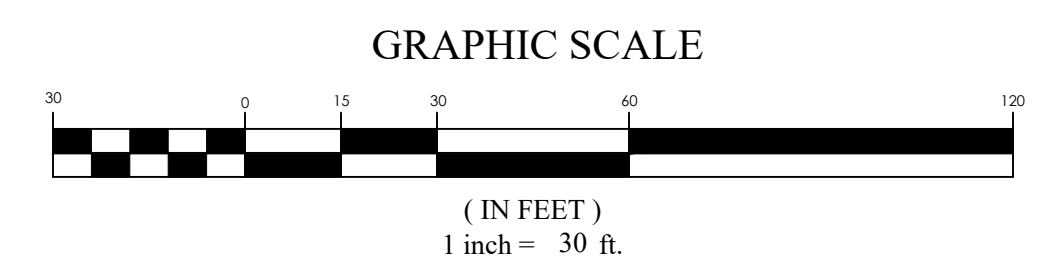
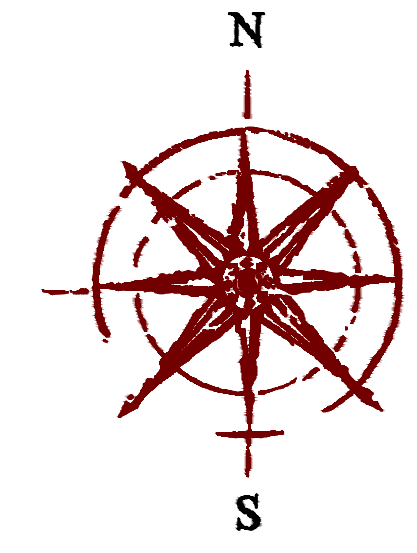


LEGEND	
[Symbol]	BOUNDARY
[Symbol]	ROW
[Symbol]	CENTERLINE
[Symbol]	LOT LINE
[Symbol]	EASEMENT
[Symbol]	15" STORM DRAIN
[Symbol]	8" SANITARY SEWER
[Symbol]	8" CULINARY WATER
[Symbol]	8" SECONDARY WATER
[Symbol]	CONTOUR MAJOR
[Symbol]	CONTOUR MINOR
[Symbol]	EXIST. STORM DRAIN
[Symbol]	EXIST. SANITARY SEWER
[Symbol]	EXIST. CULINARY WATER
[Symbol]	EXIST. FENCE
[Symbol]	EXIST. CONTOUR MAJOR
[Symbol]	EXIST. CONTOUR MINOR
[Symbol]	SIGN
[Symbol]	STREET LIGHT
[Symbol]	SD MH, INLET, AND COMBO
[Symbol]	SEWER MANHOLE
[Symbol]	CULINARY VALVE, TEE & BEND
[Symbol]	SECONDARY VALVE, TEE & BEND
[Symbol]	WATER BLOW-OFF
[Symbol]	FIRE HYDRANT
[Symbol]	STREET MONUMENT (TO BE SET)
[Symbol]	EXIST. STREET MONUMENT
[Symbol]	EXIST. SD INLET & MH
[Symbol]	EXIST. SEWER MH
[Symbol]	EXIST. VALVE, TEE, & BEND
[Symbol]	EXIST. FIRE HYDRANT
[Symbol]	SPOT ELEVATION



KEY MAP

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MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
WATER PLAN

REVISION BLOCK	
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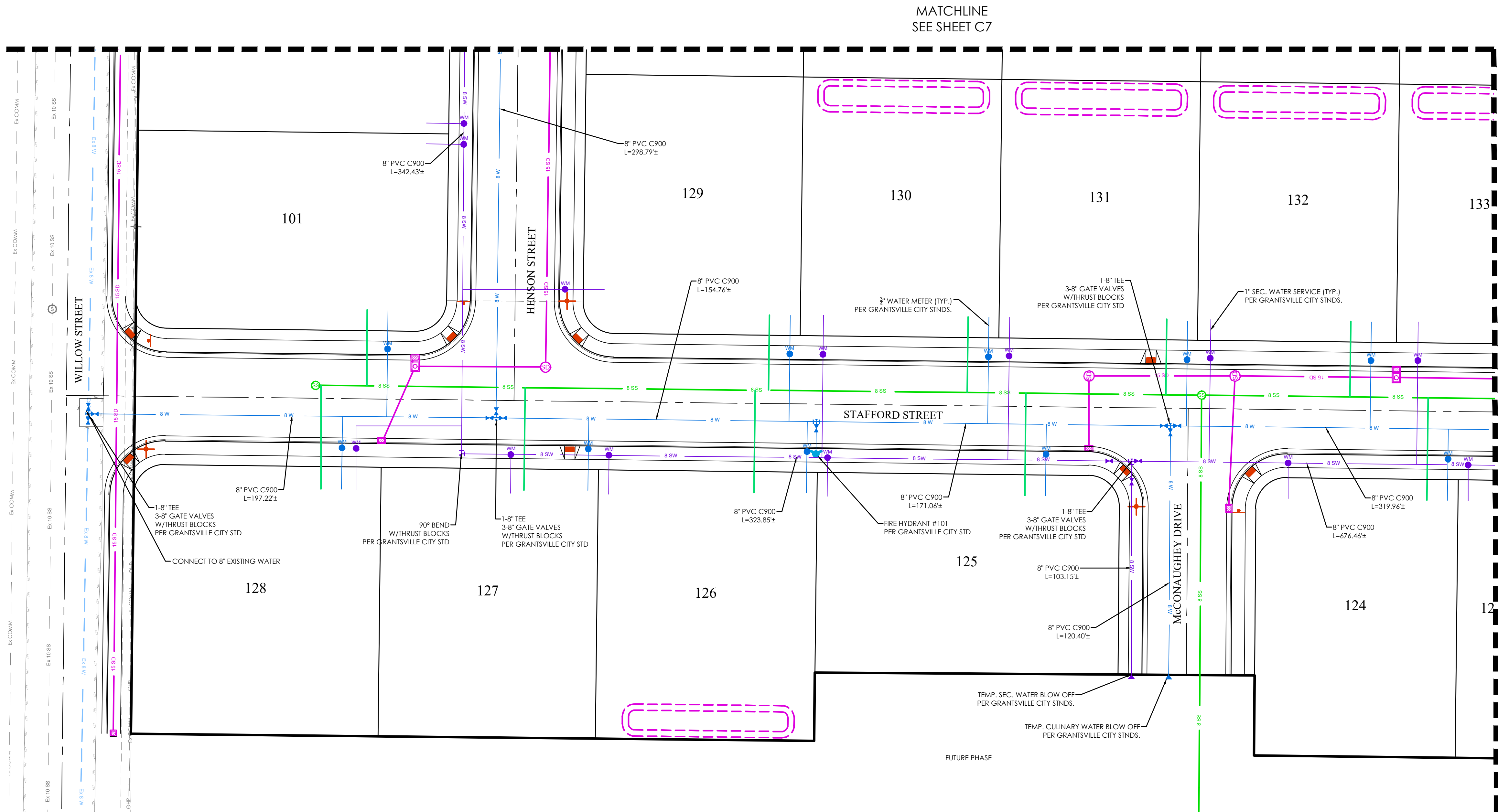
**WATER PLAN**

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Date: 09/14/22	Job #: 21-0377
Sheet:	C7.1

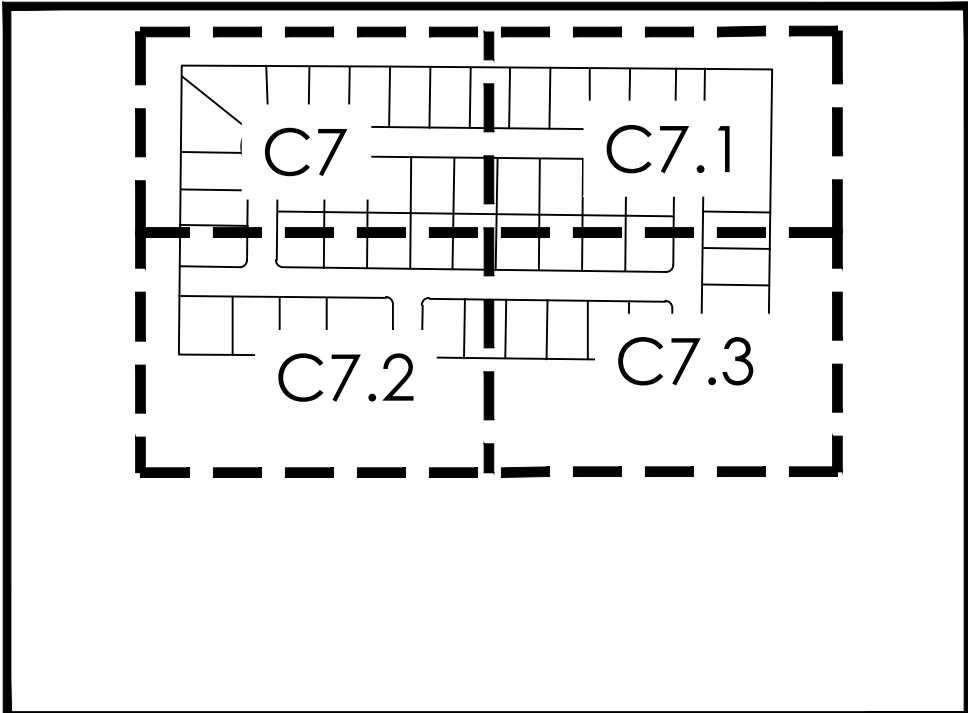
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SEE SHEET C7

MATCHLINE  
SEE SHEET C7.3



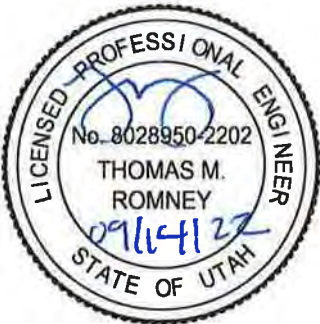
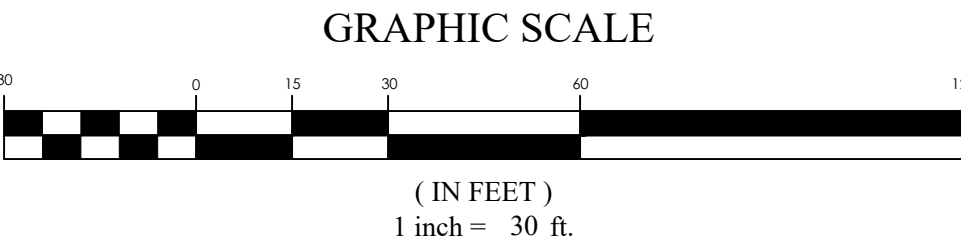


LEGEND	
	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
	15" STORM DRAIN
	8" SANITARY SEWER
	8" CULINARY WATER
	8" SECONDARY WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	EXIST. SECONDARY WATER
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION



KEY MAP

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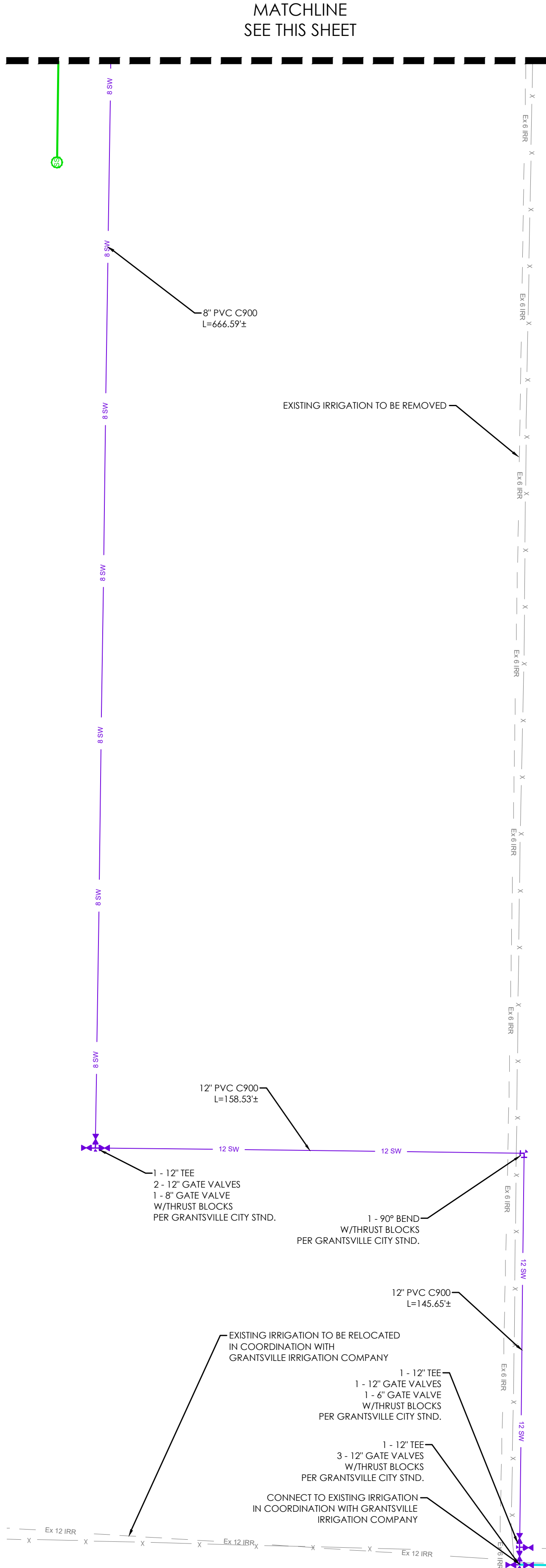
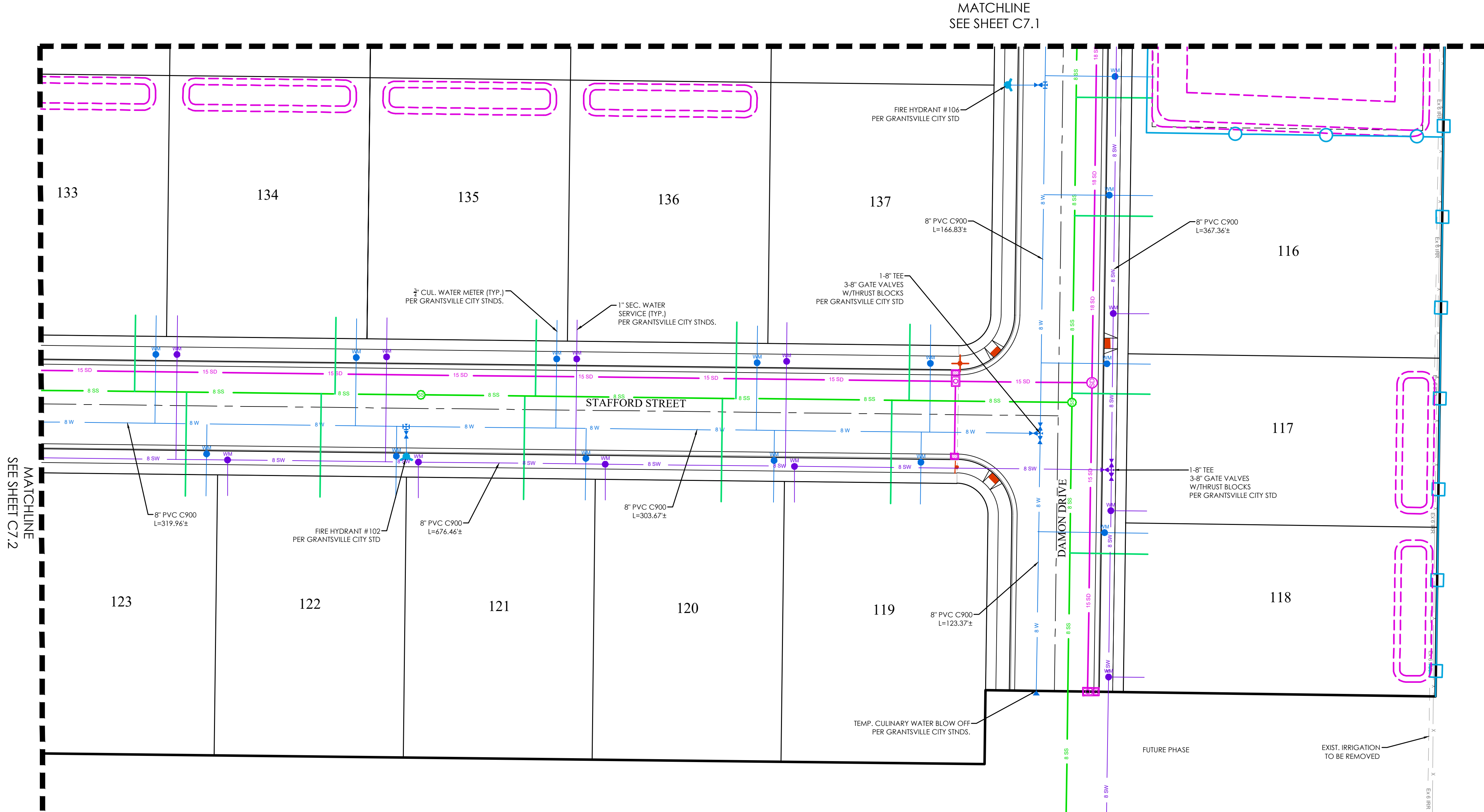
MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
WATER PLAN

REVISION BLOCK	
#	DESCRIPTION
1	
2	
3	
4	
5	
6	

**WATER PLAN**

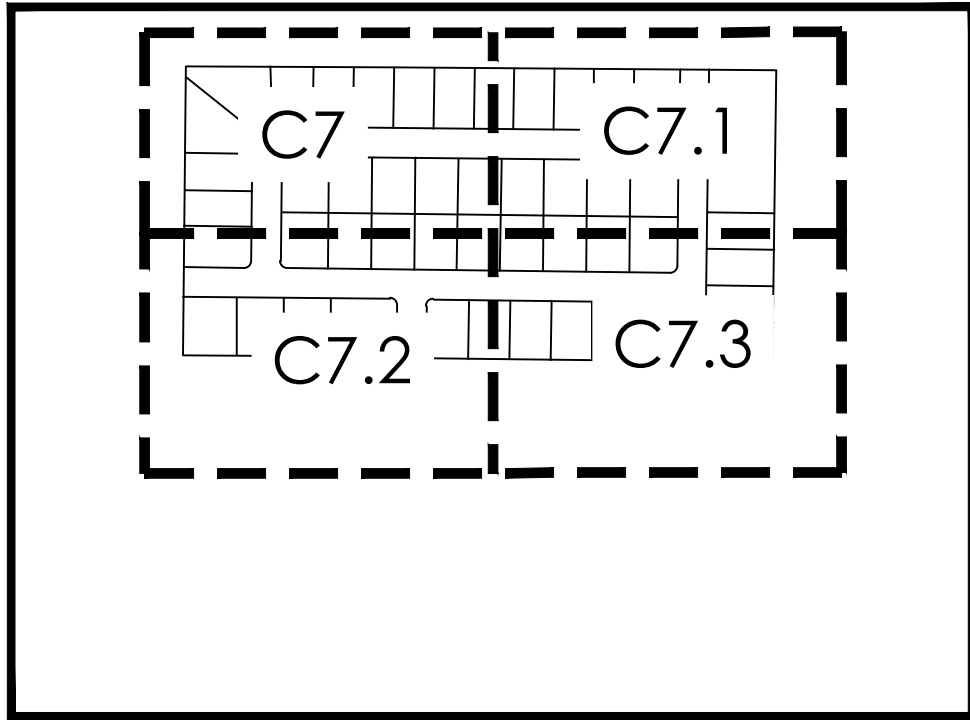
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Date: 09/14/22	Job #: 21-0377
Sheet:	C7.2





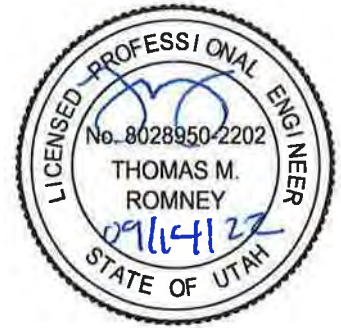
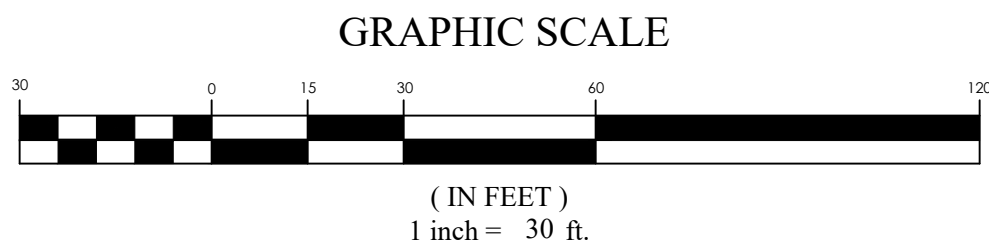
**LEGEND**

---	BOUNDARY
---	ROW
---	CENTERLINE
---	LOT LINE
---	EASEMENT
---	15" STORM DRAIN
---	8" SANITARY SEWER
---	8" CULINARY WATER
---	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
+	SIGN
+	STREET LIGHT
+	SD MH, INLET, AND COMBO
+	SEWER MANHOLE
+	CULINARY VALVE, TEE & BEND
+	SECONDARY VALVE, TEE & BEND
+	WATER BLOW-OFF
+	FIRE HYDRANT
+	STREET MONUMENT (TO BE SET)
+	EXIST. STREET MONUMENT
+	EXIST. SD INLET & MH
+	EXIST. SEWER MH
+	EXIST. VALVE, TEE, & BEND
+	EXIST. FIRE HYDRANT
+	SPOT ELEVATION



KEY MAP

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**MATTHEWS MEADOWS SUBDIVISION PHASE 1**  
**GRANTSVILLE, UT**  
**WATER PLAN**

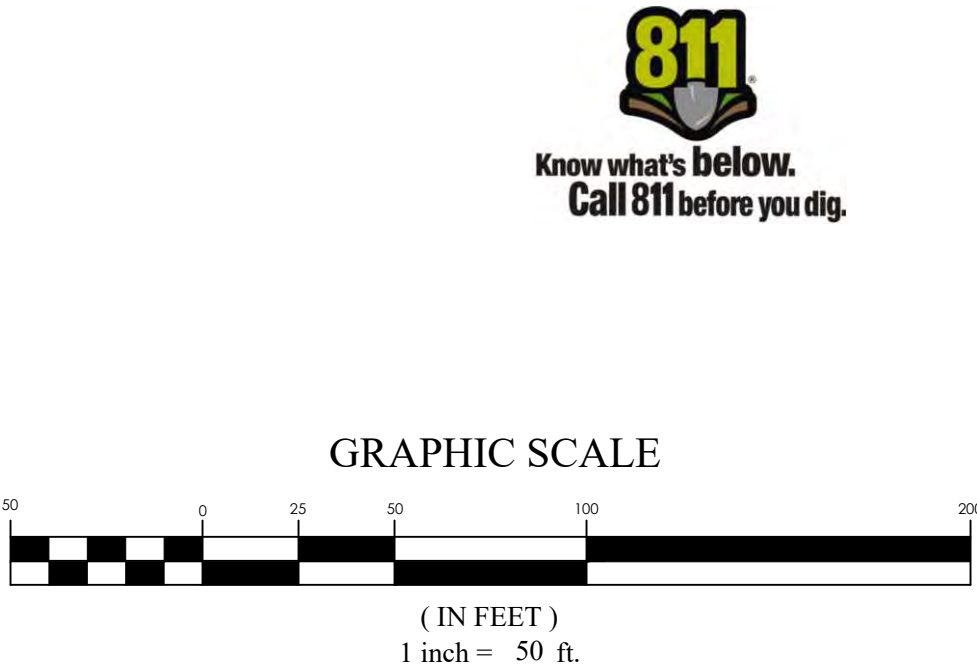
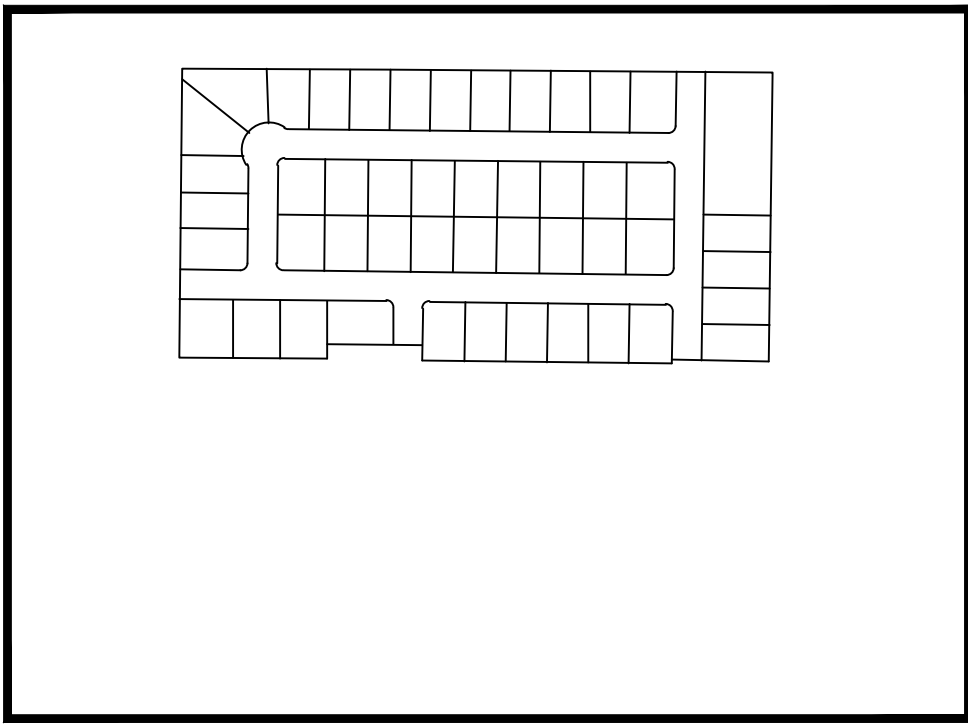
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2	
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**WATER PLAN**

Scale: 1"=30'  
Date: 09/14/22  
Sheet: C7.3

Drawn: DCJ  
Job #: 21-0377





### EROSION CONTROL LEGEND

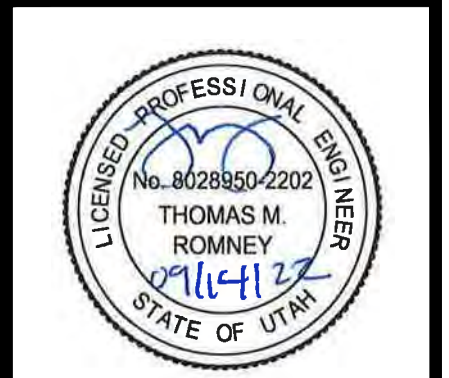
- CONSTRUCTION ENTRANCE
- MATERIALS STORAGE
- FUEL TANKS
- CONCRETE WASHOUT
- TRASH BIN
- PORTABLE TOILET

### EROSION CONTROL LEGEND

- CONSTRUCTION TRAILER
- INLET PROTECTION
- SURFACE WATERS
- OUTFALL
- SILT FENCE
- CUTBACK CURB
- FIBER ROLL



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## MATTHEWS MEADOWS SUBDIVISION PHASE 1 GRANTSVILLE, UT EROSION CONTROL PLAN

REVISION BLOCK	
#	DESCRIPTION
1	
2	
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6	

**EROSION CONTROL PLAN**

Scale: 1"=50'  
Date: 09/14/22  
Sheet: C8

Drawn: DCJ  
Job #: 21-0377

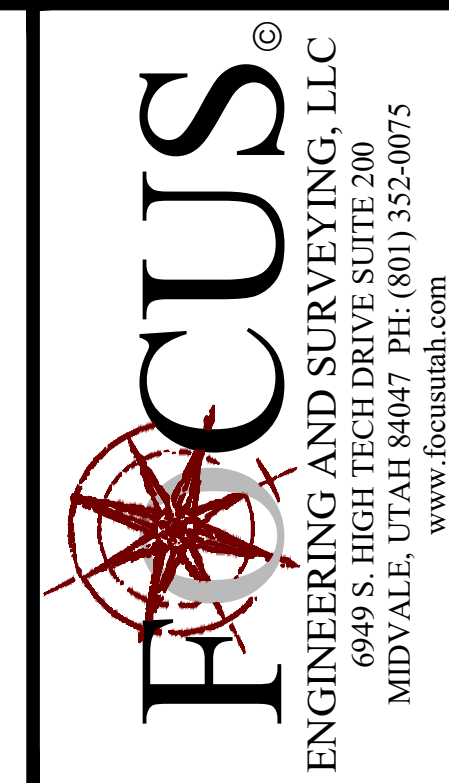




( IN FEET )  
1 inch = 50 ft.

_____	BOUNDARY
_____	ROW
_____	CENTERLINE
_____	LOT LINE
_____	EASEMENT
_____	15" SD
_____	8" STORM DRAIN
_____	8" SANITARY SEWER
_____	8" W
_____	8" CULINARY WATER
_____	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
_____	EXIST. SD
_____	EXIST. STORM DRAIN
_____	EXIST. SS
_____	EXIST. SANITARY SEWER
_____	EXIST. CULINARY WATER
_____	EXIST. FENCE
_____	EXIST. CONTOUR MAJOR
_____	EXIST. CONTOUR MINOR

	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
OVERALL SIGNAGE & STRIPING PLAN

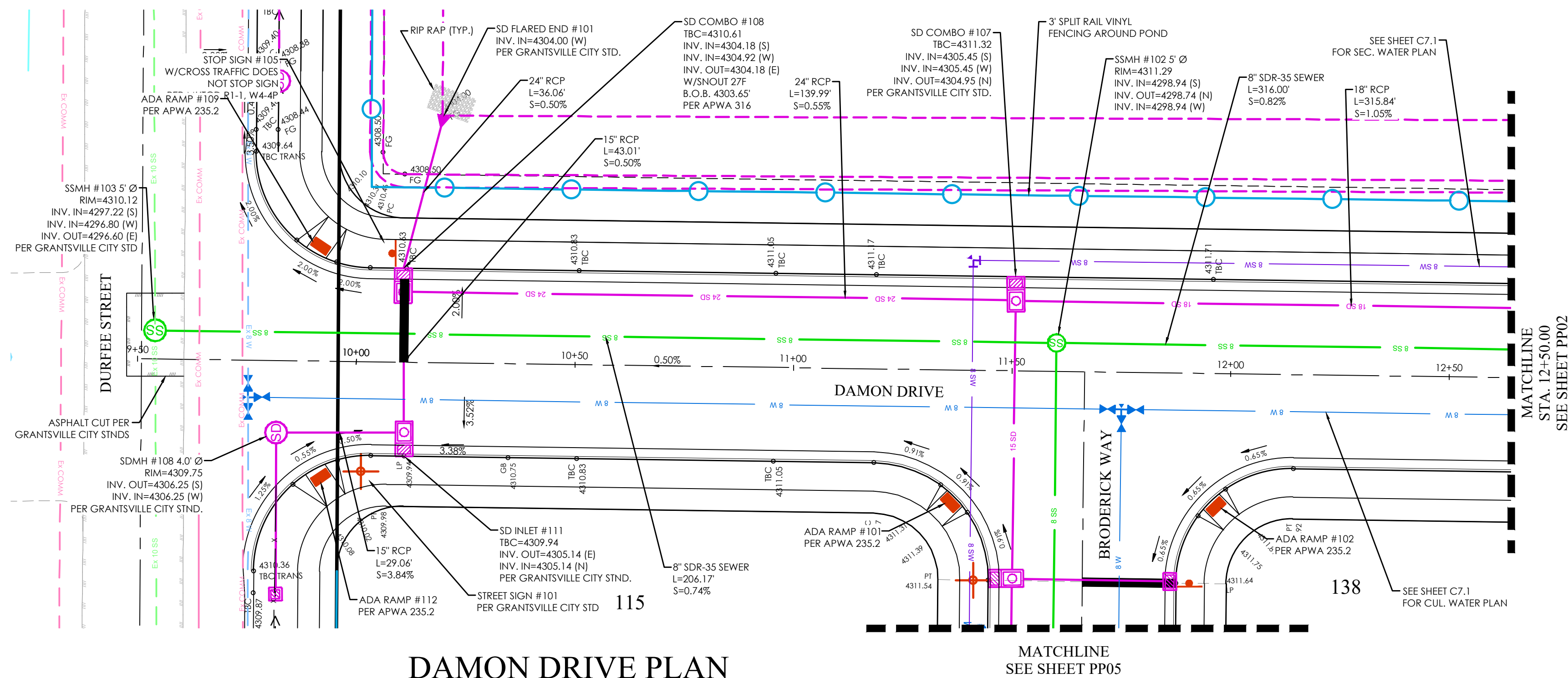
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## OVERALL SIGNAGE & STRIPING PLAN

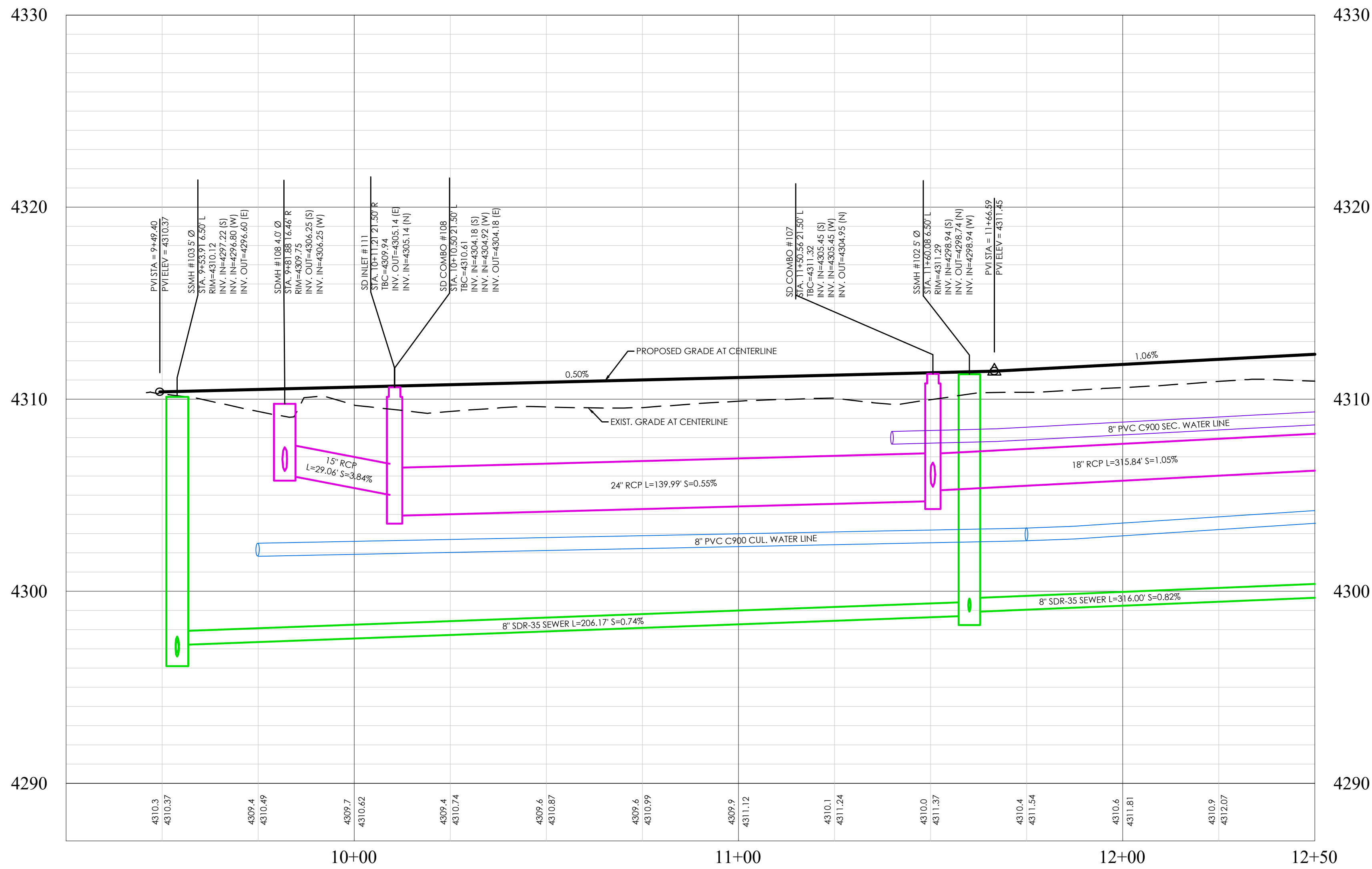
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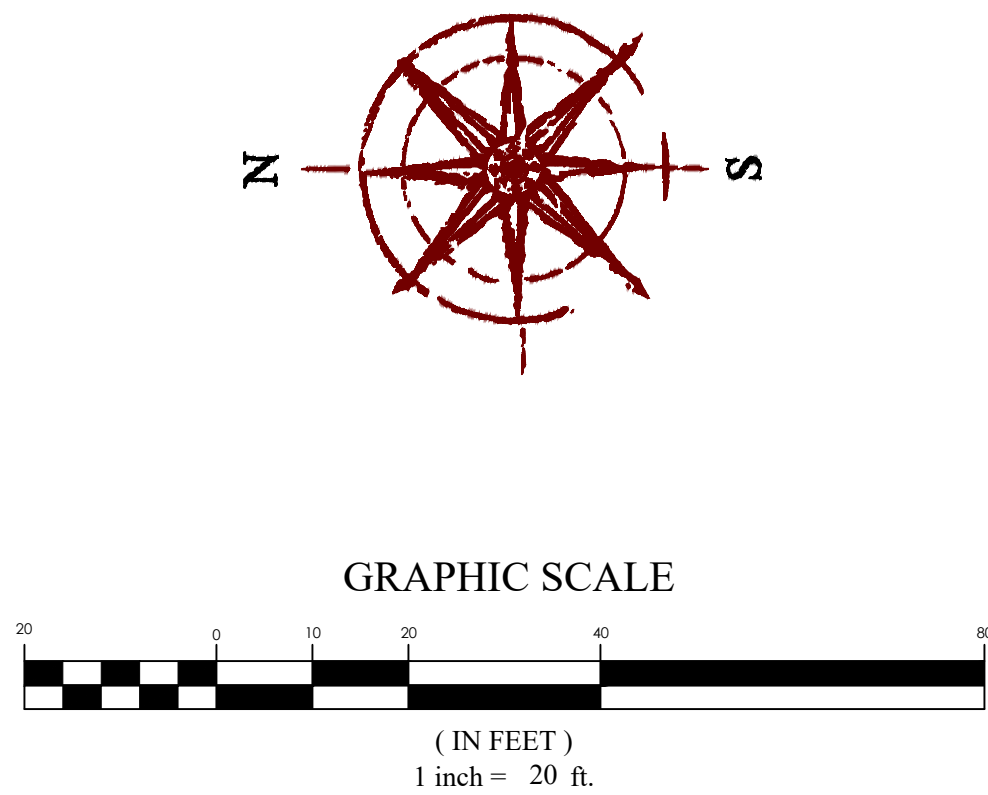




DAMON DRIVE PLAN

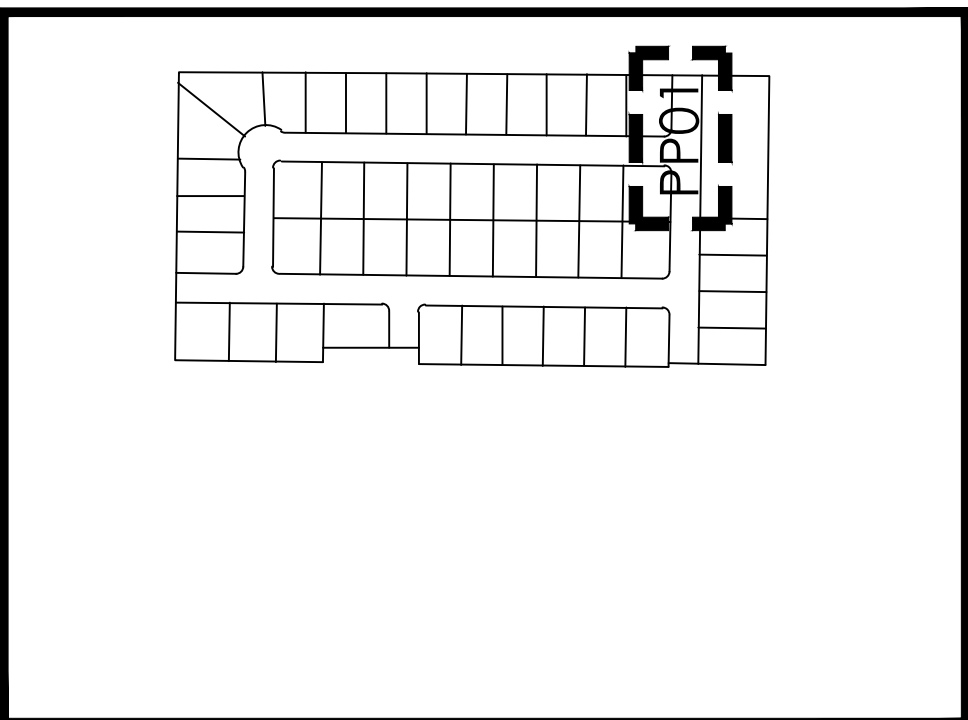


DAMON DRIVE PROFILE



LEGEND

---	BOUNDARY
---	CENTERLINE
---	LOT LINE
---	EASEMENT
---	15" SD
---	8" SS
---	8" W
---	8" SW
---	8" CULINARY WATER
---	8" SECONDARY WATER
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
---	EXIST. CONTOUR MAJOR
---	EXIST. CONTOUR MINOR
---	SIGN
---	STREET LIGHT
---	SD MH, INLET, AND COMBO
---	SEWER MANHOLE
---	CULINARY VALVE, TEE, & BEND
---	SECONDARY VALVE, TEE, & BEND
---	WATER BLOW-OFF
---	FIRE HYDRANT
---	STREET MONUMENT (TO BE SET)
---	EXIST. STREET MONUMENT
---	EXIST. SD INLET & MH
---	EXIST. SEWER MH
---	EXIST. VALVE, TEE, & BEND
---	EXIST. FIRE HYDRANT
---	SPOT ELEVATION



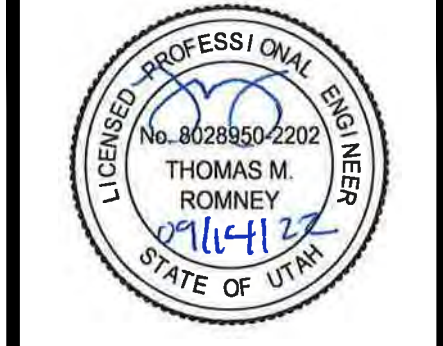
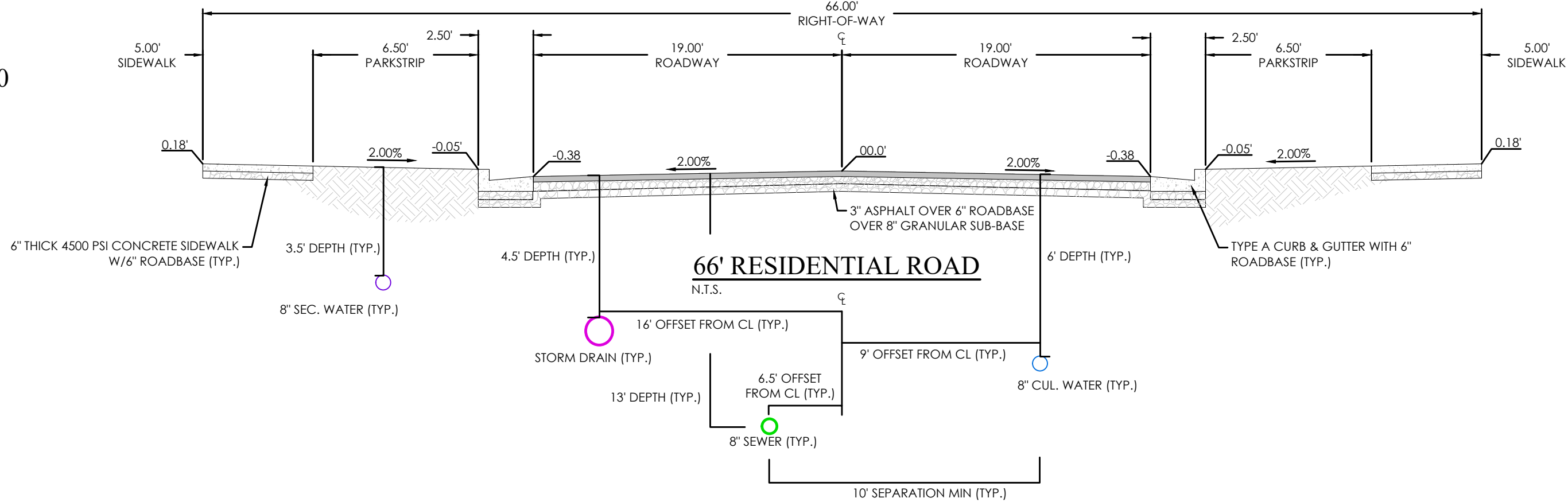
KEY MAP  
N.T.S.

- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  - PROVIDE 12" SUMPS ON ALL STORM WATER MANHOLES AND BOXES
  - ALL WATER SERVICES TO BE LOOPED UNDER THE STORM DRAIN WHERE EVER CONFLICTS OCCUR. AFTER REMOVING TOP SOIL, ALL FILL IN THE ROADWAY AREA TO BE A-1-A MATERIAL OR AS APPROVED BY THE GEOTECHNICAL REPORT AND COMPACTION TO BE INSPECTED UP TO THE ELEVATION OF THE ROAD SUB-GRADE.



BENCHMARK

NORTHEAST CORNER OF SECTION 05
TOWNSHIP 03 SOUTH, RANGE 05 WEST
SALT LAKE BASE AND MERIDIAN
ELEV: 4309.08'
DATUM: NAVD88



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
DAMON DRIVE

REVISION BLOCK

NO.	DATE	DESCRIPTION
1		
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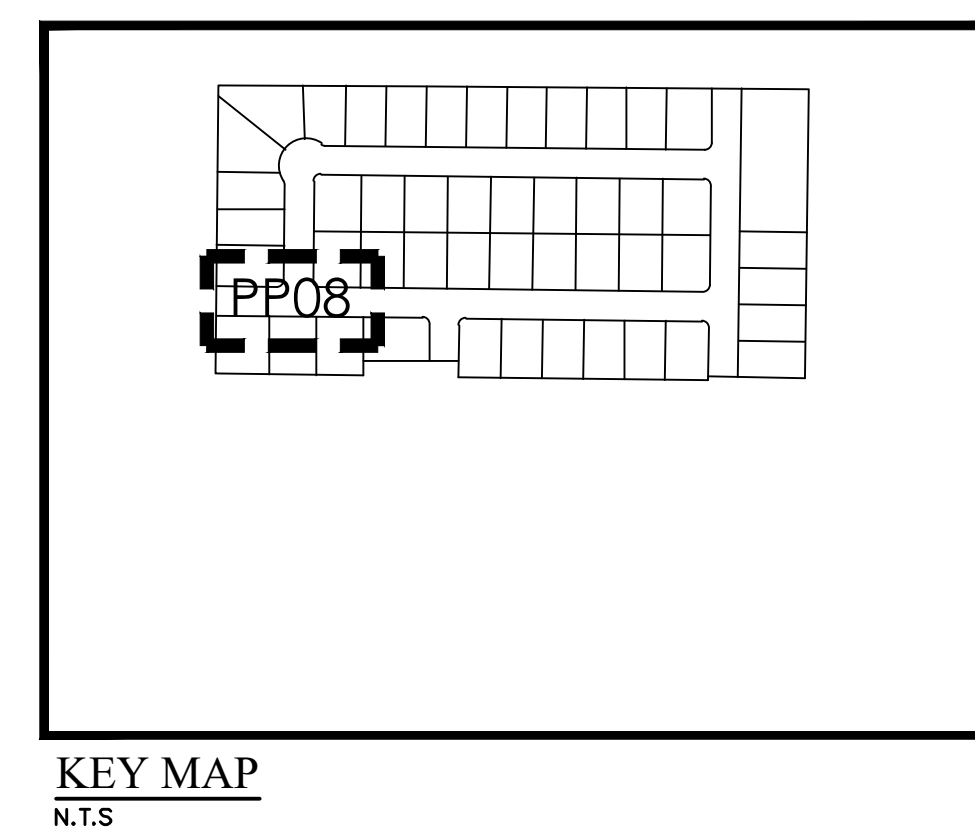
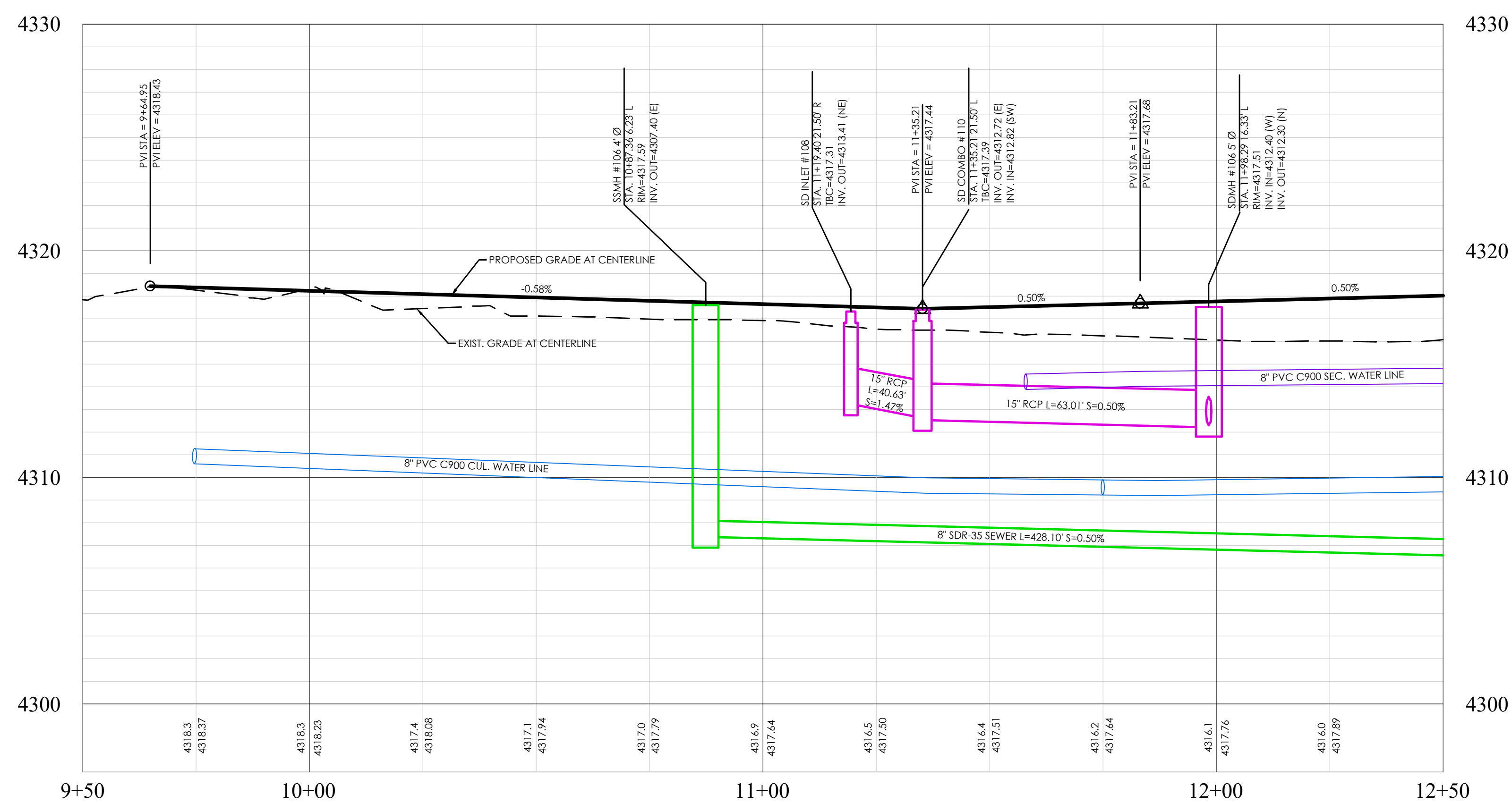
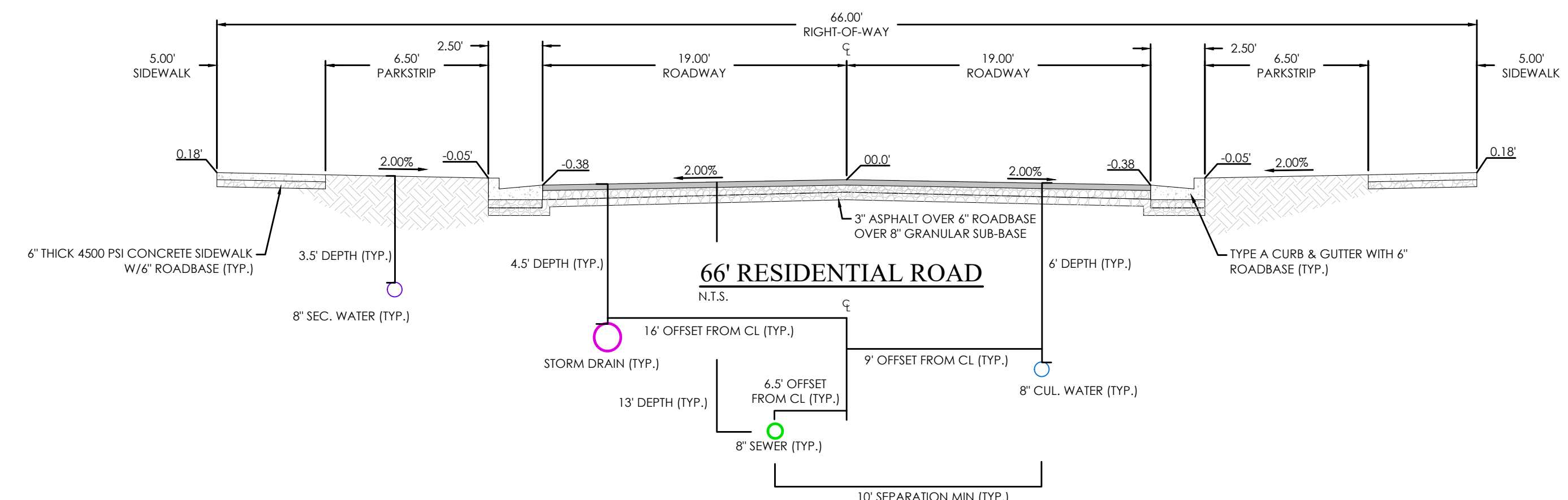
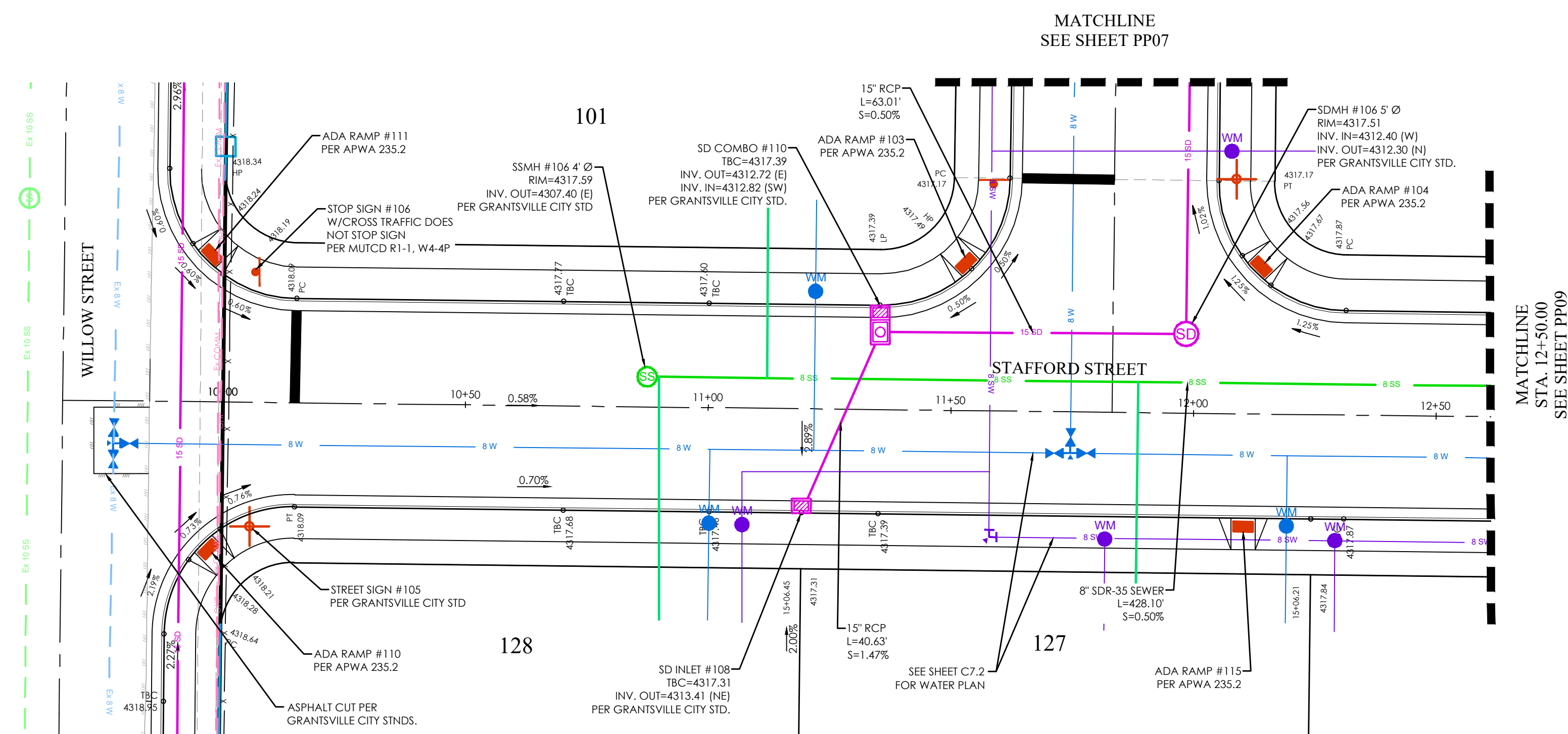




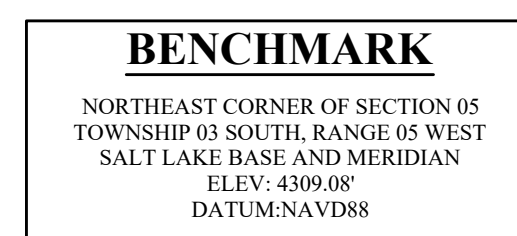
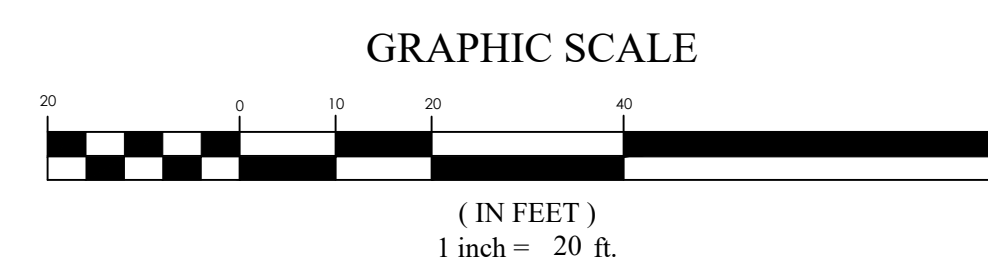








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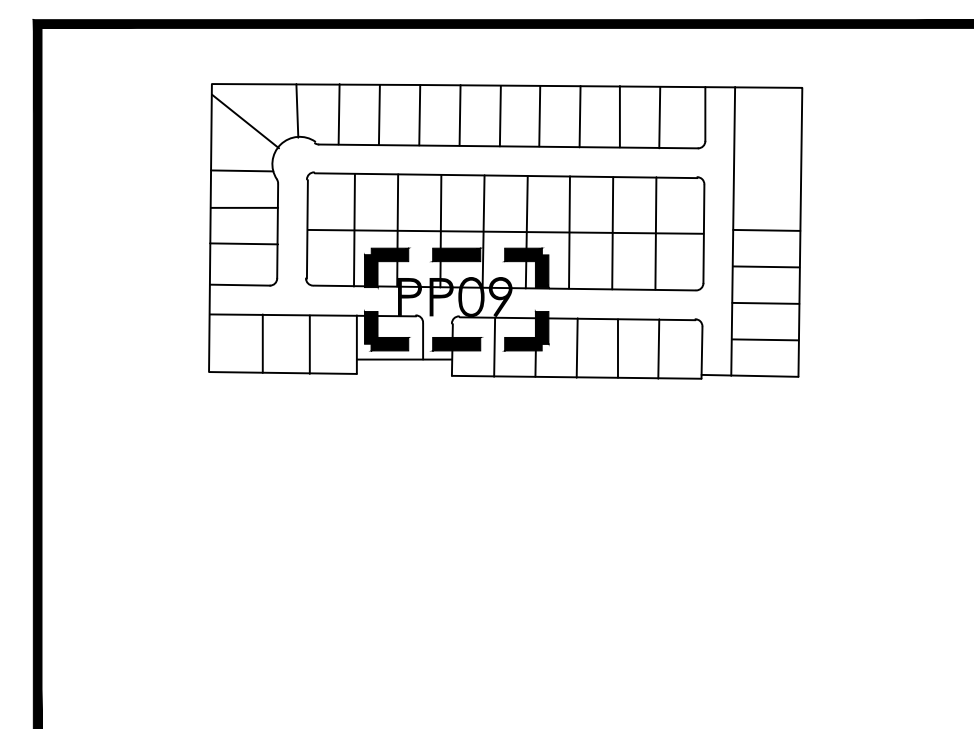
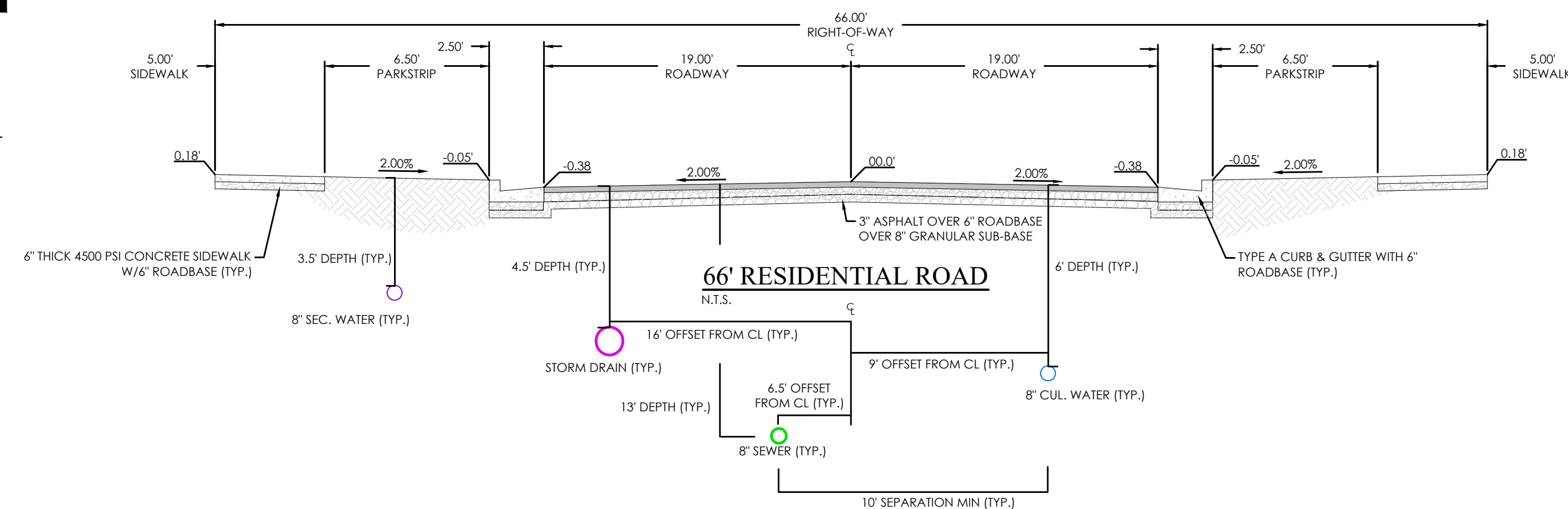
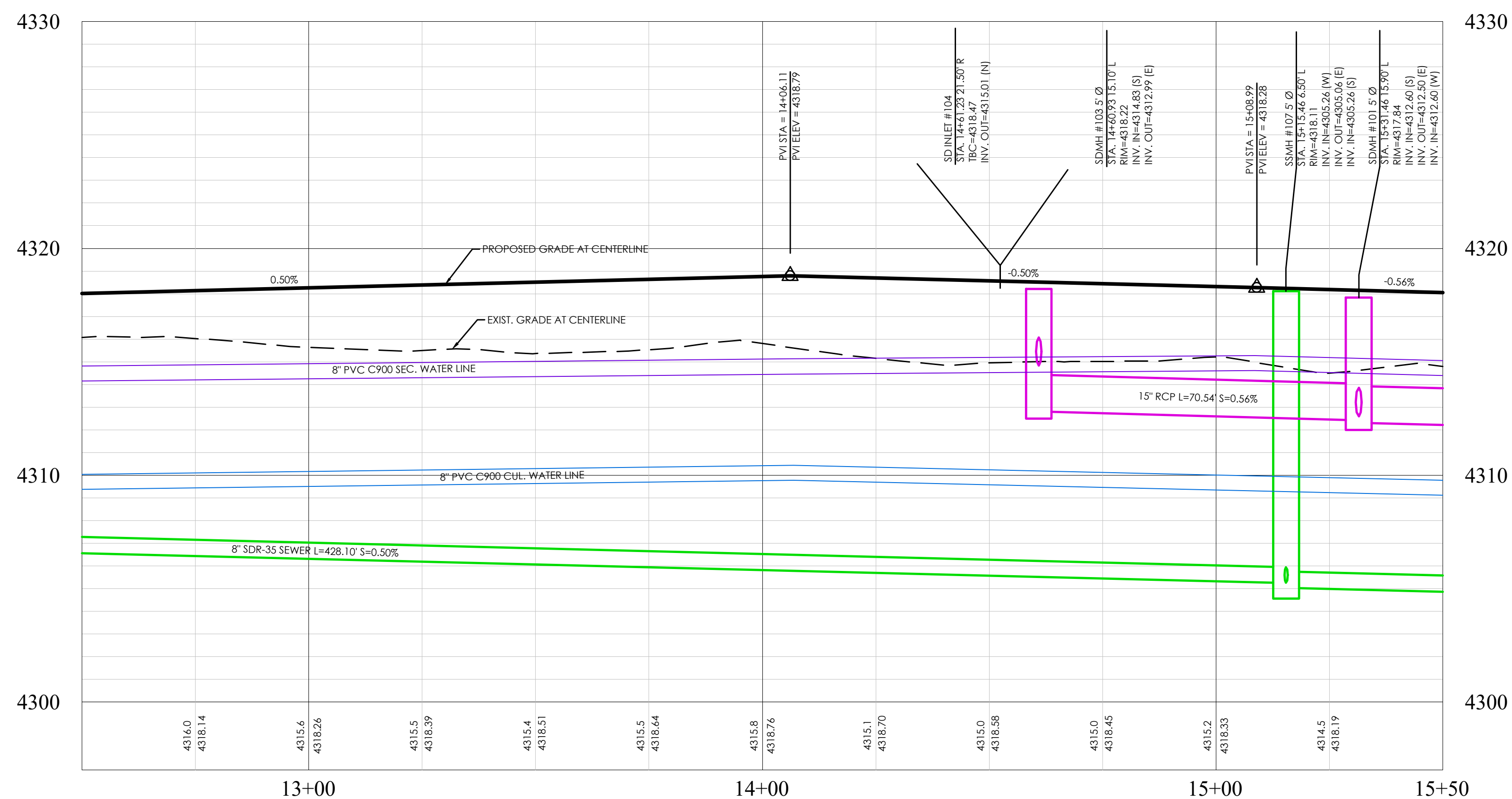
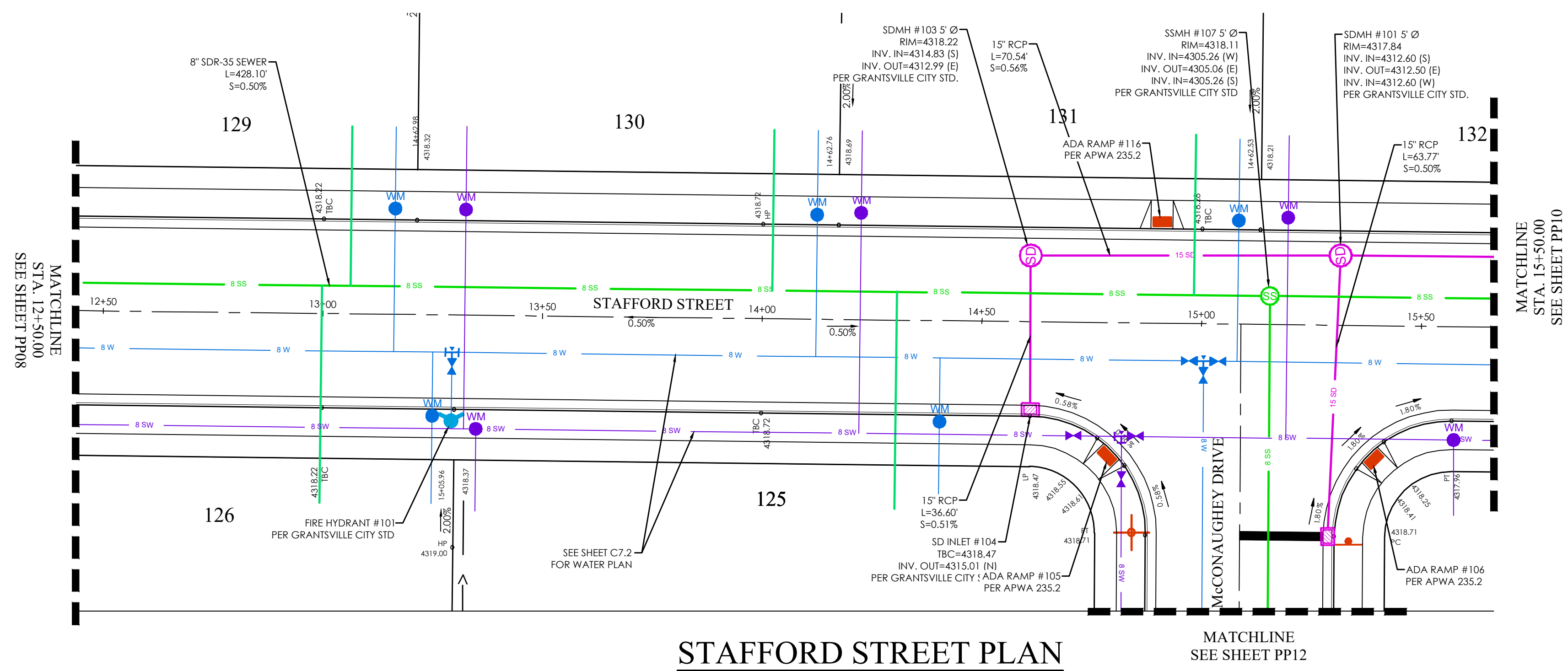
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5	10/1/2010	10/1/2010
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STAFFORD  
STREET

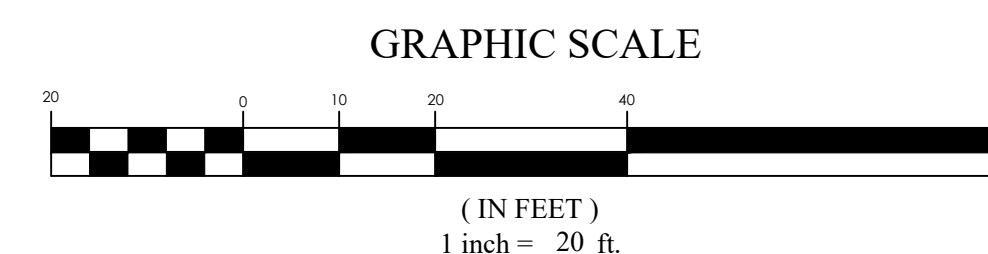
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Date: 09/14/22	Job #: 21-0377
Sheet:	

PP08





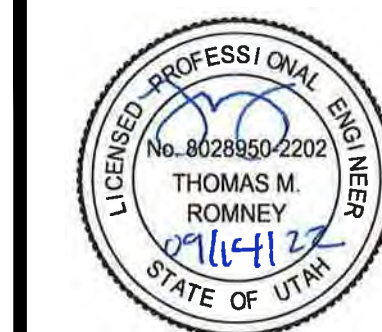
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1. CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
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# LEGEND

	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
	15" SD
	8" SS
	8" W
	8" SW
	8" W
	XXXX
	XXXX
	Ex SD
	Ex SS
	Ex W
	X
	X
	X
	XXXXX
	XXXXX
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION

o XXXX.XX



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
STAFFORD STREET

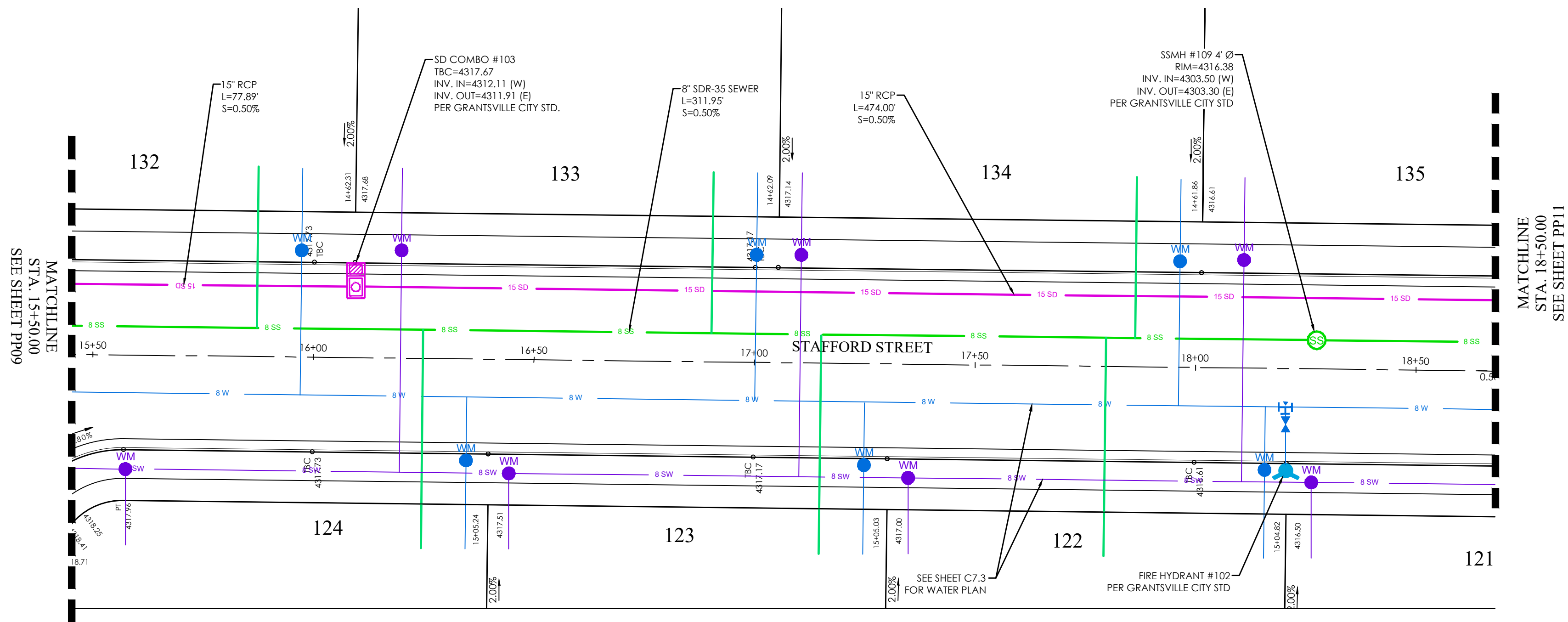
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6	06-01-00	

STAFFORD  
STREET

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Date: 09/14/22	Job #: 21-0377
Sheet:	
PP09	

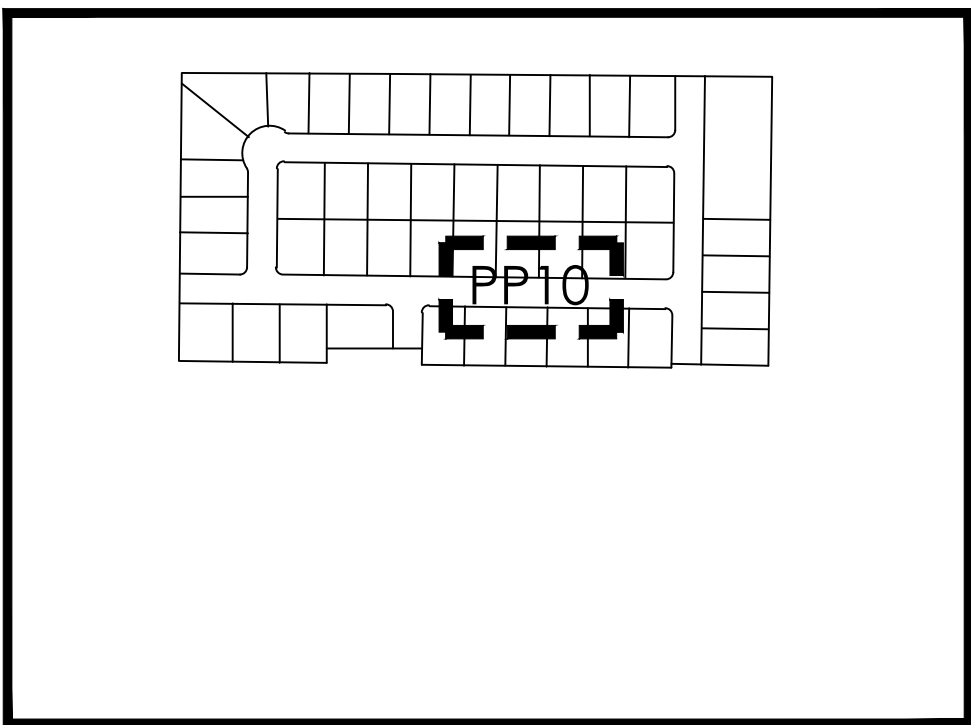
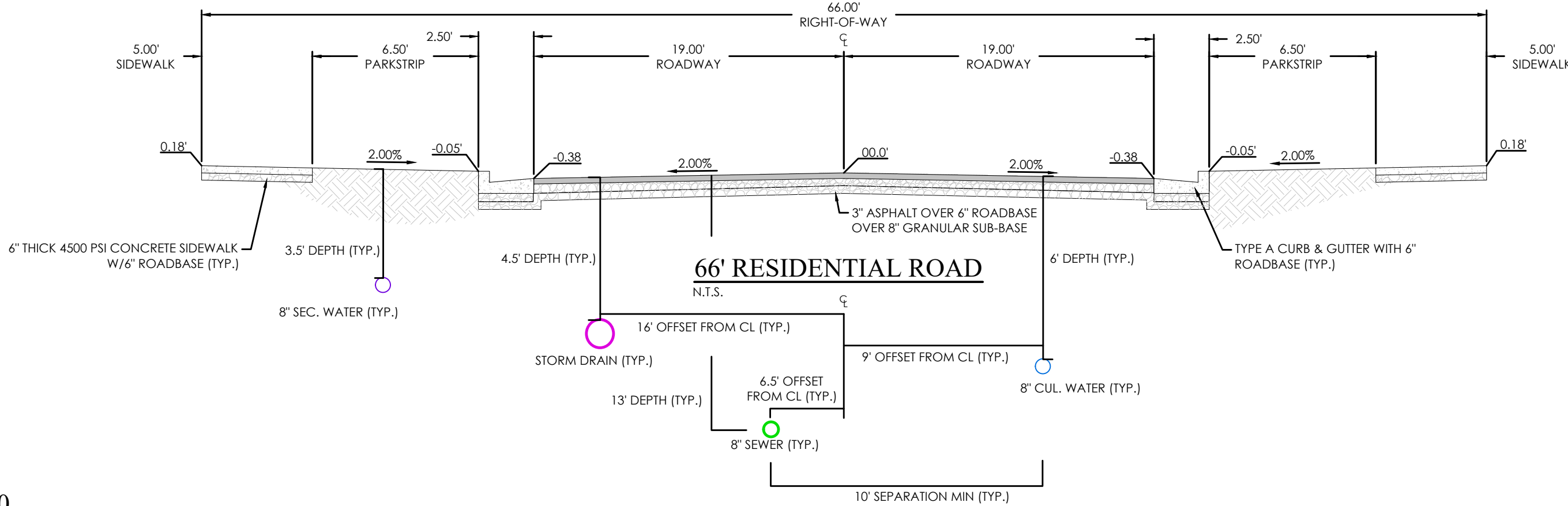






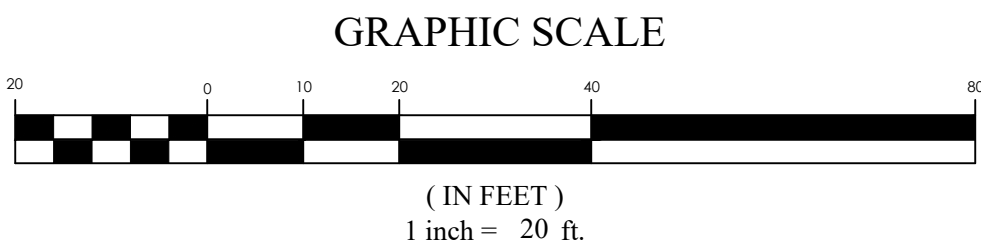
STAFFORD STREET PLAN

MATCHLINE  
STA. 18+50.00  
SEE SHEET PP11



KEY MAP  
N.T.S.

- NOTES:
1. CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  2. PROVIDE 12" SUMPS ON ALL STORM WATER MANHOLES AND BOXES
  3. ALL WATER SERVICES TO BE LOOPED UNDER THE STORM DRAIN WHERE EVER CONFLICTS OCCUR.
  4. AFTER REMOVING TOP SOIL, ALL FILL IN THE ROADWAY AREA TO BE A-1-A MATERIAL OR AS APPROVED BY THE GEOTECHNICAL REPORT AND COMPACTION TO BE INSPECTED UP TO THE ELEVATION OF THE ROAD SUB-GRADE.



**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD83



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
STAFFORD STREET

REVISION BLOCK	
#	DESCRIPTION
1	
2	
3	
4	
5	
6	

**STAFFORD STREET**

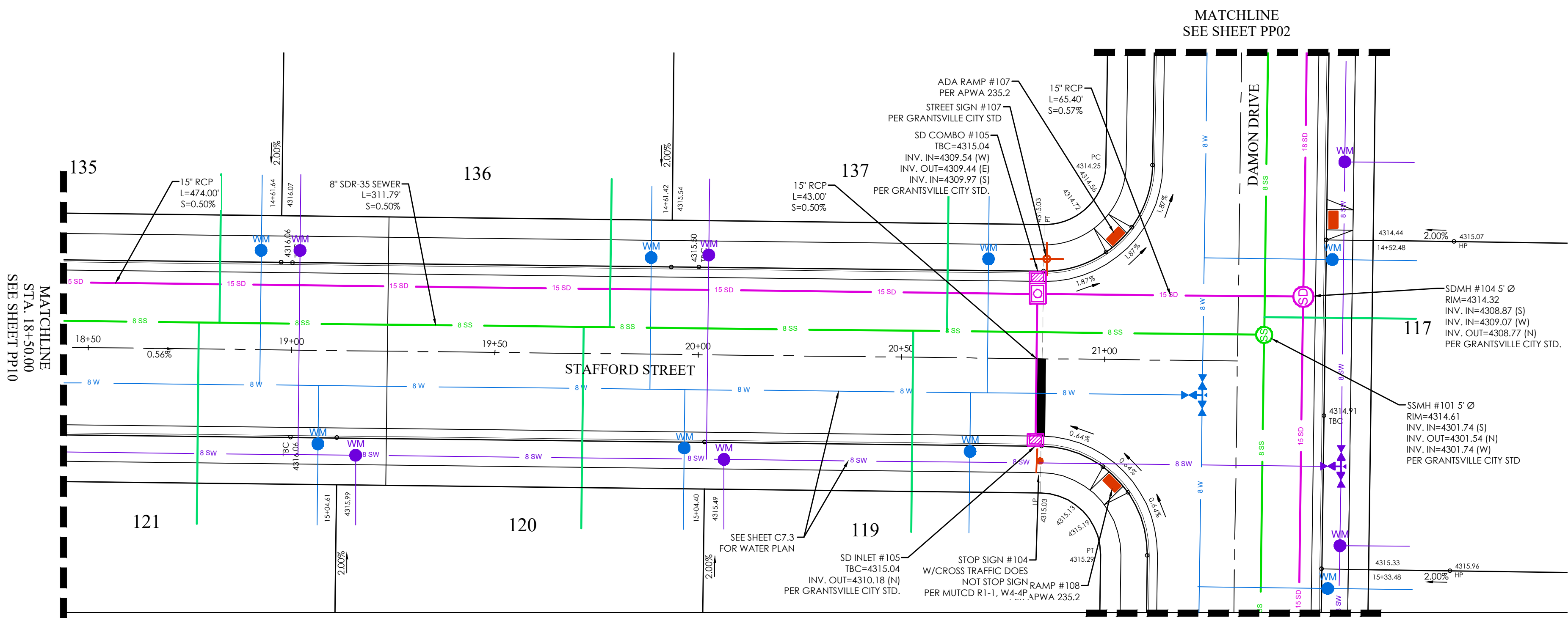
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Sheet: PP10

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Job #: 21-0377

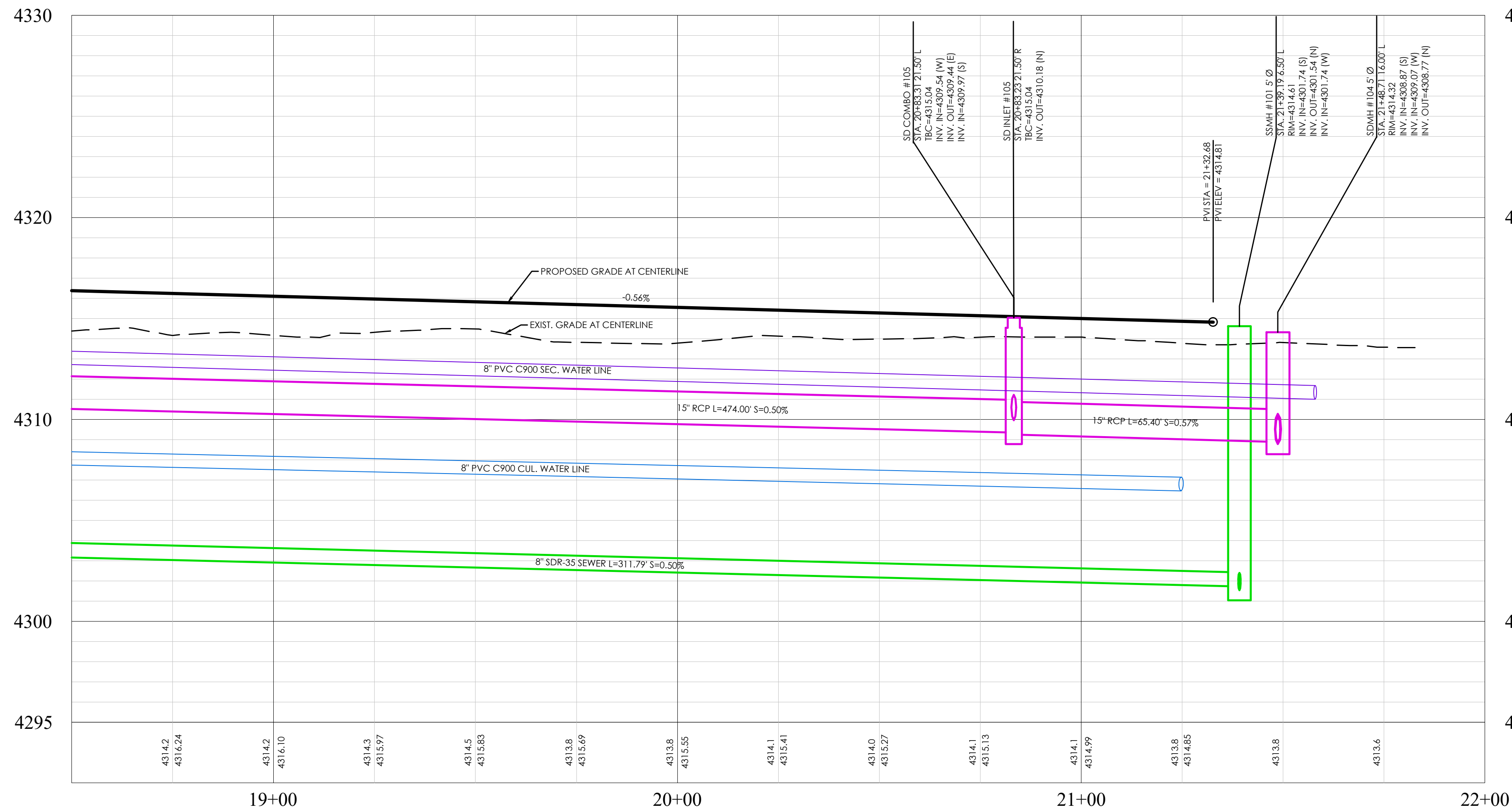
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6949 S. HIGH TECH DRIVE SUITE 200  
MIDVALE, UTAH 84047 PH: (801) 352-0075  
www.focusuh.com

LICENSED PROFESSIONAL ENGINEER  
No. 8028850-2200  
THOMAS M. ROMNEY  
09/14/22  
STATE OF UTAH

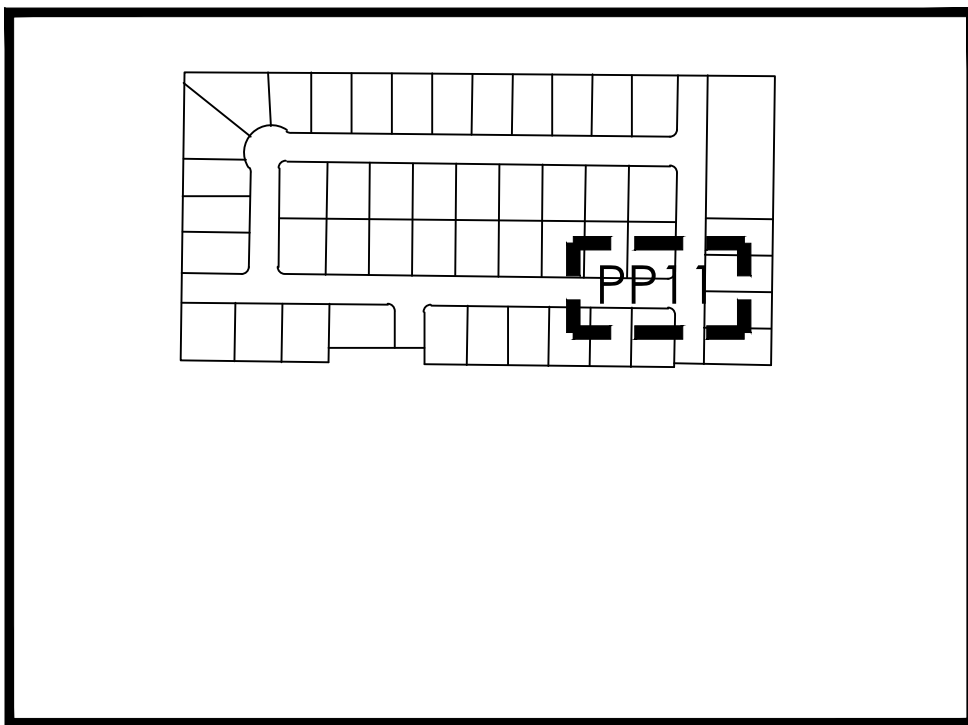
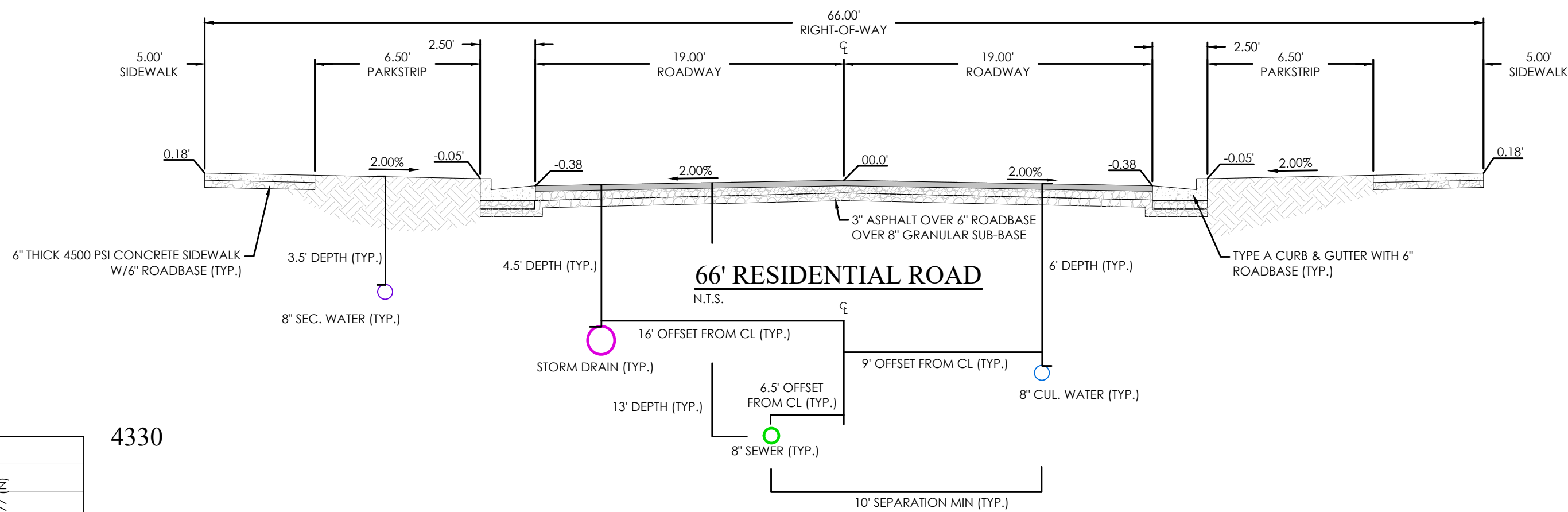




STAFFORD STREET PLAN

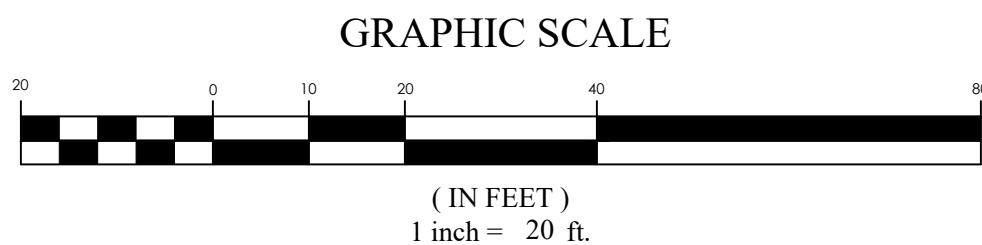


STAFFORD STREET PROFILE



KEY MAP  
N.T.S.

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1. CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
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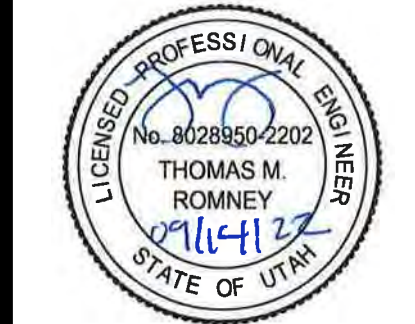


**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD83



**LEGEND**

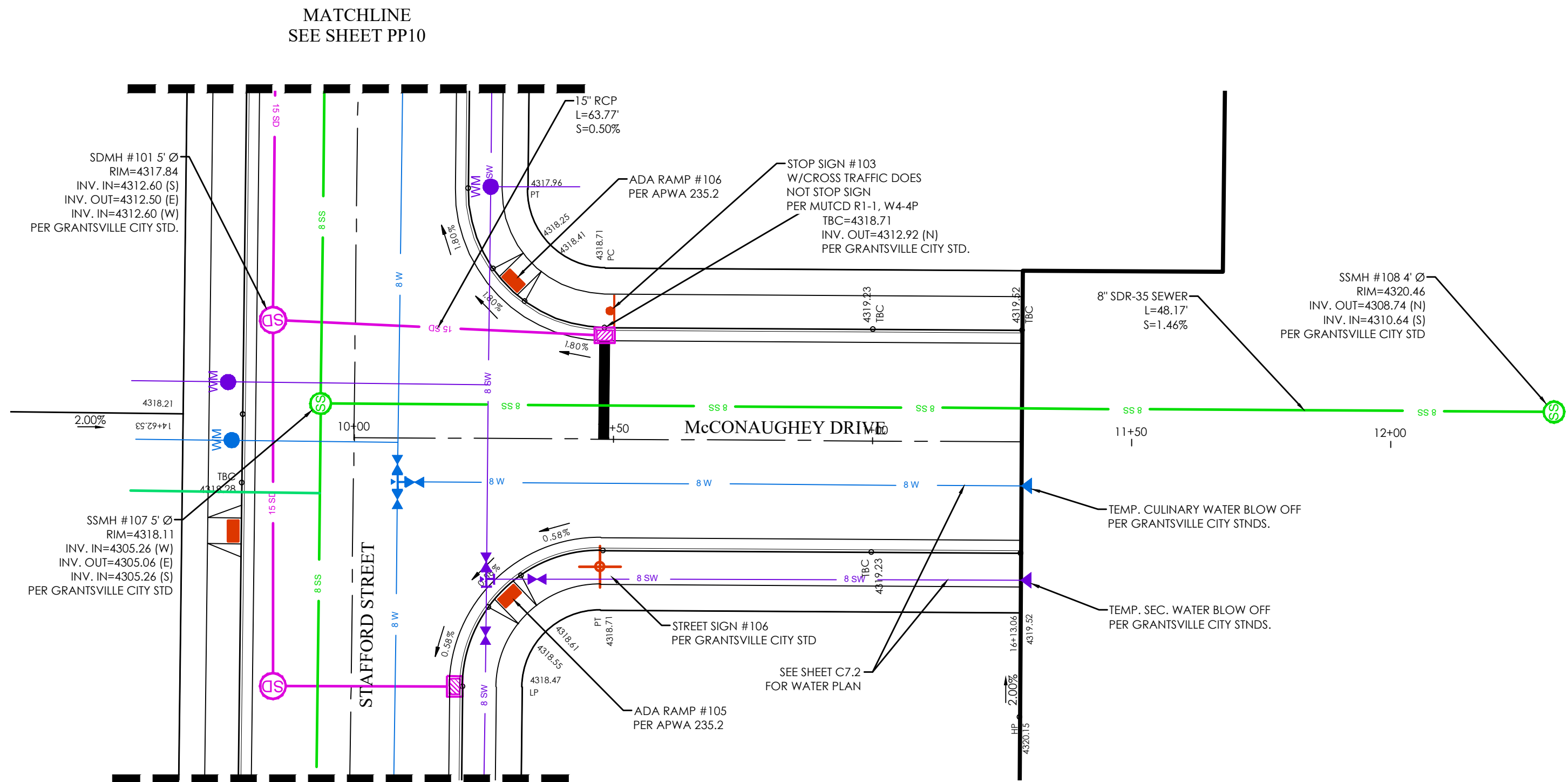
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ROW	8" SDR	8" SANITARY SEWER
CENTERLINE	8" W	8" CULINARY WATER
LOT LINE	8" W	8" SECONDARY WATER
EASEMENT	XXXX	CONTOUR MAJOR
CONTOUR MAJOR	XXXX	CONTOUR MINOR
CONTOUR MINOR	XXXX	EXIST. STORM DRAIN
EXIST. STORM DRAIN	XXXX	EXIST. SANITARY SEWER
EXIST. SANITARY SEWER	XXXX	EXIST. CULINARY WATER
EXIST. CULINARY WATER	XXXX	EXIST. FENCE
EXIST. FENCE	XXXX	EXIST. CONTOUR MAJOR
EXIST. CONTOUR MAJOR	XXXX	EXIST. CONTOUR MINOR
EXIST. CONTOUR MINOR	XXXX	SIGN
SIGN	XXXX	STREET LIGHT
STREET LIGHT	XXXX	SD MH, INLET, AND COMBO
SD MH, INLET, AND COMBO	XXXX	SEWER MANHOLE
SEWER MANHOLE	XXXX	CULINARY VALVE, TEE & BEND
CULINARY VALVE, TEE & BEND	XXXX	SECONDARY VALVE, TEE & BEND
SECONDARY VALVE, TEE & BEND	XXXX	WATER BLOW-OFF
WATER BLOW-OFF	XXXX	FIRE HYDRANT
FIRE HYDRANT	XXXX	STREET MONUMENT (TO BE SET)
STREET MONUMENT (TO BE SET)	XXXX	EXIST. STREET MONUMENT
EXIST. STREET MONUMENT	XXXX	EXIST. SD INLET & MH
EXIST. SD INLET & MH	XXXX	EXIST. SEWER MH
EXIST. SEWER MH	XXXX	EXIST. VALVE, TEE, & BEND
EXIST. VALVE, TEE, & BEND	XXXX	EXIST. FIRE HYDRANT
EXIST. FIRE HYDRANT	XXXX	SPOT ELEVATION



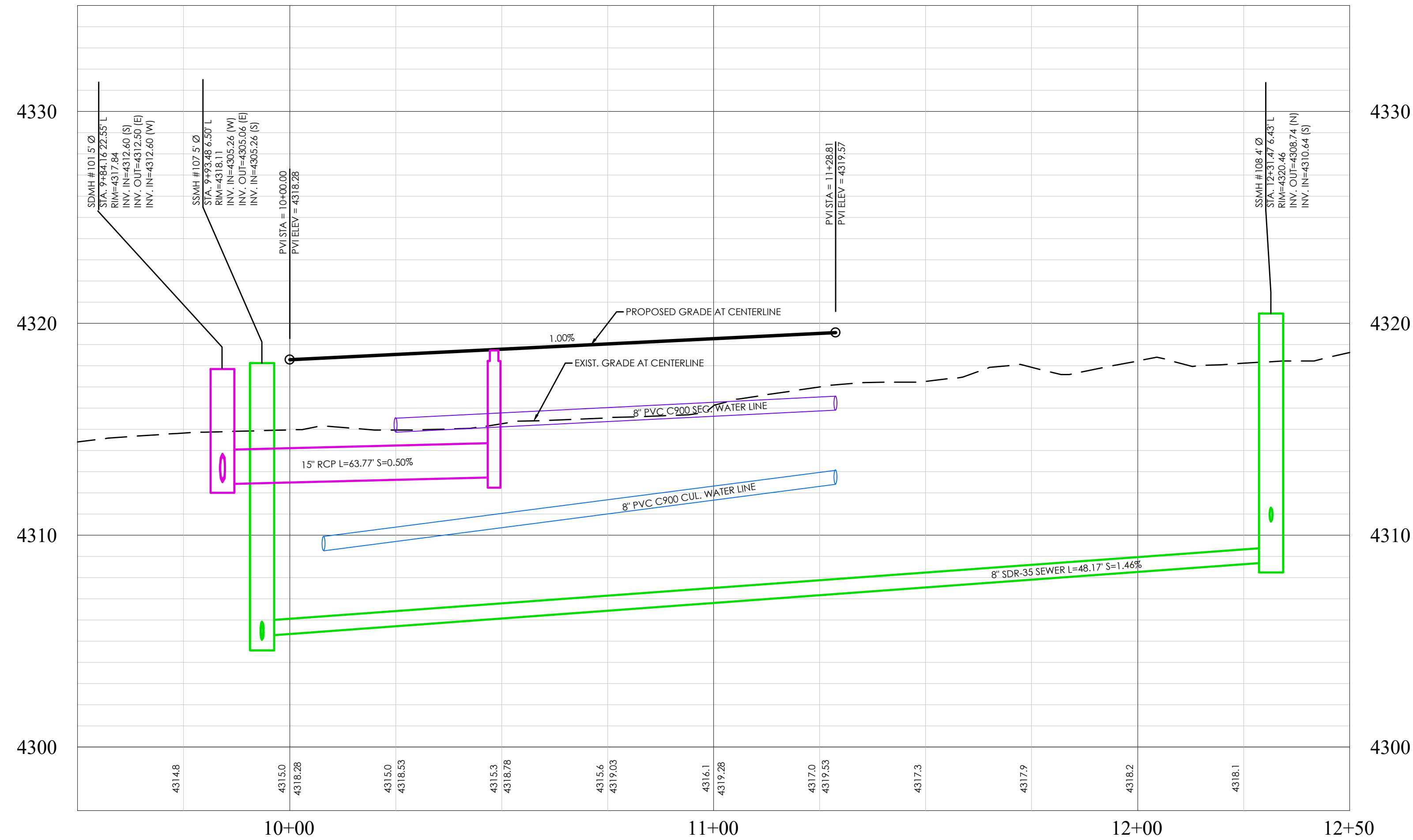
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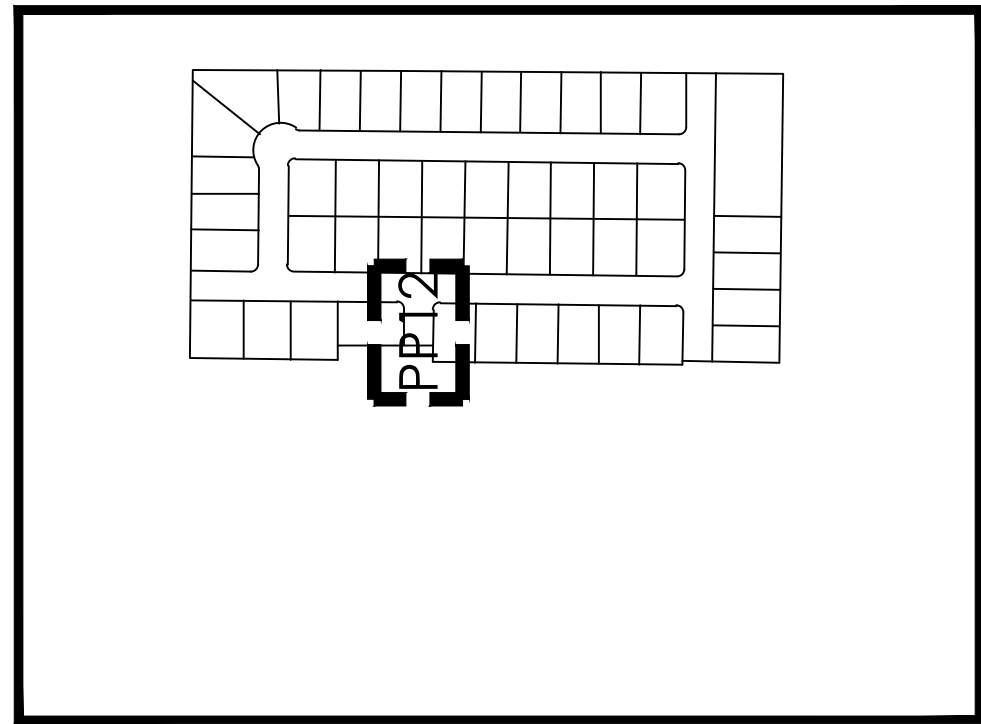
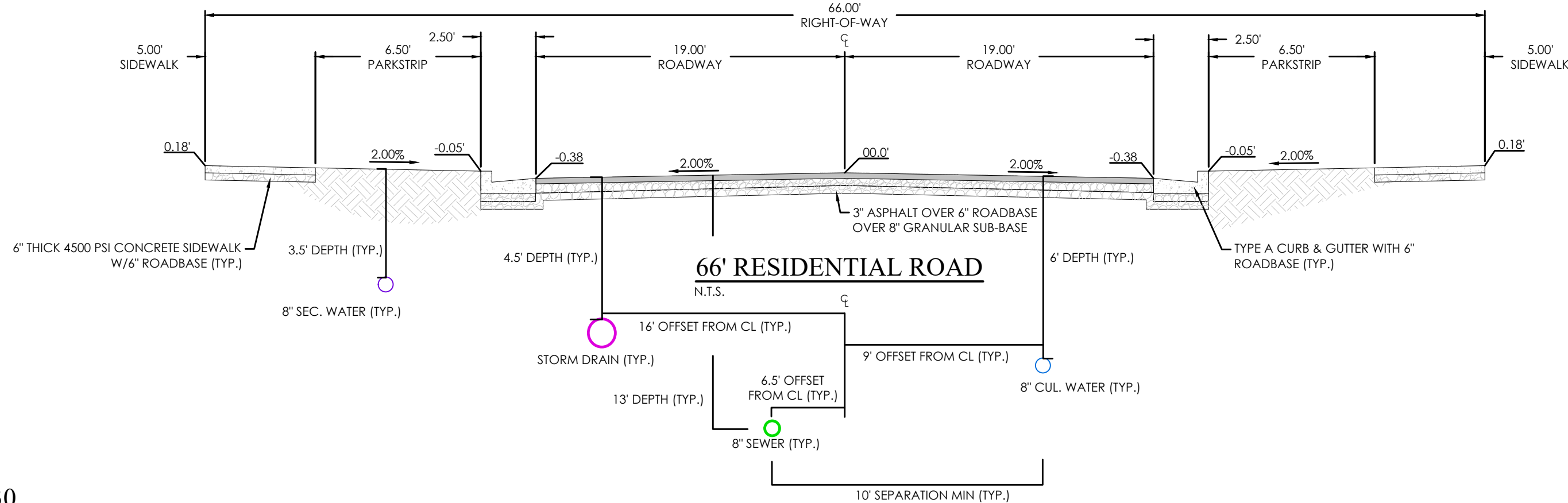




McCONAUGHEY DRIVE PLAN



McCONAUGHEY DRIVE PROFILE



KEY MAP  
N.T.S.

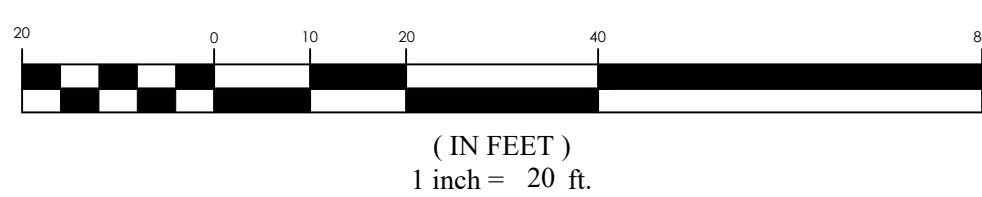
- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
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BENCHMARK

NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88



GRAPHIC SCALE



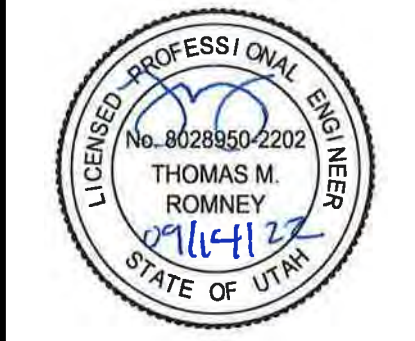
MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
McCONAUGHEY DRIVE

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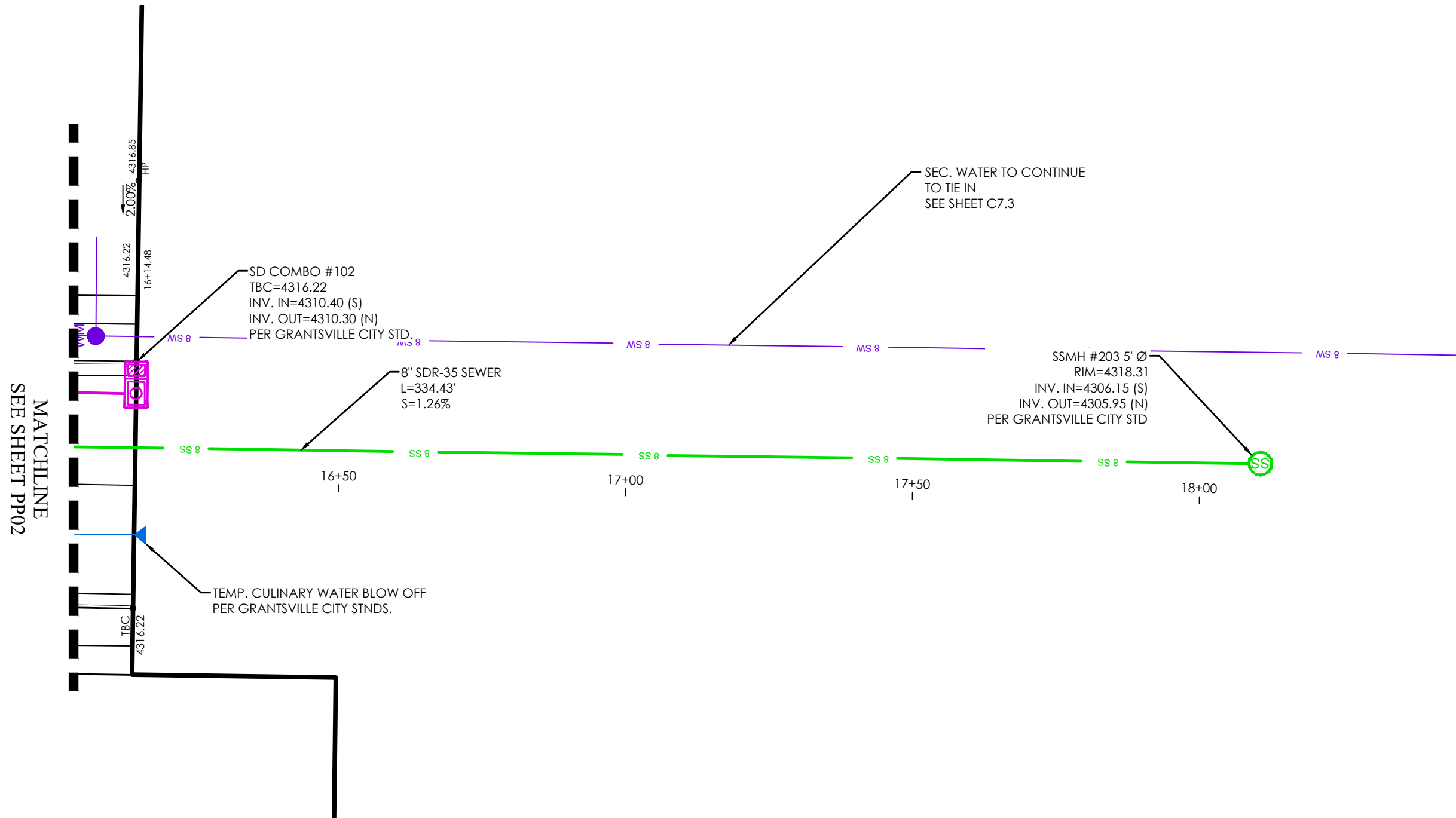
McCONAUGHEY DRIVE

Scale: 1"=20'  
Date: 09/14/22  
Job #: 21-0377

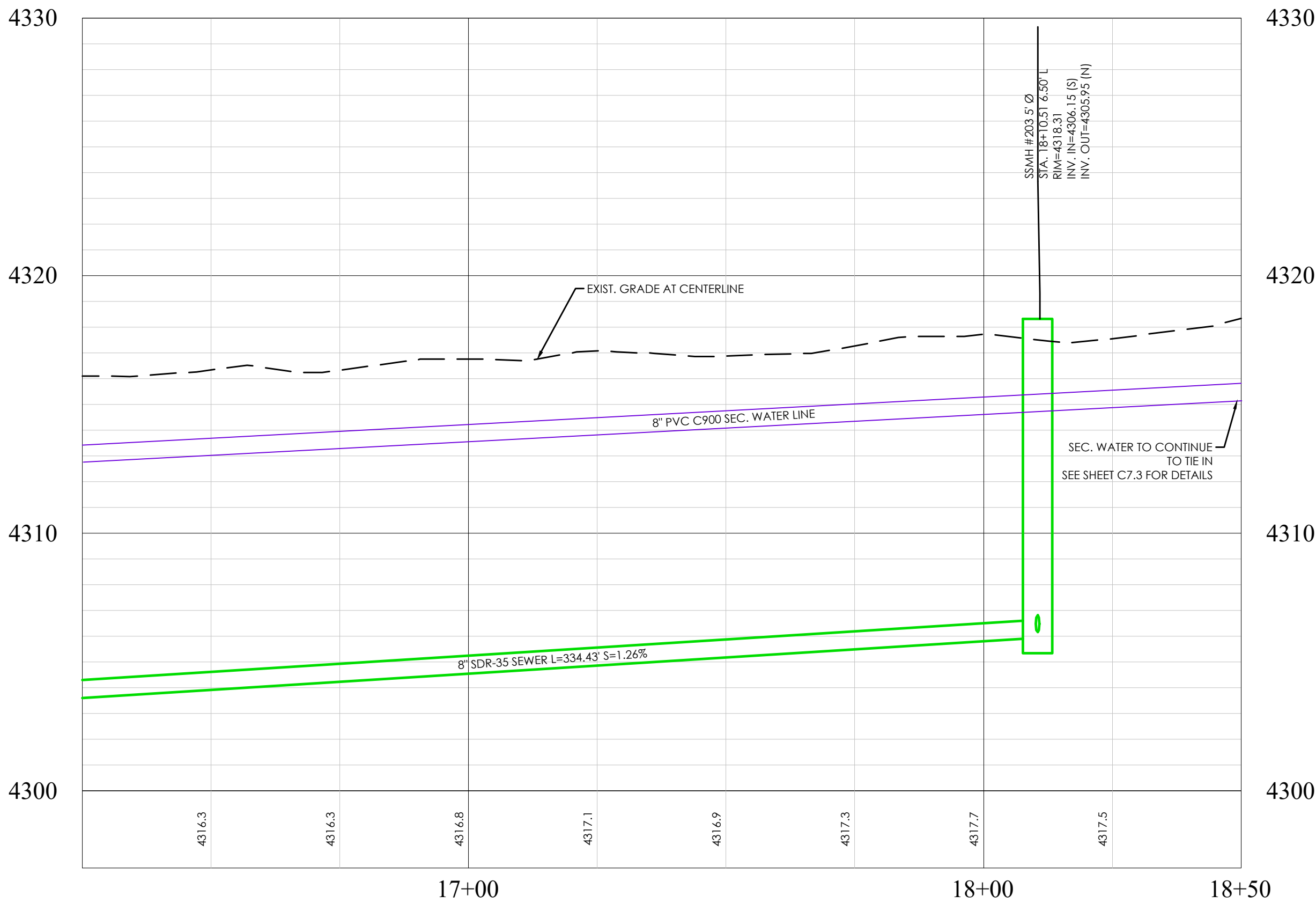
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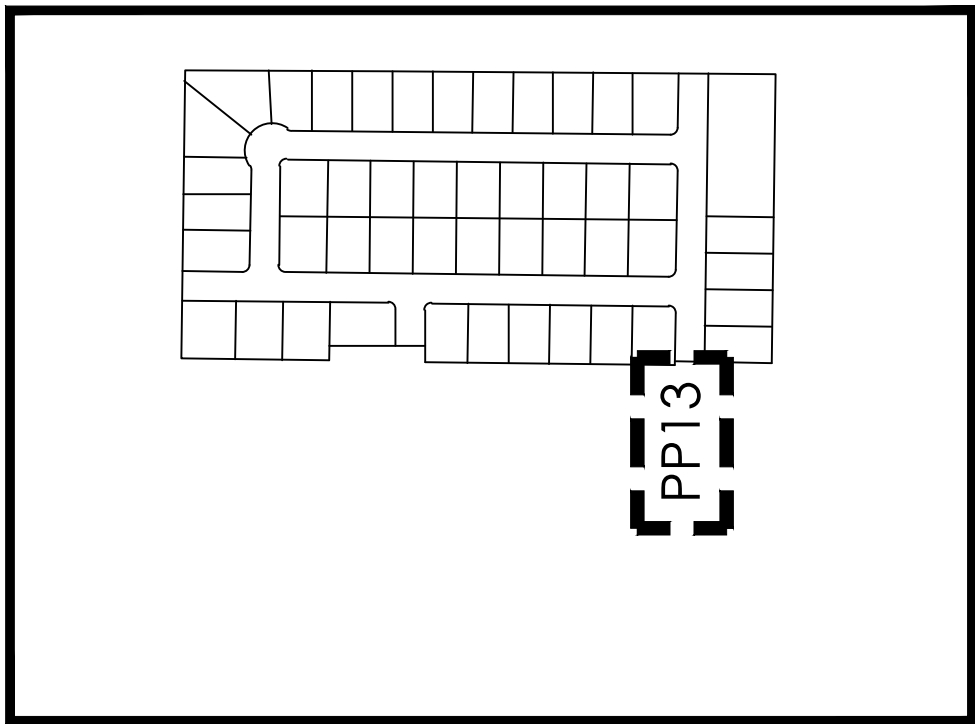
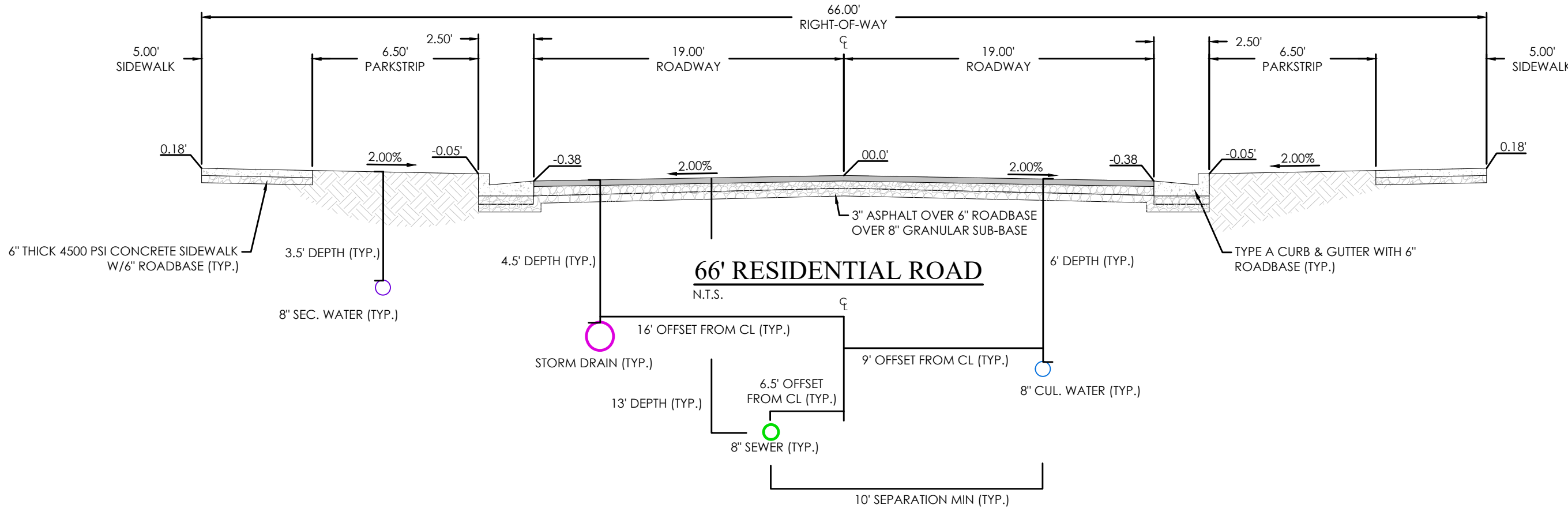




DAMON DRIVE OFFSITE PLAN



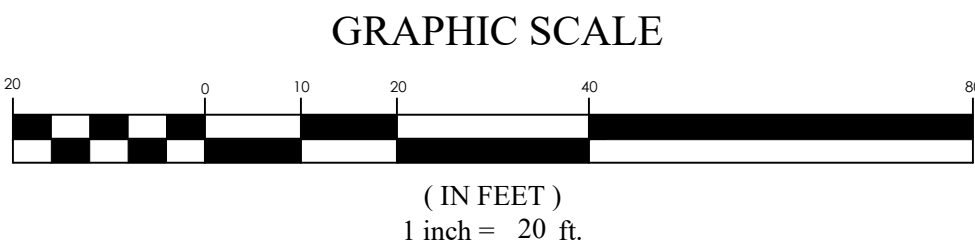
DAMON DRIVE PROFILE



KEY MAP  
N.T.S.

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**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV. 4309.08'  
DATUM NAVD83



**LEGEND**

BOUNDARY	BOUNDARY
ROW	ROW
CENTERLINE	CENTERLINE
LOT LINE	LOT LINE
EASEMENT	EASEMENT
15" SD	15" STORM DRAIN
8" SS	8" SANITARY SEWER
8" W	8" CULINARY WATER
8" W	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
XXXX	EXIST. STORM DRAIN
XXXX	EXIST. SANITARY SEWER
XXXX	EXIST. CULINARY WATER
XXXX	EXIST. FENCE
XXXX	EXIST. CONTOUR MAJOR
XXXX	EXIST. CONTOUR MINOR
XXXX	SIGN
XXXX	STREET LIGHT
XXXX	SD MH, INLET, AND COMBO
XXXX	SEWER MANHOLE
XXXX	CULINARY VALVE, TEE & BEND
XXXX	SECONDARY VALVE, TEE & BEND
XXXX	WATER BLOW-OFF
XXXX	FIRE HYDRANT
XXXX	STREET MONUMENT (TO BE SET)
XXXX	EXIST. STREET MONUMENT
XXXX	EXIST. SD INLET & MH
XXXX	EXIST. SEWER MH
XXXX	EXIST. VALVE, TEE, & BEND
XXXX	EXIST. FIRE HYDRANT
XXXX	SPOT ELEVATION

MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
DAMON DRIVE OFFSITE SEWER

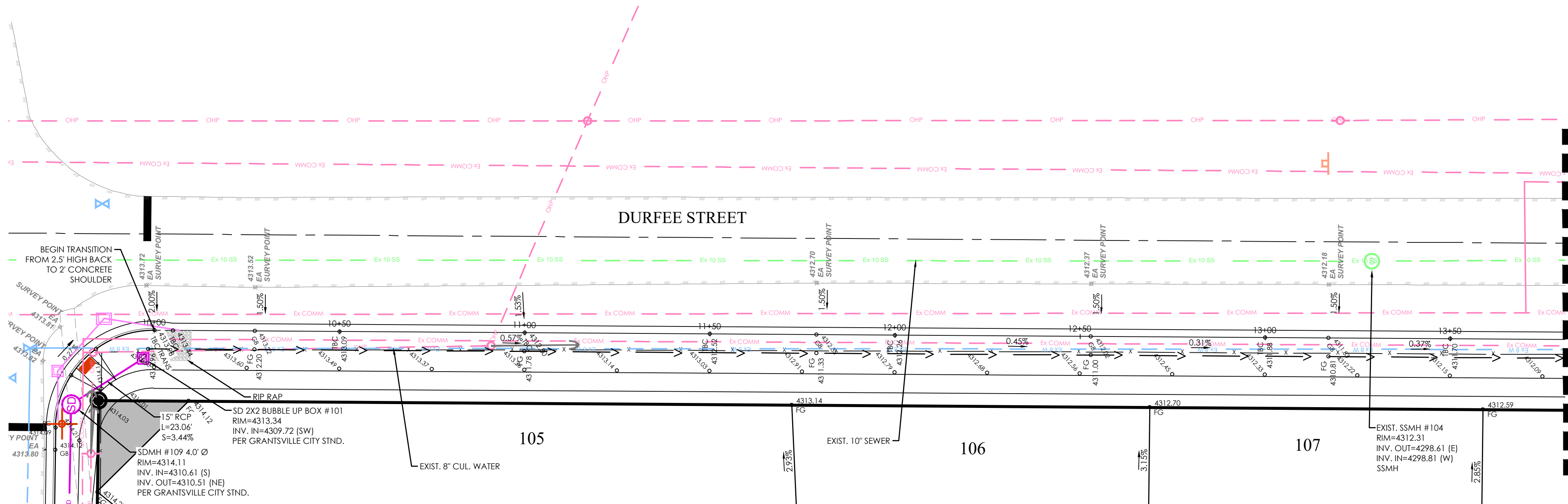
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**DAMON DRIVE OFFSITE SEWER**

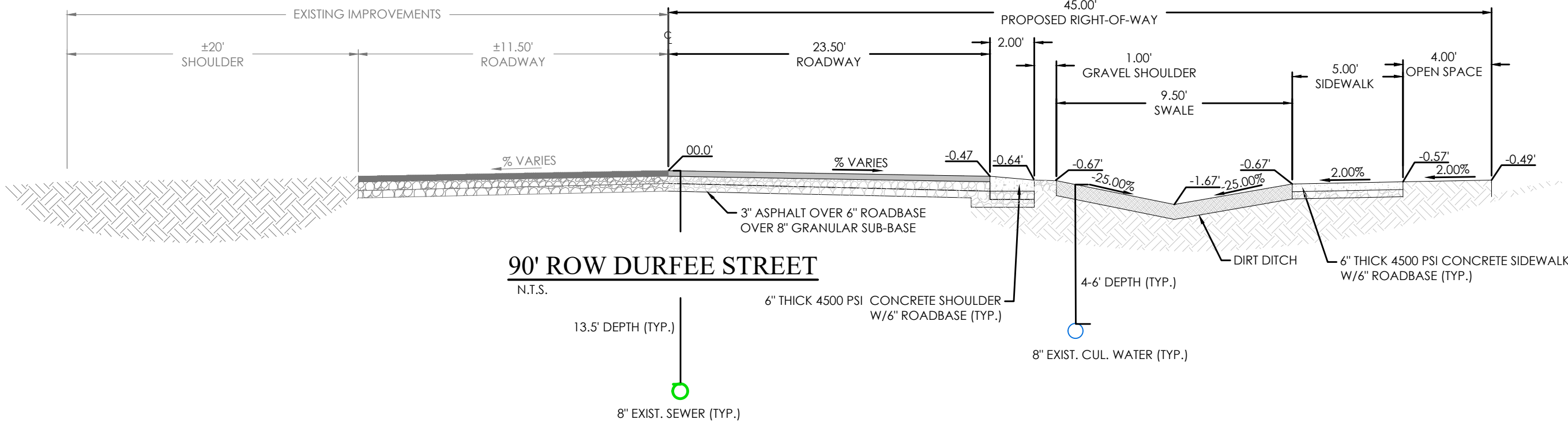
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Job #: 21-0377

Sheet: PP13

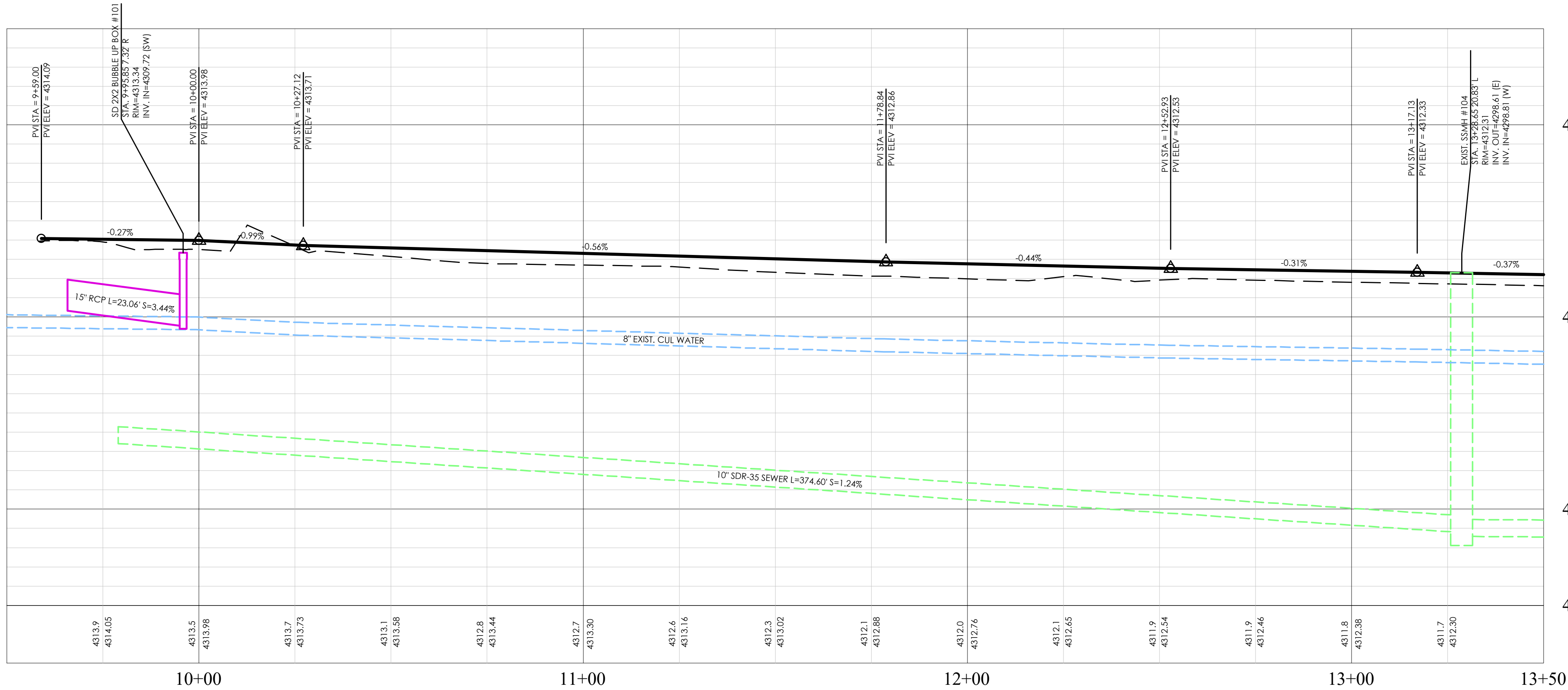




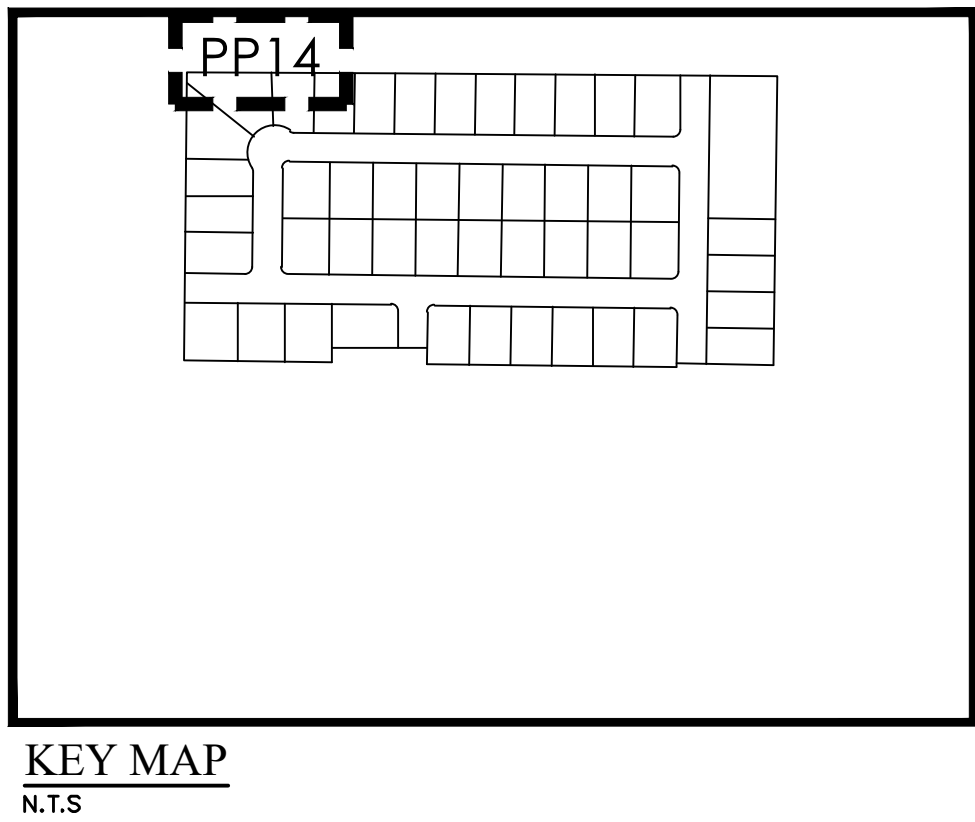
DURFEE STREET TBC PLAN



- NOTES:
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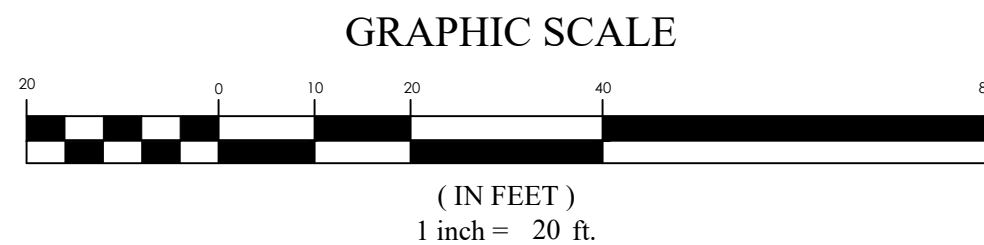


DURFEE STREET TBC PROFILE



KEY MAP  
N.T.S.

**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD83



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
DURFEE STREET TBC

REVISION BLOCK	
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**DURFEE STREET TBC**

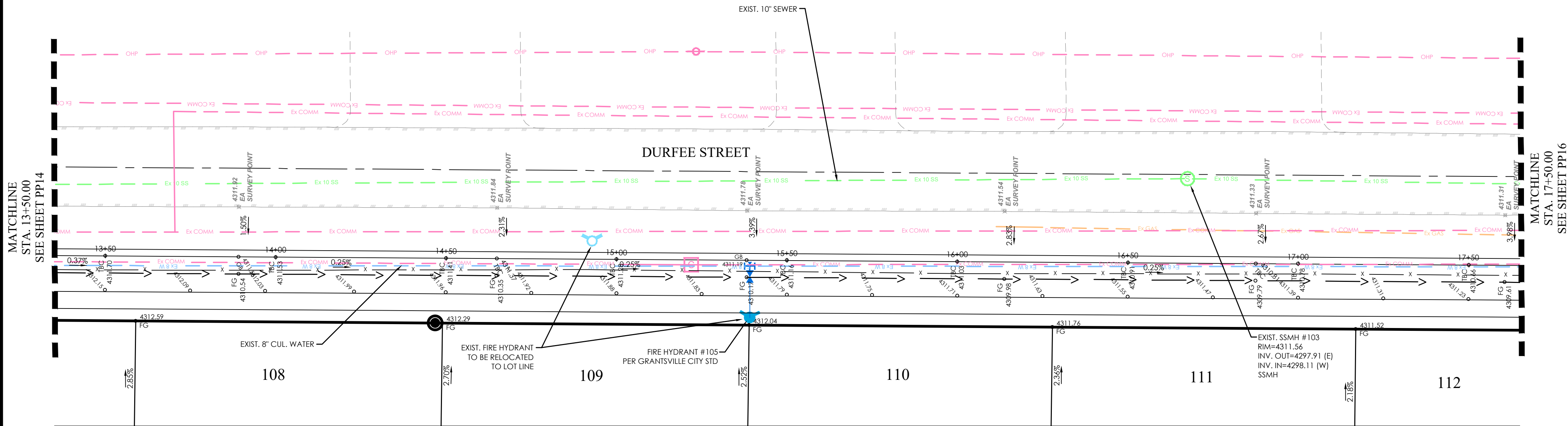
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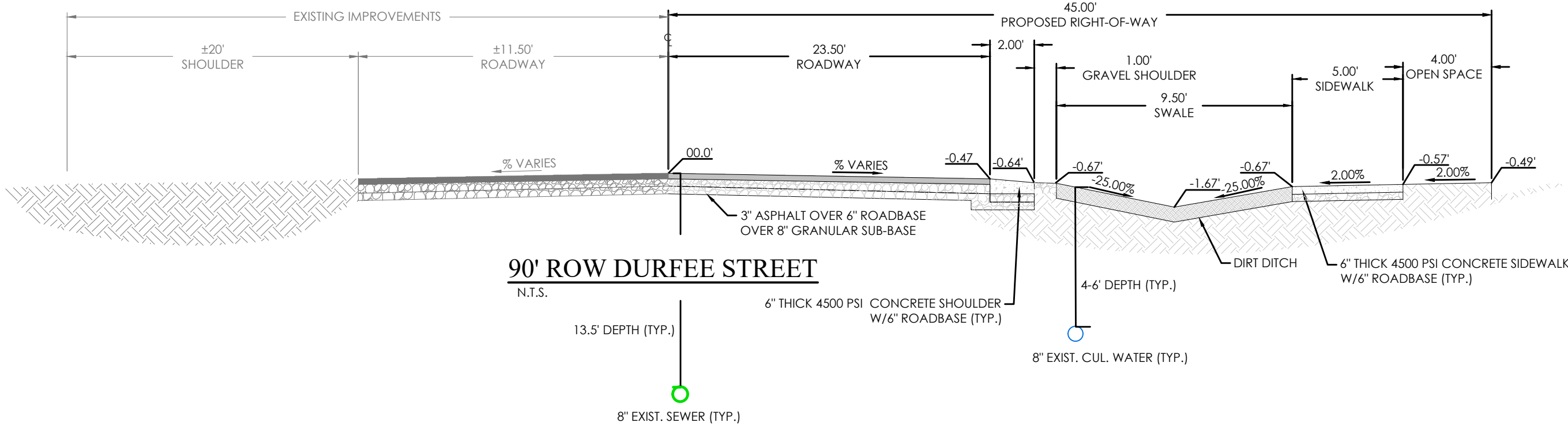
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LICENSED PROFESSIONAL ENGINEER  
No. 802850-2200  
THOMAS M. ROMNEY  
09/14/22  
STATE OF UTAH

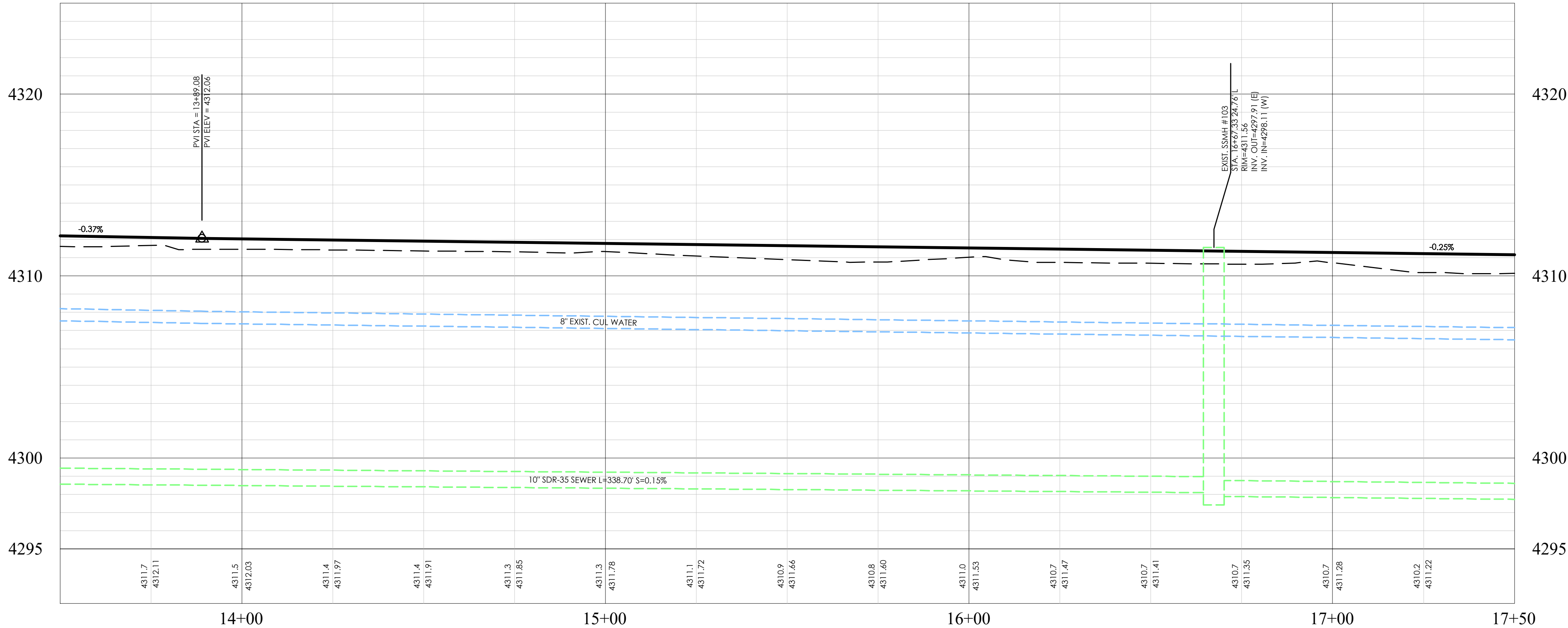




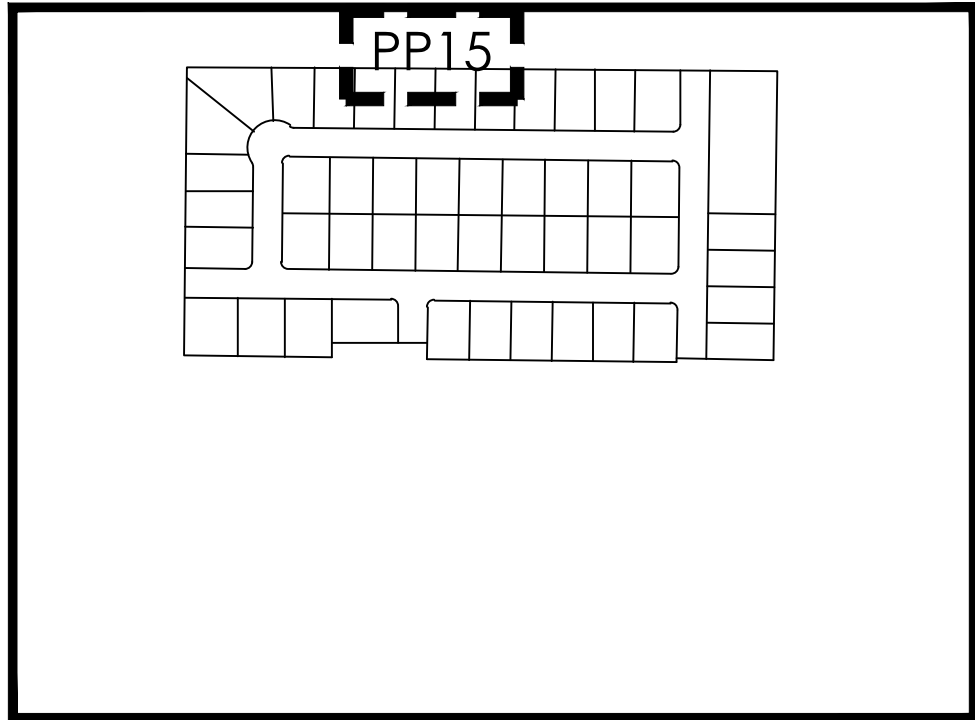
DURFEE STREET TBC PLAN



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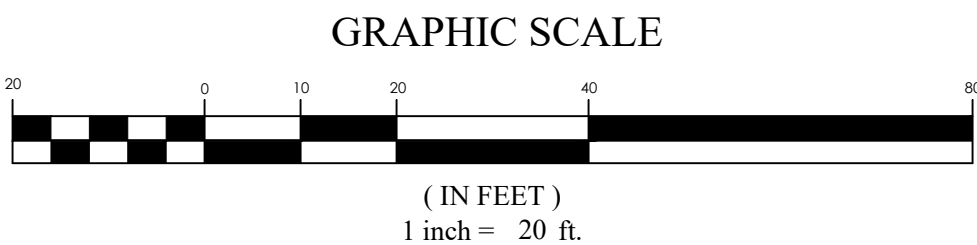
DURFEE STREET TBC PROFILE



KEY MAP  
N.T.S.



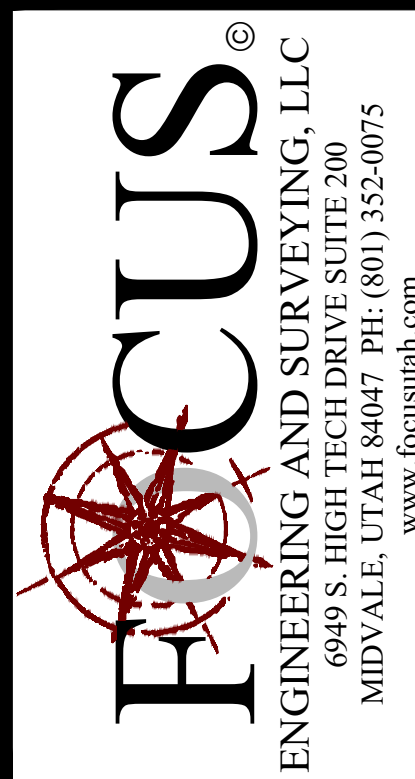
**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM=NAVD83



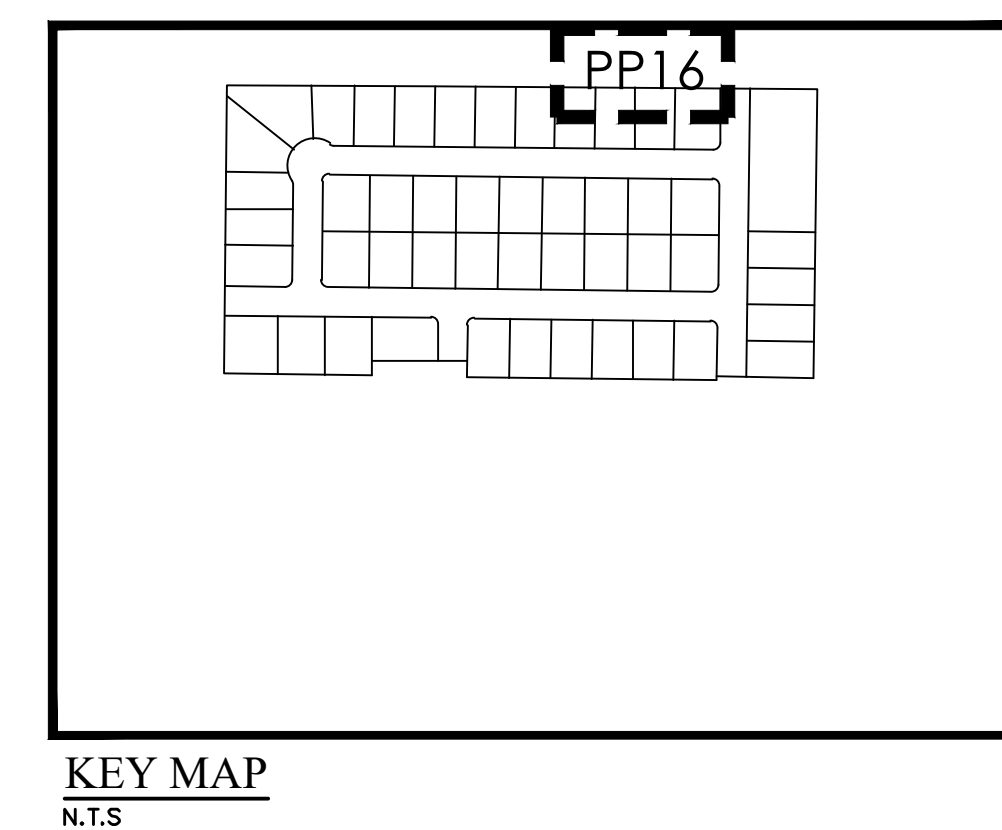
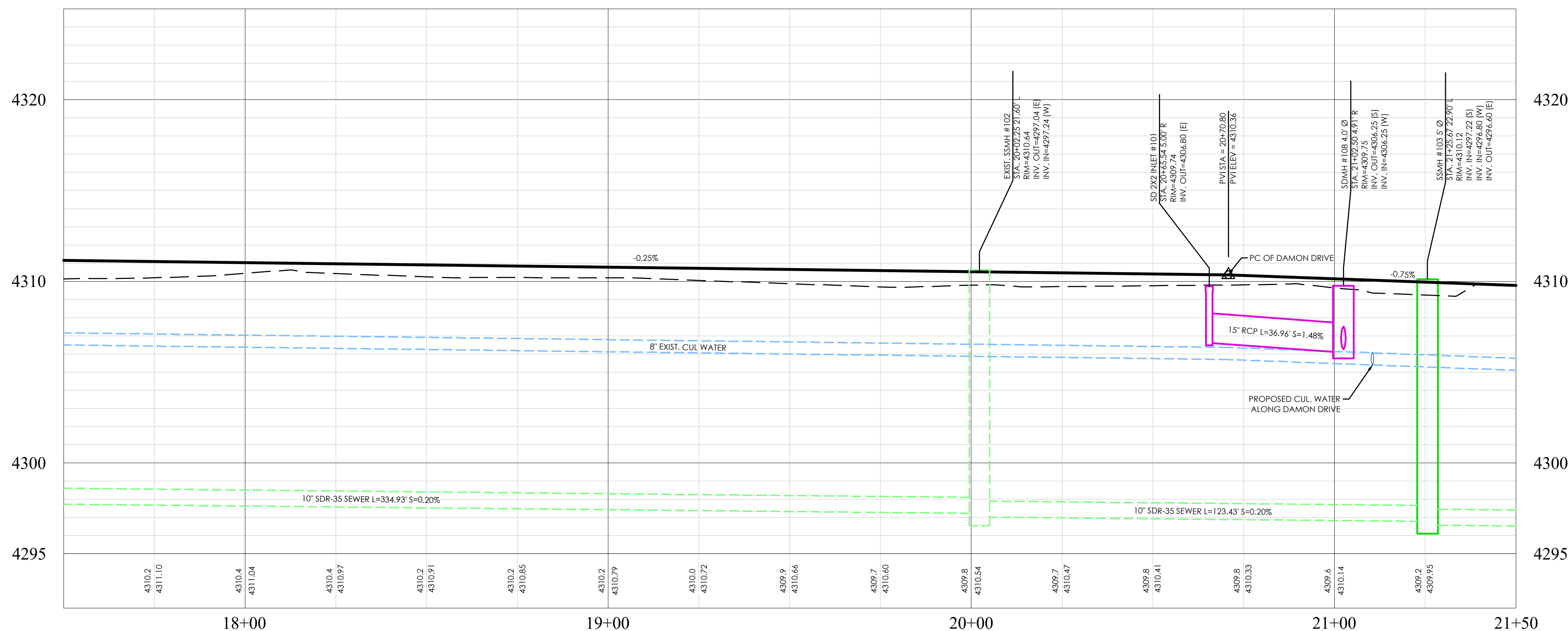
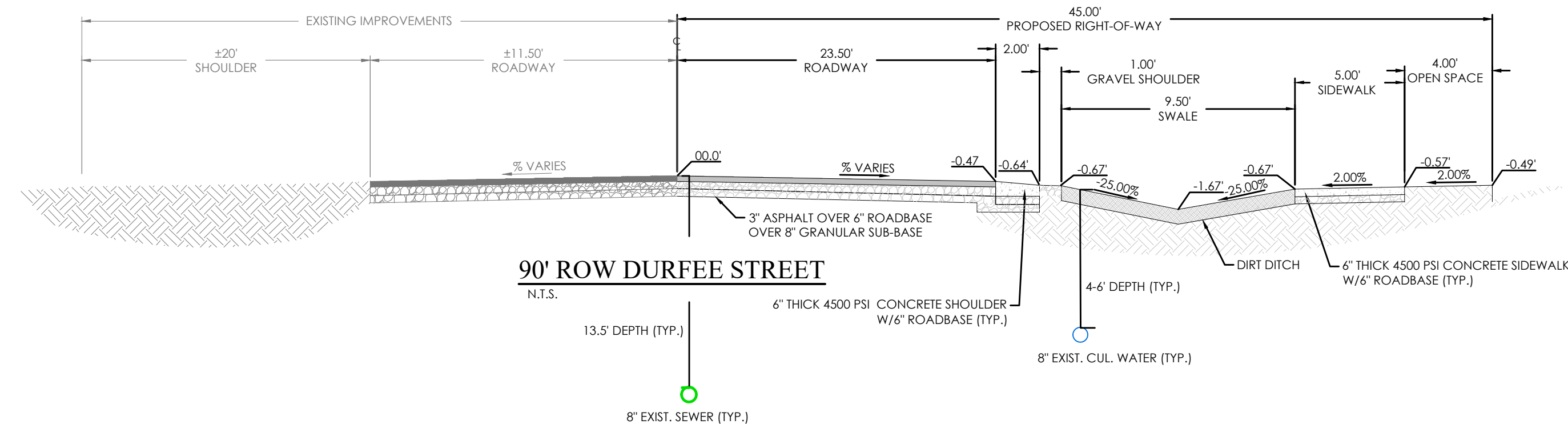
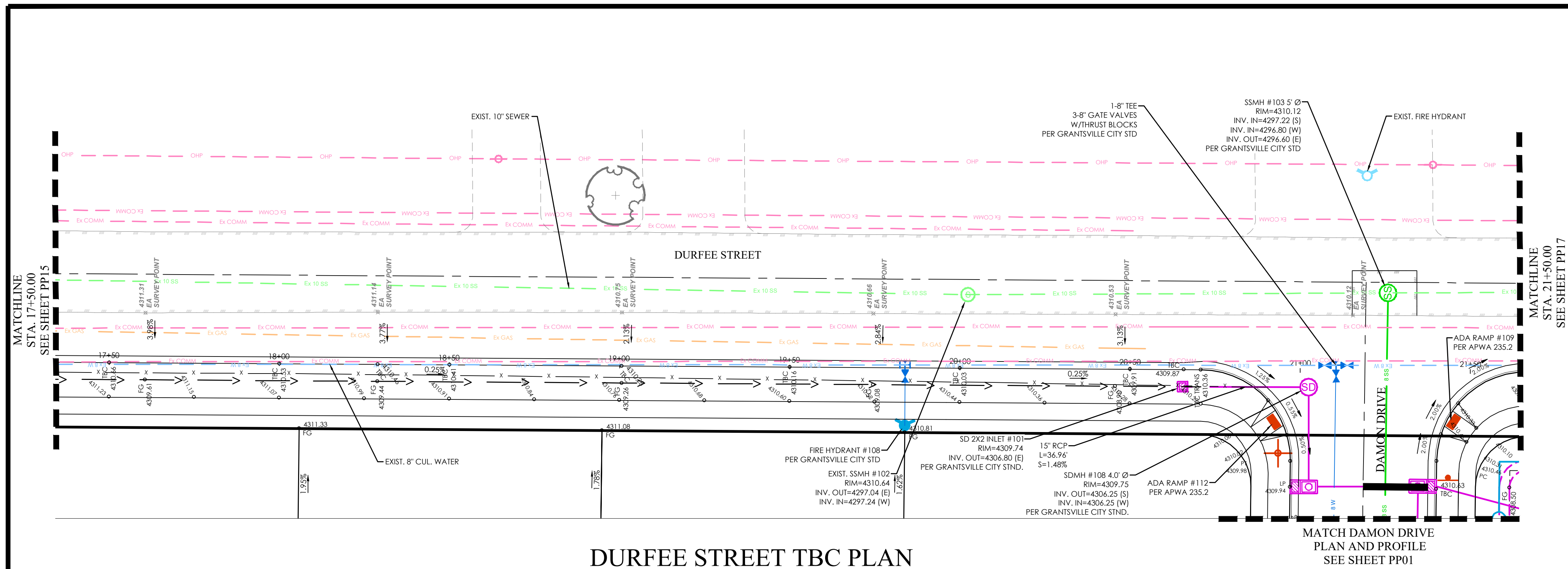
MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
DURFEE STREET TBC

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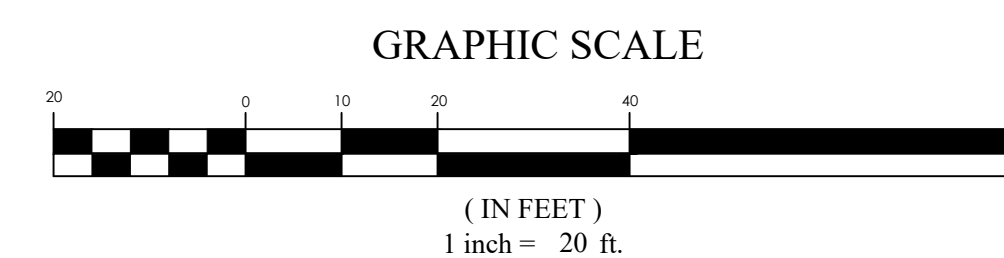
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Date: 09/14/22	Job #: 21-0377
Sheet:	PP15







**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM:NAVD88

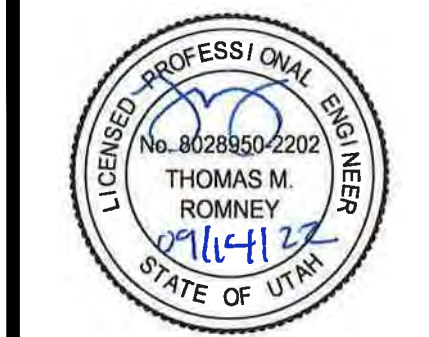


	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
	15" STORM DRAIN
	8" SANITARY SEWER
	8" CULINARY WATER
	8" SECONDARY WATER
	CONTOUR MAJOR
	CONTOUR MINOR
	EXIST. STORM DRAIN
	EXIST. SANITARY SEWER
	EXIST. CULINARY WATER
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION

NOTES:

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MIDVALE, UTAH 84047 PH: (801) 352-0075  
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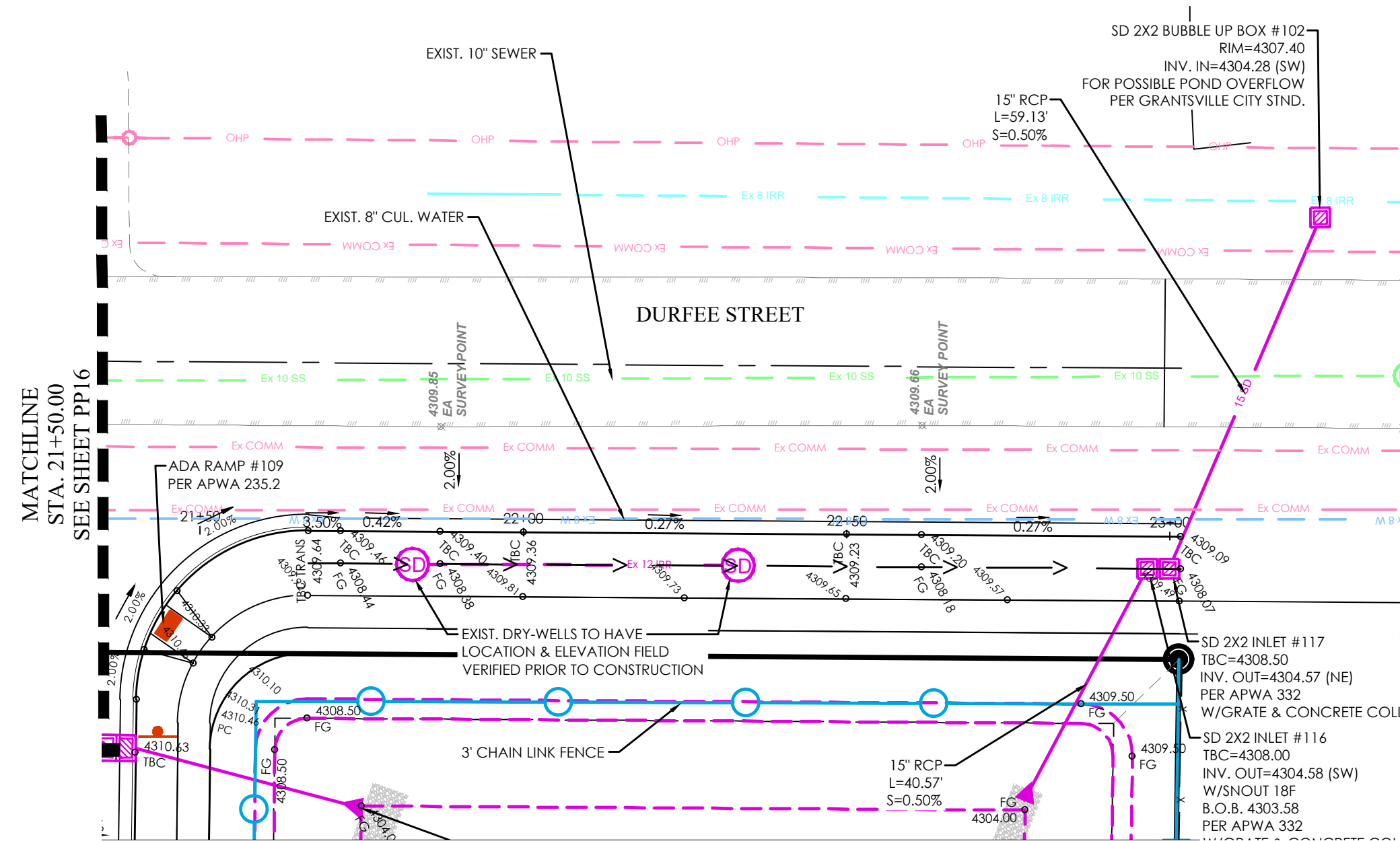


MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
DURFEE STREET TBC

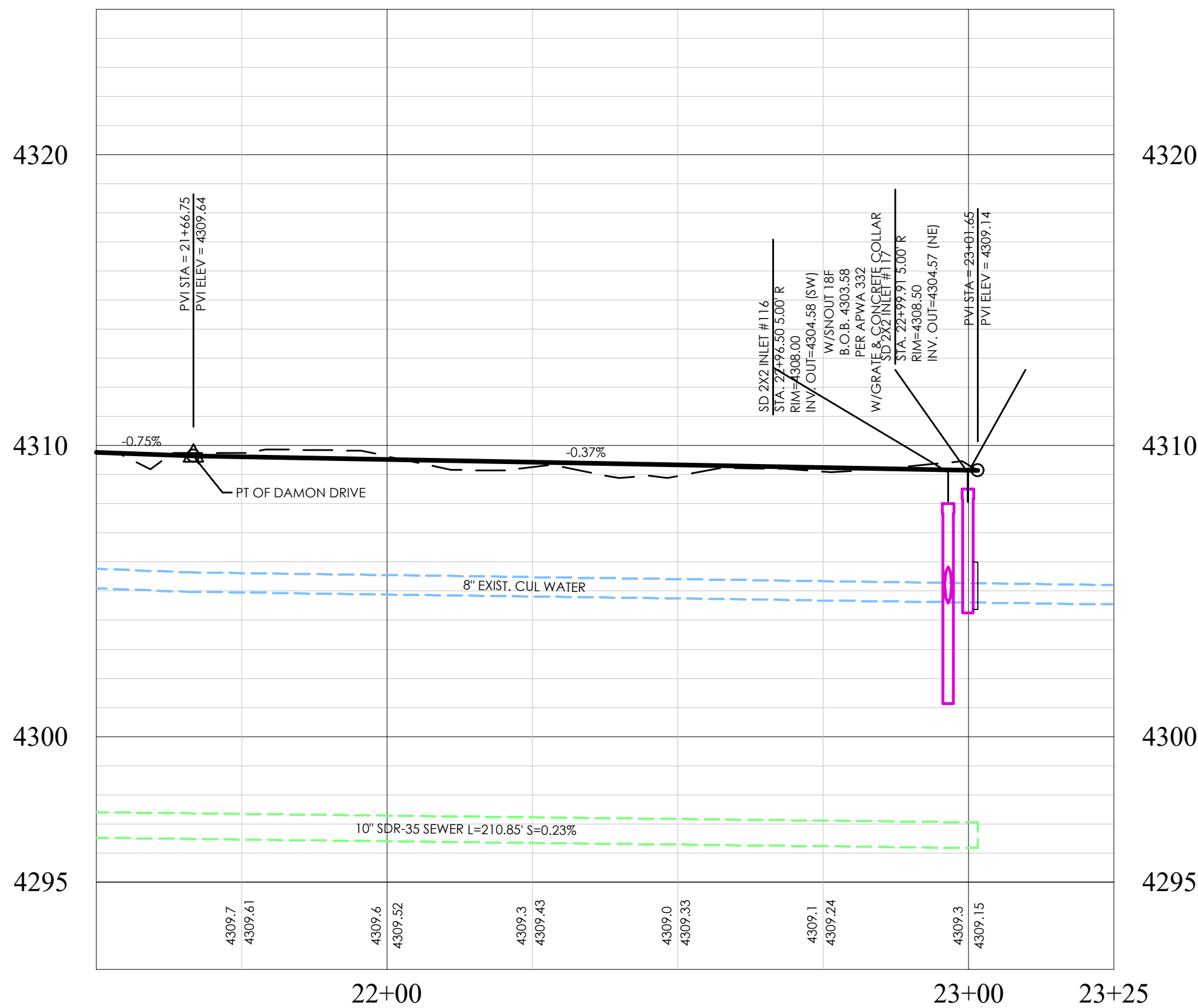
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DURFEE STREET TBC	
Scale: 1"=20'	Drawn: DCJ
Date: 09/14/22	Job #: 21-0377
Sheet:	
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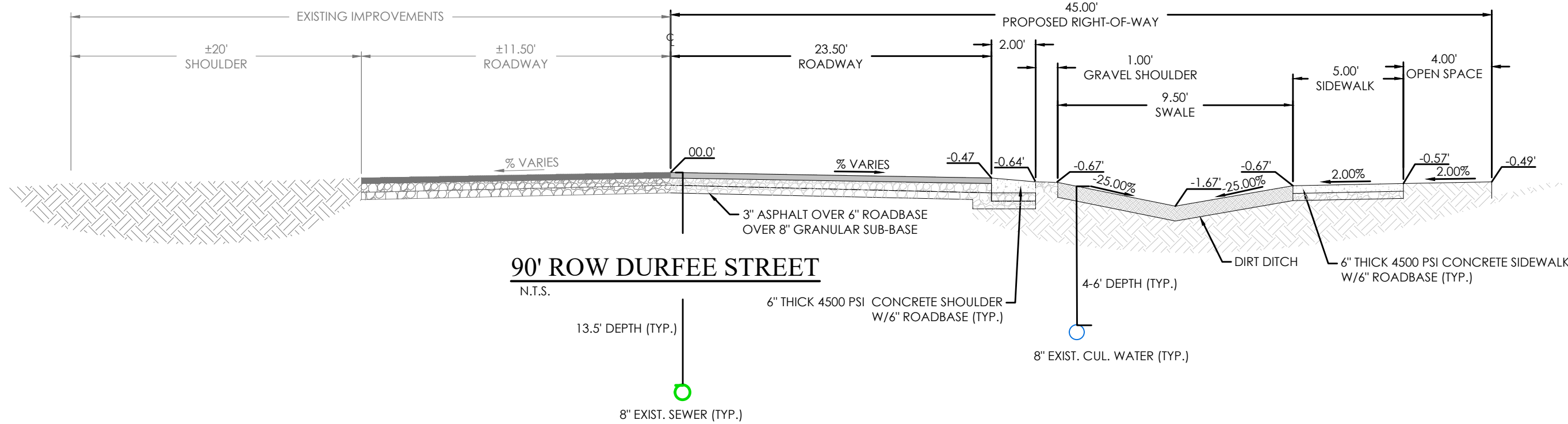




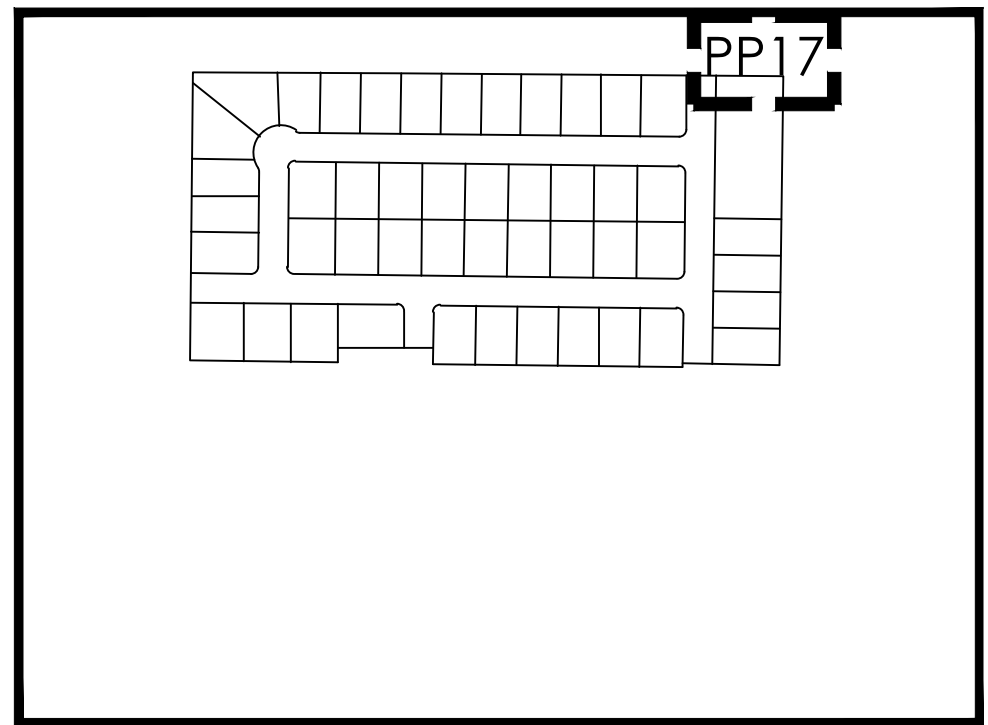
DURFEE STREET TBC PLAN



DURFEE STREET TBC PROFILE



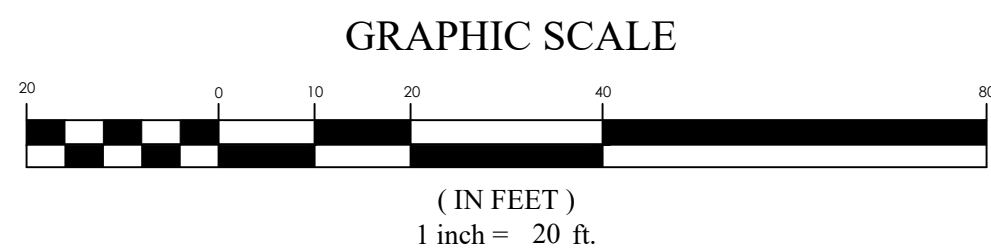
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KEY MAP  
N.T.S.



**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM=NAVD88



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
DURFEE STREET TBC

REVISION BLOCK	
#	DESCRIPTION
1	
2	
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**DURFEE STREET TBC**

Scale: 1"=20'  
Date: 09/14/22  
Sheet:

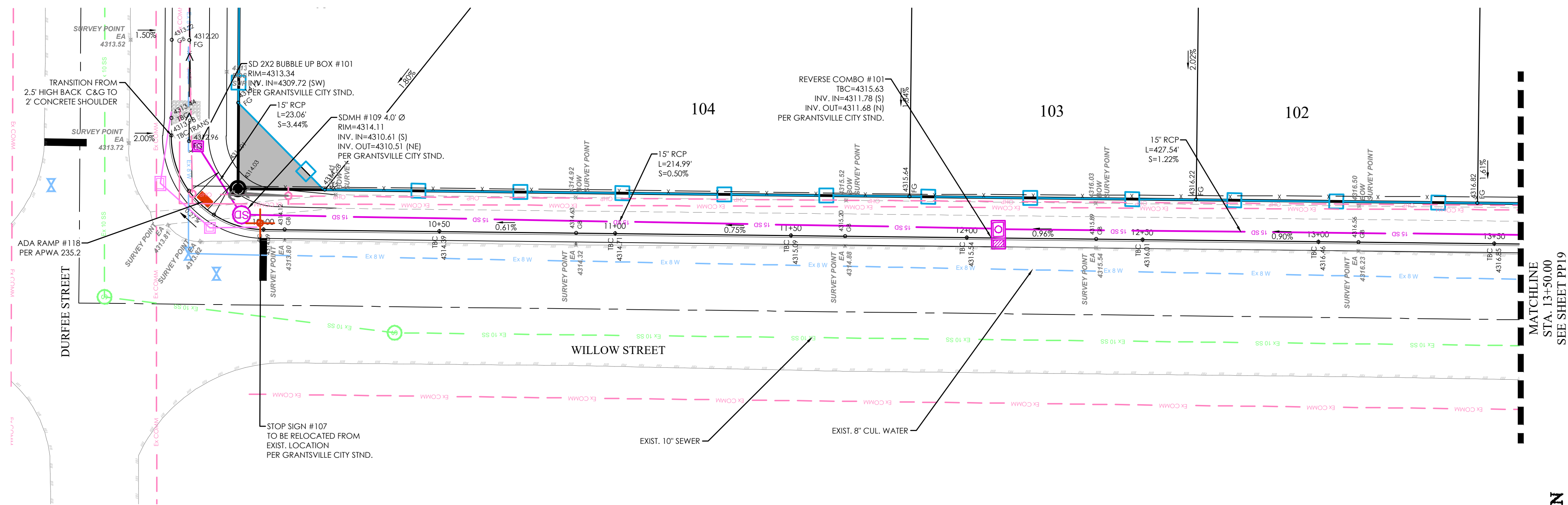
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Job #: 21-0377

**PP17**

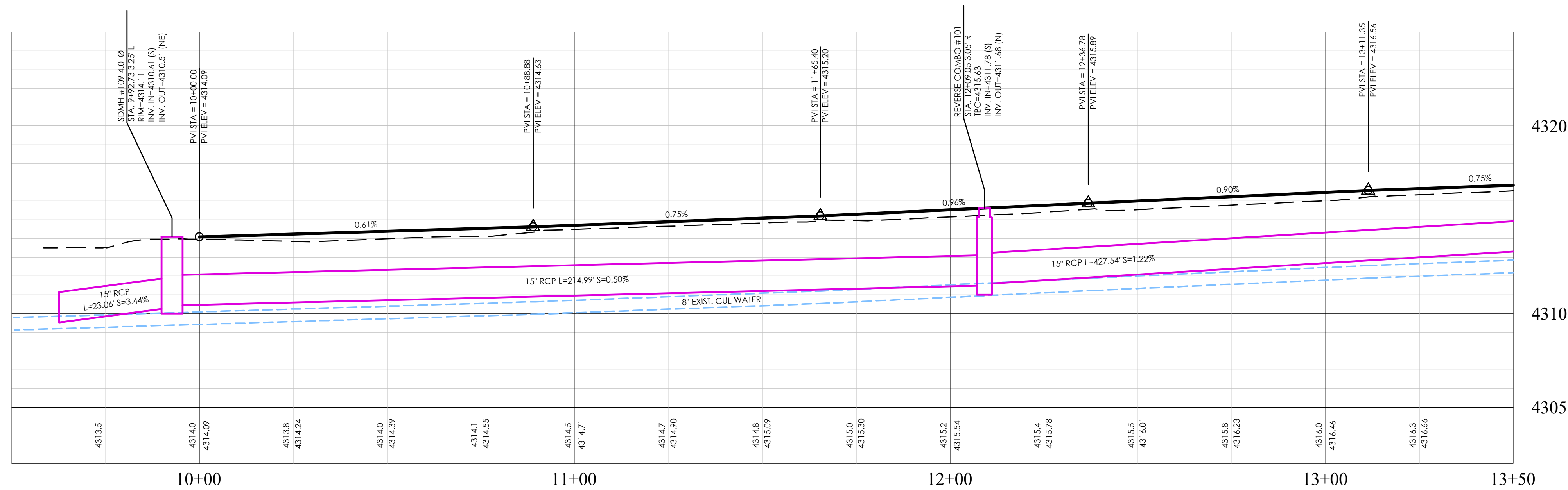
**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
6949 S. HIGH TECH DRIVE, SUITE 200  
MIDVALE, UTAH 84047 PH: (801) 352-0075  
www.focusutah.com

PROFESSIONAL ENGINEER  
No. 8028550-2200  
THOMAS M. ROMNEY  
09/14/22  
STATE OF UTAH

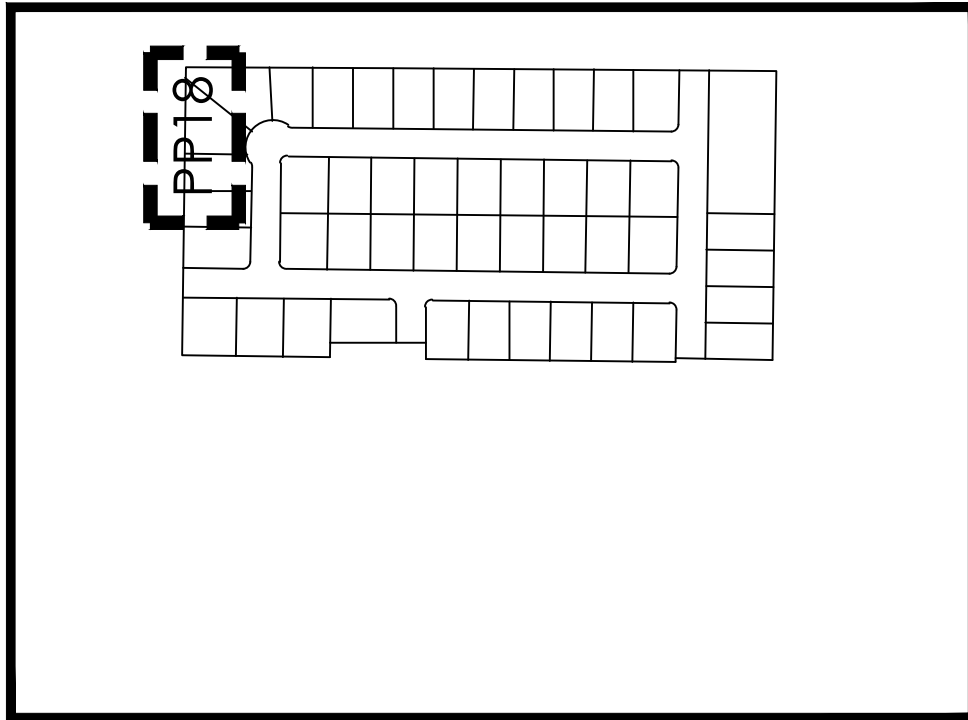
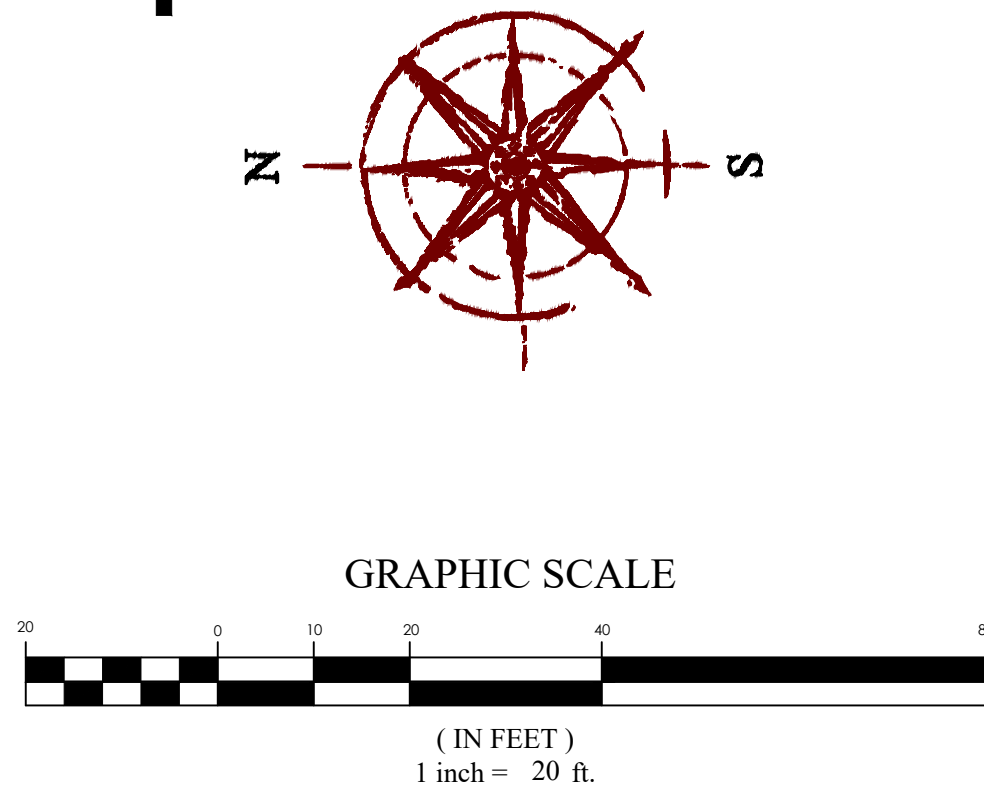




WILLOW STREET TBC PLAN



WILLOW STREET TBC PROFILE

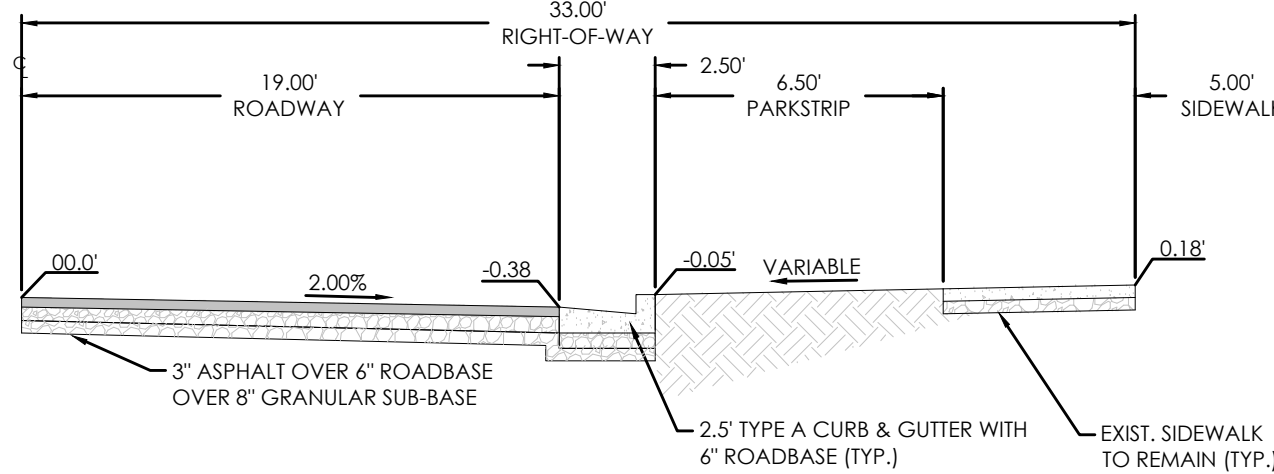


KEY MAP  
N.T.S

- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  - PROVIDE 12" SUMP ON ALL STORM WATER MANHOLES AND BOXES
  - ALL WATER SERVICES TO BE LOOPED UNDER THE STORM DRAIN WHERE EVER CONFLICTS OCCUR.

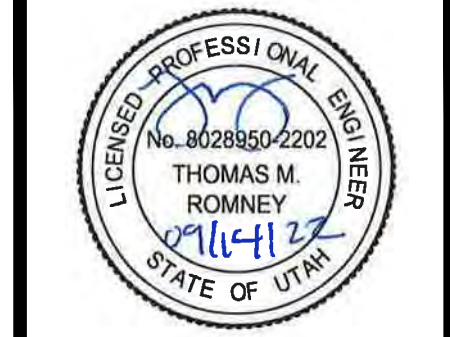


**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM=NAVD88



66' ROW WILLOW STREET (HALF WIDTH)  
N.T.S.

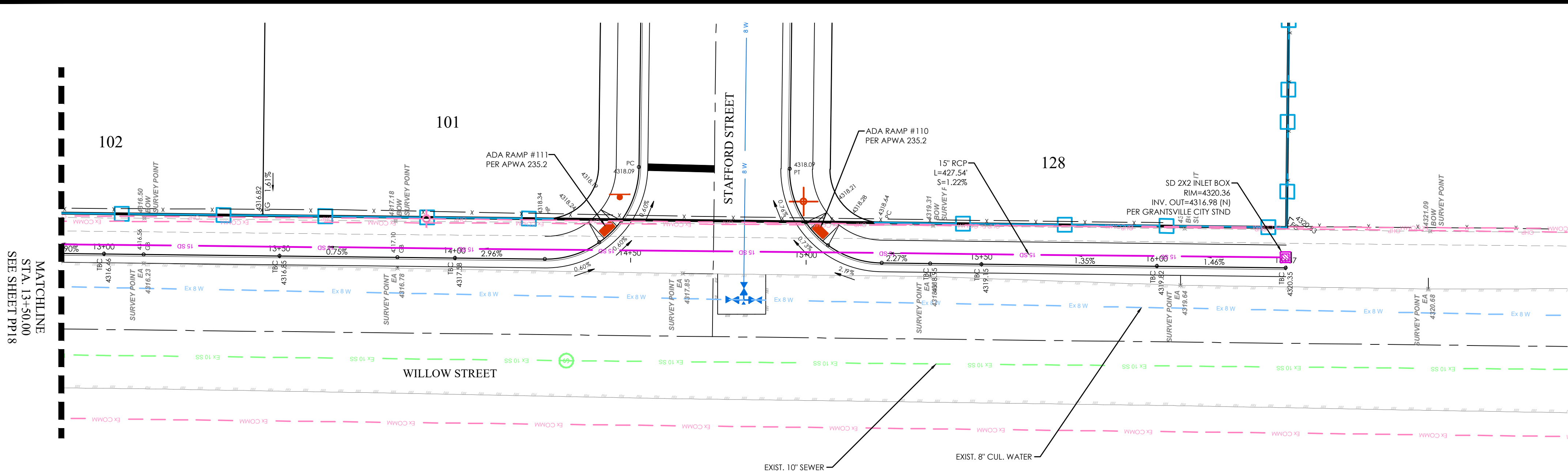
LEGEND	
	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
	15' SD
	8' SS
	8' W
	8' SW
	XXXX
	EXIST. SD
	EXIST. SS
	EXIST. W
	EXIST. SW
	EXIST. FENCE
	EXIST. CONTOUR MAJOR
	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	CULINARY VALVE, TEE, & BEND
	SECONDARY VALVE, TEE, & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
	SPOT ELEVATION



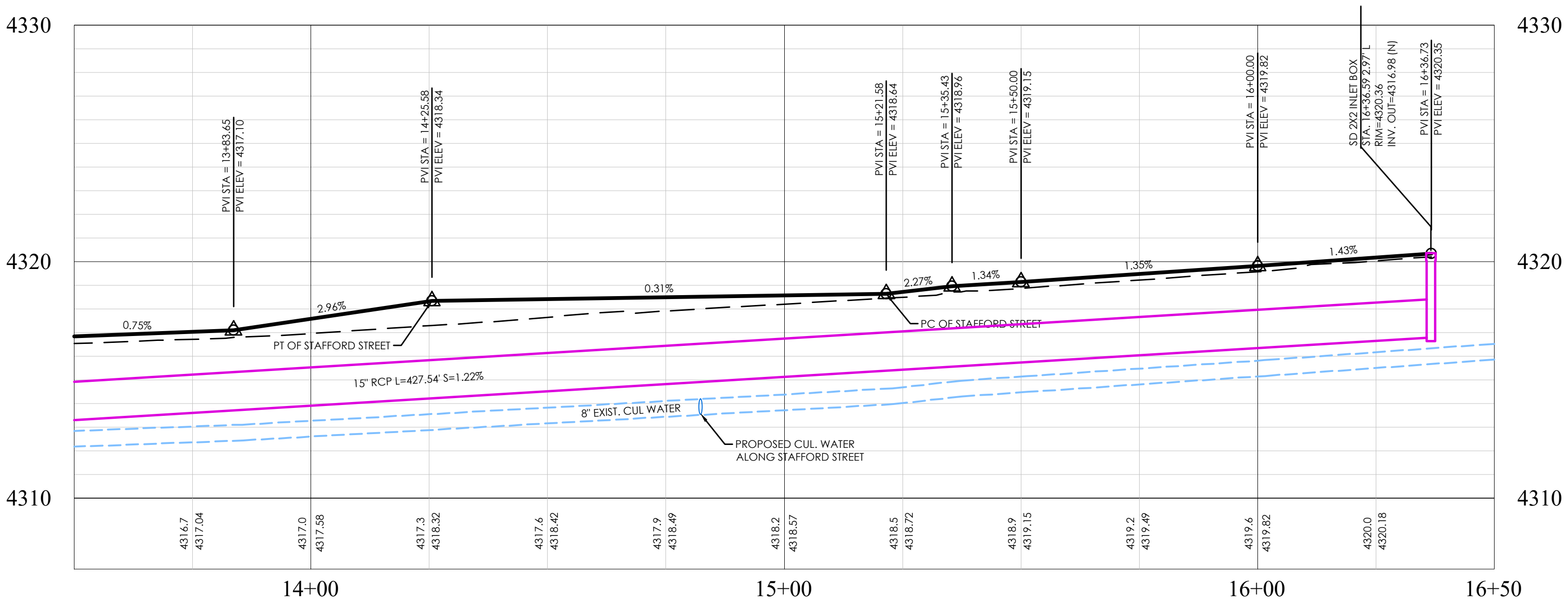
MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
WILLOW STREET TBC

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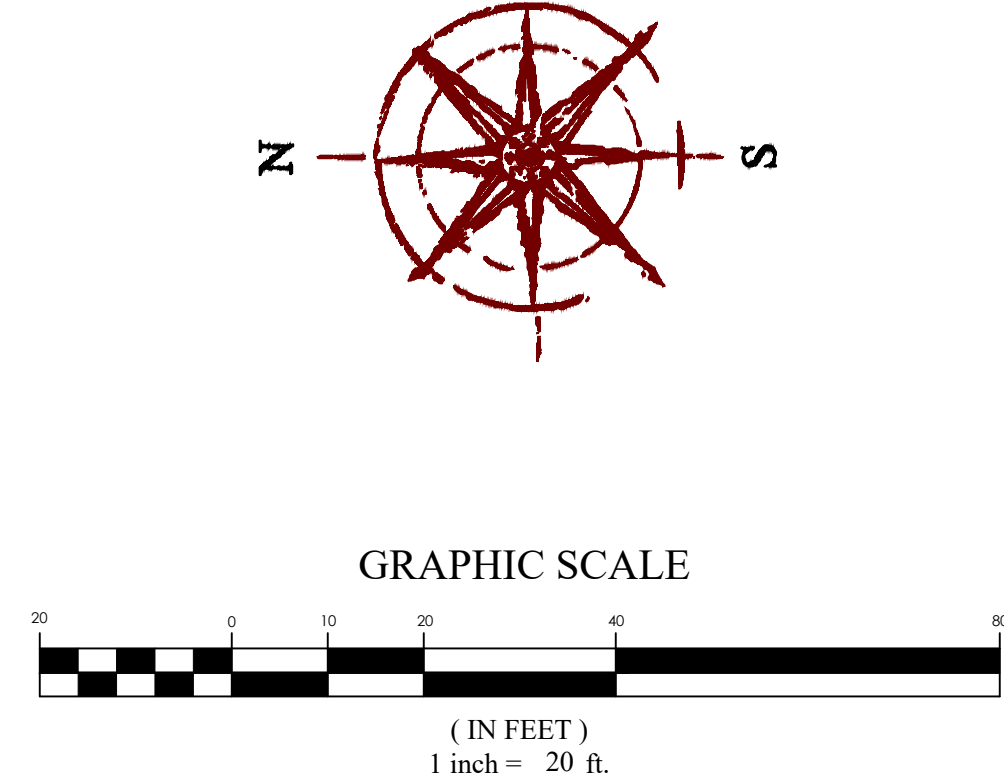




WILLOW STREET TBC PLAN

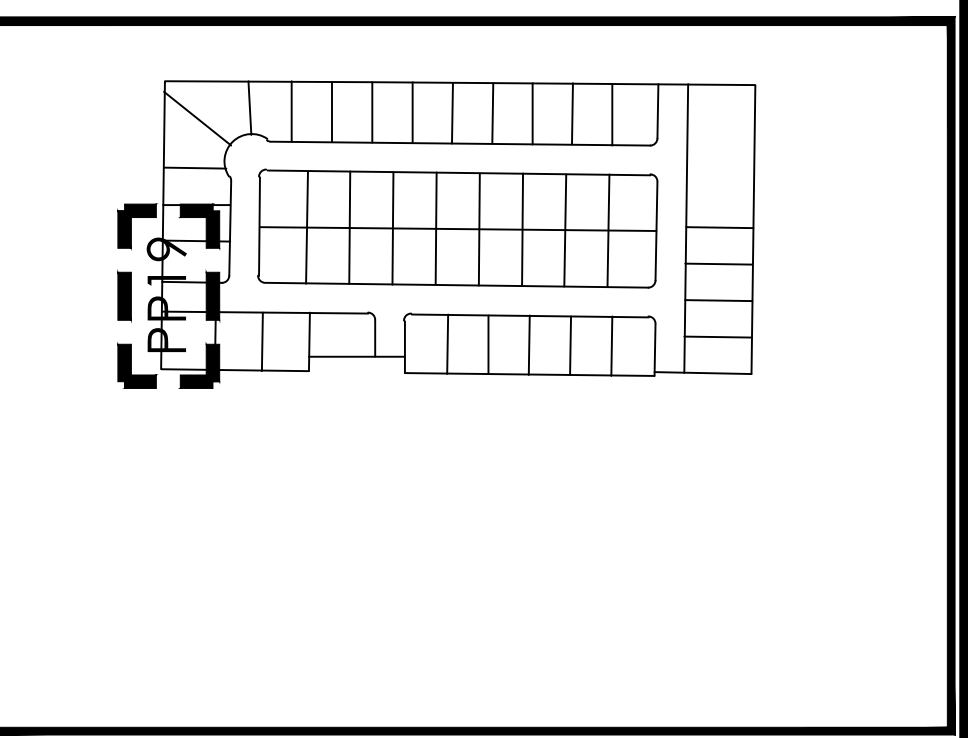


WILLOW STREET TBC PROFILE



**LEGEND**

---	BOUNDARY
---	ROW
---	CENTERLINE
---	LOT LINE
---	EASEMENT
---	15" SD
---	8" SS
---	8" W
---	8" SANITARY SEWER
---	8" CULINARY WATER
---	8" SECONDARY WATER
---	CONTOUR MAJOR
---	CONTOUR MINOR
---	EXIST. STORM DRAIN
---	EXIST. SANITARY SEWER
---	EXIST. CULINARY WATER
---	EXIST. FENCE
---	EXIST. CONTOUR MAJOR
---	EXIST. CONTOUR MINOR
+	SIGN
+	STREET LIGHT
+	SD MH, INLET, AND COMBO
+	SEWER MANHOLE
+	CULINARY VALVE, TEE & BEND
+	SECONDARY VALVE, TEE & BEND
+	WATER BLOW-OFF
+	FIRE HYDRANT
+	STREET MONUMENT (TO BE SET)
+	EXIST. STREET MONUMENT
+	EXIST. SD INLET & MH
+	EXIST. SEWER MH
+	EXIST. VALVE, TEE, & BEND
+	EXIST. FIRE HYDRANT
+	SPOT ELEVATION

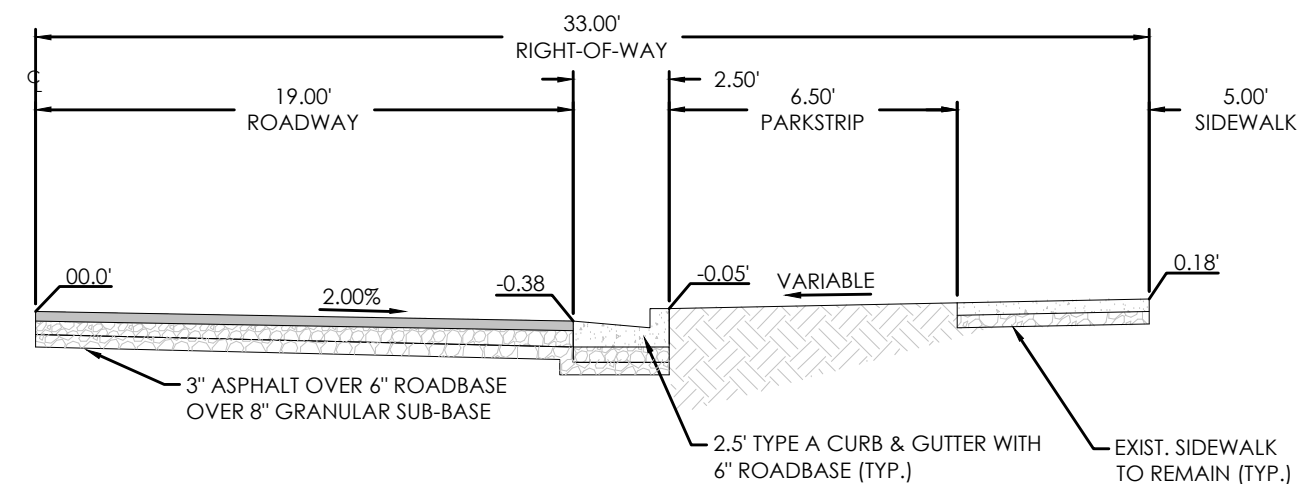


KEY MAP  
N.T.S.

- NOTES:
- CONTRACTOR TO ENSURE THAT THERE IS ADEQUATE SEPARATION BETWEEN WATER LATERALS AND SEWER MAIN. IF CONFLICTS EXIST THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
  - PROVIDE 12" SUMPS ON ALL STORM WATER MANHOLES AND BOXES
  - ALL WATER SERVICES TO BE LOOPED UNDER THE STORM DRAIN WHERE EVER CONFLICTS OCCUR.

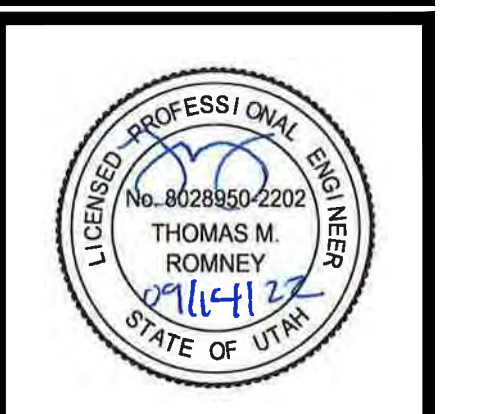


**BENCHMARK**  
NORTHEAST CORNER OF SECTION 05  
TOWNSHIP 03 SOUTH, RANGE 05 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV: 4309.08'  
DATUM: NAVD88



66' ROW WILLOW STREET (HALF WIDTH)  
N.T.S.

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MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
WILLOW STREET TBC

REVISION BLOCK	
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**WILLOW STREET TBC**

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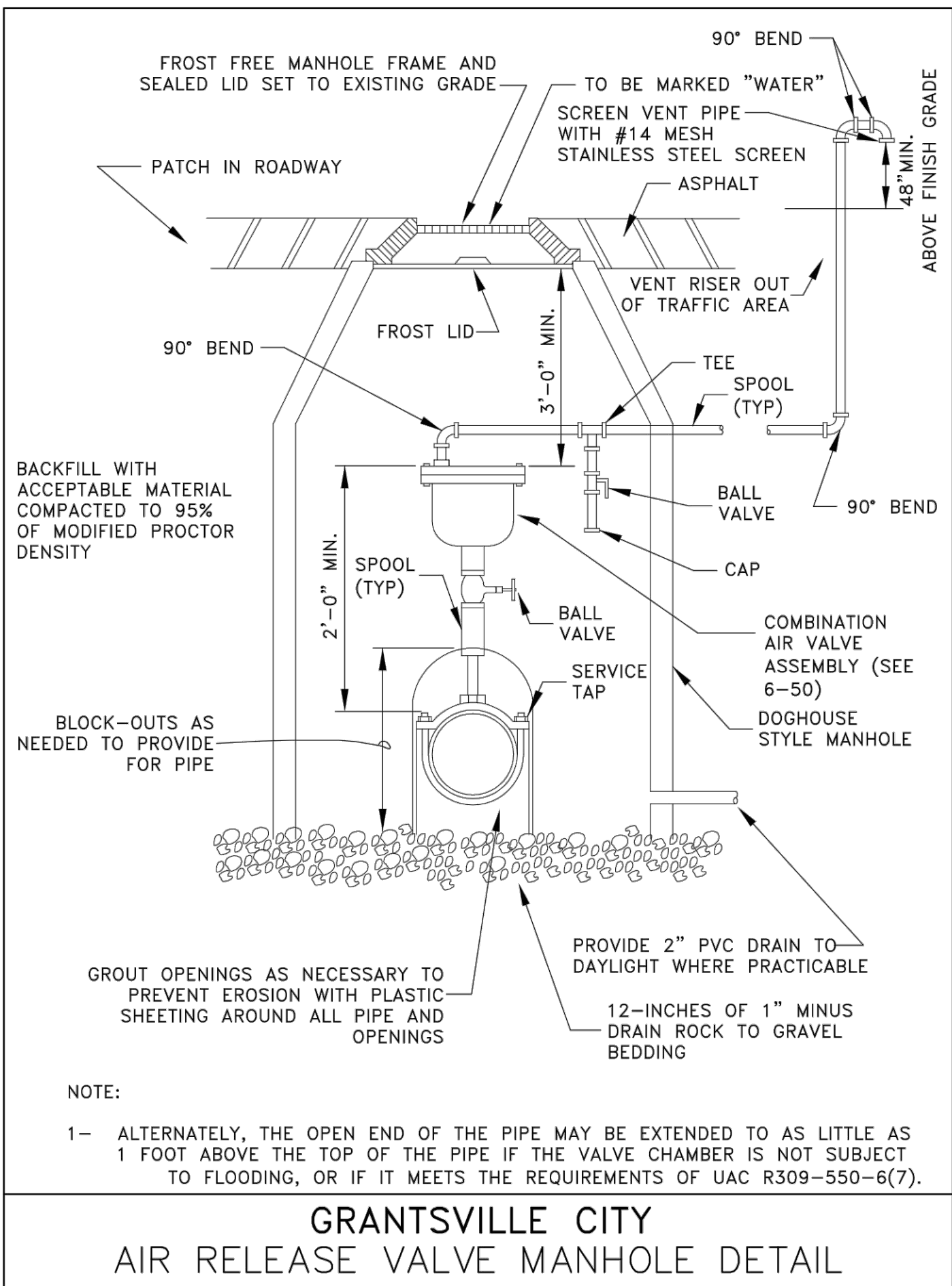
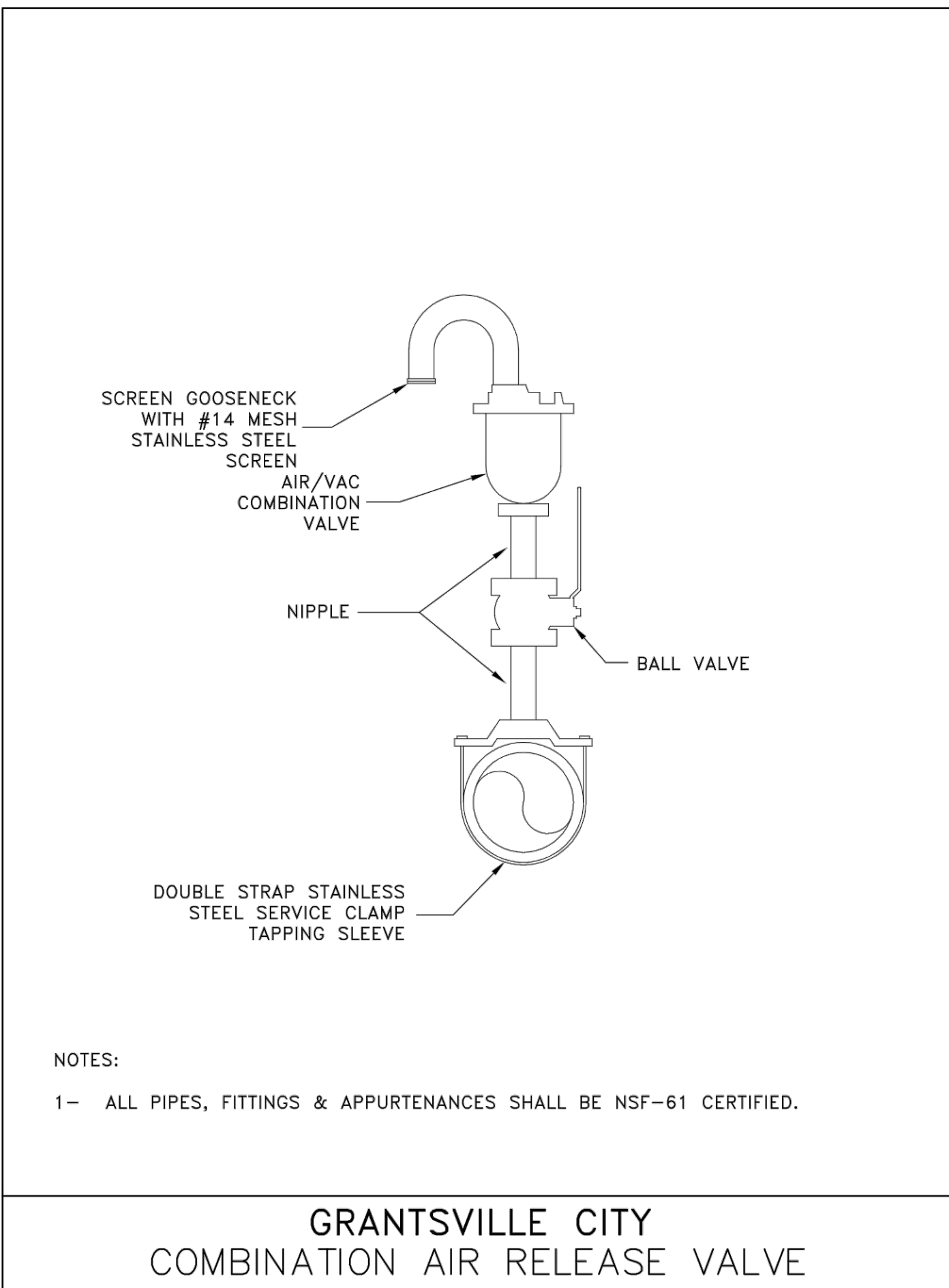
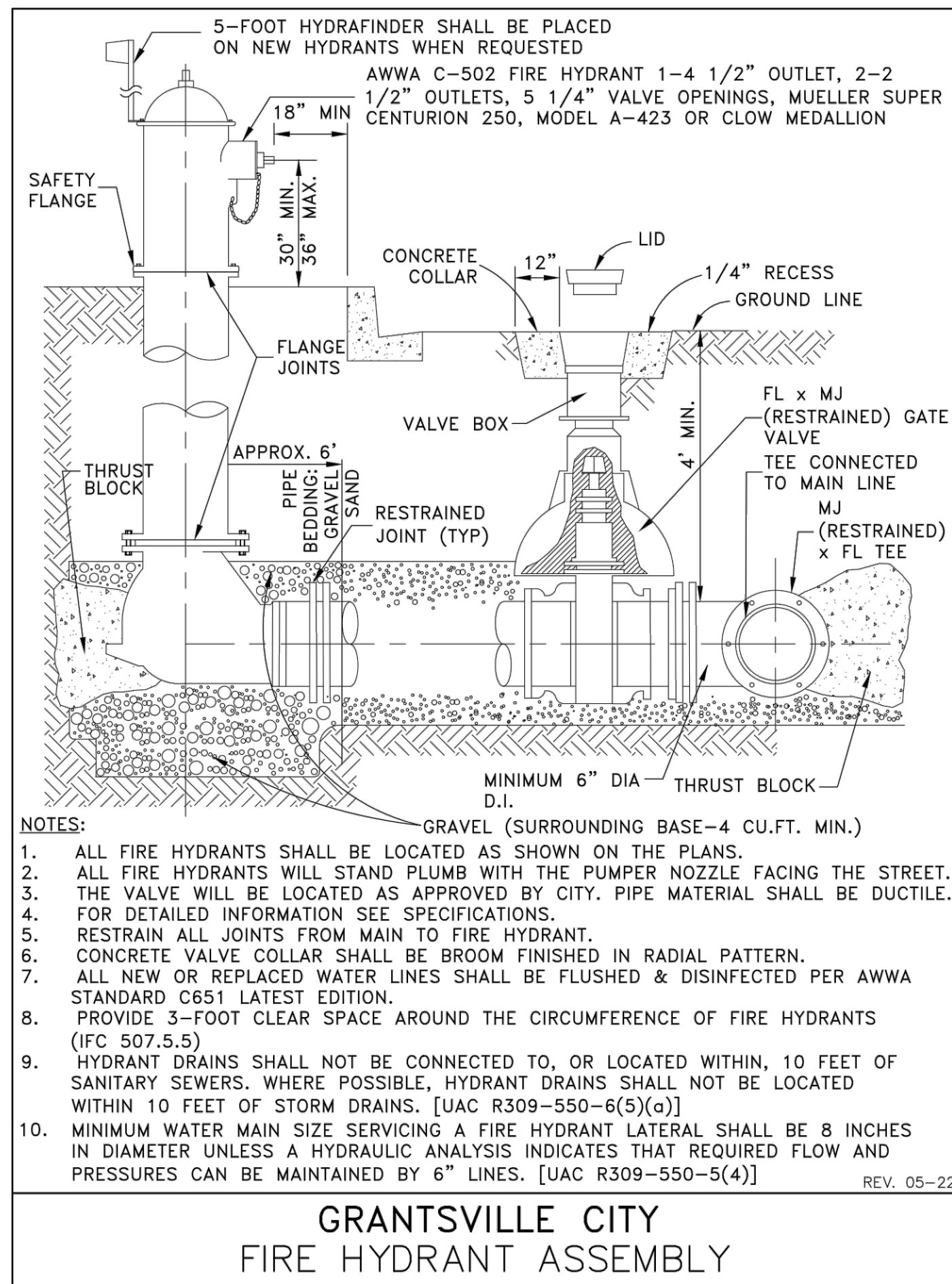
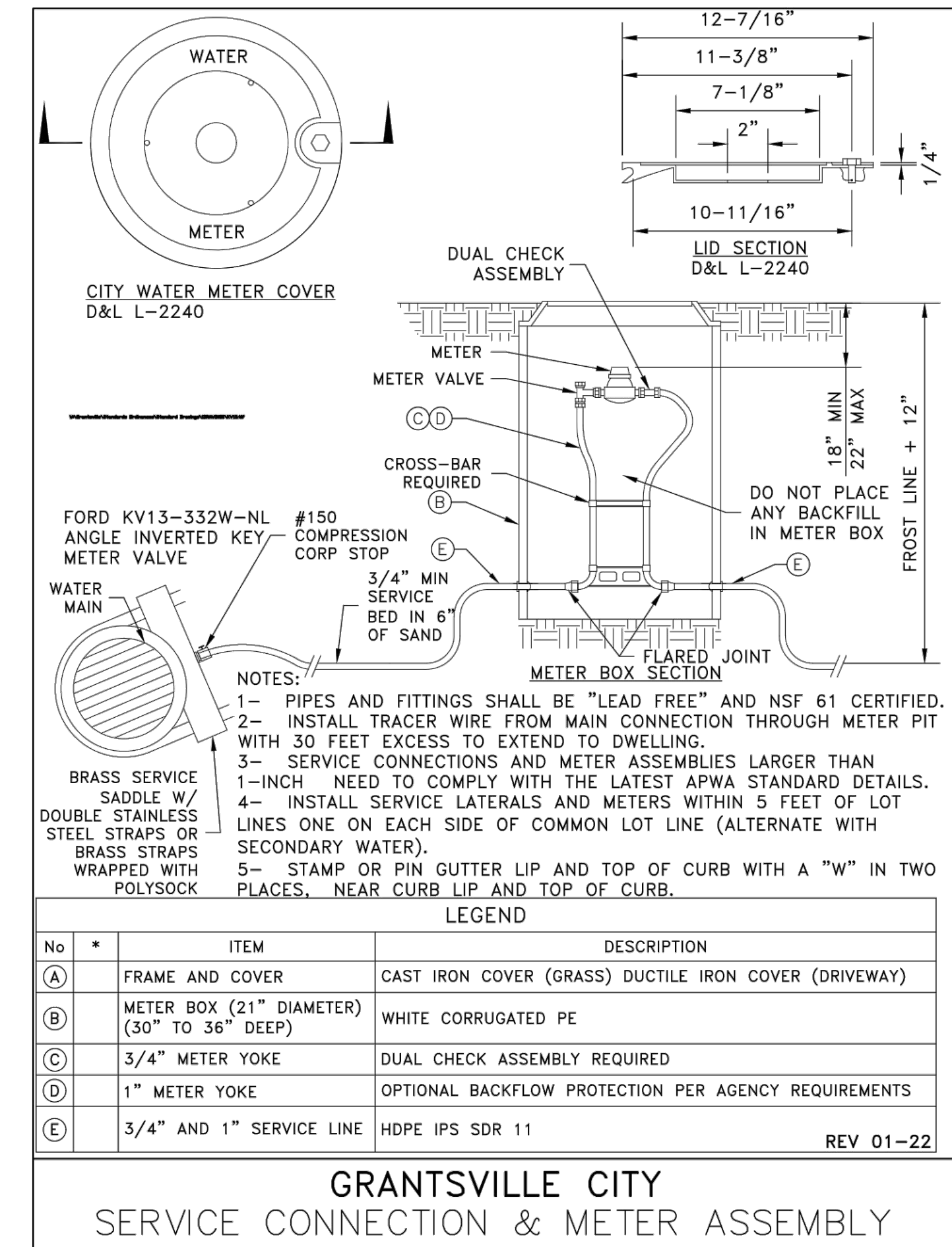
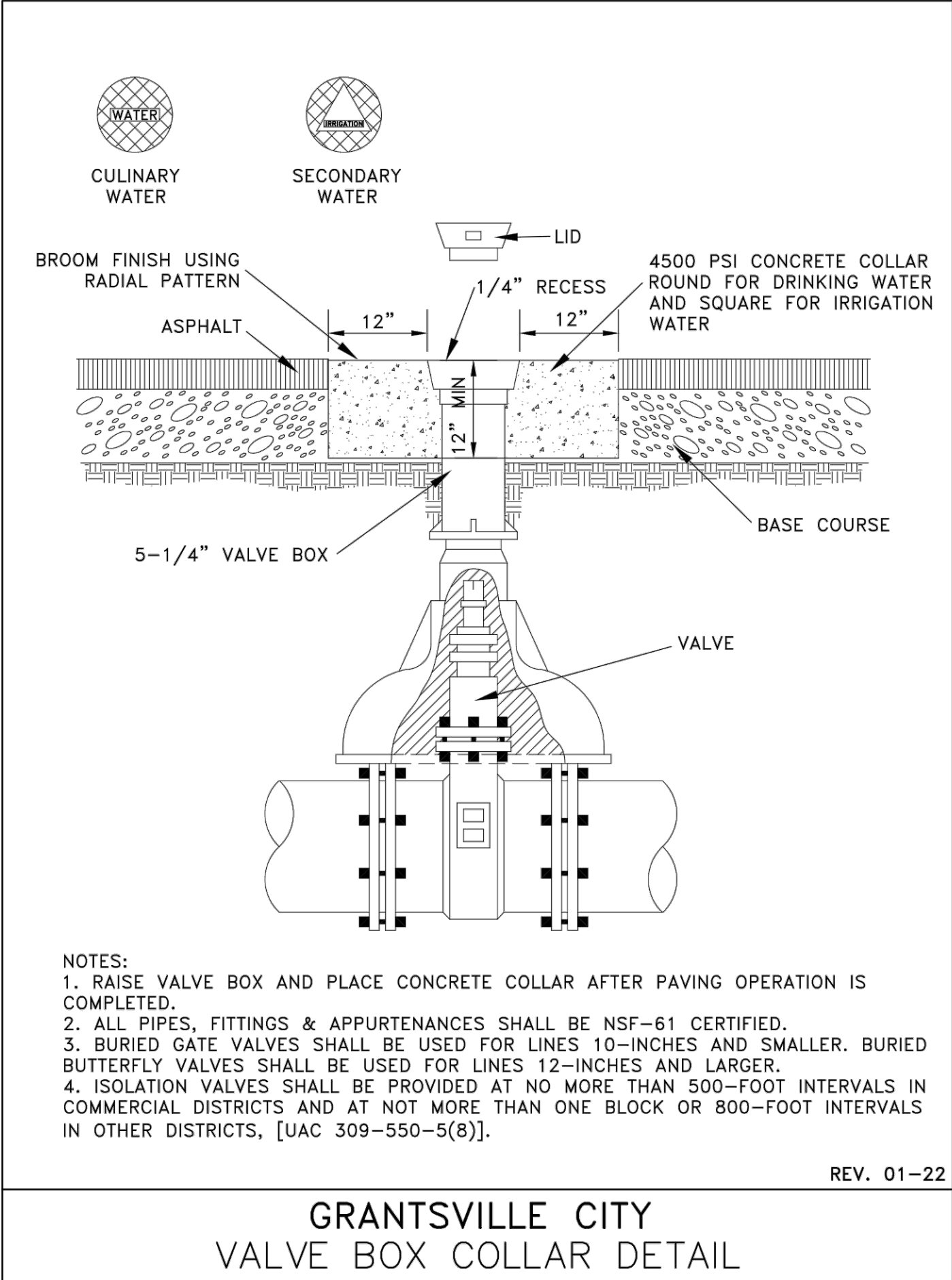
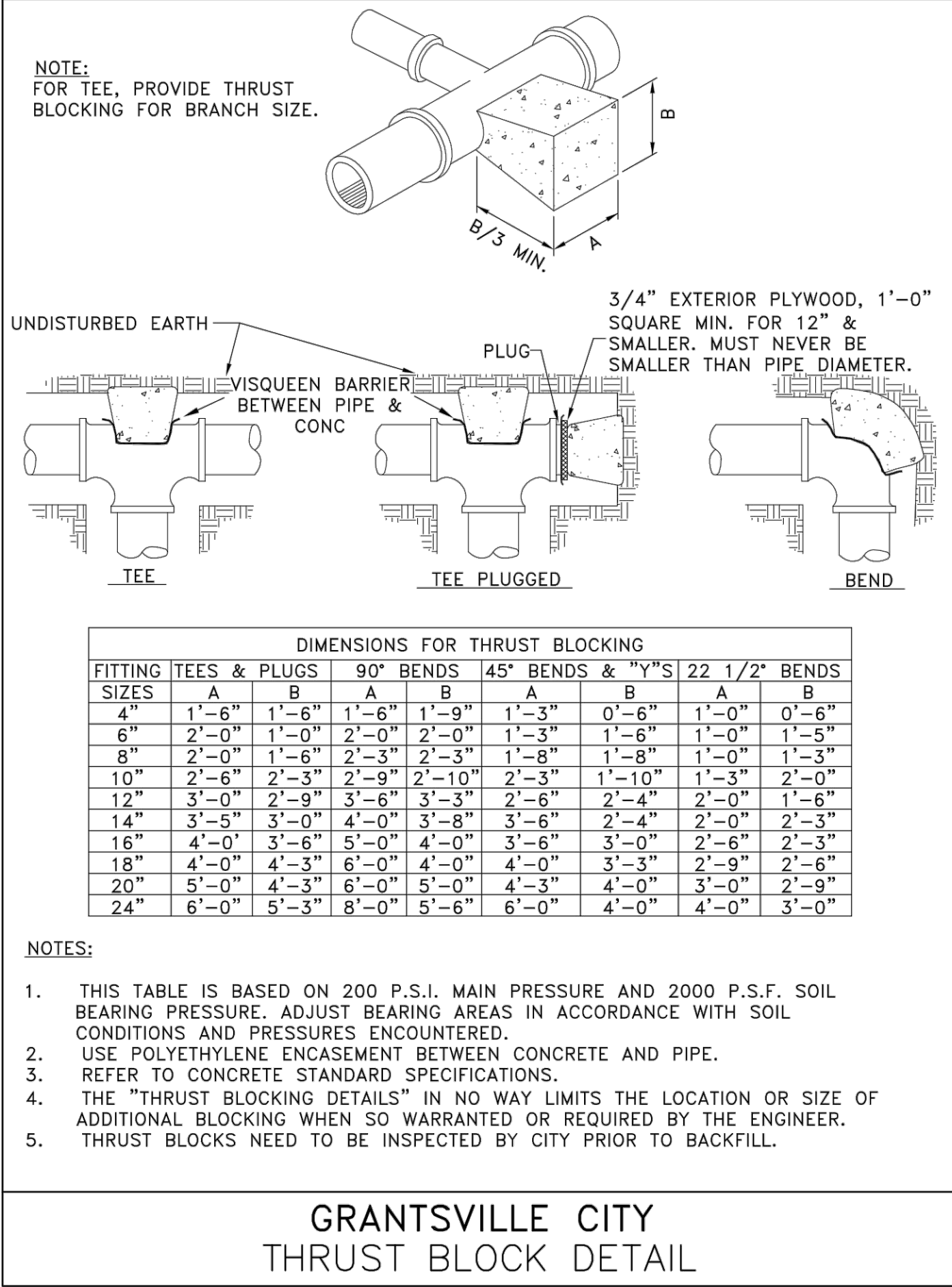
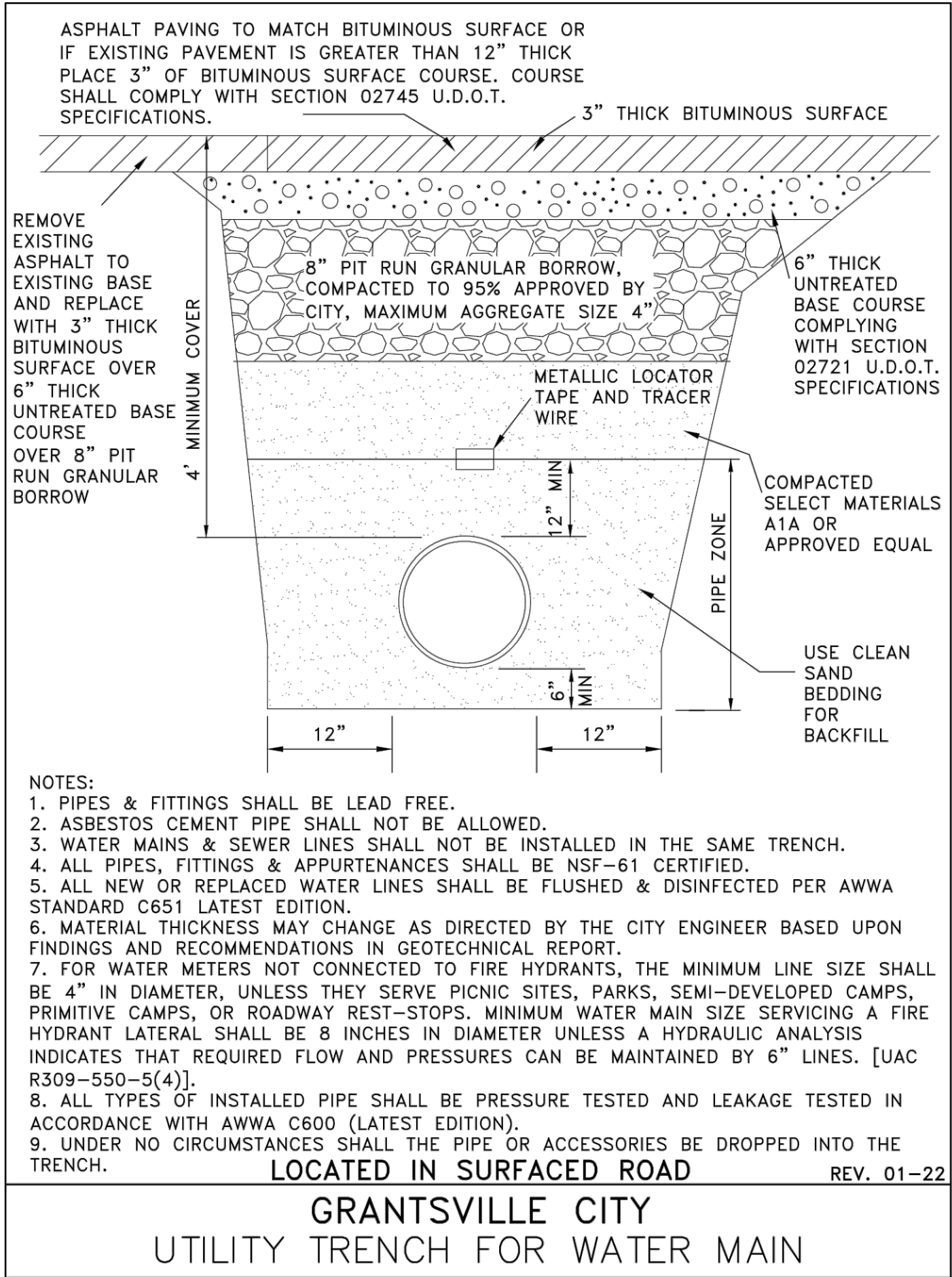
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Job #: 21-0377

**PP19**



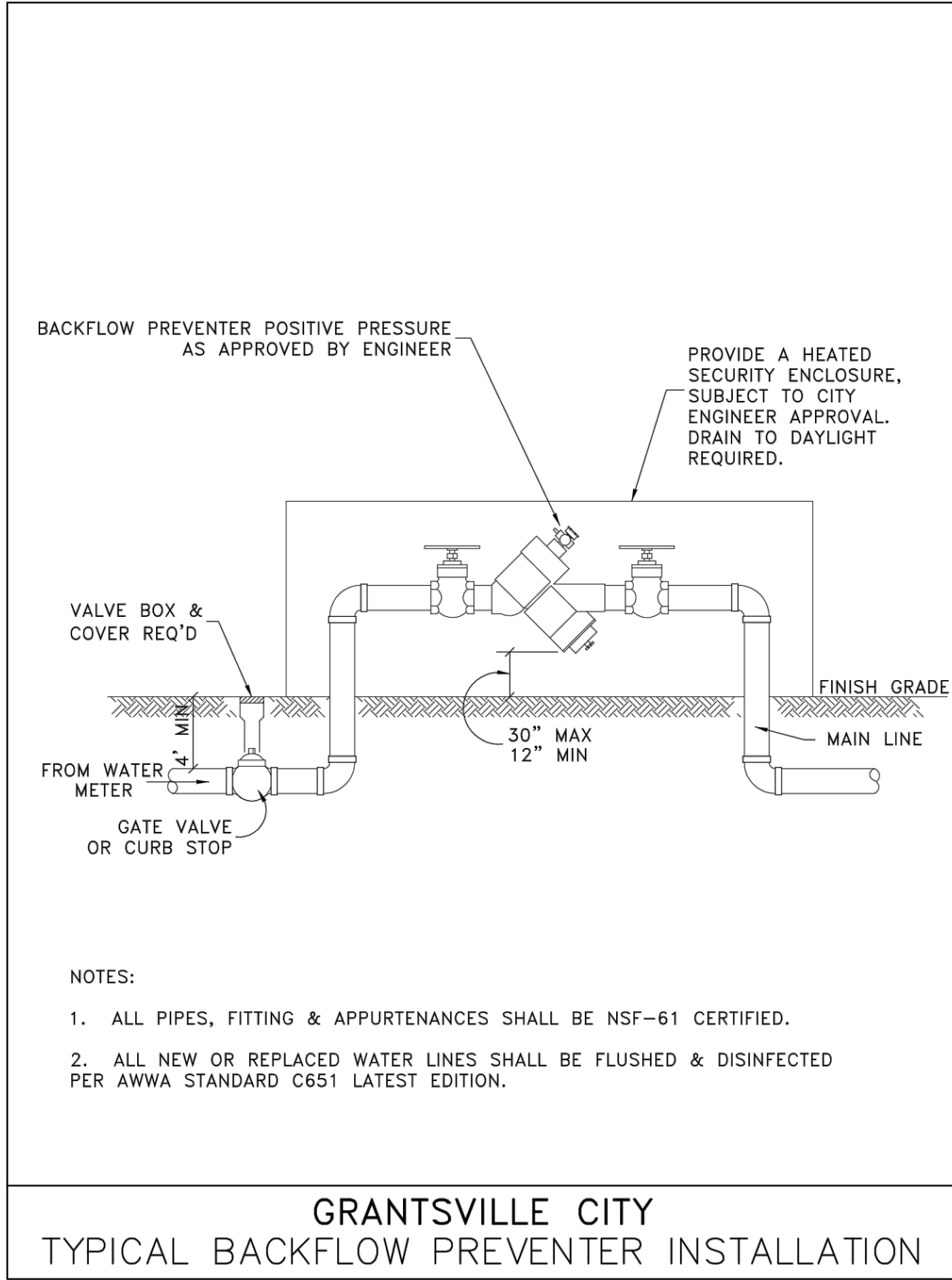
NOTE:

1. ALL SURFACE CONCRETE TO BE 4500 PSI.
2. SIDEWALK SHALL BE 6" THICK ON 6" OF COMPACTED BASEROCK

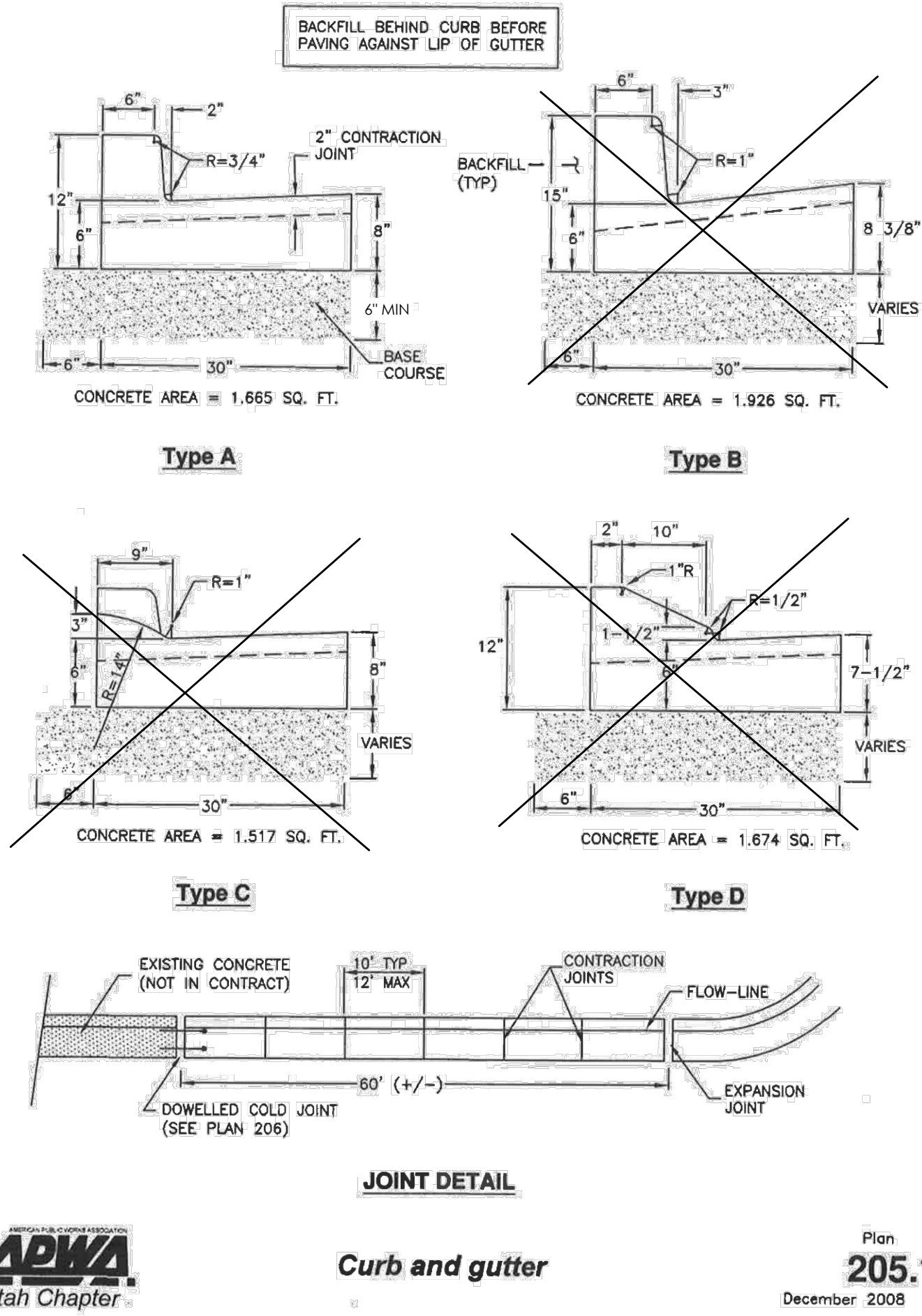


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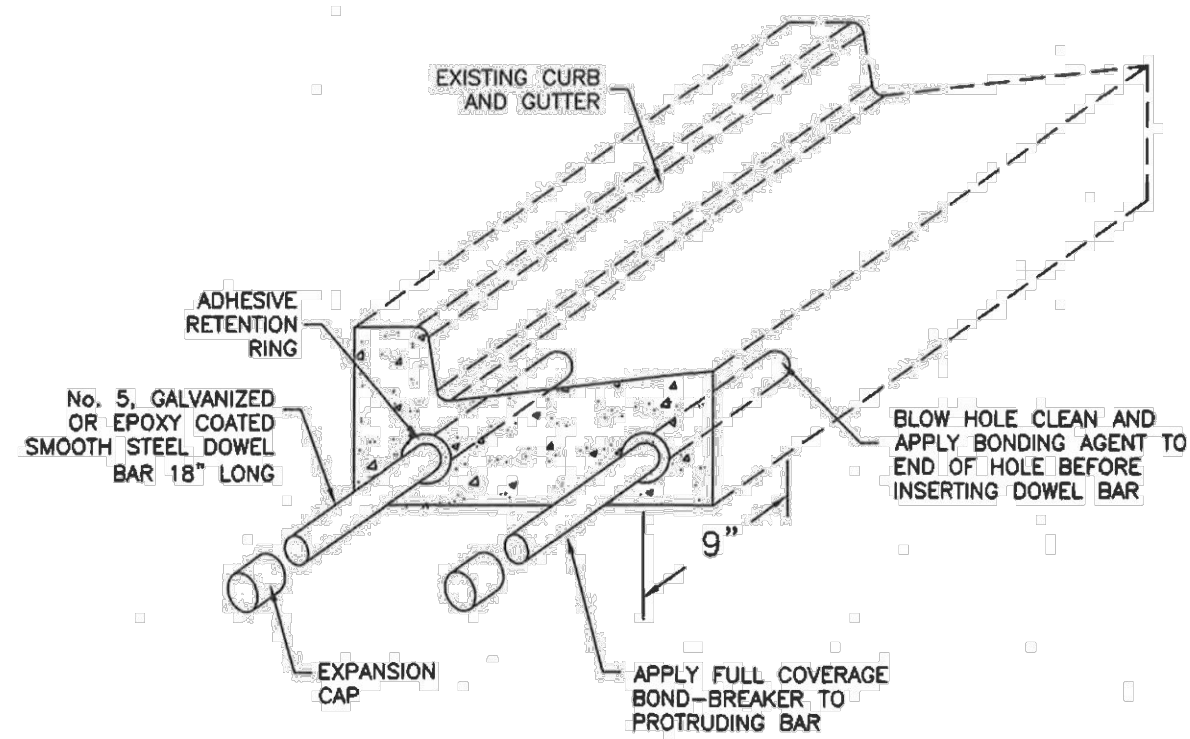
- Curb and gutter**
- GENERAL**
    - Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
    - Additional requirements are specified in APWA Section 32 16 13.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
    - Concrete: Class 4500 APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
    - Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
  - EXECUTION**
    - Base Course Placement: APWA Section 32 05 10. Thickness is 6-inches if flow-line grade is 0.5 percent (s=0.005) or greater. If slope is less, provide 8-inches. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
    - Concrete Placement: APWA Section 03 30 10.
      - Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install at the start or end of a street intersection curb return. Expansion joints are not required in concrete placement using slip-form construction.
      - Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.
      - Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
    - Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.



NOTE:

- ALL SURFACE CONCRETE TO BE 4500 PSI.

- Curb and gutter connection**
- GENERAL**
    - Connect new curb and gutter to existing curb and gutter that has not been placed by CONTRACTOR.
  - PRODUCTS**
    - Reinforcement: Galvanized or epoxy coated, 60 ksi yield grade steel, ASTM A615.
    - Adhesive: Epoxy adhesive grout, APWA Section 03 61 00.
    - Bond Breaker: Paraffin wax, lithium grease, or other semi-solid, inert lubricant.
    - Expansion Cap: Plastic, with bar movement allowance of 1/2-inch.
  - EXECUTION**
    - Ensure drill rigs (or jigs) are set at mid-depth of the gutter and horizontal to the surface. Make hole size large enough to account for dowel bar and adhesive.
    - Clean holes and dowel bars of dirt, dust and particles. Ensure coating on bars have no surface defects.
    - Place bonding agent in the back of each hole so adhesive flows out around each bar fully encasing it. DO NOT apply adhesive to end of the bar and then insert the bar into the hole.
    - Insert dowels with at least one full turning motion and if necessary, place a grout retention disk on the dowel after insertion to contain adhesive.
    - Apply complete coverage of bond-breaker on the protruding end of each dowel.
    - Install expansion caps on protruding dowel bar ends.



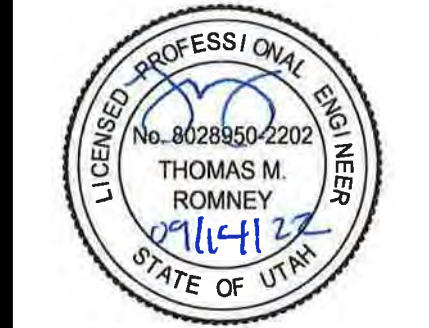
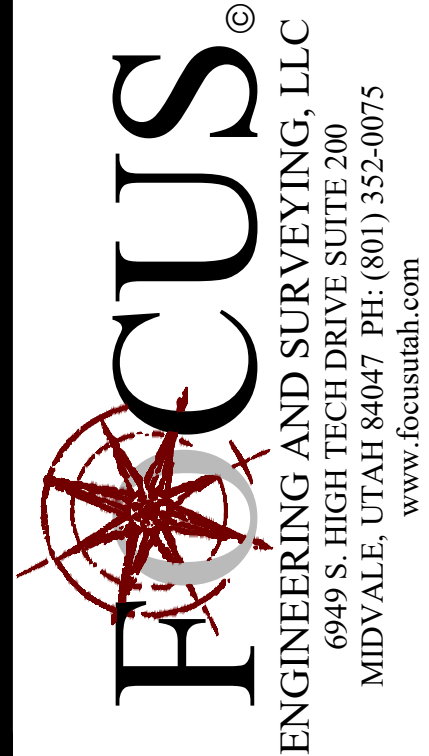
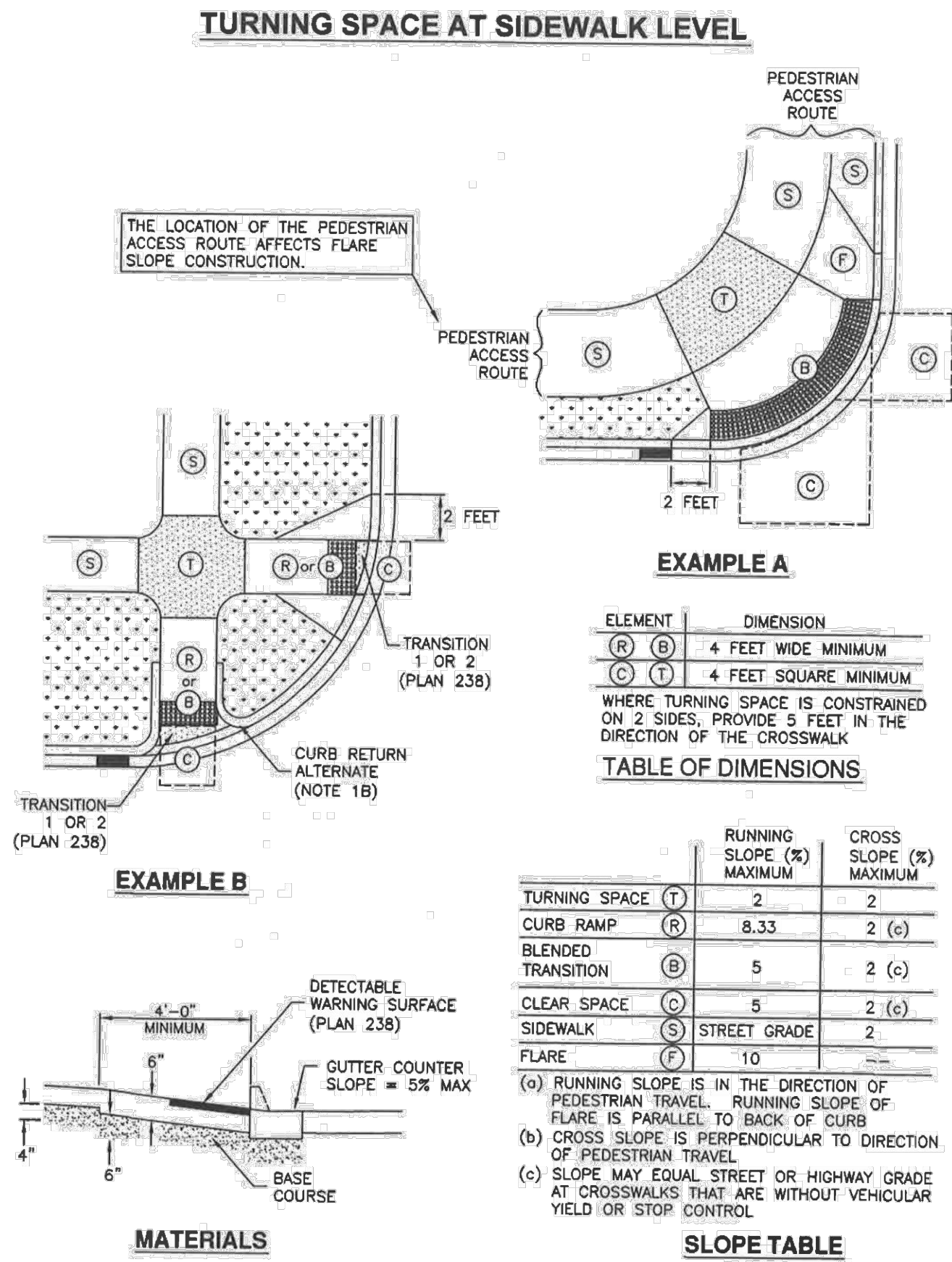
206



**Curb and gutter connection**

Plan **206**  
June 2009

- Corner curb cut assembly**
- GENERAL**
    - Where existing elements or spaces are altered to receive an assembly; slopes and dimensions shall comply with slopes and dimensions shown on the drawing, or to the maximum extent feasible permitted by the ENGINEER. Final configuration of the assembly may be different than shown. Where physical constraints (e.g. utility covers, poles, vaults, etc.) prevent compliance, a single diagonal curb cut assembly may serve both pedestrian street crossings.
    - Installation of flares or curb returns is ENGINEER's choice.
    - Definitions and supplemental requirements are specified in APWA Section 32 16 14.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
    - Detectable Warning Surface: Paver, ribbed composite panel, or tile. Provide a color that contrasts with adjacent walking surface, either light-on-dark or dark-on-light. ENGINEER to select type and color unless indicated elsewhere.
    - Concrete: Class 4500 APWA Section 03 30 04.
    - Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
  - EXECUTION**
    - Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
    - Curb Modifications:
      - The sloped surface created to accommodate a flare area shall be perpendicular to the back of curb.
      - No grade break shall exist between the flow-line and the foot of the curb ramp or blended transition. Length of the curb modification abutting the curb ramp or transition is 4 feet minimum for each crosswalk served.
    - Curb Ramp: Length not required to exceed 15 feet. Grade breaks are perpendicular to the direction of ramp run and are not permitted on ramp or turning space surface. Sides are parallel to each other and perpendicular to the ends. At the bottom grade break it may be necessary to install a transition zone, (APWA Plan 238).
    - Concrete Placement: APWA Section 03 30 10.
      - Maximum length to width ratio for rectangular panel joints is 1.5 to 1. Joint spacing measured in feet not to exceed twice slab thickness measured in inches or a maximum of 15 feet.
      - Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install contraction joints vertical, 1/8-inch wide, and 1/4 of the depth of the concrete flatwork.
      - Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
    - Clear Space: No trip hazards in the clear space.



MATTHEWS MEADOWS SUBDIVISION  
GRANTSVILLE, UT  
DETAILS

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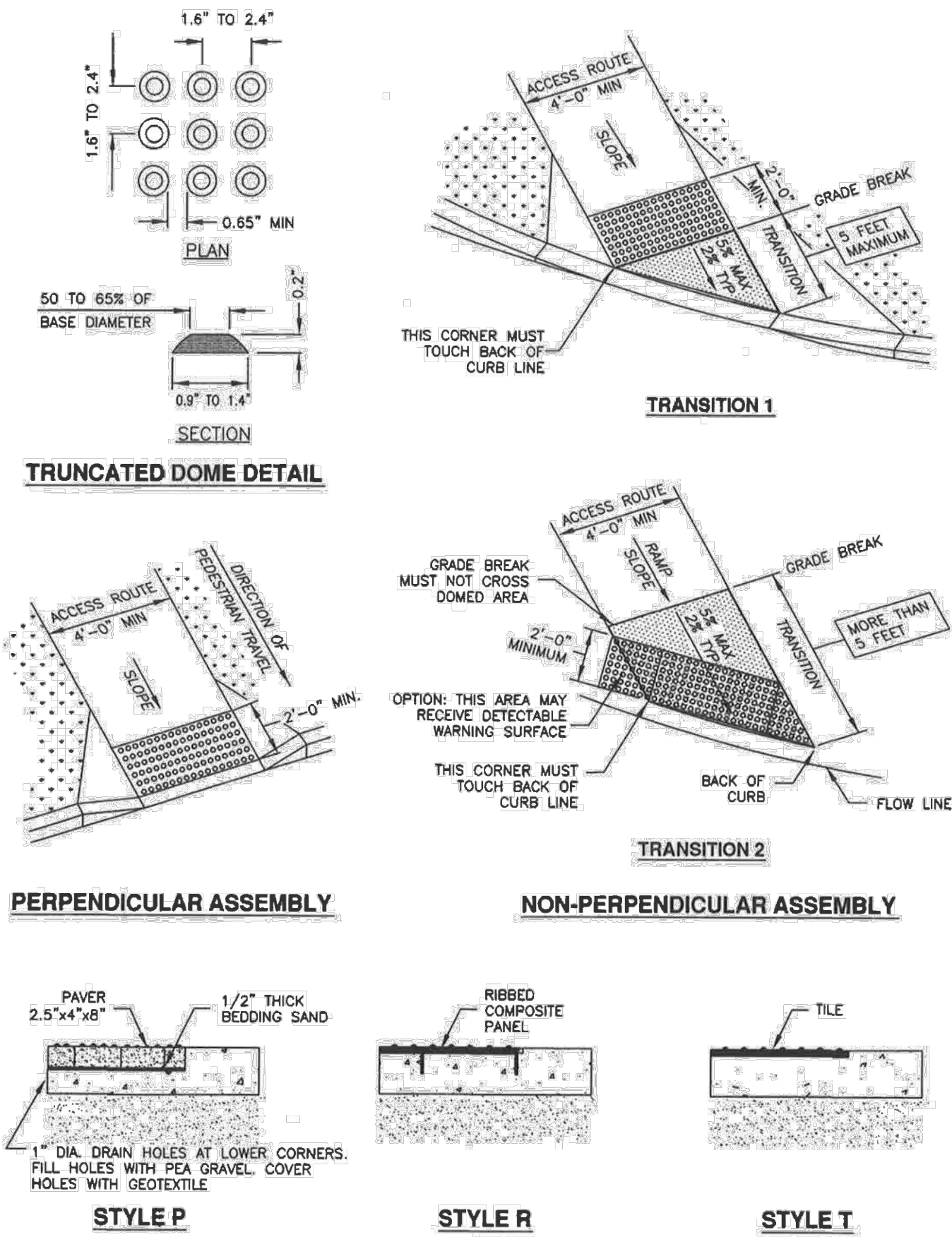
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D2



- Detectable warning surface**
- GENERAL**
    - Detectable warnings consist of a surface of truncated domes aligned in a square or radial grid pattern with dome size, dome spacing, contrast and panel size as indicated.
    - Definitions and supplemental requirements are specified in APWA Section 32 16 14.
  - PRODUCTS**
    - Pavers:
      - Concrete, APWA Section 32 14 13.
      - Brick and Mortar, APWA Section 32 14 16.
    - Tile: Unless indicated elsewhere, selection is by CONTRACTOR as allowed by ENGINEER.
    - Ribbed Composite Panel: Unless indicated elsewhere, selection is by CONTRACTOR as allowed by ENGINEER.
    - Bedding Sand, Joint Sand, Geotextile: APWA Section 32 14 13.
  - EXECUTION**
    - Layout:
      - Joints Between Units: 3/16 inch maximum or manufacturer's recommendation.
      - Flares: Do not install detectable warning units on flared surfaces.
      - Alignment: Where a ramp, turning space, or blended transition provides access to the street continuously around a corner, align the vertical rows of truncated domes to be perpendicular or radial to the grade break between the ramp and the street for a 4 feet minimum width for each crosswalk served.
      - Transition 1 or 2: Selection is by ENGINEER unless indicated elsewhere.
      - At Rail Crossings: The edge of the detectable warning surface nearest the rail crossing is 6 feet minimum and 15 feet maximum from the centerline of the nearest rail.
    - Paver Installation: APWA Section 32 14 13. If paver must be cut, minimum paver cut length is 3/4 paver, or 1/2 paver length providing the adjacent paver is also reduced no more than 1/2 its original length. Do not cut pavers longitudinally. Remove domes that were cut.
    - Tile Installation: Install according to manufacturer's recommendations. Remove domes that were cut.
    - Ribbed Composite Panel Installation: Install according to manufacturer's recommendation. Remove domes that were cut. Seal cuts to prevent water intrusion.

238

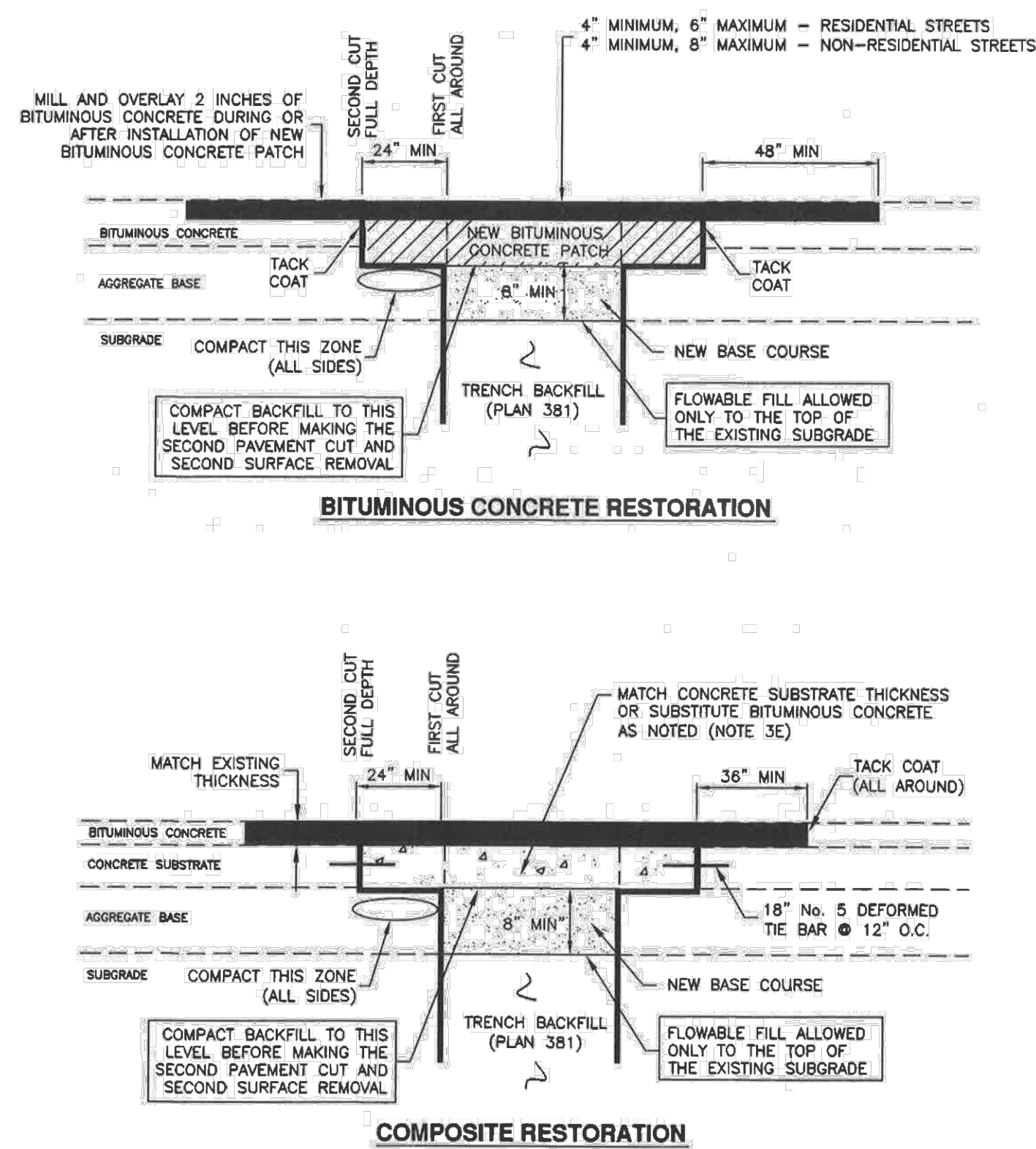


Detectable warning surface

Plan  
238  
July 2011

- Bituminous pavement T-patch**
- GENERAL**
    - Vertical cuts in bituminous pavement may be done by saw or pavement zipping. If cuts greater than 6 inches are necessary to prevent pavement "break off" consult ENGINEER for directions on handling additional costs.
    - Repair a T-patch restoration if any of the following conditions occur prior to final payment or at the end of the one year correction period.
      - Pavement surface distortion exceeds 1/4-inch deviation in 10 feet. Repair option - plane off surface distortions. coat planed surface with a cationic or anionic mulson that complies with APWA Section 32 12 03.
      - Separation appears at a connection to an existing pavement or any Street Fixture. Repair option - blow separation clean and apply joint sealant, Plan 265.
      - Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option - blow clean and apply crack seal, Plan 265.
      - Pavement raveling is greater than 1 square foot per 100 square feet. Repair option - Mill and inlay, APWA Sections 32 01 16.71 and 32 12 05.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
    - Reinforcement: No. 5, galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A615.
    - Concrete: Class 4500 APWA Section 03 30 04.
    - Tack Coat: APWA Section 32 12 13.13.
    - Bituminous Concrete: APWA Section 32 12 05.
      - Warm Weather Patch: PG64-22-DM-1/2, unless indicated otherwise.
      - Cold Weather Patch: Modified MC-250-FM-1 as indicated in APWA Section 33 05 25.
  - EXECUTION**
    - Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
    - Flowable Fill: Cure to initial set before placing aggregate base or bituminous pavement. Use in excavations that are too narrow to receive compaction equipment.
    - Tack Coat: Clean all horizontal and vertical surfaces. Apply full coverage all surfaces.
    - Pavement Placement: Follow APWA Section 32 12 16.13. Unless indicated otherwise, lift thickness is 3-inches minimum after compaction. Compact to 94 percent of ASTM D2041 (Rice density) plus or minus 2 percent.
    - Bituminous Concrete Substitution: If bituminous concrete is substituted for Portland cement concrete substrate, omit rebar and provide 1.25 inches of bituminous concrete for each 1 inch of Portland cement concrete. Follow paragraph E requirements.
    - Reinforcement: Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if 1) less than 6-inches thick, 2) if existing concrete is deteriorating, 3) if excavation is less than 3 feet square, or 4) if bituminous pavement is substituted for Portland-cement concrete substrate.
    - Concrete Substrate: Cure to initial set before placing new bituminous concrete patch.

255



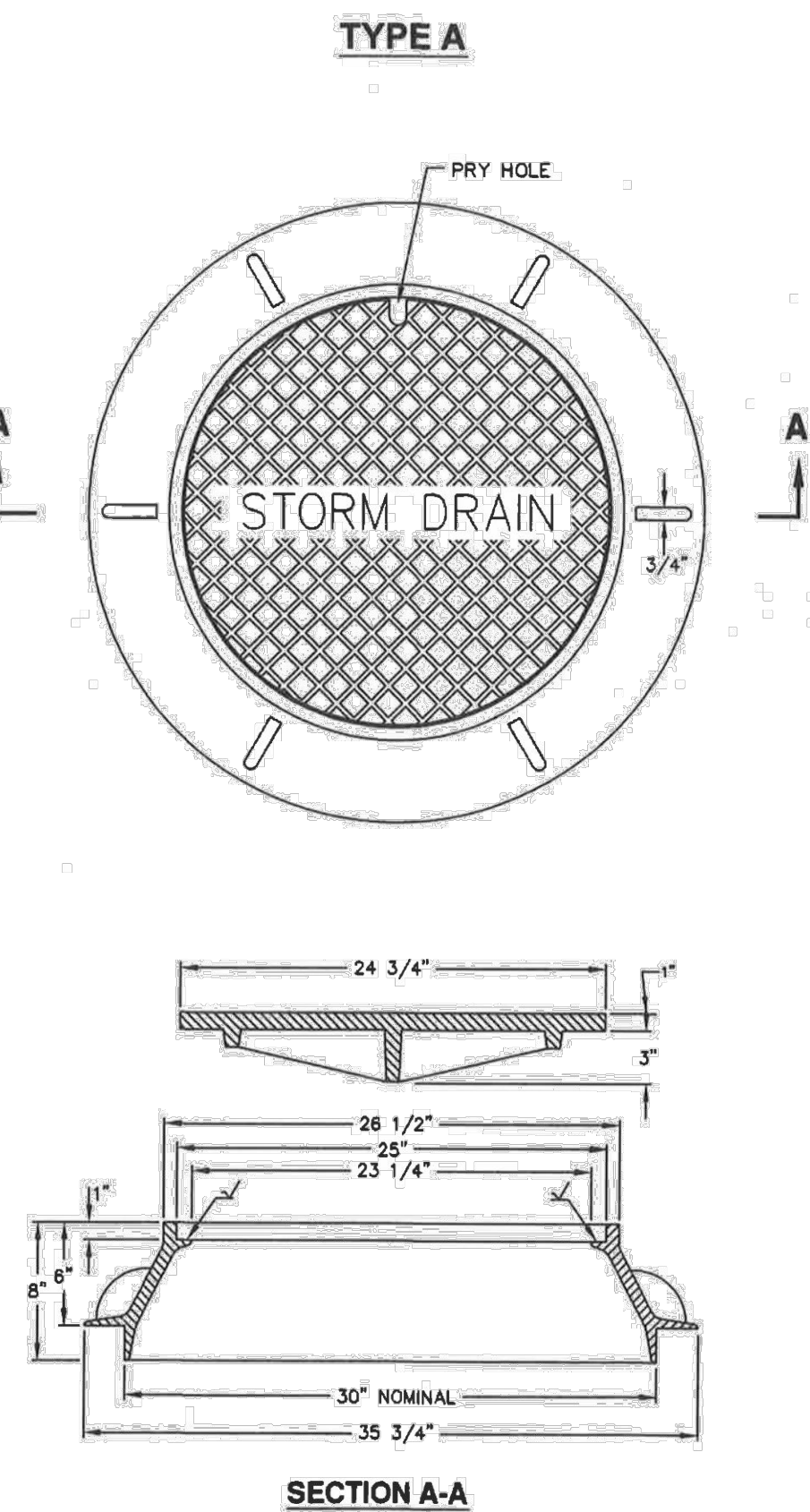
Bituminous pavement T-patch

Plan  
255  
November 2015

- 30" Frame and cover**
- GENERAL**
    - The frame and cover fits.
      - Cleanout box type B in Plan 331, and
      - Precast manhole in Plan 341.
  - PRODUCTS**
    - Castings: Grey iron class 35 minimum, ASTM A48.
      - Coated with asphalt based paint or better (except on machined surfaces).
      - Cast the heat number on the frame and cover.
      - Give the frame and cover a machine finish so the cover will not rock.
      - √ designates a machine finished surface.
      - Cast the words "STORM DRAIN" on the cover in upper case flush with the surface finish.
  - EXECUTION**
    - Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

NOTE:  
1. ALL CONCRETE TO BE 4500 PSI.

302.1

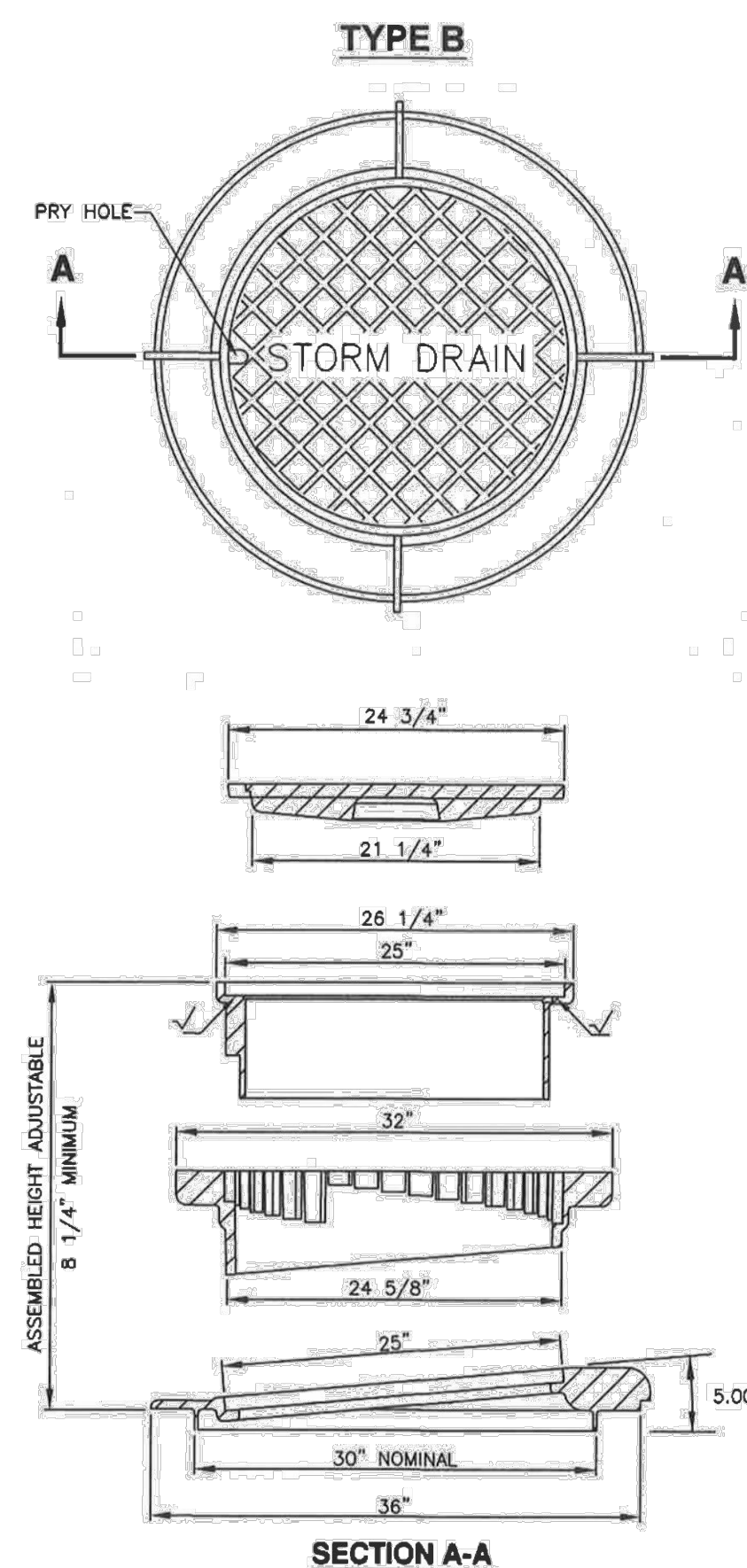


30" Frame and cover

Plan  
302.1  
September 2001

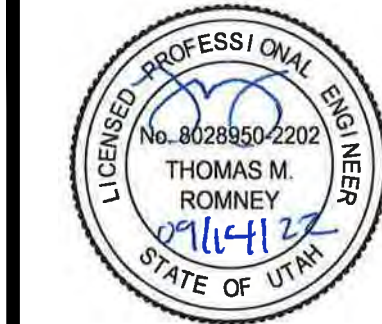
- 30" Frame and cover**
- GENERAL**
    - The frame and cover fits.
      - Cleanout box type B in Plan 331, and
      - Precast manhole in Plan 341.
  - PRODUCTS**
    - Castings: Grey iron class 35 minimum, ASTM A48.
      - Coated with asphalt based paint or better (except on machined surfaces).
      - Cast the heat number on the frame and cover.
      - Give the frame and cover a machine finish so the cover will not rock.
      - √ designates a machine finished surface.
      - Cast the words "STORM DRAIN" on the cover in upper case flush with the surface finish.
  - EXECUTION**
    - Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

302.2



30" Frame and cover

Plan  
302.2  
September 2001



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Scale: N/A Drawn: DCJ  
Date: 09/14/22 Job #: 21-0377  
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1. **GENERAL**
  - A. The frame and cover fits.
    - 1) Cleanout box type B in Plan 331; and
    - 2) Precast manhole in Plan 341.
2. **PRODUCTS**
  - A. Castings: Grey iron class 35 minimum, ASTM A48, coated with asphalt based paint or better (except on machined surfaces).
    - 1) Cast the heat number on the frame and cover.
    - 2) Give the frame and cover a machine finish so the cover will not rock.
    - 3) ✓ designates a machine-finished surface.
    - 4) Cast the words "STORM DRAIN" on the cover in upper case flush with the surface finish.
3. **EXECUTION**
  - A. Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

**44" Frame and cover**

Plan  
303  
November 2001

AMERICAN PUBLIC WORKS ASSOCIATION  
**APWA**  
Utah Chapter

1. **GENERAL**
  - A. The grate and frame fits concrete boxes in Plan 315.
2. **PRODUCTS**
  - A. Castings: Grey iron class 35 minimum per ASTM A48, coated with asphalt based paint or better.
  - B. Bolts, Nuts, Washers, Accessories: Stainless steel, APWA Section 05 05 23.
3. **EXECUTION** (Not used)

**PLAN**

**SECTION A-A**

**SECTION C-C**

**SECTION B-B**

**SECTION D-D**

36 1/2"

33"

5/8" (TYP)

2"

36"

43"

35 1/2"

12 EQUAL SPACES AT 2 13/16"

60" (TYP)

5/8" (TYP)

33"

6"

17 3/4"

3" R

CURB BOX IS ADJUSTABLE FROM 6 TO 9 INCHES

STAINLESS STEEL BOLTS, NUTS AND WASHERS

6"

24"

31"

4"

17 3/4"

15 1/2"

**35 1/2" Grate and frame**

Plan  
**308**  
January 1999

AMERICAN PUBLIC WORKS ASSOCIATION  
**APWA**  
Utah Chapter

**1. GENERAL**

A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.

**2. PRODUCTS**

A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.

C. Concrete: Class 4500 APWA Section 03 30 04.

D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.

**3. EXECUTION**

A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.

B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "warp line" in the gutter flow-line and the top of the grate at the curb face opening.

C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

D. Backfill: Place backfill against the basin wall. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

**FRAME AND GRATE (PLAN 308)**

**CURB GRADE**

**(4) 'L' BARS**

**(4) #4x18" (PLAN 206)**

**WARP LINE**

**CONSTRUCTION JOINT**

**12"**

**8"**

**No. 4 BAR**

**PLAN**

**"L" BAR DETAIL**

**FLOW LINE DROP (NOTE 38)**

**Y + 2" MIN**

**CURB HEIGHT**

**INVERT OF GUTTER**

**BOTTOM OF GUTTER**

**'L' BAR**

**DO NOT USE 'L' BARS FOR FRAME SUPPORT**

**BACKFILL**

**BASE COURSE**

**24" A-1-A BASE UNDER STRUCTURES (TYP.)**

**6" MIN**

**6"**

**3'-11 1/2"**

**SECTION A-A**

**4" MIN. CURB OPENING (NOTE 38)**

**MATCH BACK OF HOOD WITH INSIDE FACE OF BOX**

**'L' BAR**

**#4 BAR @ 12" O.C. EACH WAY ALL AROUND**

**6"**

**2'-0"**

**6"**

**3'-0"**

**SECTION B-B**

**5'-0" MAX**

**12" MIN**

**'L' BAR**

**SECTION C-C**

### Catch basin

Plan  
**315.1**  
September 2010

AMERICAN PUBLIC WORKS ASSOCIATION  
**APWA**  
Utah Chapter

**1. GENERAL**

A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.

**2. PRODUCTS**

A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.

C. Concrete: Class 4500 APWA Section 03 30 04.

D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.

**3. EXECUTION**

A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.

B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "warp line" in the gutter flow-line and the top of the grate at the curb face opening.

C. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

D. Backfill: Place backfill against the basin wall. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

[illegible]

### Catch basin

Plan  
**315.2**  
September 2010

AMERICAN PUBLIC WORKS ASSOCIATION  
**APWA**  
Utah Chapter

REVISION BLOCK		
#	DATE	DESCRIPTION
1	04-10-04	
2	04-10-04	
3	04-10-04	
4	04-10-04	
5	04-10-04	

## DETAILS

Scale: N/A	Drawn: DCJ
Date: 09/14/22	Job #: 21-037
Sheet:	

D4



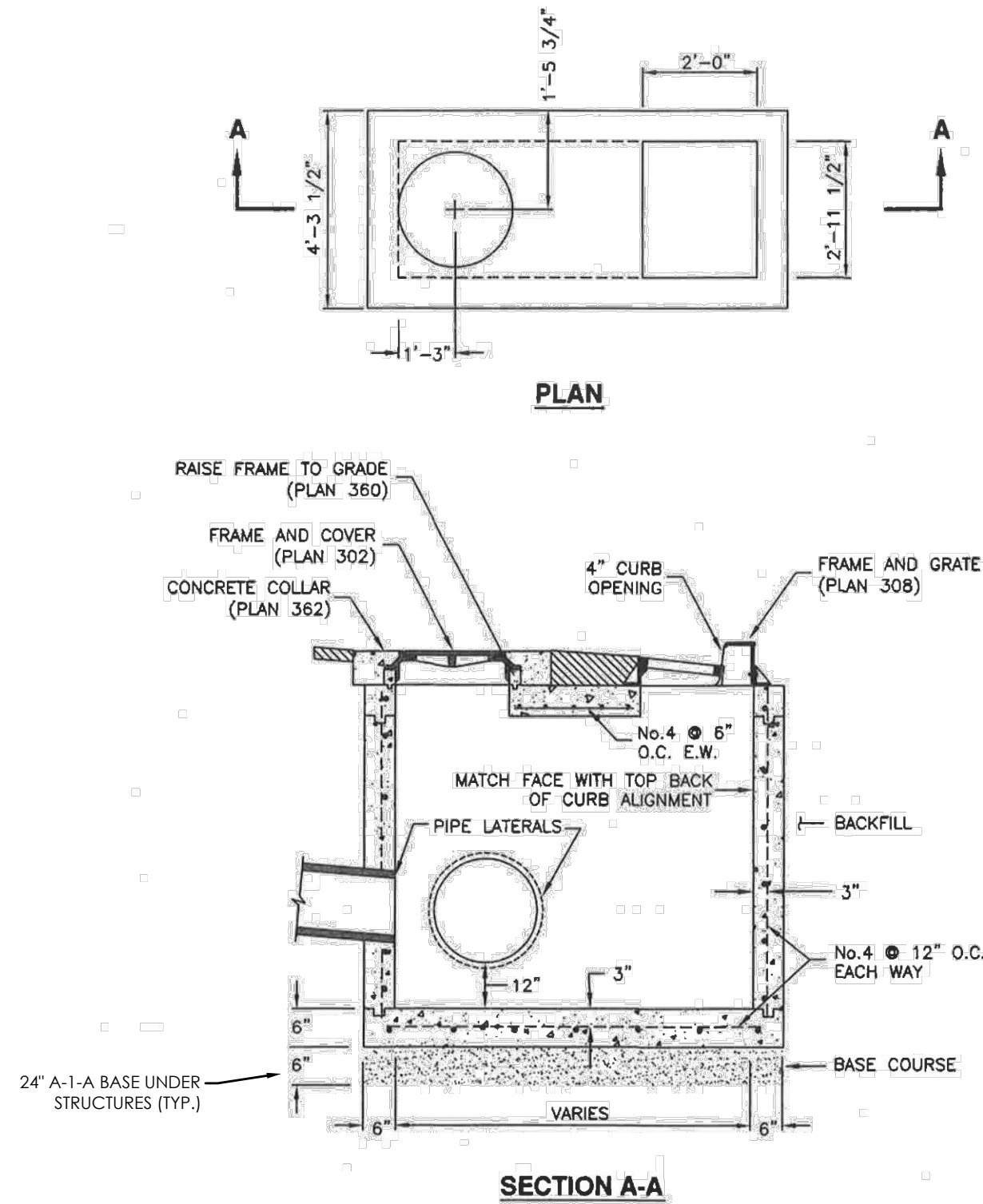
Combination catch basin and cleanout box

- GENERAL**
  - The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  - Concrete: Class 4500 APWA Section 03 30 04.
  - Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
  - Ladder Rungs: Plastic, or plastic coated steel typically 8-inches wide.
- EXECUTION**
  - Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "begin warp" line in the gutter flow-line and the top of the grate at the curb face opening.
  - Ladder Rungs: Provide rungs in boxes over 6 feet deep. When measured from the floor of the box, place bottom rung the greater distance of 4 feet from the floor of the box or 1 foot above the top of the pipe. Place top rung within 3 feet of bottom of box ceiling.
  - Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
  - Backfill: Provide backfill against all sides of the box. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

NOTE:

- ALL CONCRETE TO BE 4500 PSI.

316

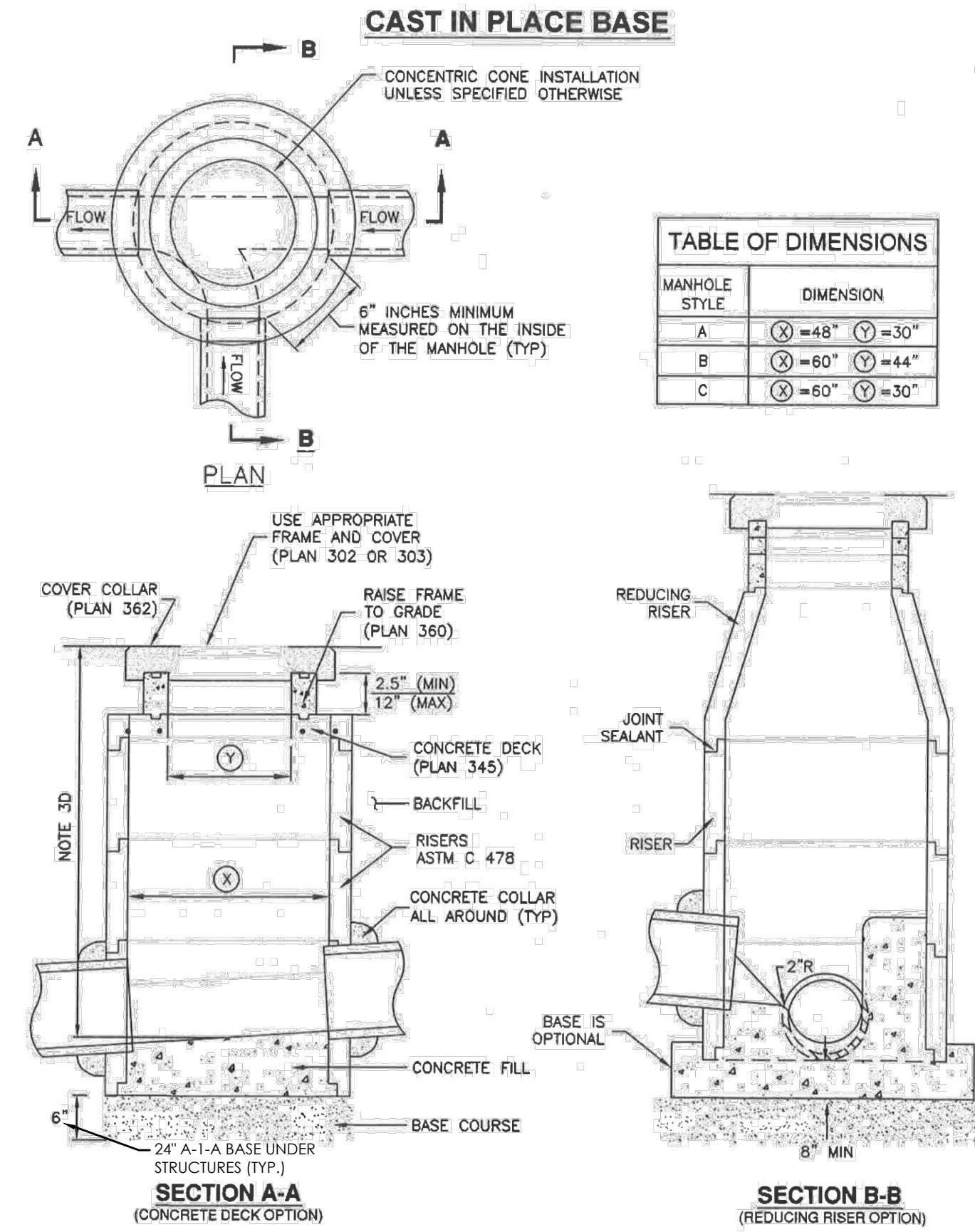


APWA Utah Chapter  
Combination catch basin and cleanout box  
Plan  
316  
March 2011

Precast manhole

- GENERAL**
  - The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  - Concrete: Class 4500 APWA Section 03 30 04.
  - Riser and Reducing Riser: ASTM C478.
  - Joint Sealant: Rubber based, compressible.
  - Grout: 2 parts sand to 1 part cement mortar, ASTM C1329.
  - Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
- EXECUTION**
  - Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a sewer rock in a geotextile wrap to stabilize an unstable foundation.
  - Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - Invert cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.
  - Concrete Deck or Reducing Riser: When depth of manhole from pipe invert to finish grade exceeds 7 feet, use an ASTM C478 reducing riser.
  - Pipe Connections: Grout around all pipe openings.
  - Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.
  - Joints: Place flexible sealant in all riser joints. Finish with grout.
  - Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.
  - Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.
  - Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

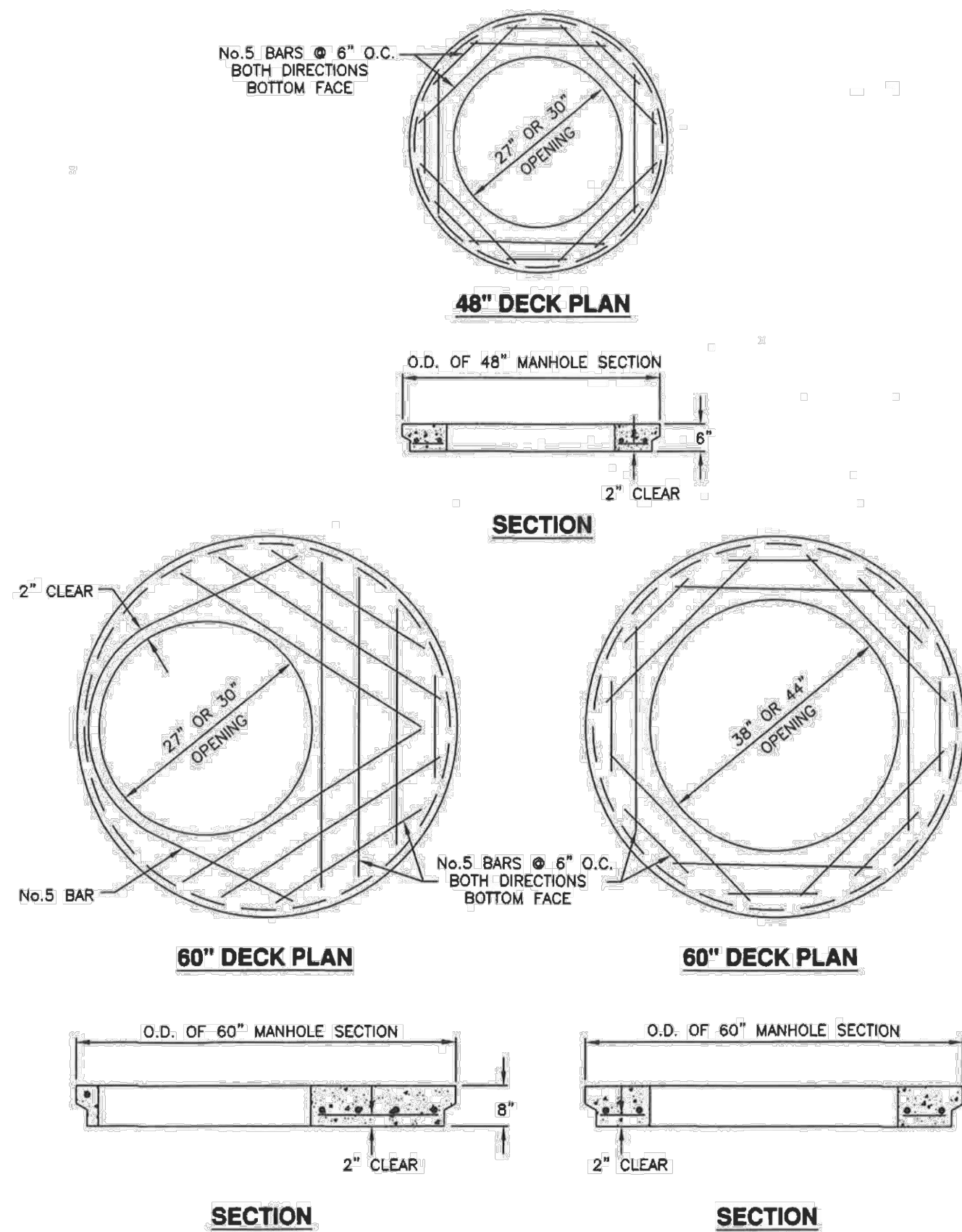
341.1



APWA Utah Chapter  
Precast manhole  
Plan  
341.1  
November 2010

Concrete deck

- GENERAL**
  - Deck is made for round manhole riser grade rings.
- PRODUCTS**
  - Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
  - Concrete: Class 4500 APWA Section 03 40 00
- EXECUTION**
  - Reinforcement: Placement APWA Section 03 20 00.
  - Concrete Placement: APWA Section 03 30 10. Apply a curing agent.



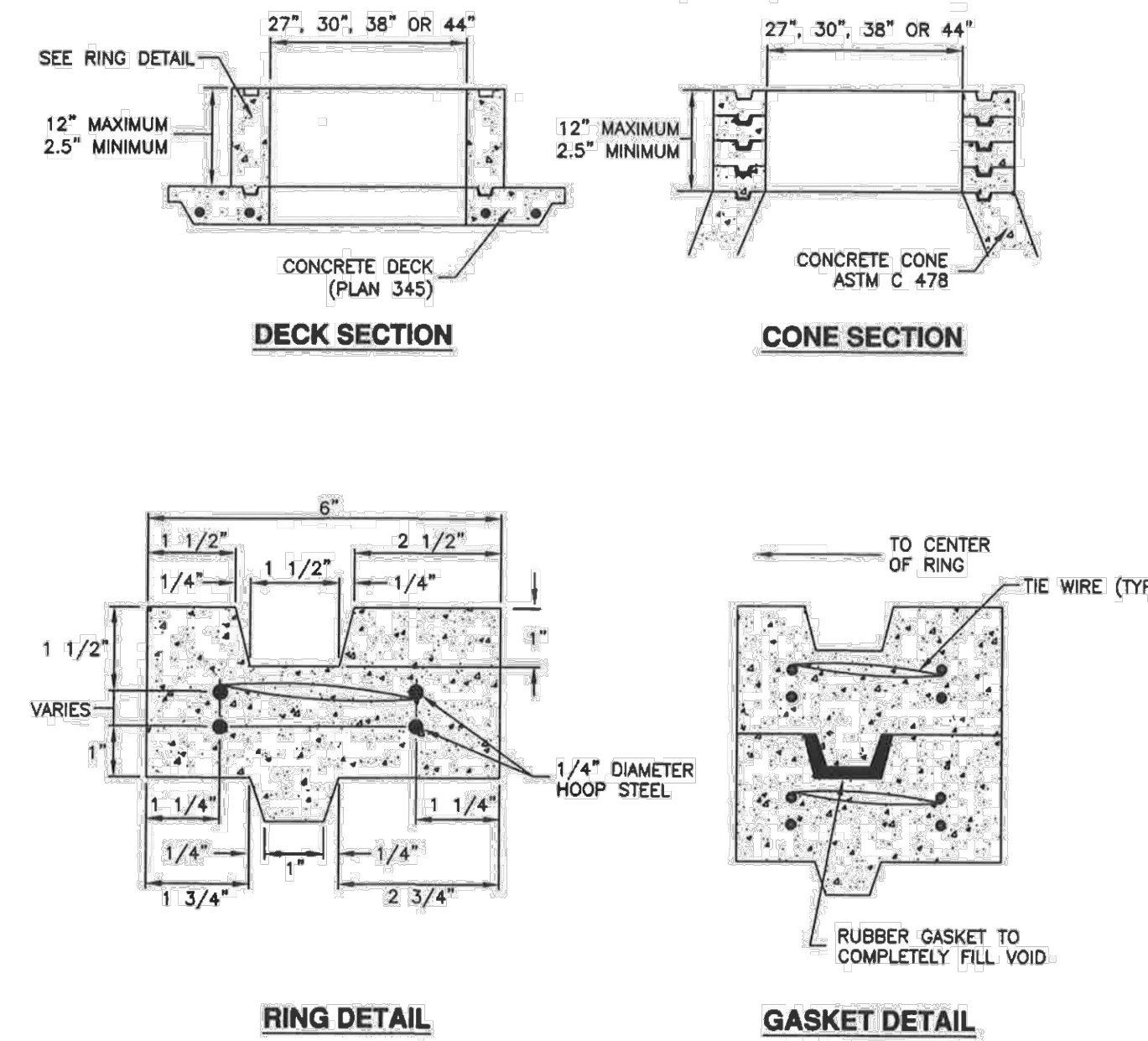
APWA Utah Chapter  
Concrete deck  
Plan  
345  
April 1997

Raise frame to grade

- GENERAL**
  - Grade rings are used in non-pressurized applications to adjust frame to grade.
- PRODUCTS**
  - Concrete: Class 4500 APWA Section 03 30 04.
  - Reinforcement: Deformed, 60 ksi yield grade hoop steel, ASTM A615.
    - 2 1/2" High Rings: Provide two 1/4" diameter steel hoops tied with No. 14 AWS gage wire, 8" on center.
    - 6" and 8" High Rings: Provide four 1/4" diameter steel hoops, tied with No. 14 AWS gage wire, 8" on center.
  - Gasket: Rubber-based, compressible.
- EXECUTION**
  - Ring Manufacture:
    - Fabrication, APWA Section 03 30 10.
    - Cure, APWA Section 03 39 00.
  - Field Installation: Seat rings with a compressible gasket.

360.1

GRADE RING



APWA Utah Chapter  
Raise frame to grade  
Plan  
360.1  
May 2006

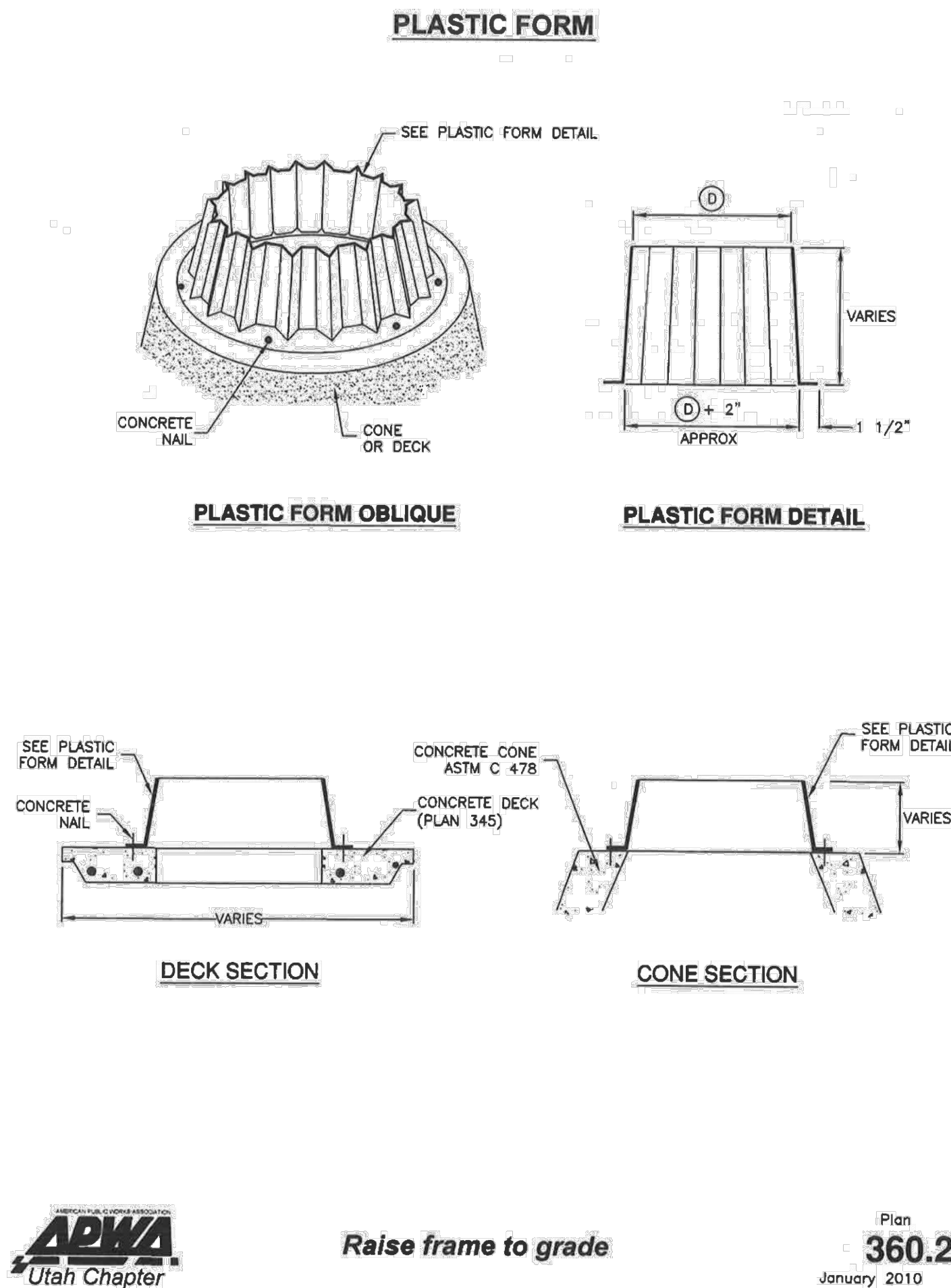
REVISION BLOCK		DESCRIPTION
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4		
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- 1. GENERAL**  
A. The plastic form is used to keep concrete in the annular space when fabricating cover collars for storm drain manholes, sanitary sewer manholes or other utilities.
- 2. PRODUCTS**  
A. Concrete Nails: CONTRACTOR's choice.
- 3. EXECUTION**  
A. Adjust plastic form height so that the top of the manhole frame and cover matches longitudinal slope and cross slope of the pavement surface, and cover is 1/2-inch lower than the pavement surface.

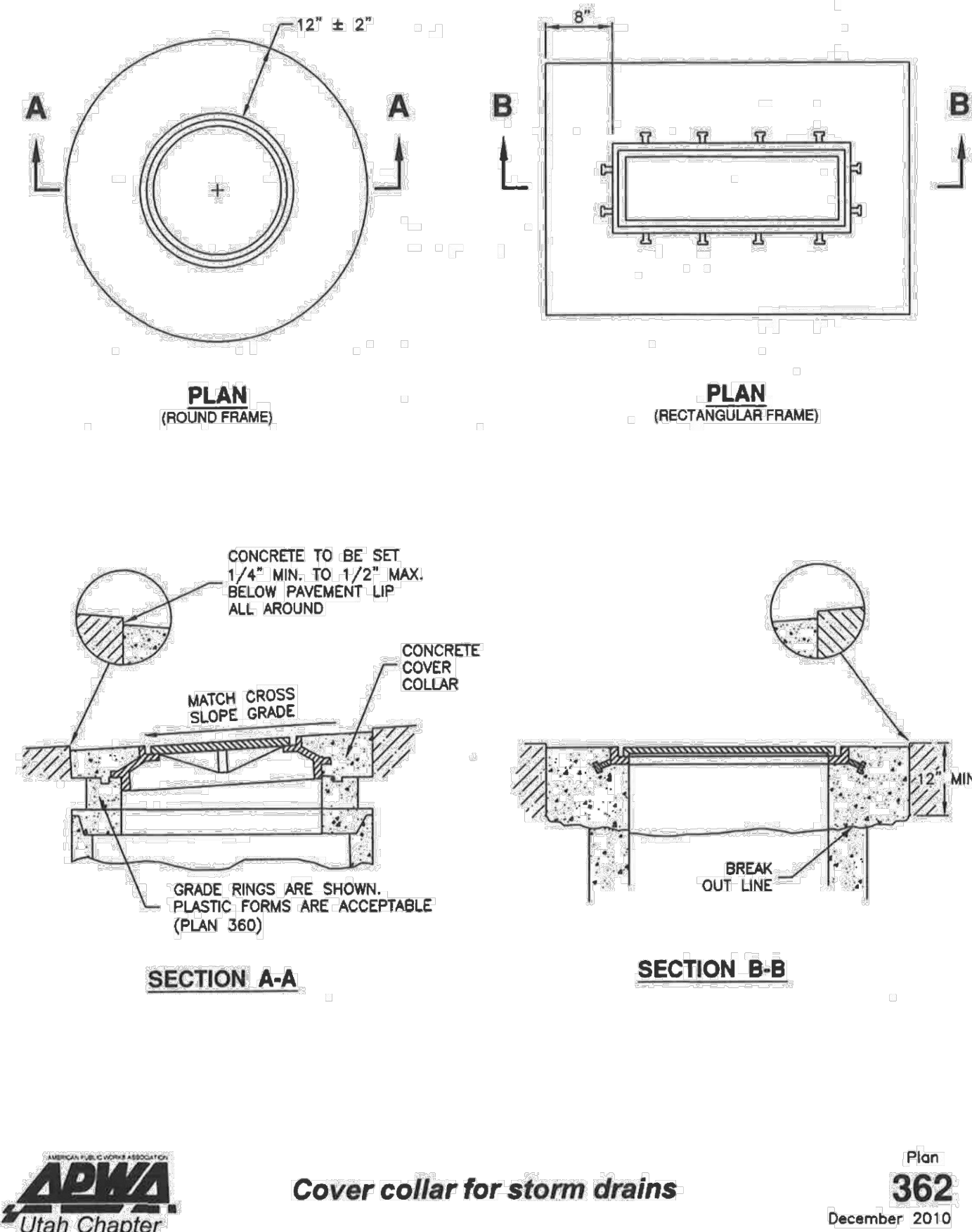
**NOTE:**  
1. ALL CONCRETE TO BE 4500 PSI.

360.2



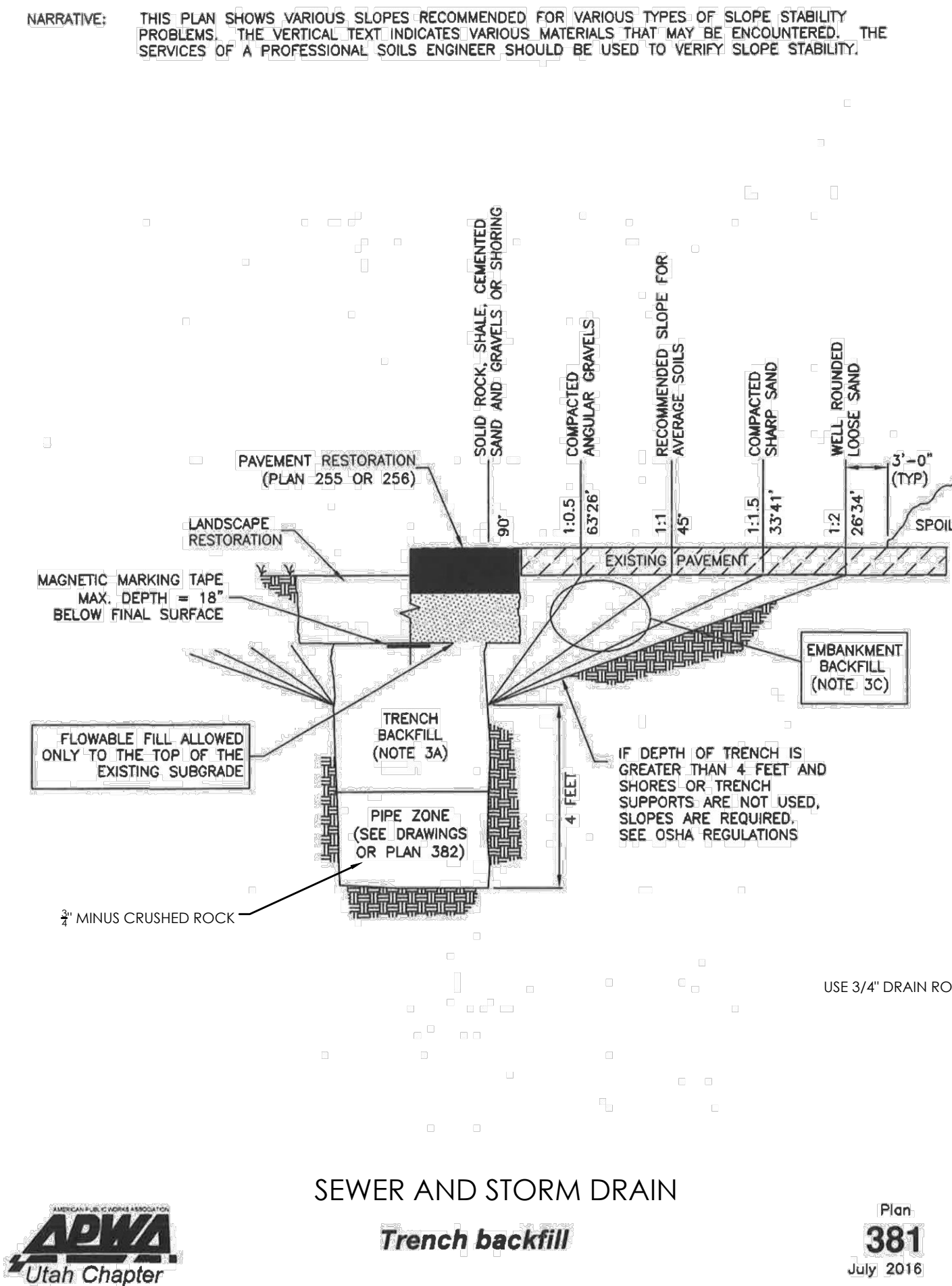
- 1. GENERAL**  
A. In a pavement surface, the concrete will support the frame under traffic loadings.
- 2. PRODUCTS**  
A. Concrete: Class 4500 APWA Section 03 30 04.  
B. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
- 3. EXECUTION**  
A. Pavement Preparation: Provide a neat vertical and concentric joint between concrete and existing bituminous concrete surfaces. Clean edges of all dirt, oil, and loose debris.  
B. Concrete Placement: APWA Section 03 30 10. Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.

362



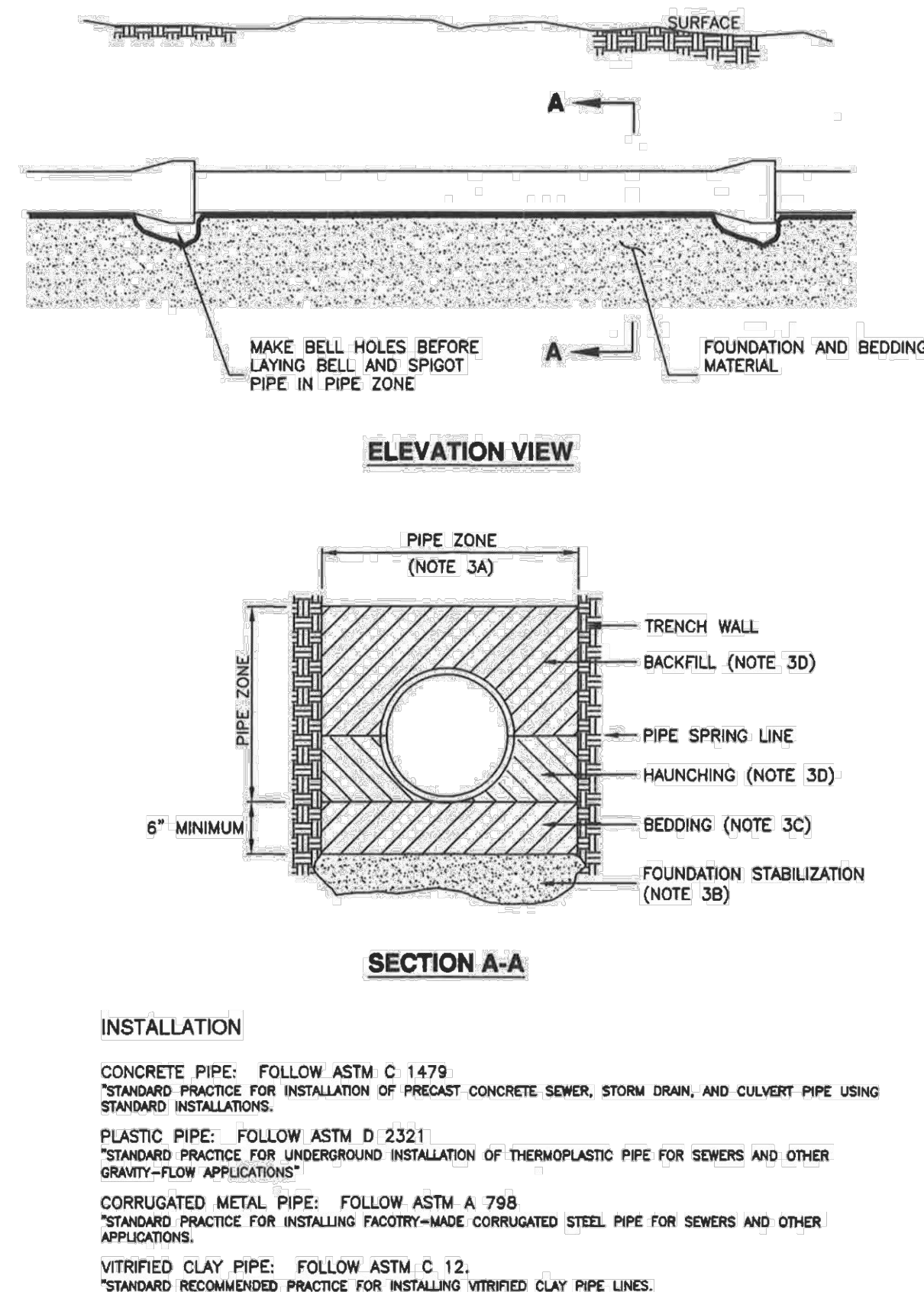
- 1. GENERAL**  
A. The drawing applies to backfilling a trench (and embankment) above the pipe zone.
- 2. PRODUCTS**  
A. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches.  
B. Flowable Fill: APWA Section 31 05 15. Target is 60 psi in 28 days with 90 psi maximum in 28 days, it must flow easily requiring no vibration for consolidation.
- 3. EXECUTION**  
A. Trench Backfill Above the Pipe Zone: Follow requirement indicated in APWA Section 33 05 20 and the following provisions. See Standard Plan 382 for backfilling the pipe zone.  
1) DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench backfill.  
2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.  
3) Water jetting is NOT allowed.  
B. Flowable Fill: If controlled low strength material is placed in the trench. Cure the material before placing surface restorations.  
C. Embankment Backfill: When trench sides are sloped proceed as follows.  
1) Maximum lift thickness is 8-inches before compaction.  
2) Compact per APWA Section 31 23 26 to 95 percent or greater relative to a standard proctor density.  
3) Submission of quality control compaction test result data may be requested by ENGINEER at any time. Provide results of tests immediately upon request.  
D. Surface Restoration:  
1) Landscaped Surface: Follow APWA Section 32 92 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements. Rake to match existing grade. Replace vegetation to match pre-construction conditions.  
2) Paved Surface: Follow APWA Section 33 05 25 (concrete pavement surfacing), or APWA Section 33 05 25 (bituminous pavement surfacing). Do not install surfacing until compaction density is acceptable to ENGINEER.

381



- 1. GENERAL**  
A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.
- 2. PRODUCTS**  
A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Concrete: APWA Section 03 30 04.  
D. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.  
E. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
- 3. EXECUTION**  
A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.  
B. Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.  
C. Bedding: Follow APWA Section 33 05 20 requirements and the following provisions.  
1) Furnish untreated base course material unless specified otherwise by pipe manufacturer.  
2) Maximum lift thickness is 8-inches.  
3) Bedding immediately under the pipe should not be compacted, but loosely placed.  
4) Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.  
5) When using concrete, provide at least Class 2,000, APWA Section 03 30 04.  
D. Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.  
1) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26 unless pipe manufacturer requires more stringent installation.  
2) Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide results of tests immediately upon request.  
E. Flowable Fill (when required and if allowed by pipe manufacturer):  
1) Place the controlled low strength material, APWA Section 31 05 15.  
2) Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.  
3) Reset pipe to line and grade if pipe "floats" out of position.

382



**MATTHEWS MEADOWS SUBDIVISION**  
**GRANTSVILLE, UT**  
**DETAILS**

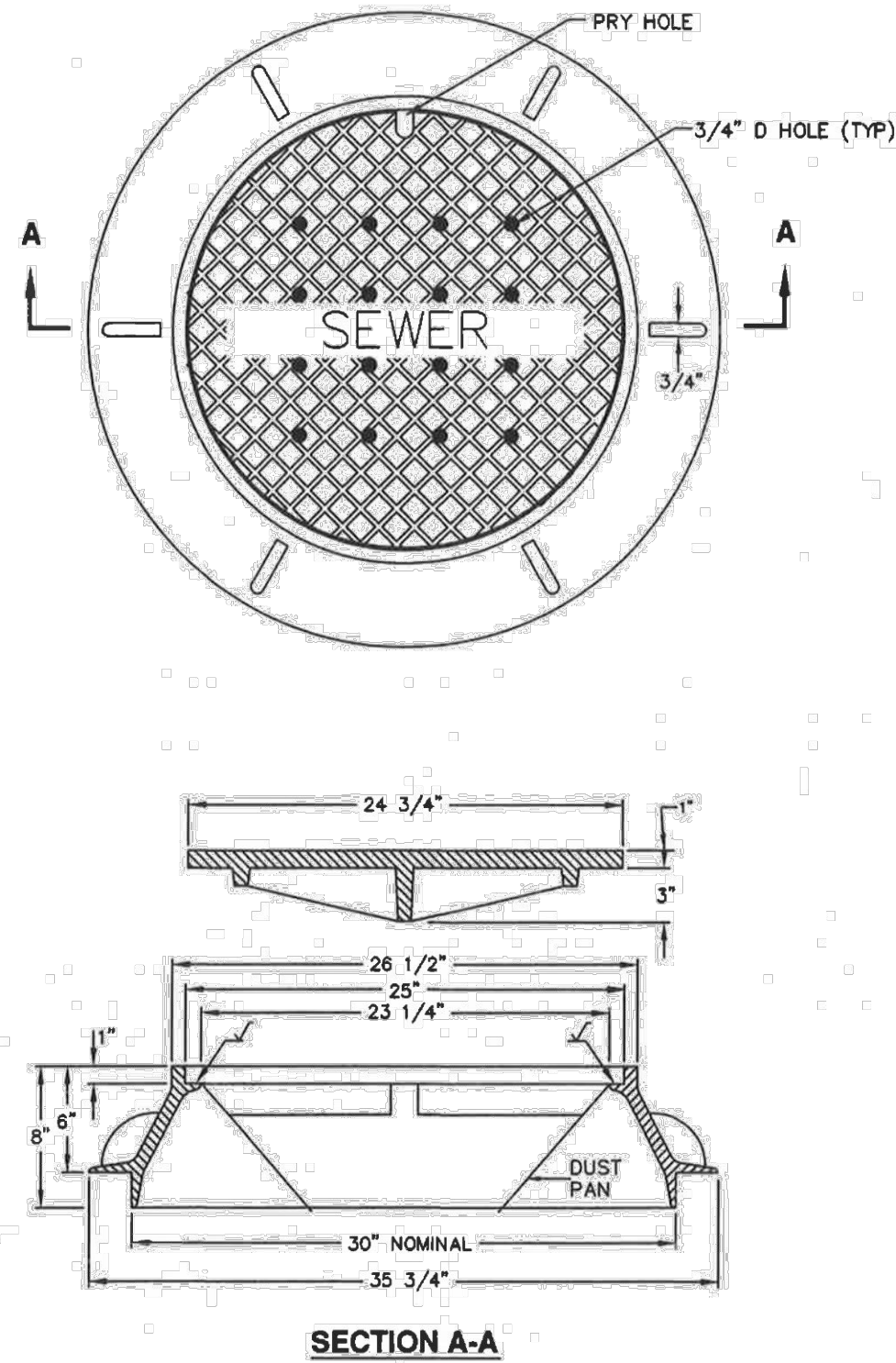
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3	DATE	DATE
4	DATE	DATE
5	DATE	DATE
6	DATE	DATE

DETAILS	
Scale: N/A	Drawn: DCJ
Date: 09/14/22	Job #: 21-0377
Sheet:	D6



30" Frame and cover

1. GENERAL  
A. The frame and cover fits the manhole in Plan 411.
2. PRODUCTS  
A. Castings: Grey iron class 35 minimum, ASTM A48, coated with asphalt based paint or better (except on machined surfaces).
  - 1) Cast the heat number on the frame and cover.
  - 2) Give the frame and cover a machine finish so the cover will not rock.
  - 3)  $\sqrt{\hspace{0.5em}}$  designates machined surface.
  - 4) Cast the words "SEWER" on the cover in upper case flush with the surface finish.
3. EXECUTION  
A. Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.



30" Frame and cover

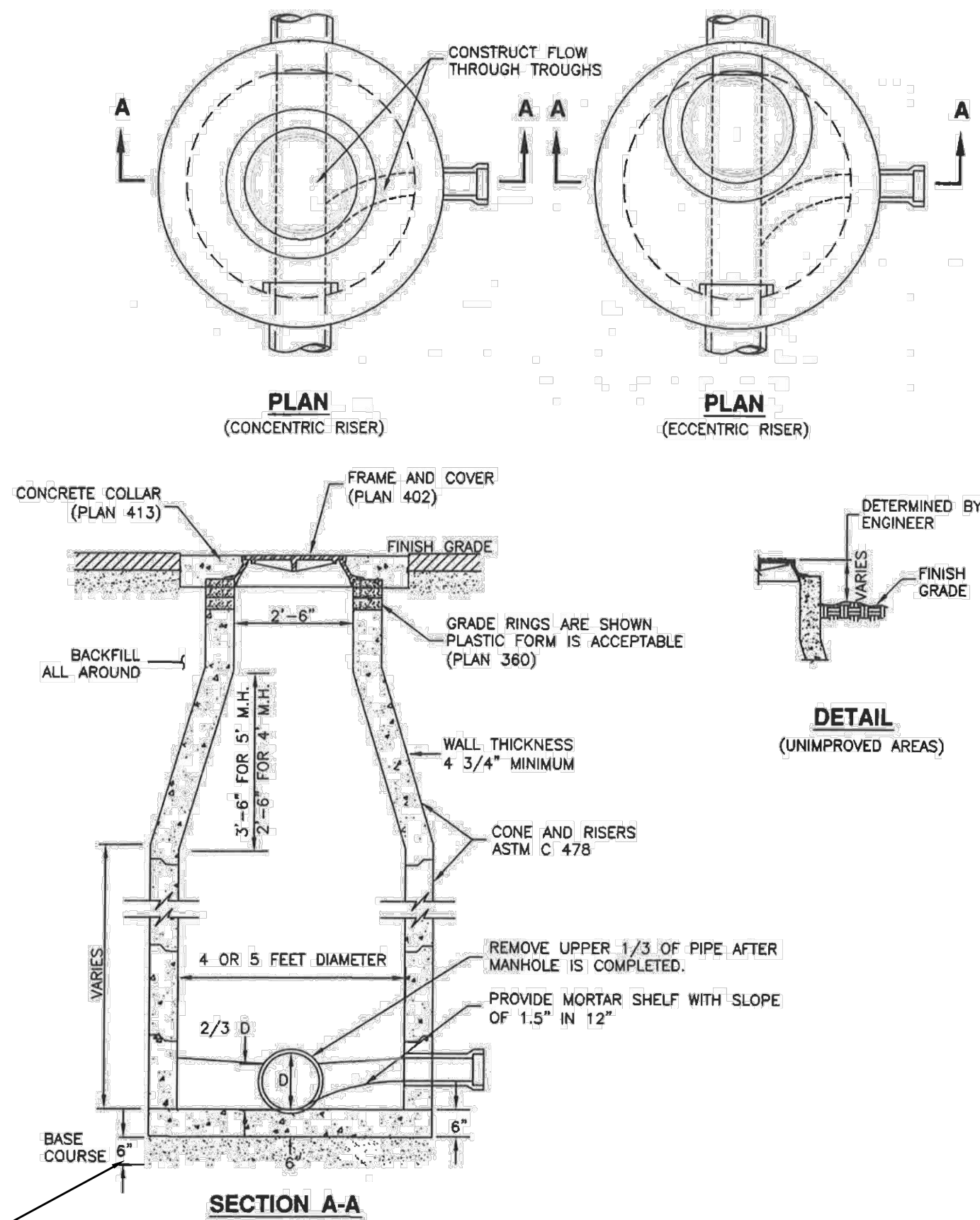
Plan  
402  
April 1997

402

- NOTE:
1. ALL CONCRETE TO BE 4500 PSI.

Sanitary sewer manhole

1. GENERAL  
A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.  
B. Manhole size.
  - 1) Diameter is 4 feet: For sewers under 12" diameter.
  - 2) Diameter is 5 feet: For sewers 12" and larger, or when 3 or more pipes intersect the manhole.
2. PRODUCTS  
A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Concrete: Class 4500 APWA Section 03 30 04.  
D. Riser and Reducing Riser: ASTM C478.  
E. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.  
F. Grout: 2 parts sand to 1 part cement mortar, ASTM C1329.  
G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
3. EXECUTION  
A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a granular backfill borrow in a geotextile wrap to stabilize an unstable foundation.  
B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.  
C. Invert Cover. During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.  
D. Pipe Connections: Grout around all pipe openings.  
E. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.  
F. Joints: Place flexible gasket-type sealant in all riser joints. Finish with grout.  
G. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.  
H. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.  
I. Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



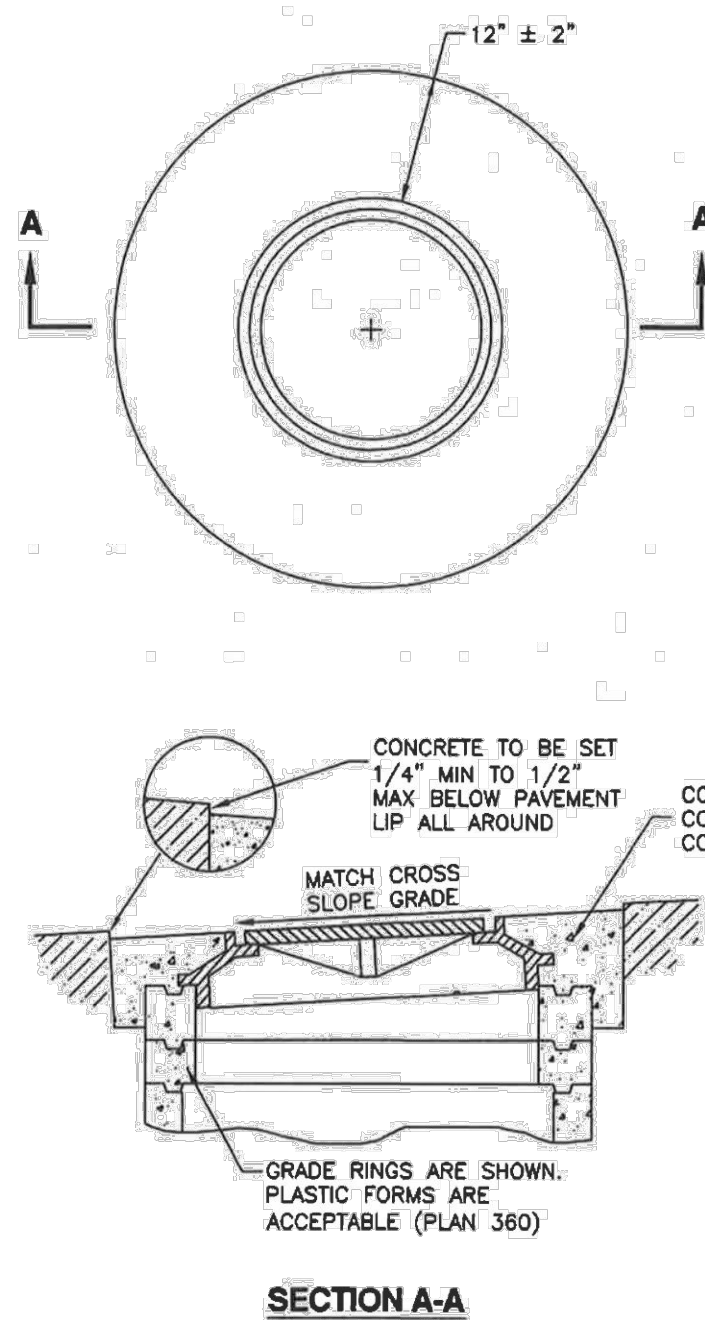
Sanitary sewer manhole

Plan  
411  
April 2011

411

Cover collar for sanitary sewer manhole

1. GENERAL  
A. In a pavement surface, the concrete will support the frame under traffic loadings.
2. PRODUCTS  
A. Concrete: Class 4500 APWA Section 03 30 04.  
B. Concrete Curing Agent: Type ID Class A (clear with fugitive dye), membrane forming compound, APWA Section 03 39 00.
3. EXECUTION  
A. Pavement Preparation: Provide a neat vertical and concentric joint between the concrete collar and the bituminous pavement surface. Clean edges of all dirt, oil, and loose debris.  
B. Concrete Placement: Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.



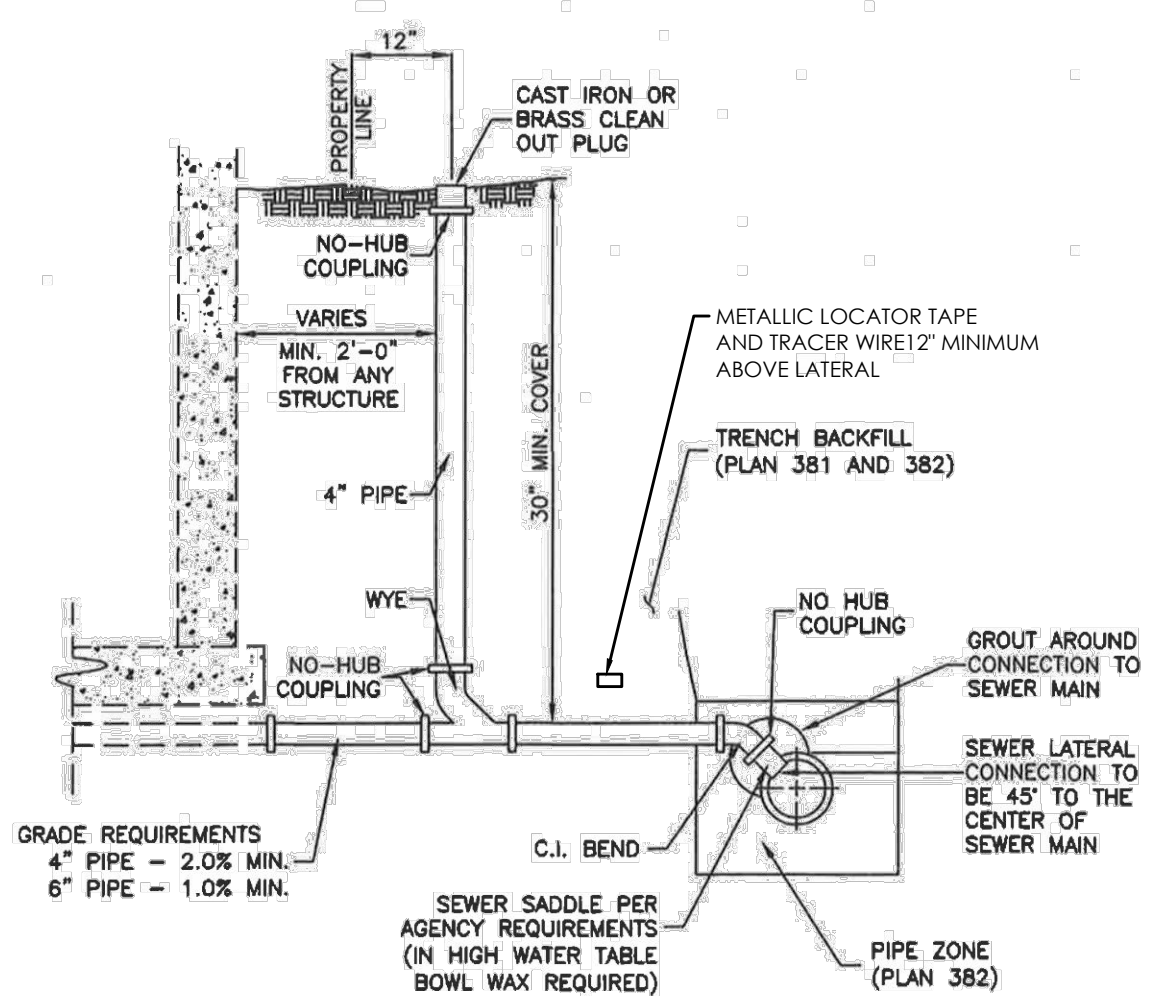
Cover collar for sanitary sewer manhole

Plan  
413  
September 2001

413

Sewer lateral connection

1. GENERAL  
A. Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.  
B. Before backfilling, secure inspection of installation by ENGINEER. Give at least 24 hours notice.  
C. Verify if CONTRACTOR or agency is to install the wye.
2. PRODUCTS  
A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.  
B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.  
C. Provide agency approved wye or tee with appropriate donut.  
D. Stainless steel straps required.
3. EXECUTION  
A. Tape wrap pipe as required by soil conditions.  
B. Remove core plug from sewer main. Do not break into sewer main to make connection.  
C. Base Course and Backfill Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

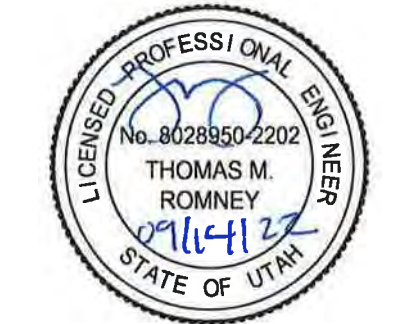


Sewer lateral connection

Plan  
431  
January 2011

431

MATTHEWS MEADOWS SUBDIVISION  
GRANTSVILLE, UT  
DETAILS



REVISION BLOCK		DESCRIPTION
#	DATE	
1		
2		
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DETAILS	
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Date: 09/14/22	Job #: 21-0377
Sheet:	D7

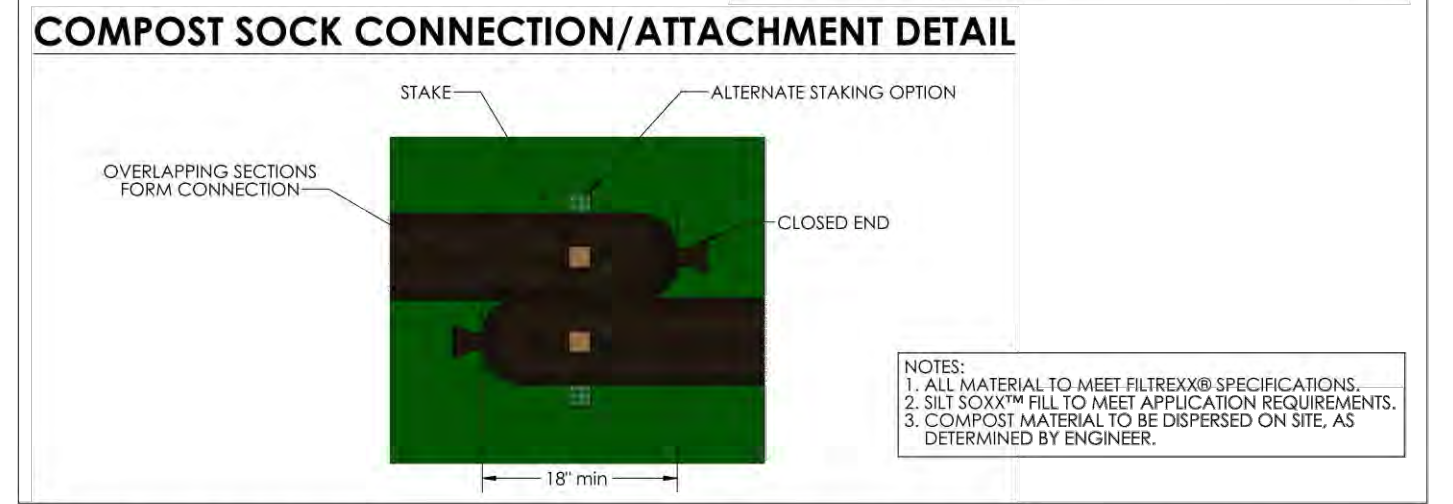




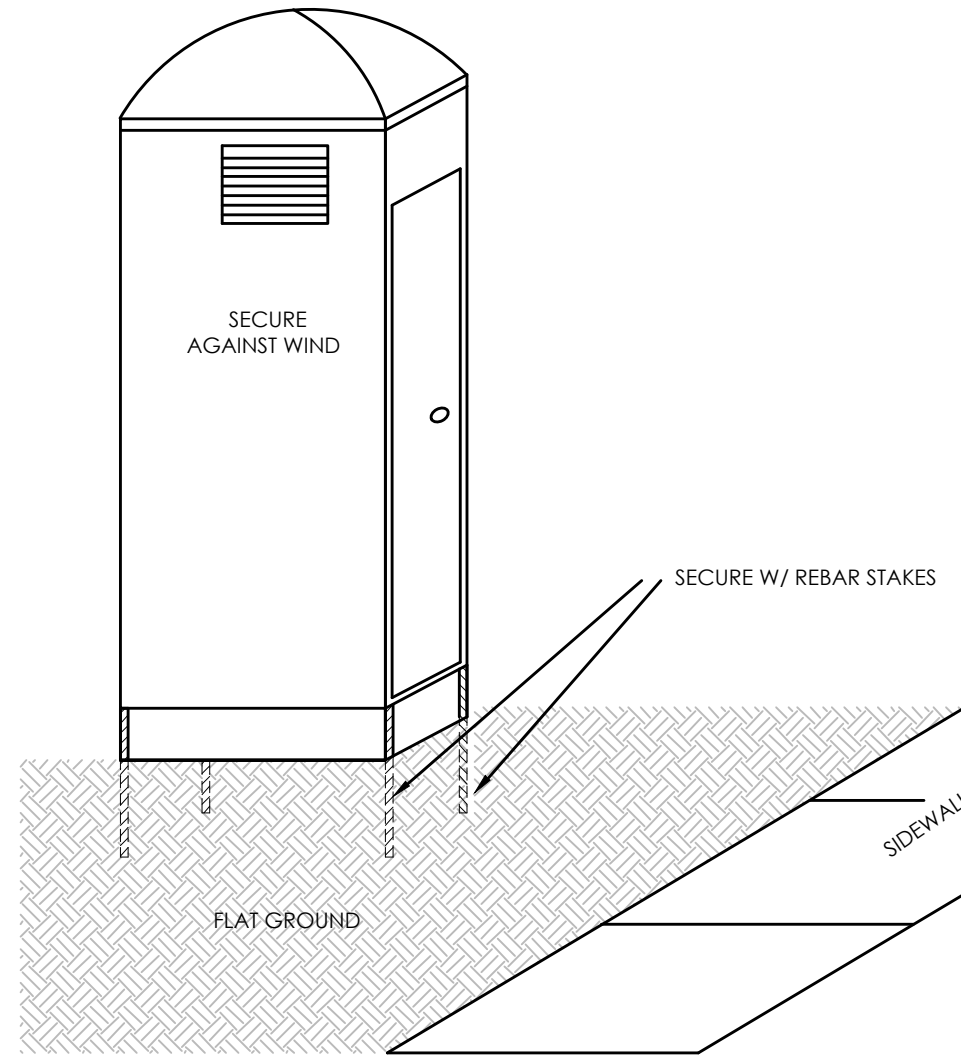
1. Perimeter control will be placed at locations indicated on plans and in the manner as directed by the Engineer.
2. Perimeter control should be installed parallel to the base of the slope or other disturbed area. In challenging conditions (i.e., 2:1 slopes), a second perimeter control shall be constructed at the top of the slope, or stacking may be increased.
3. Effective Soex height at the top should be as follows: 5" diameter Soex = 4" high; 8" diameter Soex = 6.5" high; 12" diameter Soex = 9.5" high; 18" diameter Soex = 14.5" high; 24" diameter Soex = 19" high.
4. Stakes should be installed through the middle of the perimeter control on 10 ft (3m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden stakes. 5" diameter Soex may use 1" (25 mm) x 1" (25 mm) x 18" (0.5 m) wooden stakes. In the event stacking is not possible, i.e., when perimeter control is used on pavement, concrete or other blocks that cannot be penetrated, the perimeter control to help stabilize during rainfall/runoff events.
5. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
6. Straighten or position the Soex as needed on the ground, ensuring there is good ground contact and no void spaces under the Soex.
7. Do not drag Soex across rough surfaces. If dragging across a
8. Loose compost may be backfilled along the upslope side of the perimeter control, filling the seam between the soil surface and the device, improving filtration and sediment retention.
9. If the perimeter control is to be left as a permanent filter or part of a permanent landscape, it may be used as the basis of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.

## MAINTENANCE & DISPOSAL

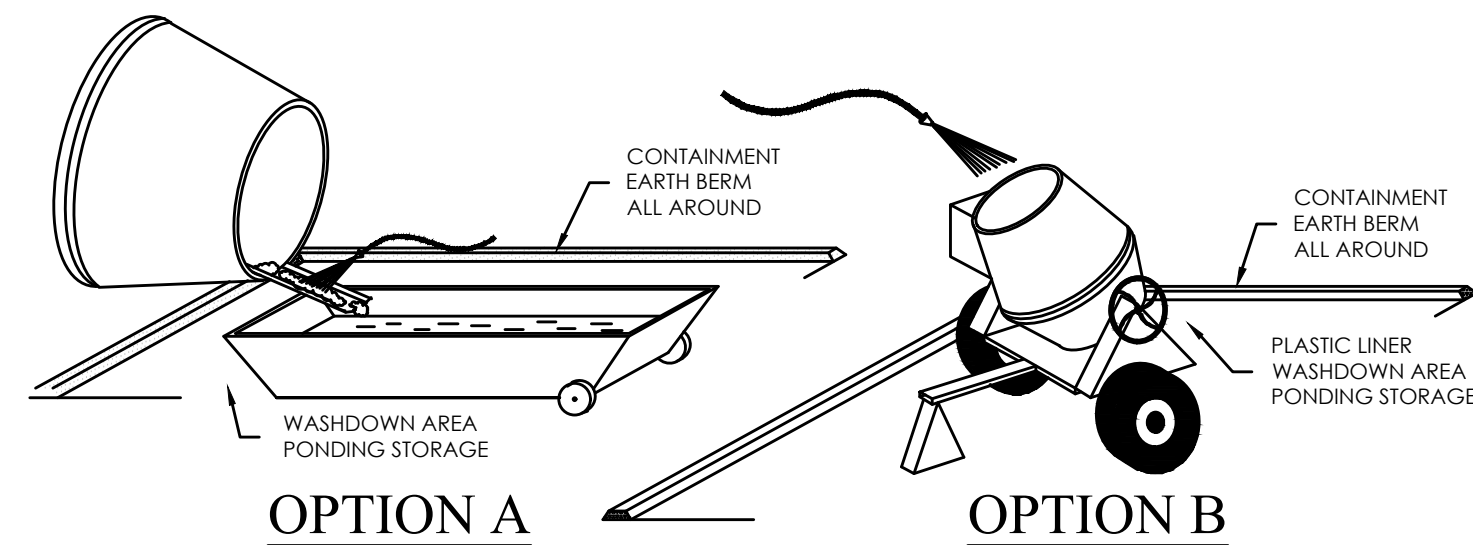
1. The contractor shall remove sediment at the base of the perimeter when accumulation has reached 1/2 of the effective height of the sock, or as directed by the Engineer. Alternatively, a new perimeter control sock can be placed on top of or slightly behind the original one creating more sediment storage capacity without disturbing the original sock.
2. Perimeter control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
3. The FilterMedia will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.



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## NTS



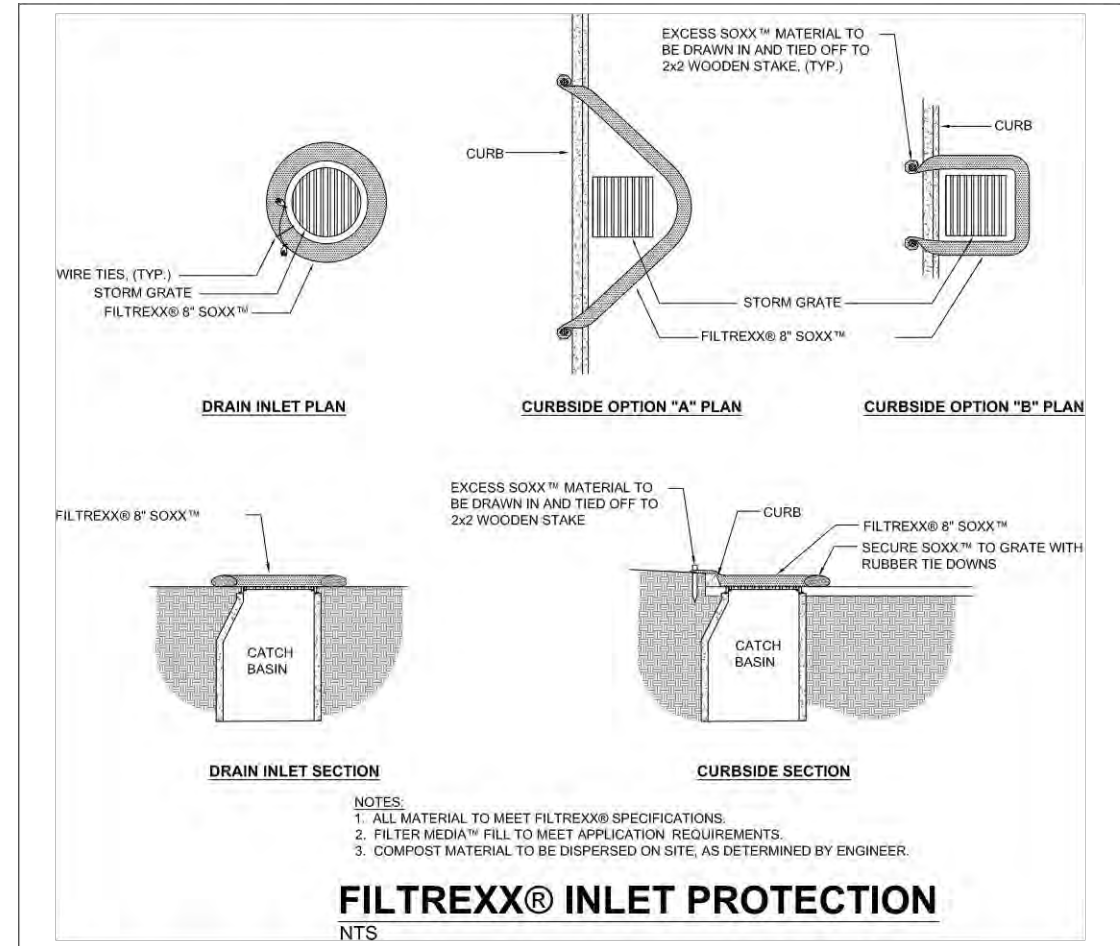
## NTS



1. Inlet protection shall be placed at locations indicated on plans as directed by the Engineer. Inlet protection should be installed in a pattern that allows complete coverage of the inlet. The inlet grate and keep the sock from falling into the opening. The inlet grate should be placed on top of the curb and drain opening. The wire grid also prevents other floating waste from passing over the inlet protection.
2. Installation of curb and inlet protection will ensure a minimal overlap of at least 1 ft (300mm) on either side of the opening being protected. Inlet protection will be anchored to the soil behind the curb and the top of the curb or other devices capable of holding the inlet protection in place.
3. Standard inlet protection for curb inlet protection and curb sediment containment will use 8 in (200mm) diameter inlet protection, and drain inlet protection will use 12 in (300mm) x 8 in (450mm) diameter inlet protection. In severe flow situations, larger inlet protection may be specified by the Engineer. During curb installation, inlet protection shall be compacted to be slightly higher than curb height.
4. Inlet protection shall be secured with debris and sediment, which shall be maintained so as to assure proper drainage and water flow into the storm drain. In severe storm events, overflow of the inlet protection may be acceptable in order to keep the inlet protection in place.
5. Curb and drain inlet protection shall be positioned so as to provide a permeable physical barrier to the drain itself, allowing sediment to collect on the outside of the inlet protection.
6. For drain inlet protection that is installed on curb, inlet protection grate and spacer is required in order to keep the inlet protection away from the drain opening. This spacer should be cinder blocks or concrete blocks, 16 in x 8 in x 16 in (400 mm x 200 mm x 400 mm) and keep the sock from falling into the opening. The inlet grate should be placed on top of the curb and drain opening. The wire grid also prevents other floating waste from passing over the inlet protection.
7. Stakes shall be installed through the middle of the drain inlet protection at 5 ft (1.5m) center to center using 2 in (50mm) by 3 ft (1m) wooden stakes.
8. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.

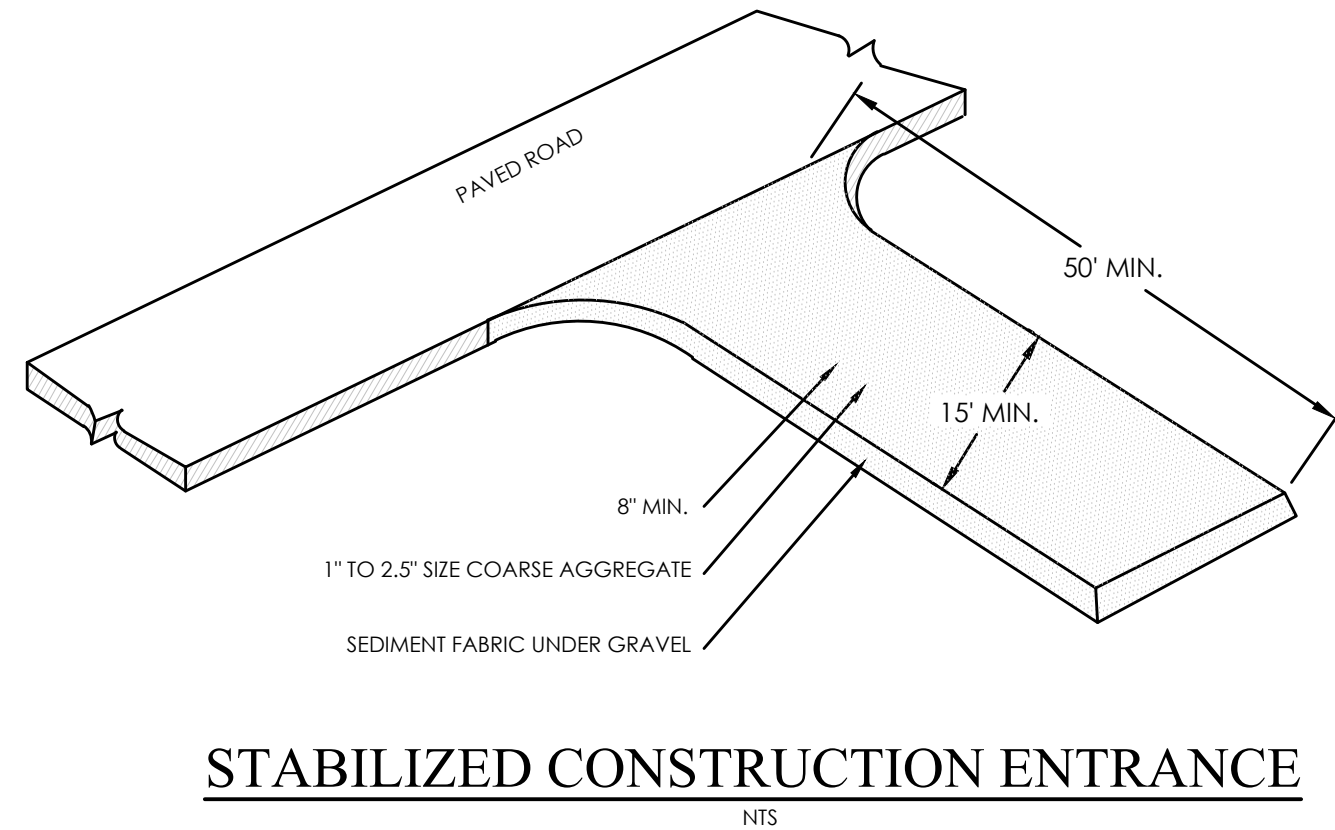
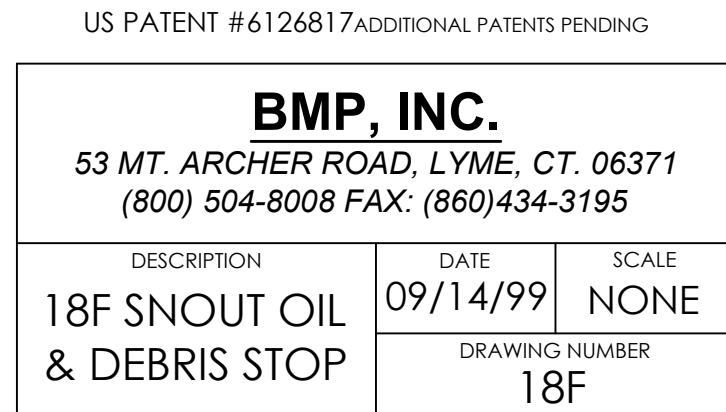
## MAINTENANCE & DISPOSAL

1. The Contractor shall remove sediment at the base of the upslope side of the inlet protection when accumulation has reached 1/2 of the effective height of the inlet protection, or as directed by the Engineer. Alternatively, for drain inlet protection, a new Sock shall be placed on the curb and drain opening, increasing the sediment storage capacity without soil disturbance.
2. Inlet protection shall be maintained until disturbed area above or around the device has been permanently stabilized and construction activity has ceased. If the inlet protection becomes lifting the inlet protection and cleaning around and under them as sediment collects.
3. The FilterMedia will be removed from paved areas or dispersed areas where the inlet protection or behind curb disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.

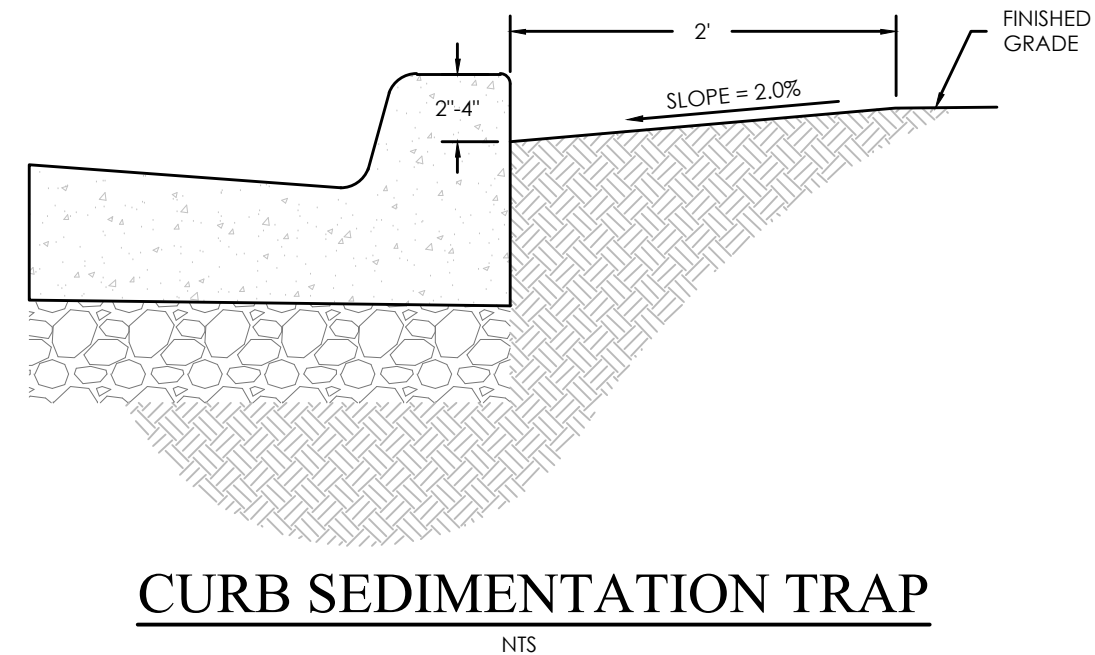


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## NTS



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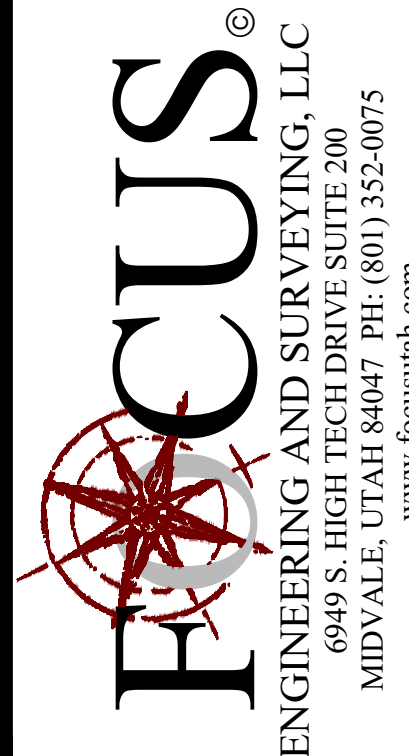
NTS

**MATTHEWS MEADOWS SUBDIVISION**  
**GRANTSVILLE, UT**  
**DETAILS**

REVISION BLOCK		
#	DATE	DESCRIPTION
1	08-08-2018	
2	08-08-2018	
3	08-08-2018	
4	08-08-2018	
5	08-08-2018	

Scale: N/A	Drawn: DCJ
Date: 09/14/22	Job #: 21-0377
Sheet:	

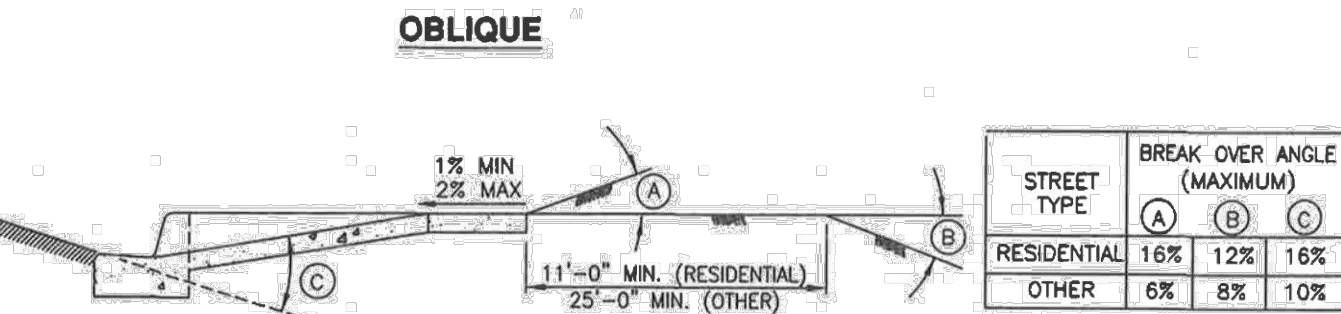
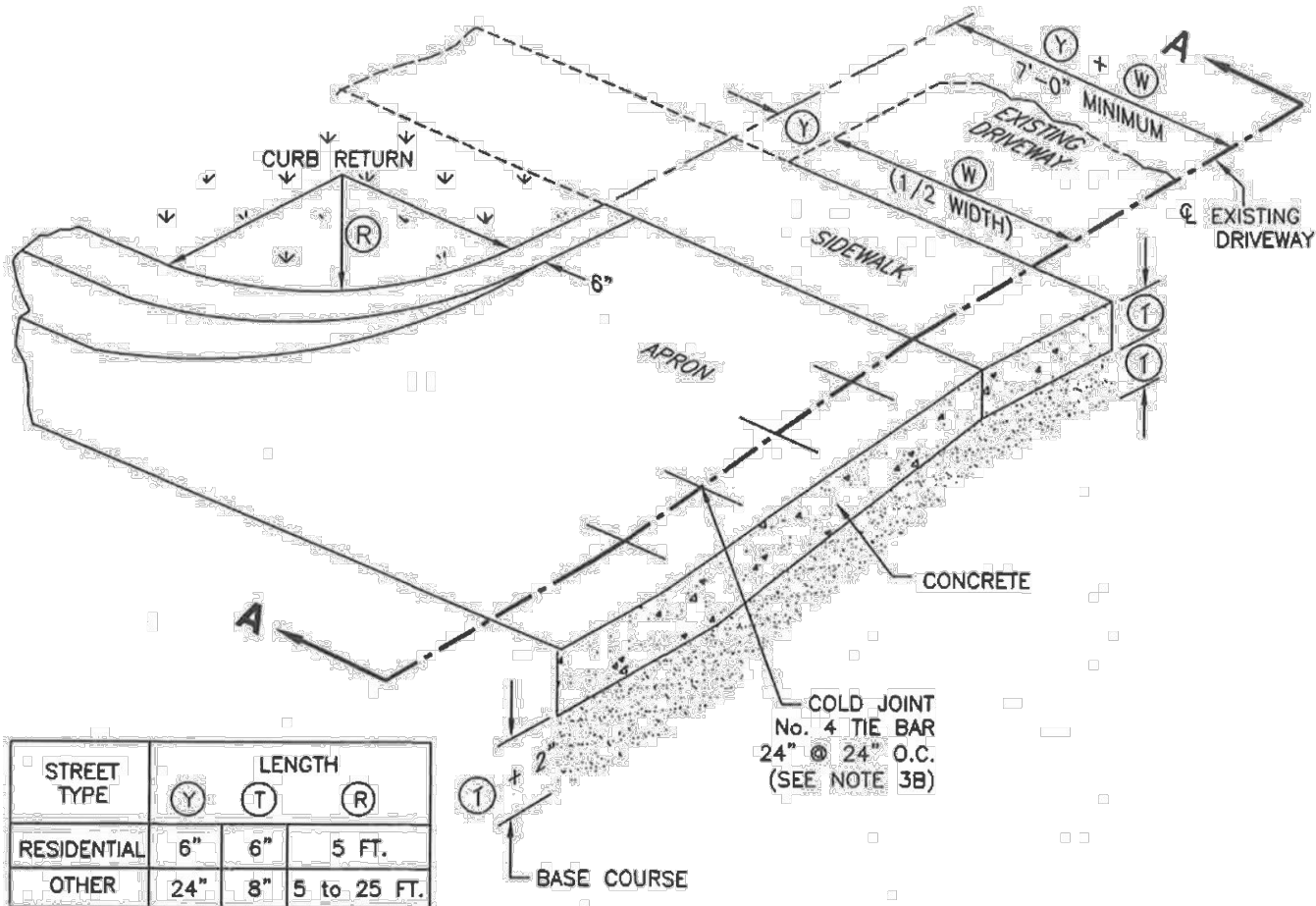
D8



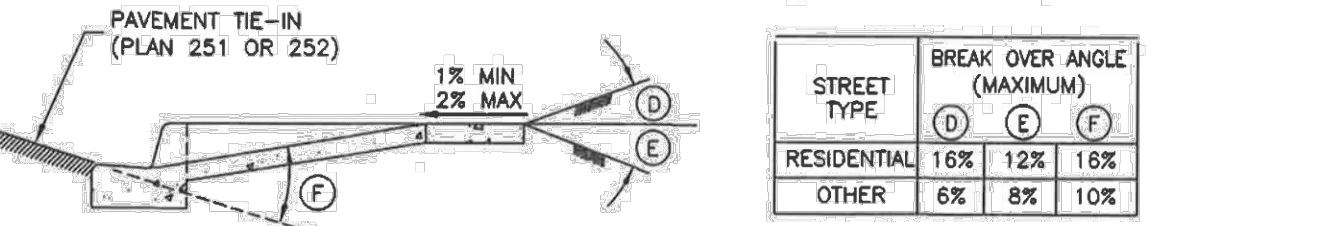


Open driveway approach

1. GENERAL
- A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
- B. Field Changes to Slope Requirements:
- 1) Grades may have a 6 percent change in slope over a 11 feet wheel base run for both crest or sag vertical curves.
- 2) Where heavy truck use and fire truck access applies, or to improve design speed, design grades should be cut in half.
- 3) Specific uses or site conditions may require profile design submittal for review and acceptance.
- C. Additional requirements are specified in APWA Section 32 16 13.
2. PRODUCTS
- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32.13.73.
- C. Concrete: Class 4500 APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
- D. Reinforcement: Galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A615.
- E. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
3. EXECUTION
- A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- B. Reinforcement: Not required if driveway apron is constructed without a cold joint.
- C. Concrete Placement: APWA Section 03 30 10.
- 1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface.
- 2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Maximum length to width ratio for non-square panels is 1.5 to 1. Maximum panel length (in feet) is 1.5 times the slab thickness (in inches).
- 3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
- D. Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.



SECTION A-A - APPROACH REQUIRING SERVICE TRUCK ACCESS



SECTION A-A - TYPICAL DRIVEWAY APPROACH

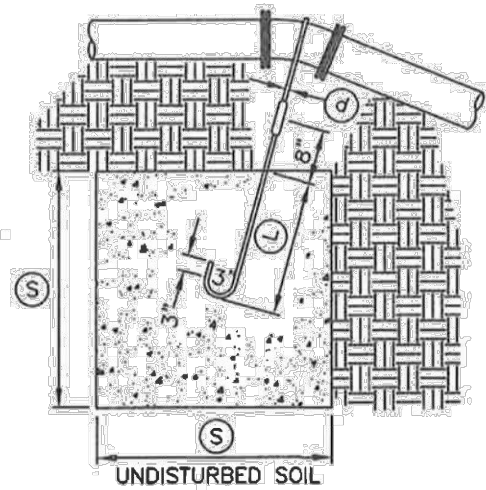


Open driveway approach

Plan  
225  
December 2009

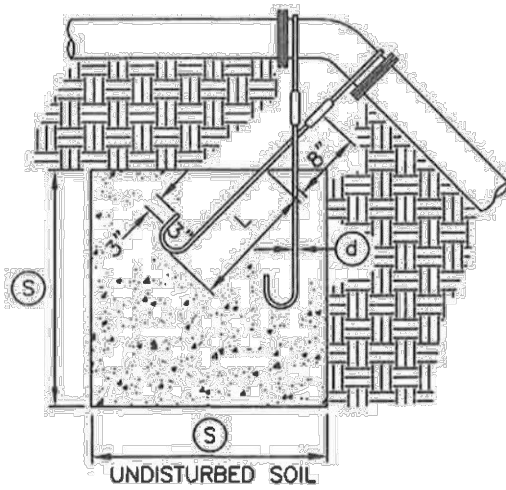
Tie-down thrust restraints

1. GENERAL
- A. Thrust design for pipe sizes or configurations not shown require special design.
- B. Bearing areas, volumes, and special thrust blocking details shown on Drawings take precedence over this plan.
- C. Restraint sizing is based upon a maximum operating pressure of 150 psi and a test pressure of 200 psi, and a minimum soil bearing strength of 2,000 psf. Operating pressures in excess of 150 psi or soils with less than 2,000 pound bearing strength will require special design.
- D. Before backfilling around thrust block, secure inspection of installation by ENGINEER.
2. PRODUCTS
- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
- C. Concrete: Class 4500 minimum, APWA Section 03 30 04.
- D. Reinforcement: Deformed, steel, ASTM A615. Give bars an epoxy coating at least 15 mils thick. Minimum stress yield strength of steel tie-down bars is 70,000 ksi.
- E. Grease: Non-oxide poly-FM.
3. EXECUTION
- A. Pour concrete against undisturbed soil. Concrete must be allowed to cure in thrust restraints for 5 days before pressurizing water lines or have additional approved thrust restraints installed before pressurizing the water line.
- B. Pipe Joints: Do not cover with concrete. Leave completely accessible.
- C. Grease: Apply grease to all buried metal surfaces. Wrap with polyethylene sheet and tape wrap.
- D. Locking restraint devices may be used in conjunction with concrete thrust blocking (at discretion of ENGINEER).
- E. Base Course and Backfill Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.



TYPE A RESTRAINT  
FOR 11 1/4" - 22 1/2" VERTICAL BENDS

TABLE OF DIMENSIONS						
PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	SIDE OF CUBE - FEET	DIAMETER OF SHANK OR REBAR RODS - INCH	DEPTH OF ROD CONCRETE - FEET	
4"	11 1/4"	8	2.0	5/8"	1.5	
	22 1/2"	15.6	2.5	5/8"	2.0	
6"	11 1/4"	15.6	2.5	5/8"	2.0	
	22 1/2"	34.3	3.25	5/8"	2.0	
8"	11 1/4"	27	3.0	5/8"	2.0	
	22 1/2"	64	4.0	5/8"	2.0	
12"	11 1/4"	64	4.0	5/8"	2.0	
	22 1/2"	125	5.0	3/4"	3.0	
16"	11 1/4"	107	4.25	7/8"	3.0	
	22 1/2"	216	6.0	7/8"	3.0	
20"	11 1/4"	138	5.17	1"	3.5	
	22 1/2"	334	6.94	1"	4.0	
24"	11 1/4"	240	6.22	1"	4.0	
	22 1/2"	476	7.81	1"	4.0	
30"	11 1/4"	369	7.17	1"	4.0	
	22 1/2"	733	9.02	1"	4.0	



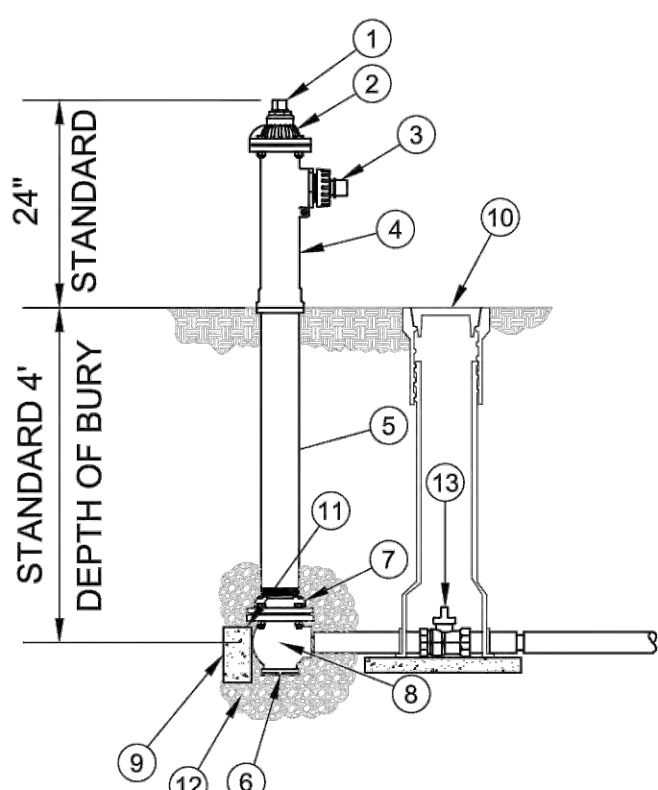
TYPE B RESTRAINT  
FOR 45" VERTICAL BENDS

TABLE OF DIMENSIONS						
PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	SIDE OF CUBE - FEET	DIAMETER OF SHANK OR REBAR RODS - INCH	DEPTH OF ROD CONCRETE - FEET	
4"	45"	1	3.0	5/8"	2.0	
6"		2.37	4.0	5/8"	2.5	
8"		3.97	4.75	5/8"	3.0	
12"		9.04	6.25	5/8"	4.0	
16"		17.24	7.75	3/4"	4.0	
20"		26.52	92.17	3/4"	4.0	
24"		37.82	10.07	3/4"	4.0	
30"		58.26	11.63	3/4"	4.0	



Tie-down thrust restraints

Plan  
562  
April 1997



GENERAL NOTES:

1. #2 ECLIPSE POST HYDRANT SHALL BE SELF-DRAINING, NON-FREEZING, COMPRESSION TYPE WITH 2-3/16" MAIN VALVE OPENING. INLET CONNECTION SHALL BE 2" FIP. OUTLET SHALL BE 2 1/2". STANDARD DEPTH OF BURY IS 4'.
2. ALL WATER FLOW SHALL PASS THRU A 3-1/2" FBE COATED STEEL PIPE AND CAST IRON TOP STOCK WATERWAY.
3. ALL WORKING PARTS SHALL BE SERVICEABLE FROM ABOVE GROUND WITH NO DIGGING OR REPLACEMENT NEEDED.
4. HYDRANT SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE OF HYDRANT. THE #2 ECLIPSE POST HYDRANT AS MANUFACTURED BY THE KUPFERLE FOUNDRY, ST. LOUIS MO. 63102.
- 5.

ITEM	ITEM / DESCRIPTION	NOTES
1	OPERATING SCREW	
2	TOP CAP	
3	SIDE CAP	
4	TOP STOCK	
5	3-1/2" FBE COATED STEEL PIPE	
6	DRAIN HOLE	
7	COUPLING	
8	INLET VALVE BODY	
9	UNDISTURBED EARTH	
10	VALVE BOX	
11	THRUST BLOCK	
12	CRUSHED ROCK	
13	HYDRANT SHUT-OFF VALVE	

REV	DATE	APPR	DESCRIPTION



GRANTSVILLE CITY  
ABOVE GRADE 2" BLOW-OFF INSTALLATION

SHEET  
6-56

MATTHEW'S MEADOWS'S SUBDIVISION  
GRANTSVILLE, UT  
DETAILS

REVISION BLOCK		DESCRIPTION
#	DATE	
1		
2		
3		
4		
5		
6		

DETAILS

Scale: N/A  
Date: 09/14/22  
Job #: 21-0377

Sheet: D9

NOTE  
WHEN UNDISTURBED EARTH IS UNAVAILABLE FOR THRUST  
BLOCKING, REFER TO APWA 562 FOR ALTERNATIVE THRUST  
BLOCKING METHOD.



GRANTSVILLE CITY GENERAL NOTES

- ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO: EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CURB, GUTTER, AND SIDEWALK, REQUIRED TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TPOOLE COUNTY SURVEYORS REQUIREMENTS.
- ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SPOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
- REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR MORE DETAILS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- ALL CITY MAINTAINED UTILITIES INCLUDING; WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATERLINES, IRRIGATION, STREET LIGHTING, AND POWER. AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS, NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1 .DXF COPY, 1 .PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPs WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOUT SEPARATOR.
- ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE, TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORICULTURE.
- WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET FENCING ALONG THE BACK OF SIDEWALK, THE DEVELOPMENT SHALL ALSO BE REQUIRED PUT IN A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
- CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO; SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATER WAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
- CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND LIP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

GRANTSVILLE CITY TRAFFIC NOTES

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC onto THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 108 (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A "Z" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE 1/2 INCH FOR RESIDENTIAL AND COLLECTOR ROADS. NO MORE THAN 15% RAP (RECLAIMED ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3% AIR VOIDS.
- POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POT HOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
- ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPLING, GRANULAR AND FLOWABLE, 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS PCMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS PCMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
- ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

GRANTSVILLE CITY GRADING NOTES

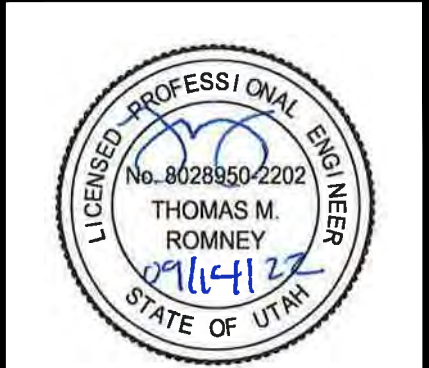
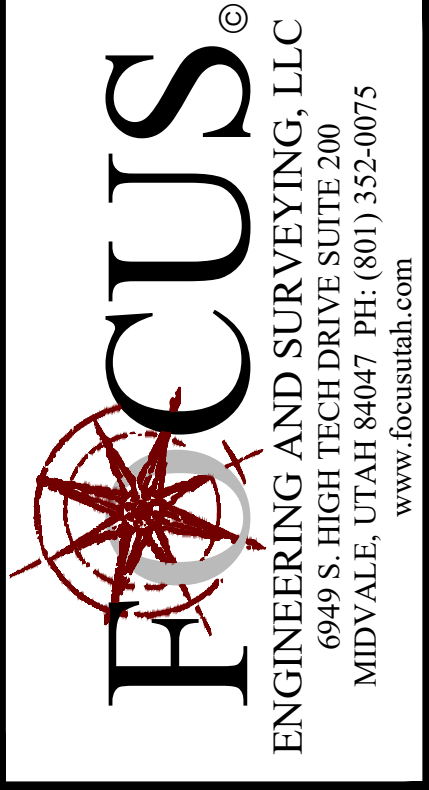
- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

GRANTSVILLE CITY FIRE DEPARTMENT NOTES

- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5', MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT. WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR, THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV ISN'T FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF ITS CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON. (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
- POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- ROADS AND ACCESSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

GRANTSVILLE CITY WATER NOTES

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
- ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPER'S EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
- FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPER'S EXPENSE) AND INSTALLED BY DEVELOPER.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY, REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER): IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPER'S EXPENSE.
- ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
- ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE.
- ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIRES STAINLESS STEEL TIE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL TIE DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
NOTES

REVISION BLOCK		DESCRIPTION	
#	DATE	1	2
1	----	----	----
2	----	----	----
3	----	----	----
4	----	----	----
5	----	----	----
6	----	----	----

NOTES

Scale: N/A

Drawn: DCJ

Date: 09/14/22

Job #: 21-0377

Sheet:

D10



GRANTSVILLE CITY  
PRE-CONSTRUCTION NOTES

CHAIN OF COMMUNICATION

- FIRST CONTACT: BRAD PACE PUBLIC WORKS INSPECTOR
- SECOND CONTACT: GLEN MILLWARD (WATER), MARKUS SEAT (SEWER), TRAVIS DANIELS (FIRE CHIEF), JASON SMITH (ASSISTANT FIRE CHIEF).

PLEASE COMMUNICATE THROUGH E-MAIL TO MAINTAIN A WRITTEN RECORD.

MAIN CONSTRUCTION CONTACT

- PROJECT FOREMAN:

CONSTRUCTION SCHEDULE

- CONSTRUCTION STARTS:
- PLEASE PROVIDE A CONSTRUCTION SCHEDULE. HELPS CITY TO PLAN FOR WHAT IS HAPPENING. PROVIDE TO JAMES AND HE WILL DISSEMINATE TO OTHERS.

PERMITTING

CONSTRUCTION STAKING

- SURVEYING & STAKING:
- WE ARE HAVING SOME ALIGNMENT ISSUES ON CITY UTILITIES PLEASE MAKE SURE YOU GET ADEQUATE STAKING.

GEOTECHNICAL

- DOES THE CONTRACTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS?
- DOES THE CITY INSPECTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS? THE CITY INSPECTORS WILL BE GIVEN A COPY.
- GEO-TECH SHALL MONITOR THE EXCAVATION AND DETERMINE THE LOCATIONS THAT REQUIRE ADDITIONAL GRANULAR SUB-BASE AND SPECIFY THE DEPTH REQUIRED. CITY WOULD LIKE A DRAWINGS SHOWING THE AREAS THAT REQUIRE ADDITIONAL WORK.
- WHO WILL DO SOILS, COMPACTION TESTING?

SUBMITTALS:

- THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR MATERIAL TO THE CITY FOR APPROVAL PRIOR TO PURCHASE OF MATERIALS AND INSTALLATION. THE CITY WANTS TO CHECK THAT THE MATERIALS MEET SPEC BEFORE THEY ARE ORDERED SO THEY DON'T GET REJECTED WHEN THEY HAVE BEEN INSTALLED. SUBMIT TO CHRISTY MONTIERTH IN PUBLIC WORKS.
- THE CITY IS FINE WITH THE MATERIALS THAT HAVE PREVIOUSLY BEEN USED.

SEWER

- PIPE MATERIAL: PVC ASTM D-3034 SDR-35
- FOLLOW OSHA REQUIREMENTS FOR TRENCHING (4' VERTICAL WITH 1:1 SLOPING OR STEPPING OR USE TRENCH BOXES).
- SEWER LATERALS PER CITY STANDARD. (APWA 431).
- UTAH REQUIREMENT OF 10' HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LATERALS.
- 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- CRUSHED ROCK ¾-INCH MINUS IN PIPE ZONE (¾-INCH ROUNDED PEA GRAVEL IS NOT ALLOWED BY THE CITY).
- SEWER LATERALS. GRAVEL BEDDING TO BE EXTENDED TO DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED).
- OFFSET TEES FOR SEWER LATERALS; GASKET TYPE.
- COMPACTION - 95% IN ROADS, 90% OFF-ROAD (ASTM D-1557, MODIFIED PROCTOR)
- INSTALLATION AS PER ASTM D-2321
- ALL PRECAST MANHOLES TO BE PROVIDED WITH RUBBER BOOTS AND STAINLESS-STEEL BANDS AT PIPE PENETRATIONS.
- INTERIOR PIPE PENETRATIONS IN ALL SEWER MANHOLES SHALL BE GROUTED.
- TRACER WIRE EXTENDING FROM MAIN TO LATERAL STUB ON ALL LATERALS AND EXTENDED TO SURFACE AT STUB MARKER. INCLUDE AN EXTRA 30-FEET TO EXTEND ALONG THE SERVICE TO THE DWELLING.
- STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB AN "S" AT ALL SERVICE LATERALS (TWO PLACES FOR EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE LATERALS IN THE PROPER LOCATIONS.
- EXTEND UTILITY LATERAL STUB MARKERS BEYOND THE 15-FOOT PU&DE (15-FEET BEHIND BACK OF WALK).
- END OF SEWER LATERALS SHALL BE PLUGGED.

TESTING:

- AIR TEST MANDATORY - CERTIFICATION REQUIRED.
- VACUUM TEST REQUIRED FOR THE MANHOLES.
- VIDEO INSPECTION AFTER FLUSHING - THE CITY DOES NOT NEED TO OBSERVE THE VIDEO INSPECTION. VIDEO RECORD TO BE PROVIDED FOR CITY REVIEW.
- PLEASE PROVIDE THE CITY 48 HOURS' NOTICE PRIOR TO TESTING.

EMERGENCY SERVICES

- INSTALL A SILT FENCE FIVE FEET OUT AROUND LIVE FIRE HYDRANTS AND ELECTRICAL TRANSFORMERS. THIS HELPS MAINTAIN A CLEAR SPACE AROUND THEM AND MAKES THEM VISIBLE IF EMERGENCY SERVICES ARE NEEDED TO FIND THEM DURING CONSTRUCTION.
- INSTALL TEMPORARY SIGNAGE AT THE BEGINNING OF WORK ON THE SITE.
- PARK ONLY ON ONE SIDE OF ACCESS ROADS SO EMERGENCY ACCESS IS CLEAR.
- COORDINATE WITH FIRE CHIEF FOR HIS INSPECTIONS. ROADS: FACE OF CURB TO FACE OF CURB IS PROPER DISTANCE AND HYDRANTS ARE PROPERLY PLACED. THE HEIGHT OF THE HYDRANTS WILL ALSO BE INSPECTED. 18" ABOVE GROUND FROM THE PUMPER NOZZLE.
- PAINT RED CURB TEN FEET EITHER DIRECTION FIRE HYDRANTS.

CULINARY WATER

- PIPE MATERIAL: PVC C900 DR18
  - USE BEDDING SAND FOR BACKFILL IN THE PIPE ZONE (CITY NEEDS TO PREAPPROVE SAND BEDDING.) CITY WANTS CLEANED WASHED SAND. THE CITY WANTS A BUCKET AHEAD OF TIME SO THE CITY CAN WET IT AND SEE IF IT SETS UP LIKE CONCRETE OR NOT. IT CAN'T SET UP LIKE CONCRETE. THEY CAN PULL FROM THE STAKER PIT BUT THE SAND NEEDS TO BE WASHED. THE CITY CAN PROVIDE AN EXAMPLE FOR WHAT THEY ARE LOOKING FOR.
  - WATER LATERALS SAND BEDDING NEEDS TO GO TO THE DWELLING.
  - NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED)
  - VALVES SHALL BE CLUSTERED IN INTERSECTIONS
  - VALVES & TEMP. BLOW-OFF ARE LOCATED AT THE DEAD-END MAIN OF PHASE LINES TO ALLOW FOR FLUSHING. ISOLATION AND CONTINUED SERVICE TO EXISTING CONNECTIONS WHEN FUTURE PHASES ARE CONSTRUCTED.
  - METER AND SERVICES SHALL BE ¾-INCH POLYETHYLENE SDR11 IPS. INSTALL SERVICE LATERALS AND METERS WITHIN 5 FEET OF LOT LINES (AS CLOSE TO LOT LINE AS PRACTICABLE), ONE ON EACH SIDE OF COMMON LOT LINE (ALTERNATE WITH SECONDARY WATER).
  - USE 150# CORP STOPS.
  - 10' HORIZONTAL SEPARATION OF WATER AND SEWER LATERAL PER STATE REQUIREMENTS. WATER LATERAL TO BE LOCATED UPSLOPE OF SEWER LATERAL TO THE EXTENT PRACTICABLE.
  - 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
  - 10' HORIZONTAL SEPARATION OF WATER AND STORMWATER.
  - METER BARRELS SHALL BE 21-INCH DIAMETER WHITE CORRUGATED POLYETHYLENE
  - METER TO BE INSTALLED 18 TO 22 INCHES BELOW THE LID.
  - PLACE SAND AROUND THE WATER SERVICE SETTER BASES AND ABOVE TO STABILIZE SETTER AND PROVIDE INSULATION. GRAVEL IS NOT ALLOWED.
  - TAPPING SADDLES SHALL BE BRASS WITH DOUBLE STAINLESS STEEL OR BRASS STRAPS WRAPPED WITH POLY SOCK.
  - USE DUAL CHECK AND HEAVY-DUTY ANGLE VALVES FOR ALL SERVICES.
  - INSTALL TRACER WIRE AND LOCATING TAPE ABOVE WATER MAIN.
  - INSTALL TRACER WIRE FROM MAIN CONNECTION THROUGH METER PIT TO STUB MARKER WITH 30' EXCESS TO EXTEND TO THE DWELLING.
  - STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB WITH A "W" AT ALL SERVICE LATERALS (2 PLACES EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE LATERALS IN THE PROPER LOCATIONS.
  - THRUST BLOCKS NEED TO BE INSPECTED BY THE CITY PRIOR TO BACKFILL. SIZE BASED ON TEST PRESSURES
  - MAKE SURE FIRE HYDRANTS NEED TO BE INSTALLED TO THE PROPER HEIGHT TO HELP THE BREAK A WAY FUNCTION WORKS.
  - HYDRO FINDERS MUST BE INSTALLED.
- TESTING:
- HYDROSTATIC PRESSURE TEST: 200 PSI FOR A MINIMUM OF 2 HOURS FOR MAIN ONLY AND 150 PSI IF TESTING WITH TAPPING SADDLES AND CORPORATIONS IN PLACE - INSPECTOR (GLEN MILLWARD OR ASSIGNED CITY INSPECTOR) MUST BE PRESENT FOR THE ENTIRE DURATION OF THE TEST.

- DISINFECTION:
- HYPOCHLORITE POWDER
  - CHLORINE RESIDUALS WILL BE TESTED ONCE BY THE CITY, BUT ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER
  - ONLY ONE SERIES OF BAC-T TESTING WILL BE PERFORMED BY THE CITY TO ACCEPT WATER LINES AND ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER (PRELIMINARY INVESTIGATIVE TESTS BY THE CONTRACTOR/DEVELOPER ARE ENCOURAGED) THE CITY NEEDS TO DO THE GRAB ON ANY SAMPLES.
- PER AWWA C651, BAC-T TESTING SHALL BE COMPLETED FOR EVERY 1,200 FEET OF NEW WATER MAIN, AT THE END OF THE LINE, AND AT EACH BRANCH. TWO CONSECUTIVE SAMPLE SETS SHALL BE COLLECTED AT THE AFOREMENTIONED LOCATIONS AT LEAST 24 HOURS APART.

THE CITY WILL NOT SWING METER BOXES TO ACCOMMODATE THE DRIVEWAY. THINK ABOUT THE LATERAL LOCATIONS BEFORE LOCATING THE DWELLING.

STORM WATER

- PIPE MATERIAL:
- REINFORCED CONCRETE (RCP) AND/OR ADS N-12-WT
  - INSTALLATION AND COMPACTION TO FOLLOW MANUFACTURERS RECOMMENDATIONS.
  - ALL CATCH BASIN BOXES INCLUDE A SUMP. FOR BOXES WITH SNOTS THE SUMP DEPTH IS BASED UPON THE SNOT MODEL MANUFACTURES RECOMMENDATION. FOR ALL OTHER BOXES THE DEPTH IS 12" BELOW THE FLOW LINE OF THE PIPES.

FRANCHISE UTILITIES

- GAS: DOMINION
- POWER: ROCKY MOUNTAIN POWER
- CABLE: COMCAST
- PHONE: CENTURY LINK
- PLEASE INSTALL STUBS FOR FUTURE PHASES FOR FRANCHISED UTILITIES SO THAT NEW STREETS AND CONCRETE DON'T HAVE TO BE CUT TO EXTEND TO A FUTURE PHASE.

SURFACE IMPROVEMENTS

- PAVEMENT:
- ½" OR ¾-INCH ASPHALT AGGREGATE (1/2" IS THE CITY PREFERENCE). THE CITY STANDARD PAVEMENT SECTION IS 3-INCH ASPHALT ON 6-INCH UBC ON 8-INCH GRANULAR BORROW. (FABRIC)
  - MARSHALL MIX REQUIRED PRIOR TO PAVING
  - ROAD BASE AND CROSS-SECTION PER APPROVED DRAWINGS.
  - PROVIDE PROPER SIGNAGE PER UTAH MUTCD.
  - PROVIDE STOPS BARS AT STOP SIGNS.
  - ADA TRUNCATED DOME INSERTS NEED TO BE YELLOW IN PED RAMPS. THE SPACING IS REQUIRED TO BE 2" TO FRONT OF RAMP AND NO MORE THAN 2" OFF THE SIDES OF THE WALKING PATH.
  - INSTALL "NO PARKING" SIGNS IN TEMPORARY TURNAROUNDS. HOMEOWNERS ARE PARKING VEHICLES IN THEM.

- CONCRETE:
- AIR TEST EVERY 50 YARDS UNLESS RESULTS ARE OUT OF SPEC (5% - 7%)
  - 3 CYLINDERS EVERY 50 YARDS
  - 4,500 PSI CONCRETE FOR ALL SURFACE IMPROVEMENTS.
  - SIDEWALK SECTION IS 6" PCC ON 6" UBC.

- EARTHWORK:
- PROVIDE COMPACTION AND SIEVE ANALYSIS ON ALL INITIAL PROCTORS AND NEW MATERIAL.
  - COMPACTION TESTS EVERY 100 FEET OF PIPE TRENCH. VARY DEPTHS TO PROVIDE RESULTS THROUGHOUT STRATA.
  - ROAD WORK AND BASE - BOTH SHOULDERS AND CENTERLINE WITH A MAXIMUM OF 200' BETWEEN TESTS.
  - PROOF ROLL TRENCHES, SUBGRADE, AND BASE
  - MINIMUM OF FOUR COMPACTION TESTS AROUND EACH MANHOLE AND CLEANOUT.
  - USE APWA DETAIL 255 FOR PIPE TRENCH PATCHING.

TESTING AND QA/QC

- 48-HOUR NOTICE IS REQUIRED PRIOR TO ANY TESTING. MAKE SURE THE TEST IS SCHEDULED.
- INSPECTOR(S) REPRESENTING THE CITY MUST BE PRESENT FOR ALL TESTING INCLUDING THOSE PERFORMED BY AN INDEPENDENT AGENCY.
- PUBLIC WORKS HOURS ARE 7 AM TO 3:30 PM MONDAY THROUGH FRIDAY. HOWEVER, THE CITY WILL WORK WITH CONTRACTOR IF CONTRACTOR IS WORKING OUTSIDE THESE HOURS.
- COMPACT FILL IN 8" LIFT'S.

CONSTRUCTION WATER

- CONTRACTOR SHALL OBTAIN WATER FOR CONSTRUCTION FROM A CITY APPROVED FIRE HYDRANT USING A HYDRANT METER RENTED FROM THE CITY. THERE IS A \$1600 REFUNDABLE DEPOSIT FOR HYDRANT METERS AND A CHARGE OF \$6 PER 1000 GALLONS FOR ALL WATER USED. \$75 A MONTH RENTAL CHARGE.
- PLEASE DON'T DAMAGE THE METERS AND DON'T TAKE ANYTHING OFF THE METER.

EROSION CONTROL / STORM WATER SYSTEM PROTECTION

- MINIMIZE POTENTIAL FOR OFF-SITE RUN-OFF
- MINIMIZE DISTURBED AREAS.
- KEEP WORKING AREA WETTED TO MINIMIZE DUST
- PROVIDE SILT FENCE TO PREVENT SEDIMENT TRANSPORT DOWNSTREAM.
- CONTAIN ALL SEDIMENT ON SITE.
- MAINTAIN BMPS AS PER SWPPP.
- SWPPP TO BE ON-SITE AT ALL TIMES.
- PROOF OF COVERAGE UNDER UPDATES REQUIRED
  - CITY WILL NEED A COPY OF THE NOI
- THE CITY IS ON COMPLIANCE GO. MAKE SURE UPDATES ARE LOADED IN COMPLIANCE GO. ADD THE CITY PUBLIC WORKS E-MAIL CONTACT. HAVE A RSI AND PTOE ON SITE.
- THE CITY WILL CHECK WITH THE CONTRACTOR AFTER AN EVENT.
- THE CITY WILL SHARE INSPECTION REPORTS WITH THE CONTRACTOR.
- INSPECT AFTER RAINFALL AND OTHER EVENTS (WEATHER, AND CONSTRUCTION AROUND BMPS) THAT MAY AFFECT BMPS.
- MAKE SURE TO FOLLOW THE SWPPP AS SHOWN ON THE PLANS.
- PROVIDE VEGETATIVE COVER ON COMPLETED OR LONG-TERM TEMPORARY GRADING WITHIN 14 DAYS.
- PUT THE SWPPP SIGN ON SITE AND VISIBLE SO THE STATE CAN SEE IT ON A DRIVE BY.

CONSTRUCTION DEBRIS DISPOSAL

- MAINTAIN A WORK SITE THAT IS CLEAN AS POSSIBLE AND PROPERLY DISPOSE OF DEBRIS AND TRASH.
- NO GARBAGE PITS ALLOWED
- NO ON-SITE CONCRETE WASHOUT ALLOWED UNLESS HAULED FROM SITE AT END OF PROJECT OR OTHER PROVISIONS ARE MADE.

SITE SAFETY

- CONFORM TO OSHA STANDARDS.
- CLOSE TRENCHES AT NIGHT.
- SECURE OPEN TRENCHES AND PLUG LINES.

SECURITY

- SECURE CONSTRUCTION EQUIPMENT WHEN NOT IN USE.

SANITATION

- CLEAN AND PROPERLY MAINTAINED PORT-A-JOHN(S) ON SITE AT ALL TIMES.

HAZARDOUS MATERIAL STORAGE ON SITE

- IF THERE ARE HAZARDOUS MATERIALS ON SITE, MAKE SURE THE CITY HAS APPROVED IT AND THAT IT HAS SECONDARY CONTAINMENT. THE FIRE CHIEF NEEDS TO KNOW WHAT IS ON SITE, HOW IT IS SECURED AND WHERE IT IS LOCATED.

SITE ACCESS

AS SHOWN ON THE SWPPP DON'T DEVIATE FROM IT.

CONSTRUCTION OBSERVATION

- CITY PERSONNEL WILL INSPECT REGULARLY AS NEEDED.

CONSTRUCTION DRAWINGS

- KEEP AN ACCURATE SET OF AS-BUILTS.
- PROVIDE COPIES OF AS-BUILTS AT COMPLETION OF PROJECT PRIOR TO OCCUPANCY.
- MAKE SURE CHANGES IN AS-BUILTS ARE BUBBLED AND CLEAR AS WHAT CHANGES HAVE OCCURRED.
- CITY HAS STORM BASIN PLAN CERTIFICATION THE DESIGNING ENGINEER NEEDS TO SIGN AND STAMP.
- PROVIDE DIGITAL SET OF AS-BUILTS (PDF, DWG AND SHAPE FILES ARE REQUIRED.) FOR CITY PRIOR TO OCCUPANCY.
- CITY WILL PROVIDE A LIST OF ITEMS REQUIRED IN THE SHAPE FILE.
- KRISTY WILL PROVIDE HER REQUIREMENTS FOR THE CONSTRUCTION DRAWINGS.
- IF THERE ARE QUESTIONS ABOUT THE PLANS AND CONDITIONS ON THE GROUND FIRST REQUEST THE DESIGN ENGINEER'S INTERPRETATION AND BRING THAT INTERPRETATION TO THE CITY WHEN QUESTIONS COME UP. THE ONSITE INSPECTORS CANNOT MAKE APPROVALS TO CHANGES. DOCUMENT CHANGES.

CONSTRUCTION DRAWINGS:

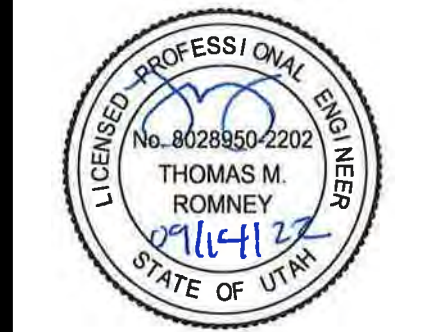
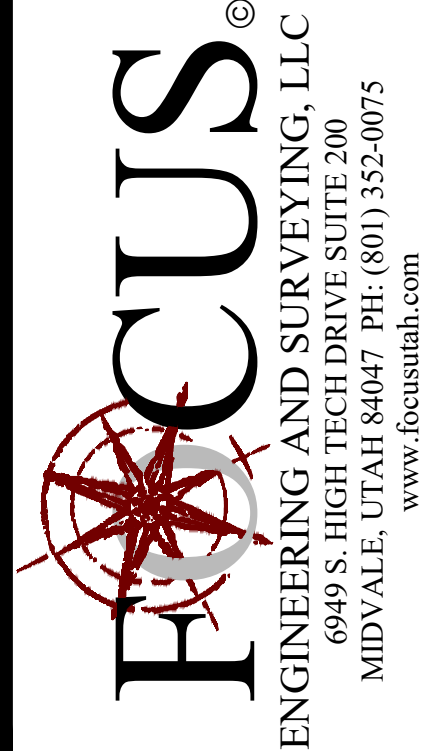
DON'T PRINT ANY PLANS UNTIL ALL OF THE CHANGES HAVE BEEN MADE AND YOU HAVE RECEIVED A COPY OF THE SIGNED PLANS FROM KRISTY CLARK.

- PROVIDE KRISTY CLARK WITH ONE 24X36 AND FOUR 11X17'S.

PROJECT CONCERNS OR QUESTIONS:

SHARE THIS DOCUMENT WITH THOSE ON SITE TO USE AS CONSTRUCTION STANDARDS.

END



MATTHEWS MEADOWS SUBDIVISION PHASE 1  
GRANTSVILLE, UT  
PRE-CON NOTES

REVISION BLOCK		DESCRIPTION
#	DATE	
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

PRE-CON  
NOTES

Scale: N/A

Drawn: DCJ

Date: 09/14/22

Job #: 21-0377

Sheet:

D11



# **AGENDA ITEM #4**

Consideration to recommend approval for the Final Plat for Cloward Court Subdivision.





Know what's **below**.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

# CLOWARD COURT SUBDIVISION

713 EAST MAIN STREET  
GRANTSVILLE, UTAH

### INDEX OF DRAWINGS

1-1	BOUNDARY TOPOGRAPHIC SURVEY
1-1	PRELIMINARY PLAT
1-1	PLAT
C-001	GENERAL NOTES
C-100	SITE / UTILITY PLAN
PP-1	PLAN AND PROFILE CLOWARD COURT

#### NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES TO 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 THE CIVIL ENGINEER 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 THE OWNER OR ENGINEER.

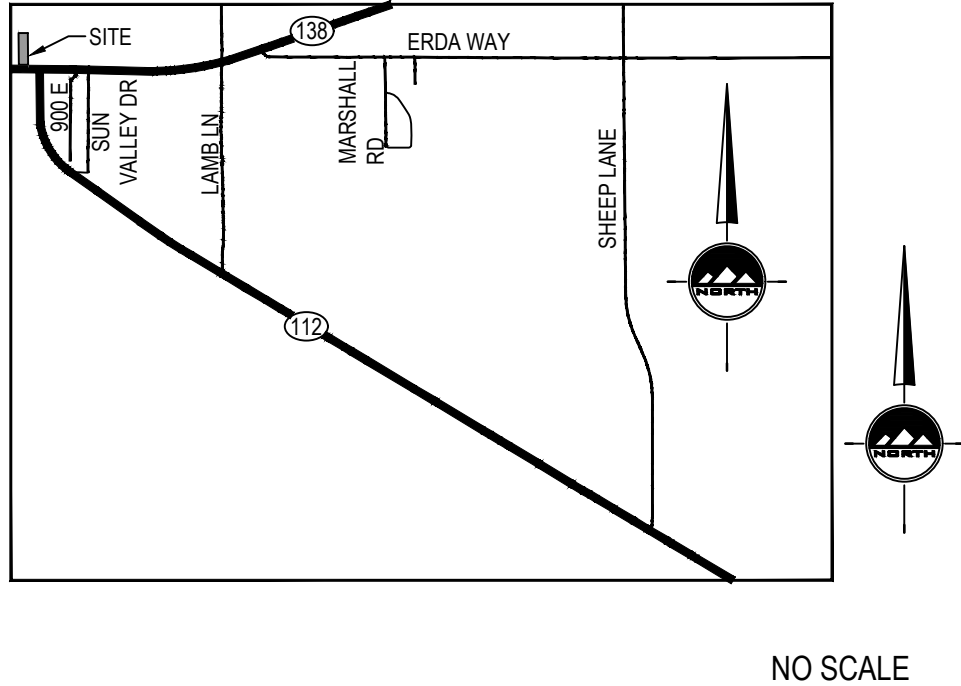
#### NOTICE TO DEVELOPER/ CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

#### UTILITY DISCLAIMER

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

### VICINITY MAP



### GENERAL NOTES

- ALL WORK SHALL CONFORM TO GRANTSVILLE CITY STANDARDS & SPECIFICATIONS.
- CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- BENCHMARK ELEVATION = WITNESS CORNER TO THE EAST QUARTER CORNER OF SECTION 32, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE & MERIDIAN ELEV. = 4285.83
- ALL UTILITIES ON THE PROPERTY SHALL BE UNDER GROUND PER THE CITY CODE. EXISTING POLES ALONG THE FRONTAGE NOT BEING MOVED, WILL BE ALLOWED TO REMAIN.



**ENSIGN**  
THE STANDARD IN ENGINEERING

**TOOELE**  
169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

**SALT LAKE CITY**  
Phone: 801.255.0529

**LAYTON**  
Phone: 801.547.1100

**CEDAR CITY**  
Phone: 435.866.1453

**RICHFIELD**  
Phone: 435.896.2983

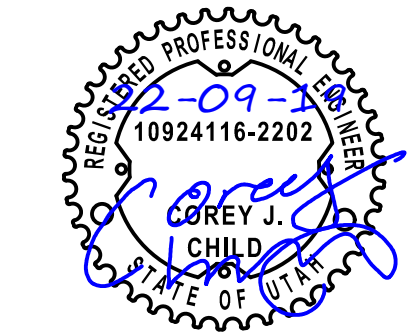
**WWW.ENSIGNENG.COM**

FOR:  
RE/MAX  
713 EAST MAIN STREET  
GRANTSVILLE, UTAH

CONTACT:  
NICOLE CLOWARD  
PHONE: 435-241-0410

CLOWARD COURT SUBDIVISION

FINAL  
713 EAST MAIN STREET  
GRANTSVILLE, UTAH



COVER

PROJECT NUMBER  
9700A

PRINT DATE  
2022-06-17

DRAWN BY  
J.CID

CHECKED BY  
D.KINSMAN

PROJECT MANAGER  
D.KINSMAN

C-000



811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

WITNESS CORNER TO THE EAST QUARTER  
CORNER OF SECTION 32, TOWNSHIP 2 SOUTH,  
RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN  
ELEV = 4293.53'

**SURVEYORS NARRATIVE**

I, Douglas J. Kinsman, do hereby state that I am a Professional Land Surveyor, and that I hold license no. 334575, as prescribed by the laws of the state of Utah, and represent that I have made a survey of the following described property. The purpose of this survey is to retrace the boundary, monument the corners, and provide boundary information to our client.

The basis of bearing for this survey is the line between the found monuments at the Witness Corner to the East Quarter Corner and the Witness Corner to the West Quarter Corner of Section 32, Township 2 South, Range 5 West, Salt Lake Base and Meridian, which bears a calculated bearing of North 88°54'16" West 5303.46 feet.

**Surveyed Description**

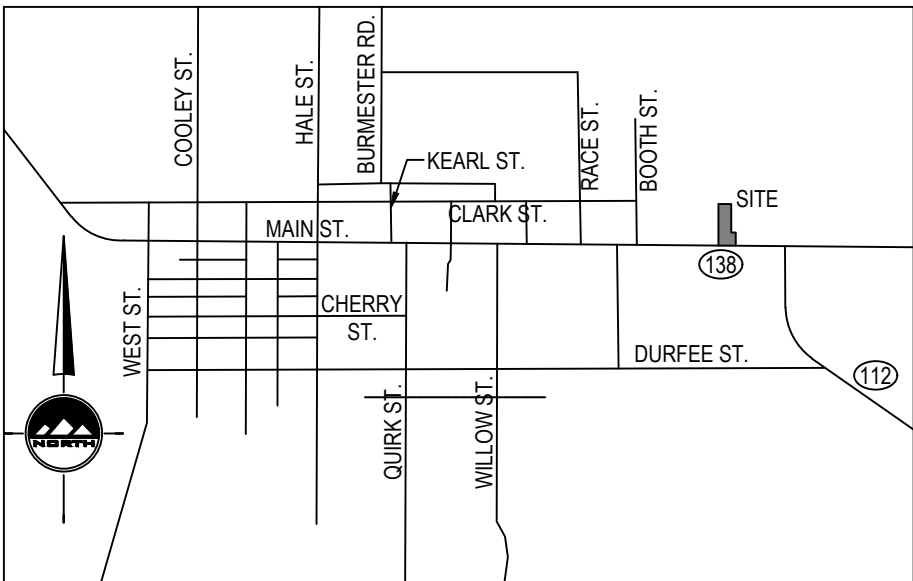
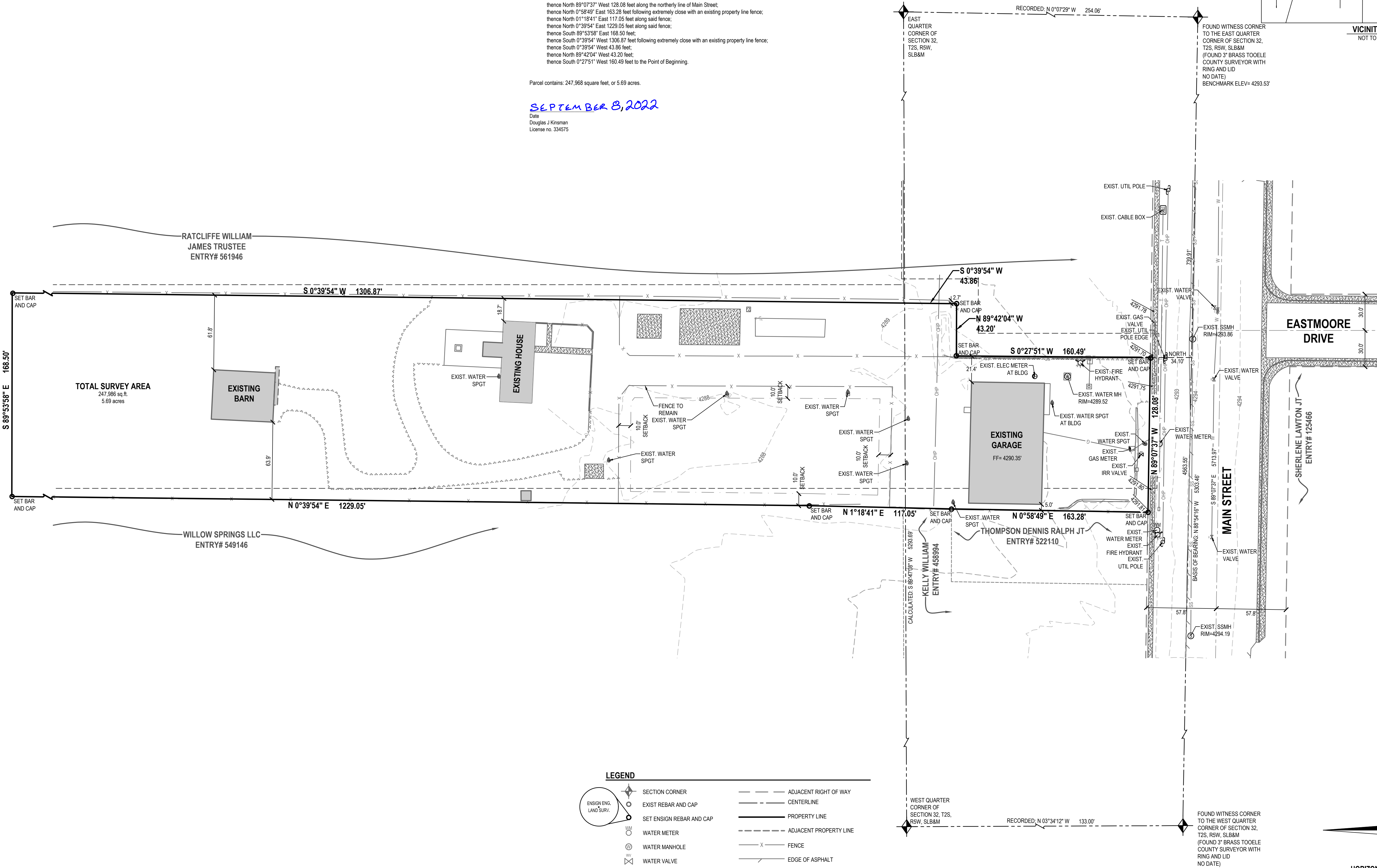
A parcel of land, situate in the Northeast Quarter of Section 32, Township 2 South, Range 5 West, Salt Lake Base and Meridian, more particularly described as follows:

Beginning at a point on the northerly line of Main Street, which is located North 88°54'16" West 739.91 feet from the found witness monument at the East Quarter Corner of Section 32, Township 2 South, Range 5 West, Salt Lake Base and Meridian, and running North 34.10 feet from the section line, and running:

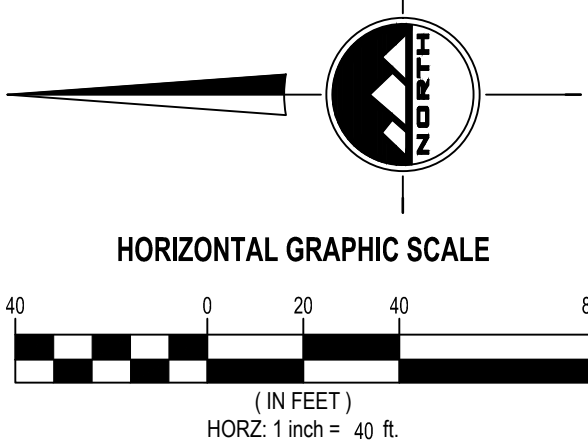
thence North 89°07'37" West 128.08 feet along the northerly line of Main Street;  
thence North 0°58'49" East 163.28 feet following extremely close with an existing property line fence;  
thence North 01°18'41" East 117.05 feet along said fence;  
thence North 0°39'54" East 1229.05 feet along said fence;  
thence South 89°53'58" East 168.50 feet;  
thence South 0°39'54" West 1306.87 feet following extremely close with an existing property line fence;  
thence South 0°39'54" West 43.86 feet;  
thence North 89°42'04" West 43.20 feet;  
thence North 89°42'04" West 43.20 feet;  
thence South 0°27'51" West 160.49 feet to the Point of Beginning.

Parcel contains: 247,968 square feet, or 5.69 acres.

SEPTEMBER 8, 2022  
Date:  
Douglas J. Kinsman  
License no. 334575



VICINITY MAP  
NOT TO SCALE



LOCATED IN THE NORTHEAST CORNER  
OF SECTION 32,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST,  
SALT LAKE BASE AND MERIDIAN  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH

EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

SALT LAKE CITY

Phone: 801.255.0529

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FOR:  
REIMAX  
713 EAST MAIN STREET  
GRANTSVILLE, UTAH  
CONTACT:  
NICOLE CLOWARD  
PHONE: 435-241-0410

REIMAX TENANT FINISH  
DESIGN SERVICES  
713 EAST MAIN STREET  
GRANTSVILLE, UTAH

PROFESSIONAL LAND SURVEYOR  
No. 334575  
DOUGLAS J. KINSMAN  
STATE OF UTAH

BOUNDARY  
TOPOGRAPHIC  
SURVEY

PROJECT NUMBER  
9700  
PRINT DATE  
9/19/22  
DRAWN BY  
J. SHAW  
CHECKED BY  
D. KINSMAN  
PROJECT MANAGER  
C. CHILD











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169 N. Main Street, Unit 1  
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PHONE: 435-241-0410

**CLOWARD COURT SUBDIVISION**  
**FINAL**  
**713 EAST MAIN STREET**  
**GRANTSVILLE, UTAH**



**GENERAL NOTES**

PROJECT NUMBER  
9700A  
PRINT DATE  
2022-06-17  
DRAWN BY  
J.CID  
CHECKED BY  
D.KINSMAN  
PROJECT MANAGER  
D.KINSMAN

**C-001**

**GRANTSVILLE GENERAL NOTES**

- ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS. ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CURB, GUTTER, AND SIDEWALK, FOUND TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TOOELE COUNTY SURVEYORS REQUIREMENTS.
- ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SNOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
- REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR MORE DETAILS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPODES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- ALL CITY MAINTAINED UTILITIES INCLUDING, WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATER LINES, IRRIGATION, STREET LIGHTING, AND POWER. AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS. NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1 DXF COPY, 1 PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPs WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOT SEPARATOR.
- ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORICULTURE.
- WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET RECONSTRUCTION, THE DEVELOPMENT SHALL ALSO BE REQUIRED TO PROVIDE A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
- CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO, SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATERWAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
- CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND TOP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS MUST BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

**GRANTSVILLE CITY GRADING NOTES**

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.

- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.

- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.

- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.

- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.

- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.

- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.

- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.

- ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

**GRANTSVILLE CITY TRAFFIC NOTES**

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCRoACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCRoACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICAADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 10B (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A "Z" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE 1/2 INCH FOR RESURFACING AND COLLECTOR AND LOCAL ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3% AIR VOIDS.
- POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
- ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPING, GRANULAR AND FLOWABLE. 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS POMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS POMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
- ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

**GRANTSVILLE CITY WATER NOTES**

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
- ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPERS EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
- FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPERS EXPENSE) AND INSTALLED BY DEVELOPER.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY. REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER) IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPERS EXPENSE.
- ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
- ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE.
- ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIREMENTS STAINLESS STEEL, THE DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL. THE DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.

**GRANSTVILLE CITY FIRE DEPARTMENT NOTES**





















































































































- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A W.W.A. APPROVED.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5' MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT. WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR, THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV IS/NT FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF ITS CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
- POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- ROADS AND ACCESSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

**ABBREVIATIONS**

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
B	BOTTOM OF EXISTING PRACTICES
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
C	CURVE
CB	CATCH BASIN
CF	CURB FACE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EOA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HP	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
PIV	POST INDICATOR VALVE
PRC	POINT OF REVERSE CURVATURE
PRO	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROOF DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SIDEWALK
SWL	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TGO	TOP OF GRATE
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TYP	TYPICAL
VC	VERTICAL CURVE
WIV	WALL INDICATOR VALVE
WL	WATER LINE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

**LEGEND**

	SECTION CORNER		EXISTING EDGE OF ASPHALT
	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
	PROPOSED MONUMENT		EXISTING STRIPING
	EXISTING REBAR AND CAP		PROPOSED STRIPING
	SET ENSIGN REBAR AND CAP		EXISTING FENCE
	EXISTING WATER METER		PROPOSED FENCE
	PROPOSED WATER METER		EXISTING FLOW LINE
	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
	PROPOSED WATER MANHOLE		GRADE BREAK
	EXISTING WATER BOX		EXISTING STORM DRAIN LINE
	EXISTING WATER VALVE		PROPOSED STORM DRAIN LINE
	PROPOSED WATER VALVE		ROOF DRAIN LINE
	EXISTING FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE HYDRANT		HIGHWATER LINE
	PROPOSED FIRE DEPARTMENT CONNECTION		EXISTING SANITARY SEWER
	EXISTING SECONDARY WATER VALVE		PROPOSED SANITARY SEWER LINE
	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN. SWR. SERVICE LINE
	EXISTING IRRIGATION BOX		EXISTING LAND DRAIN LINE
	EXISTING IRRIGATION VALVE		PROPOSED LAND DRAIN LINE
	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN SERVICE LINE
	EXISTING SANITARY SEWER MANHOLE		EXISTING CULINARY WATER LINE
	PROPOSED SANITARY SEWER MANHOLE		PROPOSED CULINARY WATER LINE
	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE LINE
	EXISTING STORM DRAIN CLEAN OUT BOX		EXISTING SECONDARY WATER LINE
	PROPOSED STORM DRAIN CLEAN OUT BOX		PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX		PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN		EXISTING IRRIGATION LINE
	PROPOSED STORM DRAIN CATCH BASIN		PROPOSED IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX		EXISTING OVERHEAD POWER LINE
	PROPOSED STORM DRAIN COMBO BOX		EXISTING ELECTRICAL LINE
	EXISTING STORM DRAIN CLEAN OUT		EXISTING GAS LINE
	EXISTING STORM DRAIN CULVERT		EXISTING TELEPHONE LINE
	PROPOSED STORM DRAIN CULVERT		ACCESSIBLE ROUTE
	TEMPORARY SAG INLET PROTECTION		SAW CUT LINE
	TEMPORARY IN-LINE INLET PROTECTION		STRAW WATTLE
	ROOF DRAIN		TEMPORARY BERM
	EXISTING ELECTRICAL MANHOLE		TEMPORARY SILT FENCE
	EXISTING ELECTRICAL BOX		LIMITS OF DISTURBANCE
	EXISTING TRANSFORMER		EXISTING WALL
	EXISTING UTILITY POLE		PROPOSED WALL
	EXISTING LIGHT		EXISTING CONTOURS
	PROPOSED LIGHT		PROPOSED 0.5' CONTOURS
	EXISTING GAS METER		BUILDABLE AREA WITHIN SETBACKS
	EXISTING GAS MANHOLE		PUBLIC DRAINAGE EASEMENT
	EXISTING GAS VALVE		EXISTING ASPHALT TO BE REMOVED
	EXISTING TELEPHONE MANHOLE		PROPOSED ASPHALT
	EXISTING TELEPHONE BOX		EXISTING CURB AND GUTTER
	EXISTING TRAFFIC SIGNAL BOX		PROPOSED CURB AND GUTTER
	EXISTING CABLE BOX		PROPOSED REVERSE PAN CURB AND GUTTER
	EXISTING BOLLARD		TRANSITION TO REVERSE PAN CURB
	PROPOSED BOLLARD		TYPE D MOUNTABLE CURB AND GUTTER
	EXISTING SIGN		CONCRETE TO BE REMOVED
	PROPOSED SIGN		EXISTING CONCRETE
	EXISTING SPOT ELEVATION		PROPOSED CONCRETE
	PROPOSED SPOT ELEVATION		STAMPED CONCRETE
	EXISTING FLOW DIRECTION		BUILDING TO BE REMOVED
	EXISTING TREE		EXISTING BUILDING
	DENSE VEGETATION		PROPOSED BUILDING

NOTE: MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PLAN SET.



811

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CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

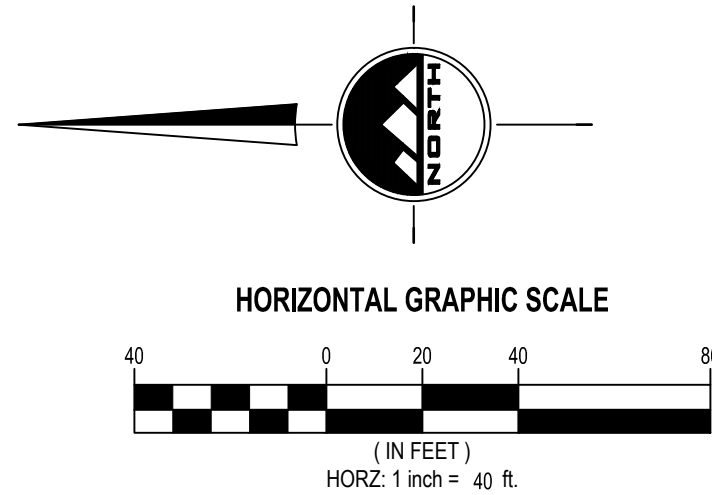
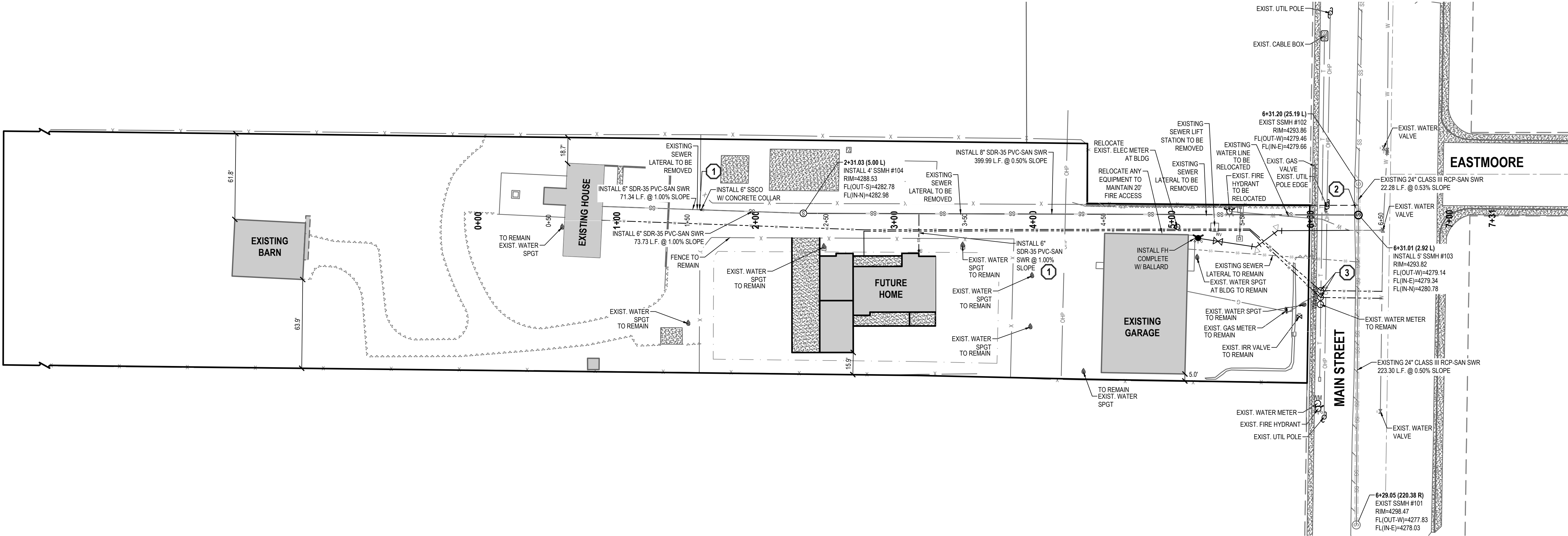
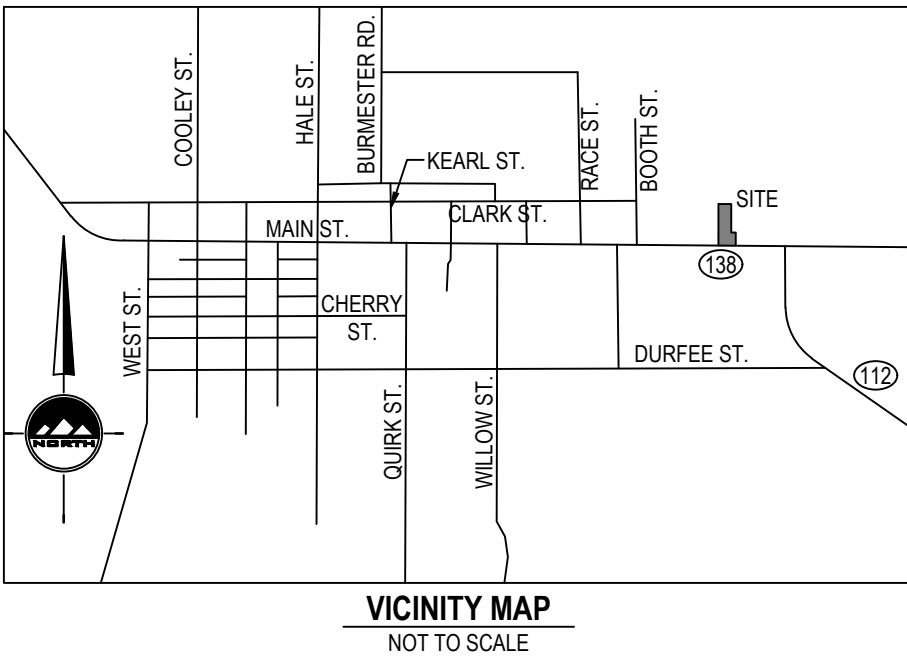
SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS.

- 1
- 6" SDR-35 PVC SANITARY SEWER LATERAL, INCLUDING CLEANOUTS AT MAXIMUM 100-FOOT SPACING, PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS. LENGTH AND SLOPE PER PLAN.
- 2
- CONNECT TO EXISTING SEWER MAIN PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- 3
- 1" CULINARY WATER METER PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS.

GENERAL NOTES

1.
- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
3.
- ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY STANDARD PLANS AND SPECIFICATIONS.
4.
- ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
5.
- DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
6.
- PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION.
7.
- THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
8.
- NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
9.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
10.
- THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.



CLOWARD COURT SUBDIVISION  
FINAL  
713 EAST MAIN STREET  
GRANTSVILLE, UTAH

EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

SALT LAKE CITY

Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY

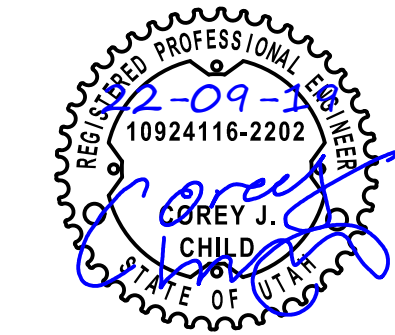
Phone: 435.866.1453

RICHFIELD

Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:  
REIMAX  
713 EAST MAIN STREET  
GRANTSVILLE, UTAH  
CONTACT:  
NICOLE CLOWARD  
PHONE: 435-241-0410



SITE / UTILITY  
PLAN

PROJECT NUMBER  
9700A  
DRAWN BY  
J.CID  
PROJECT MANAGER  
D.KINSMAN  
PRINT DATE  
2022-06-17  
CHECKED BY  
D.KINSMAN

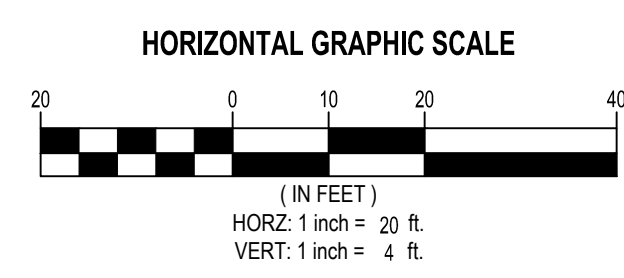
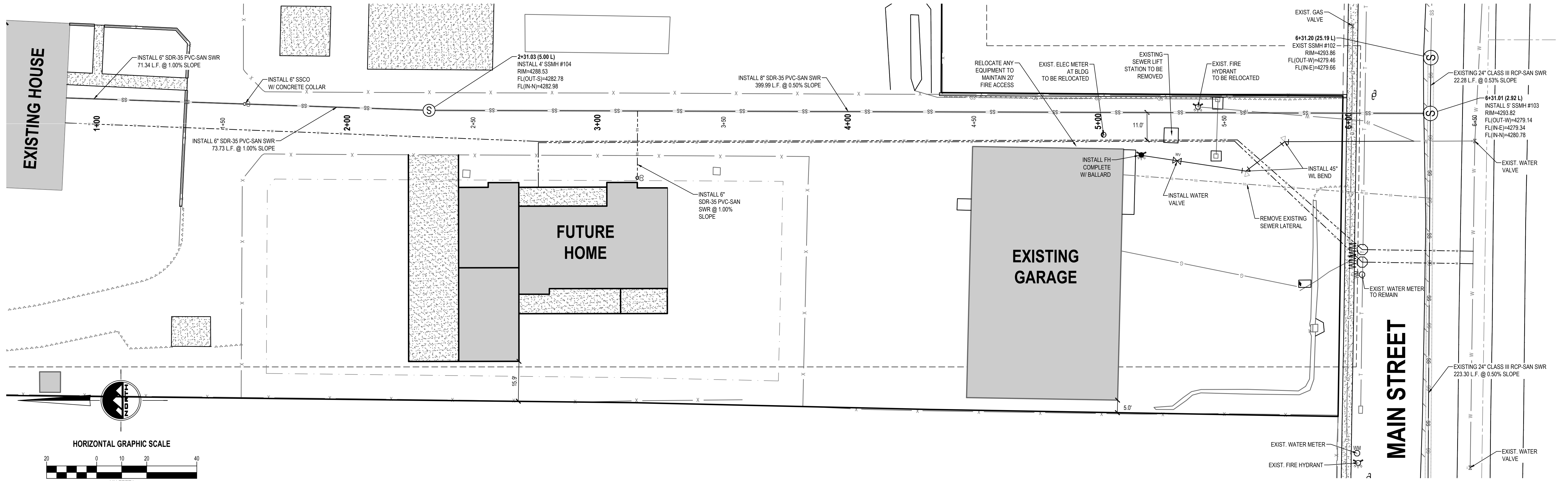
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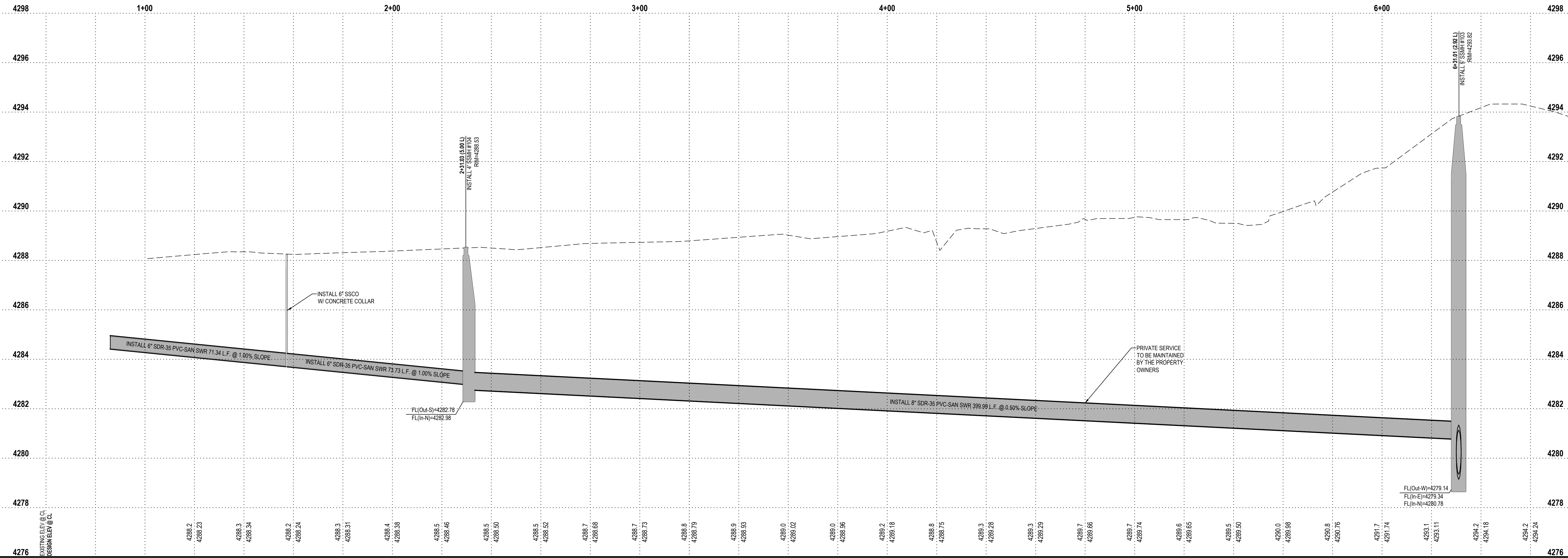
811

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CLOWARD COURT SUBDIVISION

FINAL

713 EAST MAIN STREET

GRANTSVILLE, UTAH

10924116-2202

COREY J. CHILD

STATE OF UTAH

PLAN & PROFILE  
CLOWARD COURT

PROJECT NUMBER  
9700A

PRINT DATE  
2022-06-17

DRAWN BY  
J.CID

CHECKED BY  
D.KINSMAN

PROJECT MANAGER  
D.KINSMAN

PP-1



# **AGENDA ITEM #5**

Consideration to recommend  
approval development agreement  
for the Springfield Estates  
Subdivision.



**WHEN RECORDED, RETURN TO:**

**Brett Coombs, Esq.**  
**Grantsville City Attorney**  
**429 East Main Street**  
**Grantsville City, Utah 84029**

**GRANTSVILLE CITY**  
**MASTER DEVELOPMENT AGREEMENT**  
**FOR**  
**SPRINGFIELD ESTATES SUBDIVISION**

THIS MASTER DEVELOPMENT Agreement (“**Agreement**”) is made and entered as of the 29th day of September, 2022, by and between Grantsville City, a municipal corporation of the State of Utah (“**City**”) and Shane Watson, an individual residing in the State of Utah (“**Developer**”).

**RECITALS**

A. The capitalized terms used in this Agreement and in these Recitals are defined in Section 1.2, below.

B. Developer owns and is developing the Property as a residential subdivision. Developer and the City desire that the Property be developed in a unified and consistent fashion pursuant to the Preliminary Plat and Final Plat. The Parties desire to enter into this Agreement to specify the rights and responsibilities of the Developer to develop the Property as expressed in this Agreement and the rights and responsibilities of the City to allow and regulate such development pursuant to the requirements of this Agreement.

C. The Parties understand and intend that this Agreement is a “development agreement” within the meaning of, and entered into pursuant to the terms of Utah Code Ann. §10-9a-101 (2005) *et seq.* This Agreement conforms with the intent of the City’s General Plan and the Zoning.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Developer hereby agree to the following, incorporating by reference the prior recitals as if fully set forth herein:

**TERMS**

1. **Definitions.** As used in this Agreement, the words and phrases specified below shall have the following meanings:



- 1.1. **Agreement** means this Master Development Agreement including all of its Exhibits and Addenda, including Addenda added after this Agreement is executed.
- 1.2. **Applicant** means a person or entity submitting a Development Application.
- 1.3. **Buildout** means the completion of all of the development in each phase of the entire Project in accordance with this Agreement.
- 1.4. **City** means Grantsville City, a political subdivision of the State of Utah.
- 1.5. **City's Future Laws** means the ordinances, policies, standards, and procedures which may be in effect as of a particular time in the future when a Development Application is submitted for a part of the Project and which may or may not be applicable to the Development Application depending upon the provisions of this Agreement.
- 1.6. **Council** means the elected City Council of the City.
- 1.7. **Default** means a breach of this Agreement as specified herein.
- 1.8. **Developer** means Shane Watson and his successors/assignees as permitted by this Agreement.
- 1.9. **Development** means the development of any portion of the Property pursuant to an approved Development Application.
- 1.10. **Development Application** means an application to the City for development of a portion of the Project or any other permit, certificate or other authorization from the City required for development of the Project.
- 1.11. **Final Plat** means the recordable map or other graphical representation of land prepared in accordance with Utah Code Ann. § 10-9a-603 (2019), and approved by the City, subdividing any portion of the Project.
- 1.12. **GLUDMC** means the Grantsville Land Use and Development Code.
- 1.13. **LUDMA** means the Land Use, Development, and Management Act, Utah Code Ann. § 10-9a-101 (2005), *et seq.*
- 1.14. **Maximum Residential Units** means the development on the Property of Springfield Estates Subdivision, thirty (30) Residential Dwelling Units.
- 1.15. **Notice** means any notice to or from any Party to this Agreement that is either required or permitted to be given to another party.
- 1.16. **Party/Parties** means, in the singular, Developer or the City; in the plural Developer and the City.
- 1.17. **Final Plat** means the final plat for the development of the Project, which has been approved by the City and which is attached as Exhibit "B."
- 1.18. **Project** means the residential subdivision to be constructed on the Property, in phases, pursuant to this Agreement with the associated Public Infrastructure and private facilities, and all of the other aspects approved as part of this Agreement.
- 1.19. **Property** means the real property owned by and to be developed by Developer more fully described in Exhibit A.
- 1.20. **Public Infrastructure** means those elements of infrastructure that are planned to be dedicated to the City or other public entities as a condition of the approval of a Development Application.
- 1.21. **Residential Dwelling Unit** means a structure or portion thereof designed and intended for use as attached residences as illustrated on the Final Plan.
- 1.22. **Zoning** means the R-1-12 zoning of the Property.



## **2. Development of the Project.**

**2.1. Compliance with the Final Plat and this Agreement.** Development of the Project shall be in accordance with LUDMA, GLUDMC, the City's Future Laws (to the extent they are applicable as specified in this Agreement), the Final Plat and this Agreement.

**2.2. Maximum Residential Units.** At Buildout, Developer shall be entitled to have developed the Maximum Residential Units of the type and in the general location as shown on the Final Plat.

## **3. Vested Rights.**

**3.1. Vested Rights Granted by Approval of this Agreement.** To the maximum extent permissible under the laws of Utah and the United States and at equity, the Parties intend that this Agreement grants to Developer all rights to develop the Project in fulfillment of this Agreement, LUDMA, GLUDMC, the Zoning of the Property, and the Final Plat except as specifically provided herein. The Parties specifically intend that this Agreement grant to Developer the "vested rights" identified herein as that term is construed in Utah's common law and pursuant to Utah Code Ann. § 10-9a-509 (2019).

**3.2. Exceptions.** The vested rights and the restrictions on the applicability of the City's Future Laws to the Project as specified in Section 3.1 are subject to the following exceptions:

**3.2.1. Developer Agreement.** The City's Future Laws or other regulations to which the Developer agrees in writing;

**3.2.2. State and Federal Compliance.** The City's Future Laws or other regulations which are generally applicable to all properties in the City and which are required to comply with State and Federal laws and regulations affecting the Project;

**3.2.3. Codes.** Any City's Future Laws that are updates or amendments to existing building, fire, plumbing, mechanical, electrical, dangerous buildings, drainage, or similar construction or safety related codes, such as the International Building Code, the APWA Specifications, AAHSTO Standards, the Manual of Uniform Traffic Control Devices or similar standards that are generated by a nationally or statewide recognized construction/safety organization, or by the State or Federal governments and are required to meet legitimate concerns related to public health, safety or welfare;

**3.2.4. Taxes.** Taxes, or modifications thereto, so long as such taxes are lawfully imposed and charged uniformly by the City to all properties, applications, persons and entities similarly situated; or,

**3.2.5. Fees.** Changes to the amounts of fees for the processing of Development Applications that are generally applicable to all development within the City (or a portion of the City as specified in the lawfully adopted fee schedule) and which are adopted pursuant to State law.

**3.2.6. Impact Fees.** Impact Fees or modifications thereto which are lawfully adopted, and imposed by the City pursuant to Utah Code Ann. Section 11-36a-101 (2011) *et seq.*

**3.2.7. Planning and Zoning Modification.** Changes by the City to its planning principles and design standards as permitted by Local, State or Federal law.

**3.2.8. Compelling, Countervailing Interest.** Laws, rules or regulations that the City's land use authority finds, on the record, are necessary to avoid jeopardizing a compelling, countervailing public interest pursuant to Utah Code Ann. § 10-9a-509(1)(a)(i) (2020).

**4. Term of Agreement.** Unless earlier terminated as provided for herein, the term of this Agreement shall be until January 31, 2027. If Developer has not been declared to be currently in



Default as of January 31, 2027 then this Agreement shall be automatically extended until January 31, 2032. This Agreement shall also terminate automatically at Buildout.

5. **Addenda** Addendum No. 1 contains the provisions of this Agreement that are specific to the development of phase 1 of Project. Any future phases of the Project may require an added addendum. If there is a conflict between this Agreement and Addendum No. 1 or any future addenda, then Addendum No. 1 and the future addenda shall control.

6. **Public Infrastructure.**

6.1. **Construction by Developer.** Developer, at Developer's cost and expense, shall have the right and the obligation to construct or cause to be constructed and install all Public Infrastructure reasonably and lawfully required as a condition of approval of this Development Application pursuant to GLUDMC. Such construction must meet all applicable standards and requirements and must be approved by the City's Engineer and Public Works Director.

6.2. **Responsibility Before Acceptance.** Developer shall be responsible for all Public Infrastructure covered by this Agreement until final inspection of the same has been performed by the City, and a final acceptance and release has been issued by the City. The City shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage happening or occurring to the Public Infrastructure, nor shall any officer or employee thereof, be liable for any persons or property injured by reason of said Public Infrastructure; all of such liabilities shall be assumed by the Developer.

6.3. **Warranty.** Developer shall repair any defect in the design, workmanship or materials in all Public Infrastructure which becomes evident during a period of one year following the acceptance of the improvements by the City Council or its designee (Durability Testing Period). If during the Durability Testing Period, any Public Infrastructure shows unusual depreciation, or if it becomes evident that required work was not done, or that the material or workmanship used does not comply with accepted standards, said condition shall, within a reasonable time, be corrected.

6.4. **Timing of Completion of Public Infrastructure.** In accordance with the diligence requirements for the various types of approvals as described in the GLUDMC, construction of the required Public Infrastructure for each phase shall be completed within one year after the City Council grants final plat approval for that phase and prior to recordation of the mylar for that phase. Upon a showing of good and sufficient cause by Developer the City shall, in accordance with the provisions of GLUDMC, extend the time of performance if requested prior to expiration of the completion date.

6.5. **Bonding.** In connection with any Development Application, Developer shall provide bonds or other development security, including warranty bonds, to the extent required by GLUDMC, unless otherwise provided by Utah Code § 10-9a-101, *et seq.* (2005), as amended. The Applicant shall provide such bonds or security in a form acceptable to the City or as specified in GLUDMC. Partial releases of any such required security shall be made as work progresses based on GLUDMC.



**6.6. City Completion.** The Developer agrees that in the event he does not: (a) complete all improvements within the time period specified under 6.4 above, or secure an extension of said completion date, (b) construct said improvements in accordance with City standards and as set forth in 6.1 above, or (c) pay all claimants for material and labor used in the construction of said improvements, the City shall be entitled to declare the developer(s) in default, request and receive the funds held by the guarantor as surety and utilize the monies obtained to install or cause to be installed any uncompleted improvements and/or to pay any outstanding claims, as applicable. Provided however, that the City shall not be responsible for any work beyond the amount of funds so provided. Any funds remaining after completion of the improvements shall be returned to the Guarantor. The Developer further agrees to be personally liable for any cost of improvements above the amount made available under the terms of this agreement.

**7. Upsizing/Reimbursements to Developer.**

**7.1. Upsizing.** The City shall not require Developer to “upsized” any future Public Infrastructure (i.e., to construct the infrastructure to a size larger than required to service the Project) unless financial arrangements reasonably acceptable to Developer are made to compensate Developer for the incremental or additive costs of such upsizing to the extent required by law.

**8. Default.**

**8.1. Notice.** If Developer or the City fails to perform their respective obligations hereunder or to comply with the terms hereof, the Party believing that a Default has occurred shall provide Notice to the other Party.

**8.2. Contents of the Notice of Default.** The Notice of Default shall:

**8.2.1. Specific Claim.** Specify the claimed event of Default;

**8.2.2. Applicable Provisions.** Identify with particularity the provisions of any applicable law, rule, regulation or provision of this Agreement that is claimed to be in Default; and

**8.2.3. Optional Cure.** If the City chooses, in its discretion, it may propose a method and time for curing the Default which shall be of no less than thirty (30) days duration, if weather conditions permit.

**8.3. Remedies.** Upon the occurrence of any Default, and after notice as required above, then the parties may have the following remedies:

**8.3.1. Law and Equity.** All rights and remedies available at law and in equity, including, but not limited to, injunctive relief and/or specific performance.

**8.3.2. Security.** The right to draw on any security posted or provided in connection with the Project and relating to remedying of the particular Default.

**8.3.3. Future Approvals.** The right to withhold all further reviews, approvals, licenses, building permits and/or other permits for development of the Project in the case of a default by Developer until the Default has been cured.

**8.4. Public Meeting.** Before any remedy in Section 8.3 may be imposed by the City the party allegedly in Default shall be afforded the right to attend a public meeting before the City Council and address the City Council regarding the claimed Default.

**8.5. Default of Assignee.** A default of any obligations expressly assumed by an assignee shall not be deemed a default of Developer.

**8.6. Limitation on Recovery for Default – No Damages against the City.** Anything in



this Agreement notwithstanding, Developer shall not be entitled to any claim for any monetary damages as a result of any breach of this Agreement and Developer waives any claims thereto. The sole remedy available to Developer and any assignee shall be that of specific performance.

9. **Notices.** All notices required or permitted under this Agreement shall, in addition to any other means of transmission, be given in writing by certified mail and regular mail to the following address:

**To the Developer:**

Shane Watson  
440 W Apple St  
Grantsville, UT 84029

**To the City:**

Grantsville City  
Attn: City Manager  
429 East Main Street  
Grantsville, Utah 84029

10. **Dispute Resolution.** Any disputes subject to mediation shall be resolved pursuant to Addendum No. 2.

11. **Incorporation of Recitals and Exhibits.** The Recitals and Exhibits "A" - "B" are hereby incorporated into this Agreement.

12. **Headings.** The captions used in this Agreement are for convenience only and are not intended to be substantive provisions or evidences of intent.

13. **No Third-Party Rights/No Joint Venture.** This Agreement does not create a joint venture relationship, partnership or agency relationship between the City, or Developer. Except as specifically set forth herein, the parties do not intend this Agreement to create any third-party beneficiary rights.

14. **Assignability.** The rights and responsibilities of Master Developer under this Agreement may be assigned in whole or in part, respectively, by Developer with the consent of the City as provided herein.

14.1. **Sale of Lots.** Developer's selling or conveying lots in any approved subdivision shall not be deemed to be an assignment.

14.2. **Related Entity.** Developer's transfer of all or any part of the Property to any entity "related" to Developer (as defined by regulations of the Internal Revenue Service in Section 165), Developer's entry into a joint venture for the development of the Project or Developer's pledging of part or all of the Project as security for financing shall also not be deemed to be an assignment. Developer shall give the City Notice of any event specified in this sub-section within ten (10) days after the event has occurred. Such Notice shall include providing the City with all necessary contact information for the newly responsible party.

14.3. **Process for Assignment.** Developer shall give Notice to the City of any proposed



assignment and provide such information regarding the proposed assignee that the City may reasonably request in making the evaluation permitted under this Section. Such Notice shall include providing the City with all necessary contact information for the proposed assignee. Unless the City objects in writing within twenty (20) business days of notice, the City shall be deemed to have approved of and consented to the assignment. The City shall not unreasonably withhold consent.

**14.4. Partial Assignment.** If any proposed assignment is for less than all of Master Developer's rights and responsibilities then the assignee shall be responsible for the performance of each of the obligations contained in this MDA to which the assignee succeeds. Upon any such approved partial assignment Master Developer shall not be released from any future obligations as to those obligations which are assigned but shall remain jointly and severally liable with assignee(s) to perform all obligations under the terms of this Agreement which are specified to be performed by Developer.

**14.5. Complete Assignment.** Developer may request the written consent of the City of an assignment of Developer's complete interest in this Agreement, which consent shall not be unreasonably withheld. In such cases, the proposed assignee shall have the qualifications and financial responsibility necessary and adequate, as required by the City, to fulfill all obligations undertaken in this Agreement by Developer. The City shall be entitled to review and consider the ability of the proposed assignee to perform, including financial ability, past performance and experience. After review, if the City gives its written consent to the assignment, Developer shall be released from its obligations under this Agreement for that portion of the Property for which such assignment is approved.

**15. No Waiver.** Failure of any Party hereto to exercise any right hereunder shall not be deemed a waiver of any such right and shall not affect the right of such party to exercise at some future date any such right or any other right it may have.

**16. Severability.** If any provision of this Agreement is held by a court of competent jurisdiction to be invalid for any reason, the Parties consider and intend that this Agreement shall be deemed amended to the extent necessary to make it consistent with such decision and the balance of this Agreement shall remain in full force and affect.

**17. Force Majeure.** Any prevention, delay or stoppage of the performance of any obligation under this Agreement which is due to strikes, labor disputes, inability to obtain labor, materials, equipment or reasonable substitutes therefor; acts of nature, governmental restrictions, regulations or controls, judicial orders, enemy or hostile government actions, wars, civil commotions, fires or other casualties or other causes beyond the reasonable control of the Party obligated to perform hereunder shall excuse performance of the obligation by that Party for a period equal to the duration of that prevention, delay or stoppage.

**18. Time is of the Essence.** Time is of the essence to this Agreement and every right or responsibility shall be performed within the times specified.

**19. Appointment of Representatives.** To further the commitment of the Parties to cooperate in the implementation of this Agreement, the City and Developer each shall designate and appoint a representative to act as a liaison between the City and its various departments and the Developer. The initial representative for the City shall be the City Manager. The initial representative for Developer shall be Shane Watson. The Parties may change their designated representatives by Notice. The representatives shall be available at all reasonable times to discuss and review the performance of the Parties to this Agreement and the development of the Project.



20. **Applicable Law.** This Agreement is entered into in Tooele County in the State of Utah and shall be construed in accordance with the laws of the State of Utah irrespective of Utah's choice of law rules.

21. **Venue.** Any action to enforce this Agreement shall be brought only in the Third District Court, Tooele County in and for the State of Utah.

22. **Entire Agreement.** This Agreement, and all Exhibits thereto, documents referenced herein, is the entire agreement between the Parties and may not be amended or modified except either as provided herein or by a subsequent written amendment signed by all Parties.

23. **Mutual Drafting.** Each Party has participated in negotiating and drafting this Agreement and therefore no provision of this Agreement shall be construed for or against any Party based on which Party drafted any particular portion of this Agreement.

24. **No Relationship.** Nothing in this Agreement shall be construed to create any partnership, joint venture or fiduciary relationship between the parties.

25. **Amendment.** This Agreement may be amended only in writing signed by the parties hereto.


26. **Recordation and Running with the Land.** This Agreement shall be recorded in the chain of title for the Project. This Agreement shall be deemed to run with the land.

27. **Priority.** This Agreement shall be recorded against the Property senior to any respective covenants and any debt security instruments encumbering the Property.

28. **Authority.** The Parties to this Agreement each warrant that they have all of the necessary authority to execute this Agreement. Specifically, on behalf of the City, the signature of the City Manager of the City is affixed to this Agreement lawfully binding the City pursuant to Resolution No. 2022-50 adopted by the City on August 17, 2022.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by and through their respective, duly authorized representatives as of the day and year first herein above written.

DEVELOPER  
SHANE WATSON

  
Shane But Watson  
Owner

GRANTSVILLE CITY

\_\_\_\_\_  
By: Jesse Wilson  
Its: City Manager

Approved as to form and legality:

Attest:

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
City Recorder



**CITY ACKNOWLEDGMENT**

STATE OF UTAH                    )  
  :SS.  
COUNTY OF TOOELE            )

On the \_\_\_\_\_ day of \_\_\_\_\_, 2022 personally appeared before me Jesse Wilson who being by me duly sworn, did say that he is the City Manager of Grantsville City, a political subdivision of the State of Utah, and that said instrument was signed in behalf of the City by authority of its City Council and said City Manager acknowledged to me that the City executed the same.

\_\_\_\_\_  
NOTARY PUBLIC


My Commission Expires: \_\_\_\_\_

Residing at: \_\_\_\_\_

**DEVELOPER ACKNOWLEDGMENT**

STATE OF UTAH                    )  
  :SS.  
COUNTY OF TOOELE            )

On the 29<sup>th</sup> day of September, 2022, personally appeared before me Shane Watson, who being duly sworn, did say that he is the Developer, and that the foregoing instrument was duly authorized and signed by him.

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: March 9, 2026

Residing at: Tooele, Utah





## **TABLE OF EXHIBITS**

Exhibit "A"	Legal Description of Property
Exhibit "B"	Final Plat
Addendum No. 1	Specific Project Terms
Addendum No. 2	Dispute Resolution Procedures



Exhibit "A"  
Legal Description of Property

Beginning at the Intersection of the easterly boundary of Cherry Grove Subdivision Plat A, a subdivision of Grantsville City, recorded March 16, 2000 as Entry No. 145105 in Book 14 at Page 33 in the office of the Tooele County Recorder, with the westerly extension of the northerly right-of-way line of Apple Street, as determined by a survey performed by Ensign Engineering found as File No. 2015-0021-01 in the records of Tooele County Surveyor, said point lies South 89°53'05" East 541.57 feet along the quarter section line to the northeast corner of said Cherry Grove Subdivision Plat A, South 1°28'25" West 148.15 feet along the easterly boundary of said Cherry Grove Subdivision Plat A, and continuing along said easterly boundary, South 0°56'29" West 598.065 feet from the West Quarter Corner of Section 36, Township 2 South, Range 6 West, Salt Lake Base and Meridian, (Basis of Bearing for this description is South 0°22'33" East along the section line defined by Tooele County Surveyor monuments representing the West Quarter Corner and Southwest Corner of said Section 36.); thence East 796.09 feet along said westerly extension of the northerly right-of-way line of Apple Street (record = 823 feet) to the 40 acre line and westerly boundary of Southwest Addition of the City of Grantsville; thence along said line, South 0°20'17" East 874.93 feet (record = South 882 feet) to intersect the northerly right-of-way line of Cherry Street as determined by a survey performed by Ensign Engineering found as File No. 2015-0062-01 in the records of said Tooele County Surveyor; thence along the westerly extension of said northerly right-of-way line and along an old fence line, North 89°33'29" West 815.72 feet (record = 823 feet) to intersect the easterly boundary of the property owned by Darrell Didericksen; thence along said easterly boundary and the easterly boundary of Cherry Grove Plat C PUD, recorded July 16, 2007 as Entry No. 289791 in the office of said Tooele County Recorder, North 0°57'21" East 573.105 feet to the northeast corner of said P.U.D.; thence North 89°02'39" West 0.03 feet to the southeast corner of said Cherry Grove Subdivision Plat A; thence along the easterly boundary of said Cherry Grove Subdivision Plat A the follow two (2) courses: (1) North 0°57'21" East 224.21 feet; (2) North 0°56'29" East 71.425 feet to the Point of Beginning.

Parcel contains: 702,551 square feet, or 16.128 acres.



**Exhibit “B”  
Final Plat**



**SPRINGFIELD ESTATES SUBDIVISION  
ADDENDUM NO.1**

**TERMS**

1. **Definitions.** The capitalized terms used in this Addendum No. 1 shall have the meanings set forth in the MDA unless otherwise specified herein.
2. **Modifications to GLUDMC and Other City Standards.** The City has agreed to the following exceptions to the GLUDMC and Grantsville City Construction Standards and Specifications:
  - a. Apple Street as it curves on the west end of the proposed subdivision narrows below the 66-foot standard right-of-way width as the existing street is narrower to the west. This is an existing condition that affects other properties and property owners and therefore is grandfathered in.
  - b. As designed the Development complies with GLUDMA and other City Standards.
3. **Offsite Improvements:**
  - a. Stormwater generated within the project is collected in an offsite basin owned by Apple Street One Twenty, LLC with the location described by the attached easement in Addendum No. 1 Exhibit C. The offsite basin, collection and discharge system located on private property shall be maintained by Apple Street One Twenty, LLC, its heirs, successors or assigns.
4. **Open Space:**
  - a. The Developer has included 0.386 acres of improved open space on the north side of the Apple Street right of way. The total project acreage is 16.128 acres. 10% of the total project acreage is 1.61 acres. With a credit for the open space provided on the north side of Apple Street the remaining Open space requirement is  $(1.61 - 0.386 =) 1.22$  acres.
  - b. The Developer shall provide Grantsville City a fee-in-leu for the raw ground (undeveloped) value of 1.22 acres also described as 10% of the total parcel acreage at a value of \$60,515.87 as determined by using the total appraised value (Property Appraisal attached in Exhibit D) of \$800,000 divided by 16.128 acres (\$49,603.17 per acre) multiplied by 1.22 acres. The funds shall be deposited with Grantsville City \$60,515.87 prior to recording.
  - c. Grantsville City shall utilize the fee in leu open space funds provided by the Developer for procurement and/or improvement of open space, parks, and/or trails within 3 miles of the proposed development.
5. **Construction Coordination:**
  - a. The Developer shall provide the City 48 hours' notice to coordinate with the City prior to working on or around existing City water and sewer infrastructure.
  - b. All connections to City water and sewer infrastructure shall be inspected by the City prior to back-filling.
  - c. The Developer shall request inspections at least 48 hours prior to the day the Contractor desires the inspection to occur.
  - d. The Developer shall request disinfection testing at least 48 hours prior to the day the Contractor desires the testing to occur.



**Exhibit A to Addendum No. 1**  
**Stormwater Basin Easement**  
**Stormwater Basin Maintenance Agreement**



**Exhibit B to Addendum No. 1**  
**Property Appraisal**

1



**Addendum No. 2**  
**(Dispute Resolution)**

**1. Meet and Confer.** The City and Developer/Applicant shall meet within fifteen (15) business days of any dispute under this Agreement to resolve the dispute.

**2. Mediation.**

2.1. Disputes Subject to Mediation. All disputes shall be mediated.

2.2. Mediation Process. If the City and Developer/Applicant are unable to resolve a disagreement subject to mediation, the Parties shall attempt within ten (10) business days to appoint a mutually acceptable mediator with knowledge of the legal issue in dispute. If the Parties are unable to agree on a single acceptable mediator they shall each, within ten (10) business days, appoint their own representative. These two representatives shall, between them, choose the single mediator. Developer/Applicant shall pay the fees of the chosen mediator. The chosen mediator shall within fifteen (15) business days from selection, or such other time as is reasonable under the circumstances, review the positions of the Parties regarding the mediation issue and promptly attempt to mediate the issue between the Parties. If the Parties are unable to reach an agreement, the Parties shall request that the mediator notify the Parties in writing of the resolution that the mediator deems appropriate. The mediator's opinion shall not be binding on the Parties.



# **AGENDA ITEM #6**

Consideration to recommend approval of the Final Plat for Blue Spruce.



811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

NORTH QUARTER CORNER OF SECTION 7,  
TOWNSHIP 3 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN  
(2.5" BRASS TOOELE COUNTY SURVEY  
MONUMENT ON 4" PIPE, DATED 1986)  
ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)

# BLUE SPRUCE SUBDIVISION

QUIRK STREET  
GRANTSVILLE CITY, UTAH

DATE PRINTED  
September 2, 2022

## INDEX OF DRAWINGS

- |        |                                    |
|--------|------------------------------------|
| 1 OF 1 | SUBDIVISION PLAT                   |
| C-001  | GENERAL NOTES                      |
| C-002  | PRECONSTRUCTION GENERAL NOTES      |
| C-100  | SITE PLAN                          |
| C-200  | GRADING AND DRAINAGE PLAN          |
| C-201  | GRADING AND DRAINAGE PLAN          |
| C-202  | STORM BRIXX DESIGN                 |
| C-300  | UTILITY PLAN                       |
| C-400  | EROSION CONTROL PLAN               |
| PP-1   | PLAN AND PROFILE PINYON COURT      |
| PP-2   | PLAN AND PROFILE BLUE SPRUCE DRIVE |
| PP-3   | PLAN AND PROFILE QUIRK STREET      |
| PP-4   | PLAN AND PROFILE QUIRK STREET      |
| D-500  | DETAILS                            |
| D-501  | DETAILS                            |
| D-502  | DETAILS                            |

## NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS. THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES TO 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 THE CIVIL ENGINEER 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 THE OWNER OR ENGINEER.

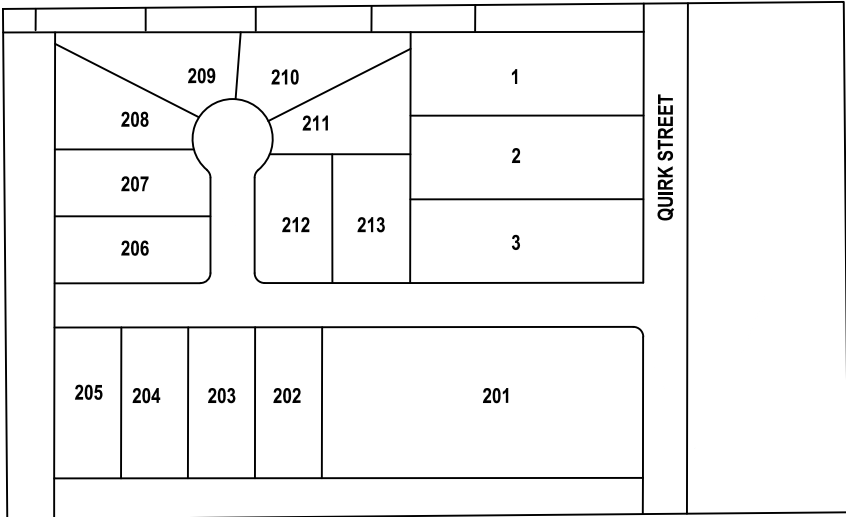
## NOTICE TO DEVELOPER/ CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

## UTILITY DISCLAIMER

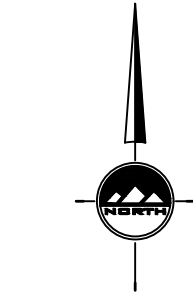
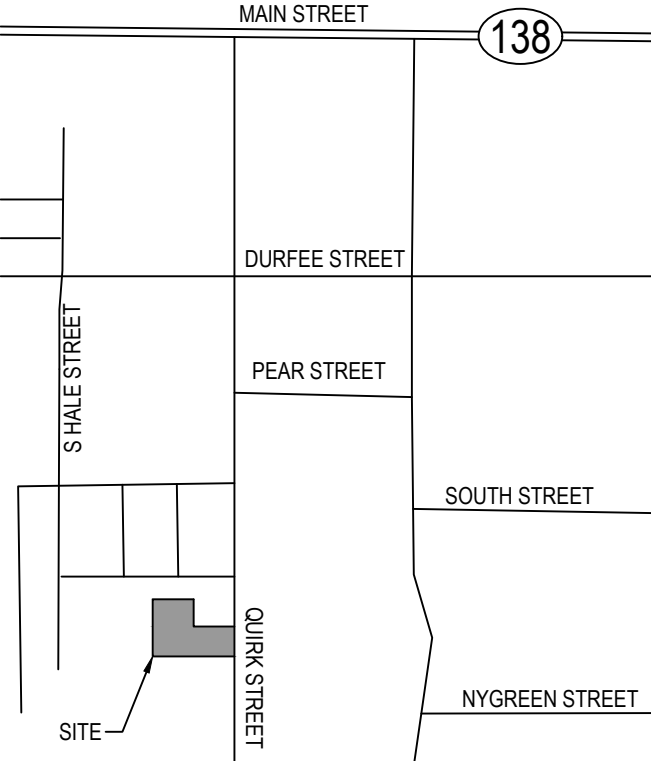
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

## KEY MAP



NO SCALE

## VICINITY MAP



NO SCALE

## GENERAL NOTES

- ALL WORK SHALL CONFORM TO GRANTSVILLE CITY STANDARDS & SPECIFICATIONS.
- CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986)  
ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)

## NOTES:

- APPROVED BY CITY COUNCIL ON: \_\_\_\_\_.
- PRE-CONSTRUCTION MEETING DATE: \_\_\_\_\_.

APPROVED FOR CONSTRUCTION ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

APPROVED BY CITY ENGINEER: GRANTSVILLE CITY, UTAH  
FOR PUBLIC IMPROVEMENTS ONLY (SHEETS \_\_\_\_\_)

CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER FROM RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION THE PUBLIC INTEREST REQUIRES A MODIFICATION OR A DEPARTURE FROM THE CITY SPECIFICATIONS, OR THE APPROVED PLANS, THE CITY SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OR A DEPARTURE, AND TO SPECIFY THE MANNER WHICH THE SAME IS MADE.



**TOOELE**  
169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

**SALT LAKE CITY**  
Phone: 801.255.0529

**LAYTON**  
Phone: 801.547.1100

**CEDAR CITY**  
Phone: 435.866.1453

**RICHFIELD**  
Phone: 435.896.2983

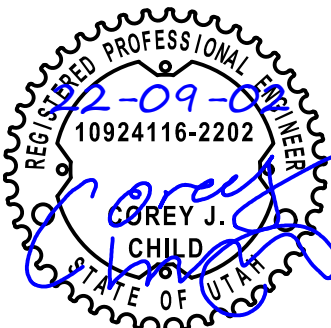
WWW.ENSIGNENG.COM

FOR:  
ICON DEVELOPMENT, LLC  
3410 NORTH MOYLE LANE  
ERDA, UTAH, 84074

CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

BLUE SPRUCE SUBDIVISION

FINAL  
QUIRK STREET  
GRANTSVILLE CITY, UTAH



NO.	DATE	REVISION	BY
1		FOR REVIEW	
2			
3			
4			
5			
6			
7			
8			

COVER

PROJECT NUMBER  
T1216E  
PRINT DATE  
2022-09-02  
DRAWN BY  
C. CHILD  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
C. CHILD

C-000



BLUE SPRUCE SUBDIVISION  
FINAL PLAT  
(AMENDING LOT 4 OF WHITE PINE ESTATES SUBDIVISION AMENDED)  
LOCATED IN THE SOUTHWEST QUARTER  
OF SECTION 6, TOWNSHIP 3 SOUTH, RANGE 5 WEST, SALT LAKE BASE  
AND MERIDIAN, GRANTSVILLE CITY, TOOELE COUNTY, UTAH

KEYNOTES:

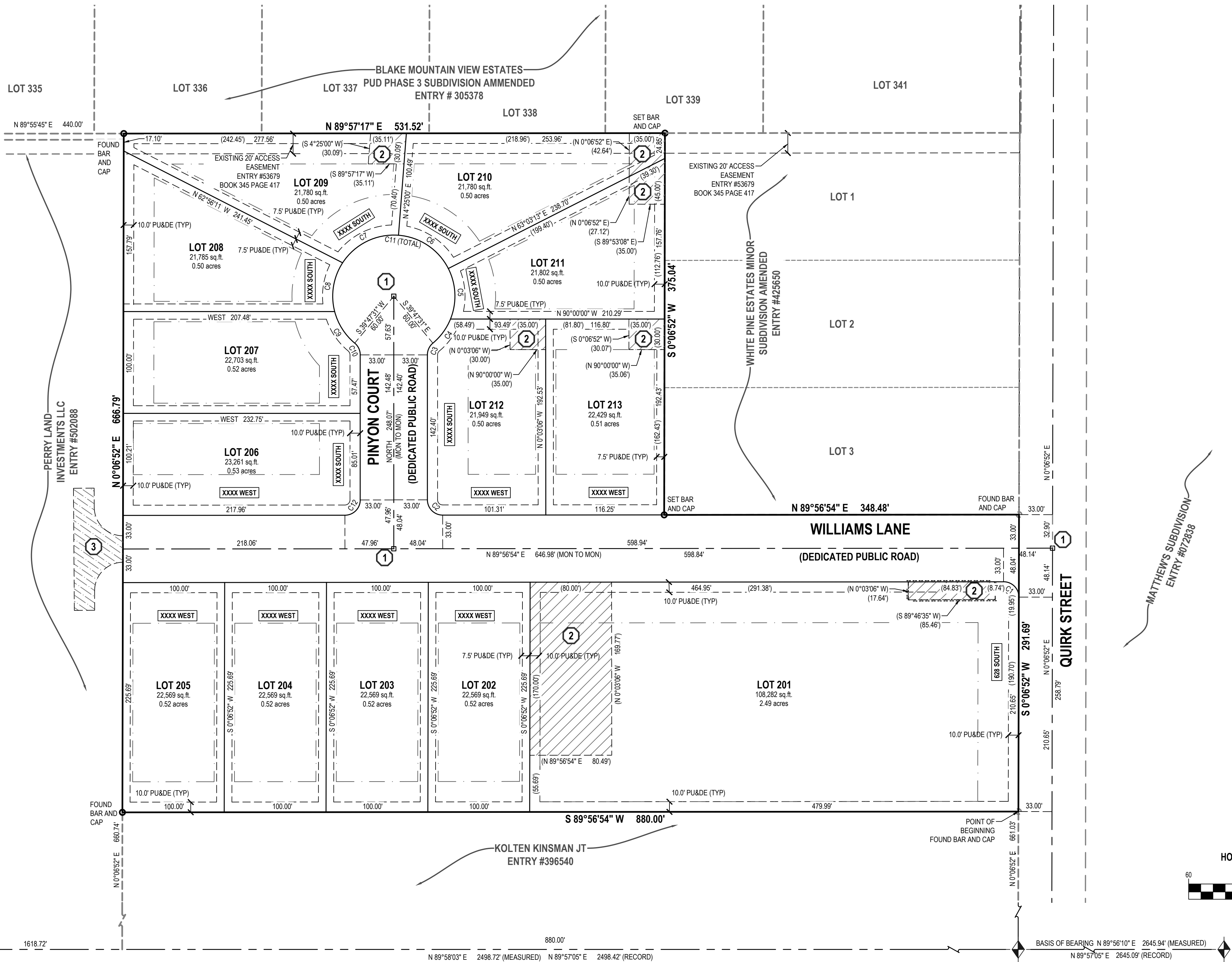
1. INSTALL STREET MONUMENT PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS.
2. STORM DRAIN EASEMENT HEREBY DEDICATED TO GRANTSVILLE CITY TO ALLOW CITY ACCESS AND TO BE MAINTAINED BY PROPERTY OWNER TO GRANTSVILLE CITY DRAIN BASIN STANDARDS.
3. TEMPORARY TURN AROUND EASEMENT ENTRY #

NOTES

1. ALL PUBLIC STREETS ARE HEREBY DEDICATED TO GRANTSVILLE CITY AS RIGHT-OF-WAY ("R.O.W.") FOR PUBLIC USE.
2. NO DRIVEWAYS SHALL BE CONSTRUCTED SO AS TO SLOPE TOWARD ANY STRUCTURES WITHOUT WRITTEN PERMISSION FROM GRANTSVILLE CITY ENGINEER.
3. 5/8" X 24" REBAR AND CAP TO BE SET AT ALL LOT CORNERS UNLESS OTHERWISE INDICATED.
4. INDIVIDUAL LOT OWNERS ARE REQUIRED TO GRADE LOTS TO PREVENT DRAINAGE ONTO NEIGHBORING PROPERTIES.

CURVE TABLE

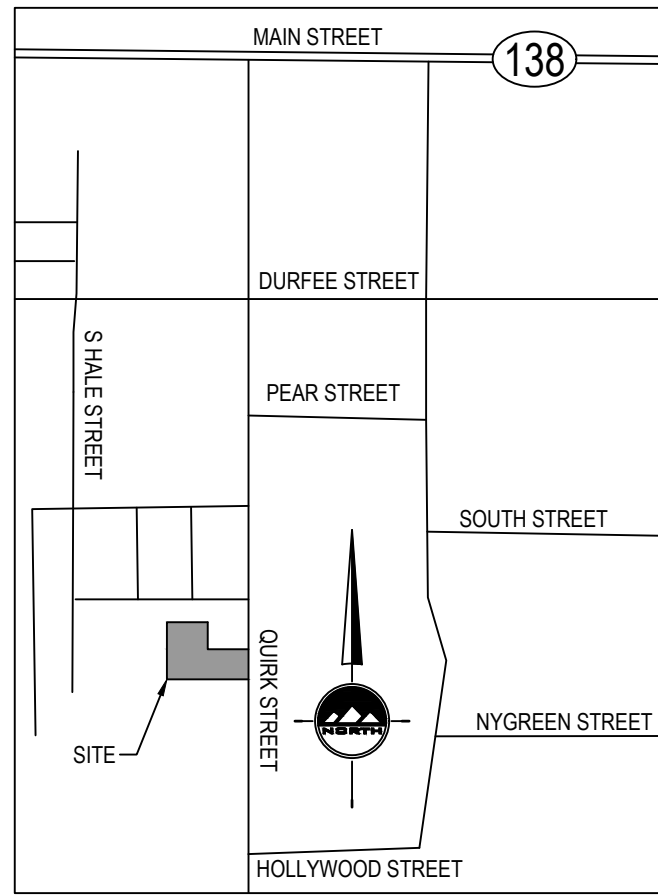
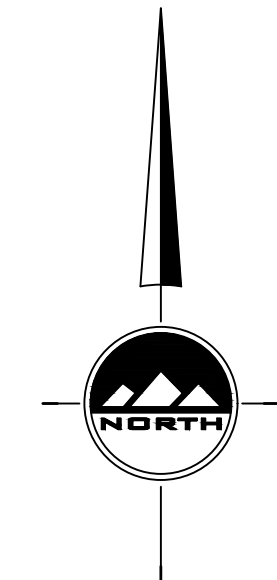
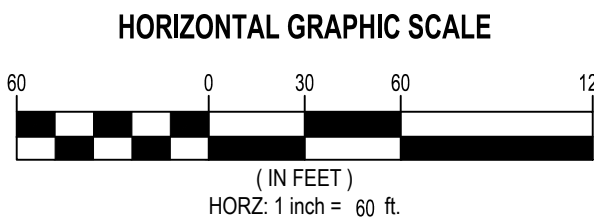
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	15.00'	23.61'	90°09'58"	N44°58'07"W	21.24'
C2	15.00'	23.58'	90°03'06"	S45°01'33"E	21.22'
C3	15.00'	13.14'	50°12'29"	S25°06'15"W	12.73'
C4	60.00'	29.62'	28°16'59"	S36°04'00"W	29.32'
C5	60.00'	51.18'	48°52'17"	S2°30'39"E	49.64'
C6	60.00'	61.40'	58°38'13"	S66°15'54"E	58.76'
C7	60.00'	64.13'	61°14'29"	N63°47'45"E	61.12'
C8	60.00'	50.00'	47°45'00"	N9°18'01"E	48.57'
C9	60.00'	37.32'	35°38'00"	N32°23'29"W	36.72'
C10	15.00'	13.14'	50°12'29"	N25°06'15"W	12.73'
C11 (TOTAL)	60.00'	293.65'	280°24'59"	N90°00'00"W	76.80'
C12	15.00'	23.55'	89°56'54"	N44°58'27"E	21.20'



SOUTHWEST CORNER  
OF SECTION 6, T3S,  
R5W, SLB8M (FOUND  
TOOELE COUNTY  
BRASS MONUMENT  
SET IN 1986)

LEGEND

	EXISTING STREET MONUMENT		PUBLIC UTILITY & DRAINAGE EASEMENT		EASEMENT LINE
	PROPOSED STREET MONUMENT TO BE SET		BOUNDARY LINE		RIGHT OF WAY LINE
	SECTION CORNER		ADJACENT PROPERTY LINE		ADJACENT RIGHT OF WAY LINE
	5/8" X 24" REBAR WITH YELLOW PLASTIC CAP, OR NAIL STAMPED "ENSGN ENG. & LAND SURV."		SECTION LINE		TANGENT LINE
			DRAINAGE EASEMENT		TEMPORARY TURN AROUND EASEMENT



VICINITY MAP  
NOT TO SCALE

SURVEYOR'S CERTIFICATE

I, Douglas J. Kinsman, do hereby certify that I am a Professional Land Surveyor, and that I hold License No. 334575, in accordance with Title 58, Chapter 22, of the Professional Engineers and Land Surveyors Act. I further certify that by authority of the owners I have completed a survey of the property described on this SUBDIVISION plat in accordance with Section 17-23-17, have verified all measurements, and have subdivided said tract of land into lots and streets, together with easements, hereafter to be known as

BLUE SPRUCE SUBDIVISION

and that the same has been correctly surveyed and monumented on the ground as shown on this plat.

BOUNDARY DESCRIPTION

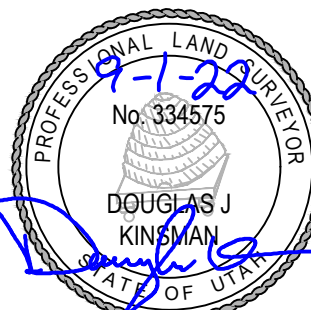
A parcel of land, situate in the Southwest Quarter of Section 6, Township 3 South, Range 5 West, Salt Lake Base and Meridian, more particularly described as follows:

All of Lot 4 of "White Pine Estates Minor SUBDIVISION Amended" as recorded March 4th, 2016, under Entry no. 425650, in the Tooele County Recorder's Office;

Parcel contains: 456,042 square feet or 10.47 acres, 13 Lots, 1 Parcel.

SEPT 1, 2022

Date  
Douglas J. Kinsman  
License no. 334575



OWNER'S DEDICATION

Know all men by these present that the undersigned are the owner(s) of the heron described tract of land and hereby cause the same to be divided into lots and streets together with easements as set forth hereafter to be known as:

BLUE SPRUCE SUBDIVISION

The undersigned owner(s) hereby dedicate to Grantsville City all those parts or portions of said tract of land on said plat designated herein as streets, the same to be used as public thoroughfares forever. The undersigned owner(s) also hereby convey to Grantsville City and to any and all public utility companies providing service to the heron described tract a perpetual, non-exclusive easement over the public utility and drainage easements shown on this plat, the same to be used for sewer, water lines appurtenances, fire facilities, drainage facilities and the installation, maintenance and operation of public utility service lines and facilities. The undersigned owners also hereby convey any other easements as shown and/or noted on this plat to the parties indicated and for the purposes shown herein.

In witness whereof I / we have hereunto set my / our hand this \_\_\_\_\_ day of \_\_\_\_\_ A.D., 20\_\_\_\_

By: ICON DEVELOPMENT, LLC  
Sean Perkins, Managing Member

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH  
County of Tooele  
J.S.S.

On the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 20\_\_\_\_  
personally appeared before me, the undersigned Notary Public, in and for said County of \_\_\_\_\_ in the State of Utah, who after being duly sworn, acknowledged to me that He/She is the \_\_\_\_\_ of \_\_\_\_\_  
Limited Liability Company and that He/She signed the Owner's Dedication freely and voluntarily for and in behalf of said Limited Liability Company for the purposes therein mentioned and acknowledged to me that said Corporation executed the same.

MY COMMISSION EXPIRES: \_\_\_\_\_  
RESIDING IN \_\_\_\_\_ COUNTY.

NOTARY PUBLIC

BLUE SPRUCE SUBDIVISION  
FINAL PLAT

(AMENDING LOT 4 OF WHITE PINE ESTATES SUBDIVISION AMENDED)  
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 3  
SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN,  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH

TOOELE COUNTY RECORDER

RECORDED #  
STATE OF UTAH, COUNTY OF TOOELE, RECORDED AND FILED AT THE  
REQUEST OF :  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
FEE\$ \_\_\_\_\_  
TOOELE COUNTY RECORDER

TOOELE COUNTY TREASURER

I HEREBY CERTIFY THAT PROPERTY TAXES DUE AND OWNING HAVE BEEN PAID IN FULL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
FOR PARCEL NO. \_\_\_\_\_

TOOELE COUNTY TREASURER

CITY MAYOR APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE GRANTSVILLE CITY MAYOR.

GRANTSVILLE CITY MAYOR

CITY ATTORNEY'S APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE GRANTSVILLE CITY ATTORNEY.

GRANTSVILLE CITY ATTORNEY

CITY FIRE DEPARTMENT APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE GRANTSVILLE CITY FIRE DEPT.

GRANTSVILLE CITY FIRE CHIEF

GRANTSVILLE CITY PUBLIC WORKS APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE GRANTSVILLE CITY PUBLIC WORKS.

GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

PLANNING COMMISSION APPROVAL

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE GRANTSVILLE CITY PLANNING COMMISSION.

CHAIR, GRANTSVILLE CITY PLANNING COMMISSION

TOOELE COUNTY SURVEY DEPARTMENT

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE TOOELE COUNTY SURVEY DEPARTMENT.

RECORD OF SURVEY FILE #2006-0060-01

TOOELE COUNTY SURVEY DEPT. DIRECTOR

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN THIS OFFICE.

GRANTSVILLE CITY ENGINEER

DATE

DEVELOPER  
ICON DEVELOPMENT, LLC  
3410 N. MOYLE LANE  
ERDA, UTAH, 84074  
SEAN PERKINS  
435-850-8436

SHEET 1 OF 1

PROJECT NUMBER : T1216E  
MANAGER : C. CHILD  
DRAWN BY : C. CHILD  
CHECKED BY : D. KINSMAN  
DATE : 9/22/22



TOOELE  
160 North Main Street Unit 1  
Tooele, Utah 84074  
Phone: 435.843.3590  
Fax: 435.578.0108

WWW.ENSGNENG.COM

SALT LAKE CITY  
Phone: 801.541.0053  
LAYTON  
Phone: 801.541.1190  
CEDAR CITY  
Phone: 435.855.1453  
RICHFIELD  
Phone: 435.896.2985



GRANTSVILLE GENERAL NOTES

- ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CURB, GUTTER, AND SIDEWALK, FOUND TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TOOELE COUNTY SURVEYORS REQUIREMENTS.
- ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS, FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP STOP FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
- REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE T1 GENERAL PROVISIONS FOR MORE DETAILS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- ALL CITY MAINTAINED UTILITIES INCLUDING: WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATERLINES, IRRIGATION, STREET LIGHTING, AND POWER. AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS. NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1 DXF COPY, 1 PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPs WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOUT SEPARATOR.
- ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORCULTURE.
- WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET FENCING ALONG THE BACK OF SIDEWALK, THE DEVELOPMENT SHALL ALSO BE REQUIRED PUT IN A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
- CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO: SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATER WAYS, MANHOLE, VAULT AND VAULT COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
- CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND LIP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

GRANTSVILLE CITY GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1" + TO 0.1" -.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

GRANTSVILLE CITY TRAFFIC NOTES

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCRoeACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAYING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICAADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 108 (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A 2" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE 3/4 INCH FOR RESIDENTIAL AND COLLECTOR ROADS. NO MORE THAN 15% RAP (RECLAIMED ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3% AIR VOIDS.
- POTHOLES: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
- ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND UNDER PAVEMENTS. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS SHALL BE CLEAN, NONCLUMPING, GRANULAR AND FLOWABLE, 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16' ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS POMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS POMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEERS DIRECTION.
- ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

GRANTSVILLE CITY WATER NOTES

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY- EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
- ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPER'S EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
- FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. THE SUPPLY OF WATER MAINS SHALL BE PROVIDED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPER'S EXPENSE) AND INSTALLED BY DEVELOPER.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY, REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- WATER SUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER), IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPER'S EXPENSE.
- ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
- ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE.
- ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIRES STAINLESS STEEL TIE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL TIE DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS, UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE. THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.

GRANSTVILLE CITY FIRE DEPARTMENT NOTES

- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A W.V.A. APPROVED.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5' MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT, WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR. THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV ISN'T FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WAY TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF ITS CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON. (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE PIV).
- POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- ROADS AND ACCESSSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BMP	BEST MANAGEMENT PRACTICES
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
C	CURVE
CB	CATCH BASIN
CF	CURB FACE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EQA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HR	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
PIV	POST INDICATOR VALVE
PRO	POINT OF REVERSE CURVATURE
PT	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PV	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROAD DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SIDEWALK
SWL	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TOS	TOP OF GRADE
TOA	TOP OF ASPHALT
TCC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TV	TYPICAL
VC	VERTICAL CURVE
WV	WALL INDICATOR VALVE
WL	WATER LINE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

LEGEND

	SECTION CORNER		EXISTING EDGE OF ASPHALT
	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
	PROPOSED MONUMENT		EXISTING STRIPING
	EXISTING REBAR AND CAP		PROPOSED STRIPING
	SET ENSIGN REBAR AND CAP		EXISTING FENCE
	EXISTING WATER METER		PROPOSED FENCE
	PROPOSED WATER METER		EXISTING FLOW LINE
	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
	PROPOSED WATER MANHOLE		GRADE BREAK
	EXISTING WATER BOX		EXISTING STORM DRAIN LINE
	EXISTING WATER VALVE		PROPOSED STORM DRAIN LINE
	PROPOSED WATER VALVE		ROOF DRAIN LINE
	EXISTING FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE HYDRANT		HIGHWATER LINE
	PROPOSED FIRE DEPARTMENT CONNECTION		EXISTING SANITARY SEWER
	EXISTING SECONDARY WATER VALVE		PROPOSED SANITARY SEWER LINE
	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN. SWR. SERVICE LINE
	EXISTING IRRIGATION BOX		EXISTING LAND DRAIN LINE
	EXISTING IRRIGATION VALVE		PROPOSED LAND DRAIN LINE
	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN SERVICE LINE
	EXISTING SANITARY SEWER MANHOLE		EXISTING CULINARY WATER LINE
	PROPOSED SANITARY SEWER MANHOLE		PROPOSED CULINARY WATER LINE
	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE LINE
	EXISTING STORM DRAIN CLEAN OUT BOX		EXISTING SECONDARY WATER LINE
	PROPOSED STORM DRAIN CLEAN OUT BOX		PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX		PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN		EXISTING IRRIGATION LINE
	PROPOSED STORM DRAIN CATCH BASIN		PROPOSED IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX		EXISTING OVERHEAD POWER LINE
	PROPOSED STORM DRAIN COMBO BOX		EXISTING ELECTRICAL LINE
	EXISTING STORM DRAIN CLEAN OUT		EXISTING GAS LINE
	EXISTING STORM DRAIN CULVERT		EXISTING TELEPHONE LINE
	PROPOSED STORM DRAIN CULVERT		ACCESSIBLE ROUTE
	TEMPORARY SAG INLET PROTECTION		SAW CUT LINE
	TEMPORARY IN-LINE INLET PROTECTION		STRAW WATTLE
	ROOF DRAIN		TEMPORARY BERM
	EXISTING ELECTRICAL MANHOLE		TEMPORARY SILT FENCE
	EXISTING ELECTRICAL BOX		LIMITS OF DISTURBANCE
	EXISTING TRANSFORMER		EXISTING GRAVEL
	EXISTING UTILITY POLE		EXISTING WALL
	EXISTING LIGHT		PROPOSED WALL
	PROPOSED LIGHT		EXISTING CONTOURS
	EXISTING GAS METER		PROPOSED 0.5' CONTOURS
	EXISTING GAS MANHOLE		BUILDABLE AREA WITHIN SETBACKS
	EXISTING GAS VALVE		PUBLIC DRAINAGE EASEMENT
	EXISTING TELEPHONE MANHOLE		EXISTING ASPHALT TO BE REMOVED
	EXISTING TELEPHONE BOX		PROPOSED ASPHALT
	EXISTING TRAFFIC SIGNAL BOX		EXISTING CURB AND GUTTER
	EXISTING CABLE BOX		PROPOSED CURB AND GUTTER
	EXISTING BOLLARD		PROPOSED REVERSE PAN CURB AND GUTTER
	PROPOSED BOLLARD		TRANSITION TO REVERSE PAN CURB
	EXISTING SIGN		TYPE D MOUNTABLE CURB AND GUTTER
	PROPOSED SIGN		CONCRETE TO BE REMOVED
	EXISTING SPOT ELEVATION		EXISTING CONCRETE
	PROPOSED SPOT ELEVATION		PROPOSED CONCRETE
	EXISTING FLOW DIRECTION		STAMPED CONCRETE
	EXISTING TREE		BUILDING TO BE REMOVED
	DENSE VEGETATION		EXISTING BUILDING
			PROPOSED BUILDING

NOTE: MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PLAN SET.



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BLUE SPRUCE SUBDIVISION  
FINAL  
QUIRK STREET  
GRANTSVILLE CITY, UTAH



GRANTSVILLE PRECONSTRUCTION GENERAL NOTES

CHAIN OF COMMUNICATION

- FIRST CONTACT: BRAD PACE PUBLIC WORKS INSPECTOR
- SECOND CONTACT: GLEN MILLWARD (WATER), MARKUS SEAT (SEWER), TRAVIS DANIELS (FIRE CHIEF), JASON SMITH (ASSISTANT FIRE CHIEF).

PLEASE COMMUNICATE THROUGH E-MAIL TO MAINTAIN A WRITTEN RECORD.

MAIN CONSTRUCTION CONTACT

- PROJECT FOREMAN:

CONSTRUCTION SCHEDULE

- CONSTRUCTION STARTS:
- PLEASE PROVIDE A CONSTRUCTION SCHEDULE. HELPS CITY TO PLAN FOR WHAT IS HAPPENING. PROVIDE TO JAMES AND HE WILL DISSEMINATE TO OTHERS.

PERMITTING

CONSTRUCTION STAKING

- SURVEYING & STAKING:
- WE ARE HAVING SOME ALIGNMENT ISSUES ON CITY UTILITIES PLEASE MAKE SURE YOU GET ADEQUATE STAKING.

GEOTECHNICAL

- DOES THE CONTRACTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS?
- DOES THE CITY INSPECTOR HAVE A COPY OF THE GEOTECHNICAL REPORT AND IS HE FAMILIAR WITH THE REQUIREMENTS? THE CITY INSPECTORS WILL BE GIVEN A COPY.
- GEO-TECH SHALL MONITOR THE EXCAVATION AND DETERMINE THE LOCATIONS THAT REQUIRE ADDITIONAL GRANULAR SUB-BASE AND SPECIFY THE DEPTH REQUIRED. CITY WOULD LIKE A DRAWINGS SHOWING THE AREAS THAT REQUIRE ADDITIONAL WORK.
- WHO WILL DO SOILS, COMPACTION TESTING?

SUBMITTALS:

- THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR MATERIAL TO THE CITY FOR APPROVAL PRIOR TO PURCHASE OF MATERIALS AND INSTALLATION. THE CITY WANTS TO CHECK THAT THE MATERIALS MEET SPEC BEFORE THEY ARE ORDERED SO THEY DONT GET REJECTED WHEN THEY HAVE BEEN INSTALLED. SUBMIT TO CHRISTY MONTIERTH IN PUBLIC WORKS.
- THE CITY IS FINE WITH THE MATERIALS THAT HAVE PREVIOUSLY BEEN USED.

SEWER

- PIPE MATERIAL: PVC ASTM D-3034 SDR-35
- FOLLOW OSHA REQUIREMENTS FOR TRENCHING (4' VERTICAL WITH 1:1 SLOPING OR STEPPING OR USE TRENCH BOXES).
- SEWER LATERALS PER CITY STANDARD. (APWA 431).
- UTAH REQUIREMENT OF 10' HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LATERALS.
- 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- CRUSHED ROCK ¾-INCH MINUS IN PIPE ZONE (3/8-INCH ROUNDED PEA GRAVEL IS NOT ALLOWED BY THE CITY).
- SEWER LATERALS. GRAVEL BEDDING TO BE EXTENDED TO DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED).
- OFFSET TEES FOR SEWER LATERALS; GASKET TYPE.
- COMPACTION - 95% IN ROADS, 90% OFF-ROAD (ASTM D-1557, MODIFIED PROCTOR)
- INSTALLATION AS PER ASTM D-2321
- ALL PRECAST MANHOLES TO BE PROVIDED WITH RUBBER BOOTS AND STAINLESS-STEEL BANDS AT PIPE PENETRATIONS.
- INTERIOR PIPE PENETRATIONS IN ALL SEWER MANHOLES SHALL BE GROUTED.
- TRACER WIRE EXTENDING FROM MAIN TO LATERAL STUB ON ALL LATERALS AND EXTENDED TO SURFACE AT STUB MARKER. INCLUDE AN EXTRA 30-FEET TO EXTEND ALONG THE SERVICE TO THE DWELLING.
- STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB AN "S" AT ALL SERVICE LATERALS (TWO PLACES FOR EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE LATERALS IN THE PROPER LOCATIONS.
- EXTEND UTILITY LATERAL STUB MARKERS BEYOND THE 15-FOOT PU&DE (15-FEET BEHIND BACK OF WALK).
- END OF SEWER LATERALS SHALL BE PLUGGED.

TESTING:

- AIR TEST MANDATORY - CERTIFICATION REQUIRED.
- VACUUM TEST REQUIRED FOR THE MANHOLES.
- VIDEO INSPECTION AFTER FLUSHING - THE CITY DOES NOT NEED TO OBSERVE THE VIDEO INSPECTION. VIDEO RECORD TO BE PROVIDED FOR CITY REVIEW.
- PLEASE PROVIDE THE CITY 48 HOURS' NOTICE PRIOR TO TESTING.

EMERGENCY SERVICES

- INSTALL SILT FENCE FIVE FEET OUT AROUND FIRE HYDRANTS AND ELECTRICAL TRANSFORMERS AFTER THEIR INSTALLATION. THIS HELPS MAINTAIN A CLEAR SPACE AROUND THEM AND MAKES THEM VISIBLE IF EMERGENCY SERVICES ARE NEEDING TO FIND THEM DURING CONSTRUCTION.
- INSTALL TEMPORARY SIGNAGE AT THE BEGINNING OF WORK ON THE SITE.
- PARK ONLY ON ONE SIDE OF ACCESS ROADS SO EMERGENCY ACCESS IS CLEAR.
- COORDINATE WITH FIRE CHIEF FOR HIS INSPECTIONS. ROADS: FACE OF CURB TO FACE OF CURB IS PROPER DISTANCE AND HYDRANTS ARE PROPERLY PLACED. THE HEIGHT OF THE HYDRANTS WILL ALSO BE INSPECTED. 18" ABOVE GROUND FROM THE PUMPER NOZZLE.
- PAINT RED CURB TEN FEET EITHER DIRECTION FIRE HYDRANTS.

CULINARY WATER

- PIPE MATERIAL: PVC C900 DR18
- USE BEDDING SAND FOR BACKFILL IN THE PIPE ZONE (CITY NEEDS TO PREAPPROVE SAND BEDDING.) CITY WANTS CLEANED WASHED SAND. THE CITY WANTS A BUCKET AHEAD OF TIME SO THE CITY CAN WET IT AND SEE IF IT SETS UP LIKE CONCRETE OR NOT. IT CANT SET UP LIKE CONCRETE. THEY CAN PULL FROM THE STAKER PIT BUT THE SAND NEEDS TO BE WASHED. THE CITY CAN PROVIDE AN EXAMPLE FOR WHAT THEY ARE LOOKING FOR.
- WATER LATERALS SAND BEDDING NEEDS TO GO TO THE DWELLING.
- NATIVE SOILS MAY BE USED ABOVE THE PIPE ZONE IF THEY ARE SUITABLE TO THE CITY AND CAN MEET COMPACTION REQUIREMENTS (BLENDING MAY BE REQUIRED)
- VALVES SHALL BE CLUSTERED IN INTERSECTIONS
- VALVES & TEMP. BLOW-OFF ARE LOCATED AT THE DEAD-END MAIN OF PHASE LINES TO ALLOW FOR FLUSHING, ISOLATION AND CONTINUED SERVICE TO EXISTING CONNECTIONS WHEN FUTURE PHASES ARE CONSTRUCTED.
- METER AND SERVICES SHALL BE ¾-INCH POLYETHYLENE SDR11 IPS. INSTALL SERVICE LATERALS AND METERS WITHIN 5-FEET OF LOT LINES (AS CLOSE TO LOT LINE AS PRACTICABLE), ONE ON EACH SIDE OF COMMON LOT LINE (ALTERNATE WITH SECONDARY WATER).
- USE 150# CORP STOPS.
- 10' HORIZONTAL SEPARATION OF WATER AND SEWER LATERAL PER STATE REQUIREMENTS. WATER LATERAL TO BE LOCATED UPSLOPE OF SEWER LATERAL TO THE EXTENT PRACTICABLE.
- 18" MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER.
- 10' HORIZONTAL SEPARATION OF WATER AND STORMWATER.
- METER BARRELS SHALL BE 21-INCH DIAMETER WHITE CORRUGATED POLYETHYLENE
- METER TO BE INSTALLED 18 TO 22 INCHES BELOW THE LID.
- PLACE SAND AROUND THE WATER SERVICE SETTER BASES AND ABOVE TO STABILIZE SETTER AND PROVIDE INSULATION. GRAVEL IS NOT ALLOWED.
- TAPPING SADDLES SHALL BE BRASS WITH DOUBLE STAINLESS STEEL OR BRASS STRAPS WRAPPED WITH POLY SOCK.
- USE DUAL CHECK AND HEAVY-DUTY ANGLE VALVES FOR ALL SERVICES.
- INSTALL TRACER WIRE AND LOCATING TAPE ABOVE WATER MAIN.
- INSTALL TRACER WIRE FROM MAIN CONNECTION THROUGH METER PIT TO STUB MARKER WITH 30' EXCESS TO EXTEND TO THE DWELLING.
- STAMP (WHEN WET) OR PIN (DO NOT GRIND) GUTTER BOTH AT THE LIP AND TOP OF CURB WITH A "W" AT ALL SERVICE LATERALS (2 PLACES EACH SERVICE). MAKE SURE THESE ARE LOCATED ABOVE THE LATERALS IN THE PROPER LOCATIONS.
- THRUST BLOCKS NEED TO BE INSPECTED BY THE CITY PRIOR TO BACKFILL. SIZE BASED ON TEST PRESSURES
- MAKE SURE FIRE HYDRANTS NEED TO BE INSTALLED TO THE PROPER HEIGHT TO HELP THE BREAK A WAY FUNCTION WORKS.
- HYDRO FINDERS MUST BE INSTALLED.

TESTING:

- HYDROSTATIC PRESSURE TEST: 200 PSI FOR A MINIMUM OF 2 HOURS FOR MAIN ONLY AND 150 PSI IF TESTING WITH TAPPING SADDLES AND CORPORATIONS IN PLACE - INSPECTOR (GLEN MILLWARD OR ASSIGNED CITY INSPECTOR) MUST BE PRESENT FOR THE ENTIRE DURATION OF THE TEST.

DISINFECTION:

- HYPOCHLORITE POWDER
- CHLORINE RESIDUALS WILL BE TESTED ONCE BY THE CITY, BUT ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER
- ONLY ONE SERIES OF BAC-T TESTING WILL BE PERFORMED BY THE CITY TO ACCEPT WATER LINES AND ANY RETESTS WILL BE PERFORMED BY THE CONTRACTOR/DEVELOPER (PRELIMINARY INVESTIGATIVE TESTS BY THE CONTRACTOR/DEVELOPER ARE ENCOURAGED) THE CITY NEEDS TO DO THE GRAB ON ANY SAMPLES.
  - PER AWWA C651, BAC-T TESTING SHALL BE COMPLETED FOR EVERY 1,200 FEET OF NEW WATER MAIN, AT THE END OF THE LINE, AND AT EACH BRANCH. TWO CONSECUTIVE SAMPLE SETS SHALL BE COLLECTED AT THE AFOREMENTIONED LOCATIONS AT LEAST 24 HOURS APART.

THE CITY WILL NOT SWING METER BOXES TO ACCOMMODATE THE DRIVEWAY. THINK ABOUT THE LATERAL LOCATIONS BEFORE LOCATING THE DWELLING.

STORM WATER

PIPE MATERIAL:

- REINFORCED CONCRETE (RCP) AND/OR ADS N-12-WT
- INSTALLATION AND COMPACTION TO FOLLOW MANUFACTURERS RECOMMENDATIONS.
- ALL CATCH BASIN BOXES INCLUDE A SUMP. FOR BOXES WITH SNOTS THE SUMP DEPTH IS BASED UPON THE SNOT MODEL. MANUFACTURES RECOMMENDATION. FOR ALL OTHER BOXES THE DEPTH IS 12" BELOW THE FLOW LINE OF THE PIPES.

FRANCHISE UTILITIES

- GAS: DOMINION
- POWER: ROCKY MOUNTAIN POWER
- CABLE: COMCAST
- PHONE: CENTURY LINK
- PLEASE INSTALL STUBS FOR FUTURE PHASES FOR FRANCHISED UTILITIES SO THAT NEW STREETS AND CONCRETE DONT HAVE TO BE CUT TO EXTEND TO A FUTURE PHASE.

SURFACE IMPROVEMENTS

PAVEMENT:

- ½" OR ¾-INCH ASPHALT AGGREGATE (1/2" IS THE CITY PREFERENCE). THE CITY STANDARD PAVEMENT SECTION IS 3-INCH ASPHALT ON 6-INCH UBC ON 8-INCH GRANULAR BORROW. (FABRIC)
- MARSHALL MIX REQUIRED PRIOR TO PAVING
- ROAD BASE AND CROSS-SECTION PER APPROVED DRAWINGS.
- PROVIDE PROPER SIGNAGE PER UTAH MUTCD.
- PROVIDE STOPS BARS AT STOP SIGNS.
- ADA TRUNCATED DOME INSERTS NEED TO BE YELLOW IN PED RAMPS. THE SPACING IS REQUIRED TO BE 2" TO FRONT OF RAMP AND NO MORE THAN 2" OFF THE SIDES OF THE WALKING PATH.
- INSTALL "NO PARKING" SIGNS IN TEMPORARY TURNAROUNDS. HOMEOWNERS ARE PARKING VEHICLES IN THEM.

CONCRETE:

- AIR TEST EVERY 50 YARDS UNLESS RESULTS ARE OUT OF SPEC (5% - 7%)
- 3 CYLINDERS EVERY 50 YARDS
- 4,500 PSI CONCRETE FOR ALL SURFACE IMPROVEMENTS.
- SIDEWALK SECTION IS 6" PCC ON 6" UBC.

EARTHWORK:

- PROVIDE COMPACTION AND SIEVE ANALYSIS ON ALL INITIAL PROCTORS AND NEW MATERIAL.
- COMPACTION TESTS EVERY 100 FEET OF PIPE TRENCH. VARY DEPTHS TO PROVIDE RESULTS THROUGHOUT STRATA.
- ROAD WORK AND BASE - BOTH SHOULDERS AND CENTERLINE WITH A MAXIMUM OF 200' BETWEEN

TESTS.

- PROOF ROLL TRENCHES, SUBGRADE, AND BASE
- MINIMUM OF FOUR COMPACTION TESTS AROUND EACH MANHOLE AND CLEANOUT.
- USE APWA DETAIL 255 FOR PIPE TRENCH PATCHING.

TESTING AND QA/QC

- 48-HOUR NOTICE IS REQUIRED PRIOR TO ANY TESTING. MAKE SURE THE TEST IS SCHEDULED.
- INSPECTOR(S) REPRESENTING THE CITY MUST BE PRESENT FOR ALL TESTING INCLUDING THOSE PERFORMED BY AN INDEPENDENT AGENCY.
- PUBLIC WORKS HOURS ARE 7 AM TO 3:30 PM MONDAY THROUGH FRIDAY. HOWEVER, THE CITY WILL WORK WITH CONTRACTOR IF CONTRACTOR IS WORKING OUTSIDE THESE HOURS.
- COMPACT FILL IN 8' LIFTS.

CONSTRUCTION WATER

- CONTRACTOR SHALL OBTAIN WATER FOR CONSTRUCTION FROM A CITY APPROVED FIRE HYDRANT USING A HYDRANT METER RENTED FROM THE CITY. THERE IS A \$1800 REFUNDABLE DEPOSIT FOR HYDRANT METERS AND A CHARGE OF \$6 PER 1000 GALLONS FOR ALL WATER USED. \$75 A MONTH RENTAL CHARGE.
- PLEASE DONT DAMAGE THE METERS AND DONT TAKE ANYTHING OFF THE METER.

EROSION CONTROL / STORM WATER SYSTEM PROTECTION

- MINIMIZE POTENTIAL FOR OFF-SITE RUN-OFF
- MINIMIZE DISTURBED AREAS.
- KEEP WORKING AREA WETTED TO MINIMIZE DUST
- PROVIDE SILT FENCE TO PREVENT SEDIMENT TRANSPORT DOWNSTREAM.
- CONTAIN ALL SEDIMENT ON SITE.
- MAINTAIN BMPS AS PER SWPPP.
- SWPPP TO BE ON-SITE AT ALL TIMES.
- PROOF OF COVERAGE UNDER UPDES REQUIRED
  - CITY WILL NEED A COPY OF THE NOI.
- THE CITY IS ON COMPLIANCE GO. MAKE SURE UPDATES ARE LOADED IN COMPLIANCE GO. ADD THE CITY PUBLIC WORKS E-MAIL CONTACT. HAVE A RSI AND PTOE ON SITE.
- THE CITY WILL CHECK WITH THE CONTRACTOR AFTER AN EVENT.
- THE CITY WILL SHARE INSPECTION REPORTS WITH THE CONTRACTOR.
- INSPECT AFTER RAINFALL AND OTHER EVENTS (WEATHER, AND CONSTRUCTION AROUND BMPS) THAT MAY AFFECT BMPS.
- MAKE SURE TO FOLLOW THE SWPPP AS SHOWN ON THE PLANS.
- PROVIDE VEGETATIVE COVER ON COMPLETED OR LONG-TERM TEMPORARY GRADING WITHIN 14 DAYS.
- PUT THE SWPPP SIGN ON SITE AND VISIBLE SO THE STATE CAN SEE IT ON A DRIVE BY.

CONSTRUCTION DEBRIS DISPOSAL

- MAINTAIN A WORK SITE THAT IS CLEAN AS POSSIBLE AND PROPERLY DISPOSE OF DEBRIS AND TRASH.
- NO GARBAGE PITS ALLOWED
- NO ON-SITE CONCRETE WASHOUT ALLOWED UNLESS HAULED FROM SITE AT END OF PROJECT OR OTHER PROVISIONS ARE MADE.

SITE SAFETY

- CONFORM TO OSHA STANDARDS.
- CLOSE TRENCHES AT NIGHT.
- SECURE OPEN TRENCHES AND PLUG LINES.

SECURITY

- SECURE CONSTRUCTION EQUIPMENT WHEN NOT IN USE.

SANITATION

- CLEAN AND PROPERLY MAINTAINED PORT-A-JOHN(S) ON SITE AT ALL TIMES.

HAZARDOUS MATERIAL STORAGE ON SITE

- IF THERE ARE HAZARDOUS MATERIALS ON SITE, MAKE SURE THE CITY HAS APPROVED IT AND THAT IT HAS SECONDARY CONTAINMENT. THE FIRE CHIEF NEEDS TO KNOW WHAT IS ON SITE, HOW IT IS SECURED AND WERE IT IS LOCATED.

SITE ACCESS

AS SHOWN ON THE SWPPP DONT DEVIATE FROM IT.

CONSTRUCTION OBSERVATION

- CITY PERSONNEL WILL INSPECT REGULARLY AS NEEDED.

CONSTRUCTION DRAWINGS

- KEEP AN ACCURATE SET OF AS-BUILTS.
- PROVIDE COPIES OF AS-BUILTS AT COMPLETION OF PROJECT PRIOR TO OCCUPANCY.
- MAKE SURE CHANGES IN AS-BUILTS ARE BUBBLED AND CLEAR AS WHAT CHANGES HAVE OCCURRED.
- CITY HAS STORM BASIN PLAN CERTIFICATION THE DESIGNING ENGINEER NEEDS TO SIGN AND STAMP.
- PROVIDE DIGITAL SET OF AS-BUILTS (PDF, DWG AND SHAPE FILES ARE REQUIRED.) FOR CITY PRIOR TO OCCUPANCY.
- CITY WILL PROVIDE A LIST OF ITEMS REQUIRED IN THE SHAPE FILE.
- BRAYDEE WILL PROVIDE REQUIREMENTS FOR THE CONSTRUCTION DRAWINGS.
- IF THERE ARE QUESTIONS ABOUT THE PLANS AND CONDITIONS ON THE GROUND FIRST REQUEST THE DESIGN ENGINEER'S INTERPRETATION AND BRING THAT INTERPRETATION TO THE CITY WHEN QUESTIONS COME UP. THE ONSITE INSPECTORS CANNOT MAKE APPROVALS TO CHANGES. DOCUMENT CHANGES.

CONSTRUCTION DRAWINGS:

DONT PRINT ANY PLANS UNTIL ALL OF THE CHANGES HAVE BEEN MADE AND YOU HAVE RECEIVED A COPY OF THE SIGNED PLANS FROM BRAYDEE BAUGH.

- PROVIDE BRAYDEE BAUGH WITH ONE 24X36 AND FOUR 11X17'S.

Name	Company Represented	Contact Information	Email
James Waltz	Grantsville City Public Works Director	435-849-1636	jwaltz@grantsvilleut.gov
Glen Millward	Grantsville City Water Dept.	435-849-3323	glenray88@hotmail.com
Markus Seat	Grantsville City Sewer and Storm Depts.	435-224-3261	mseat@grantsvilleut.gov
Brad Pace	Grantsville City Public Works Inspector	435-840-5567	bradleepace@hotmail.com
Lyle Perkins	Grantsville City Building Dept.	435-841-9388	lperkins@grantsvilleut.gov
Andy Jensen	Grantsville City Building Official	435-255-4431	ajensen@grantsvilleut.gov
Kristy Clark	Grantsville City Planning and Zoning Dept.	435-884-3411	kclark@grantsvilleut.gov
Dan England	Grantsville City City Engineer	435-884-1661	dengland@grantsvilleut.gov
Travis Daniels	Grantsville City Fire Chief	435-840-4335	firechief@grantsvilleut.gov
Shay Stark	Aqua Engineering Project Support	801-683-3731 801-520-1746	shay.stark@equaeng.com
Christy Montierth	Grantsville City		cmontierth@grantsvilleut.gov
Jason Smith	Grantsville City Fire Marshall	801-598-7049	firemarshal@grantsvilleut.gov



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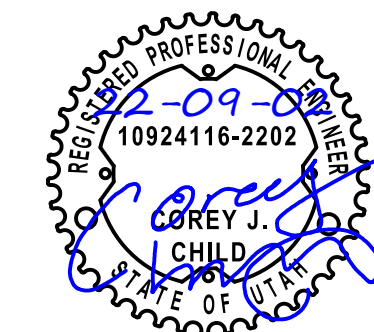
**RICHFIELD**  
Phone: 435.896.2983

**WWW.ENSIGNENG.COM**

FOR:  
ICON DEVELOPMENT, LLC  
3410 NORTH MOYLE LANE  
ERDA, UTAH, 84074

CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

BLUE SPRUCE SUBDIVISION  
FINAL  
QUIRK STREET  
GRANTSVILLE CITY, UTAH



**PRECONSTRUCTION  
GENERAL NOTES**

PROJECT NUMBER  
T1216E  
PRINT DATE  
2022-09-02  
DRAWN BY  
C. CHILD  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
C. CHILD

**C-002**



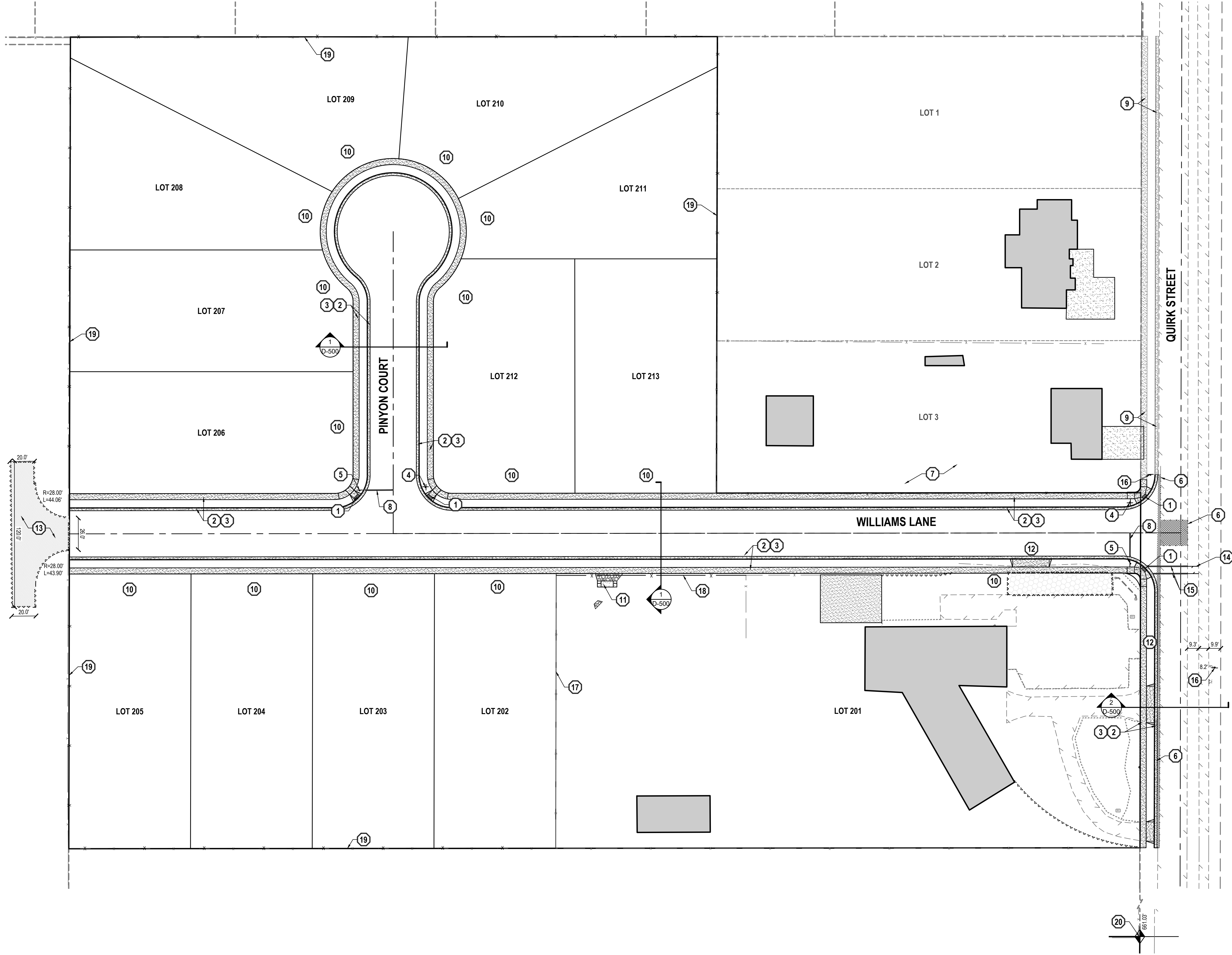
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CONSTRUCTION.

BENCHMARK

NORTH QUARTER CORNER OF SECTION 7,  
TOWNSHIP 3 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN  
(2.5" BRASS TOOEL COUNTY SURVEY  
MONUMENT ON 4" PIPE, DATED 1986)  
ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)



GENERAL NOTES

- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
- SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
- ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
- ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
- NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
- THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
- GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
- RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- CONSTRUCT HANDICAP ACCESS RAMP PER APWA PLAN No. 235 AND SPECIFICATIONS, WITH DETECTABLE WARNING SURFACE PER APWA PLAN No. 238 AND SPECIFICATIONS.
- CONSTRUCT 2.5' TYPE A CURB AND GUTTER PER APWA PLAN No. 205 AND SPECIFICATIONS. (TYP.)
- CONSTRUCT 5.0' SIDEWALK PER APWA PLAN No. 231 AND SPECIFICATIONS. (TYP.)
- INSTALL STREET INTERSECTION IDENTIFICATION PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS AND MUTCD R1-1.
- INSTALL STOP SIGN PER MUTCD R1-1 WITH W4-4P.
- SAWCUT 2' PAST EXISTING EDGE OF EXISTING ASPHALT PAVEMENT TO PROVIDE A CLEAN EDGE FOR THE TRANSITION BETWEEN EXISTING AND PROPOSED ASPHALT PAVEMENT.
- PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, SIGNS, ETC. (TYPICAL UNLESS OTHERWISE NOTED).
- 12" WIDE SOLID STOP BAR PER M.U.T.C.D. STANDARD PLANS.
- HOME OWNER AND CONTRACTOR TO COORDINATE WITH GRANTSVILLE CITY ON INSTALLING THESE IMPROVEMENTS SIMULTANOUSLY WITH SUBDIVISION IMPROVEMENTS.
- DRIVE WAY AND APPROACH TO BE INSTALLED BY LOT OWNER PER GRANTSVILLE CITY STANDARDS.
- CONCRETE SPILLWAY - SEE GRADING PLAN AND DETAIL 10D-500.
- OWNER TO COORDINATE WITH GRANTSVILLE CITY ON EXISTING DRIVE APPROACHES. NO BUSINESS ACCESS TO QUIRK STREET
- TEMPORARY TURNAROUND CONSTRUCTED WITH A HARD SURFACE; 10" AGGREGATE BASE 95% MOD PROCTOR ON SUITABLE NATURAL SOILS, PROPERLY PREPARED SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO PROPERLY PREPARED/SUITABLE NATURAL SOILS; CAPABLE OF SUPPORTING THE IMPOSED LOAD OF AT LEAST 75,000 POUNDS AND COMPACTION PROCTOR TO AT LEAST 95%. TURNAROUND TO BE INSPECTED BY DEVELOPMENT INSPECTOR.
- 3" ASPHALTIC CONCRETE PER SPECIFICATIONS, DM-1/2, PG 64-22, MAX RAP = 15% ON 8" OF UNTREATED BASE COURSE COMPACTED PER GRANTSVILLE CITY STANDARDS. ENSURE PROPER COVERAGE OVER THE STORM DRAIN CULVERT
- 8" WIDE SOLID CROSS WALK BAR PER M.U.T.C.D. STANDARD PLANS
- INSTALL CROSS WALK SIGN PER M.U.T.C.D. STANDARD PLANS
- EXISTING MASONRY WALL
- INSTALL MATCHING MASONRY FENCE WITH OPENING FOR RETENTION BASIN EMERGENCY OVERFLOW
- 6' WHITE VINYL PERIMETER FENCE, SEE CONTRACTOR FOR ADDITIONAL INFORMATION.
- BENCHMARK BENCHMARK - NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOEL COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4995.95' (USED ELEVATION)

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



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BLUE SPRUCE SUBDIVISION  
FINAL  
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NO.	DATE	REVISION	BY
1		FOR REVIEW	
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SITE PLAN

PROJECT NUMBER  
T1216E

PRINT DATE  
2022-09-02

DRAWN BY  
C. CHILD

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
C. CHILD

C-100



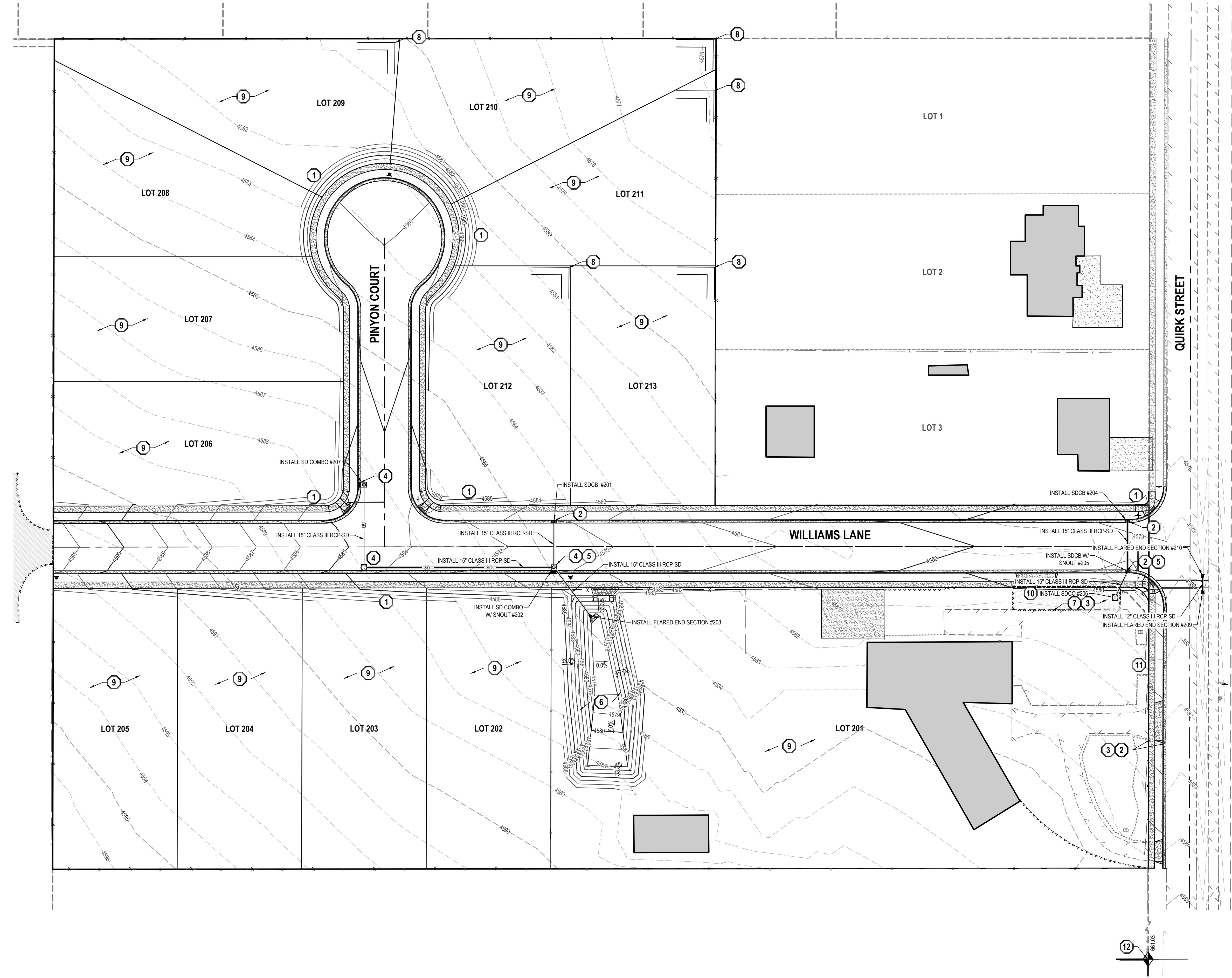
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- GENERAL NOTES
1.

ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2.

ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3.

ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
4.

THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
5.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
6.

ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
7.

ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
8.

THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
9.

NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
10.

THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
11.

GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
12.

RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
13.

GSN MUST BE NOTIFIED PRIOR TO THE PLACEMENT OF STRUCTURAL SITE GRADING FILLS, FLOOR SLABS, FOOTINGS, AND PAVEMENTS TO VERIFY THAT ALL LOOSE/DISTURBED SOILS AND NON-ENGINEERED FILLS HAVE BEEN COMPLETELY REMOVED.

- SCOPE OF WORK:
- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

DAYLIGHT TO EXISTING GROUND WITH MAXIMUM 3:1 SLOPE.
- 2

CATCH BASIN PER CITY STANDARDS AND SPECIFICATIONS.
- 3

STORM BRICK UNDERGROUND RETENTION AREA. (WE WILL BE PROVIDED WITH FINAL DESIGN)
- 4

COMBINATION INLET/CLEANOUT BOX PER CITY STANDARDS AND SPECIFICATIONS.
- 5

SNOUT 18" OR APPROVED EQUAL. CUT PIPE FLUSH WITH STRUCTURAL WALL. ENSURE PIPE/STRUCTURE INTERFACE IS SMOOTH AND FREE OF DEBRIS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. INSTALL ON SOUTH SIDE OF STORM DRAIN BOX.
- 6

RETENTION BASIN I, SEE C-201 AND DETAIL 8/D-500.
- 7

RETENTION BASIN II, STORM BRICK DESIGN (WE WILL BE PROVIDED WITH FINAL DESIGN)
- 8

BACKYARD 25' X 30' WIDE RETENTION BASIN PER DETAIL 9/D-500, MINIMUM VOLUME PER C-201 CALCULATIONS.
- 9

INDIVIDUAL LOT OWNERS ARE REQUIRED TO GRADE LOTS TO PREVENT DRAINAGE ONTO NEIGHBORING PROPERTIES.
- 10

DRIVE WAY AND APPROACH TO BE INSTALLED BY LOT OWNER PER GRANTSVILLE CITY STANDARDS.
- 11

OWNER TO COORDINATE WITH GRANTSVILLE CITY ON EXISTING DRIVE APPROACHES.
- 12

BENCHMARK BENCHMARK - NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN (2.5" BRASS TOOELE COUNTY SURVEY MONUMENT ON 4" PIPE, DATED 1986) ELEV = 4595.95' (USED ELEVATION)  
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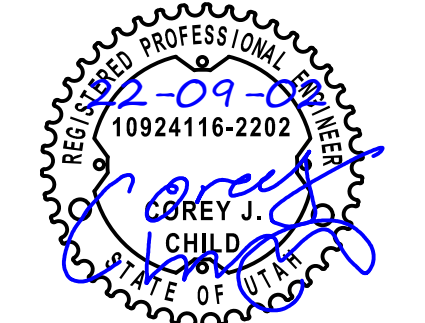
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BLUE SPRUCE SUBDIVISION

FINAL

QUIRK STREET

GRANTSVILLE CITY, UTAH



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GRADING PLAN

PROJECT NUMBER  
T1216E

PRINT DATE  
2022-09-02

DRAWN BY  
C. CHILD

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
C. CHILD

C-200



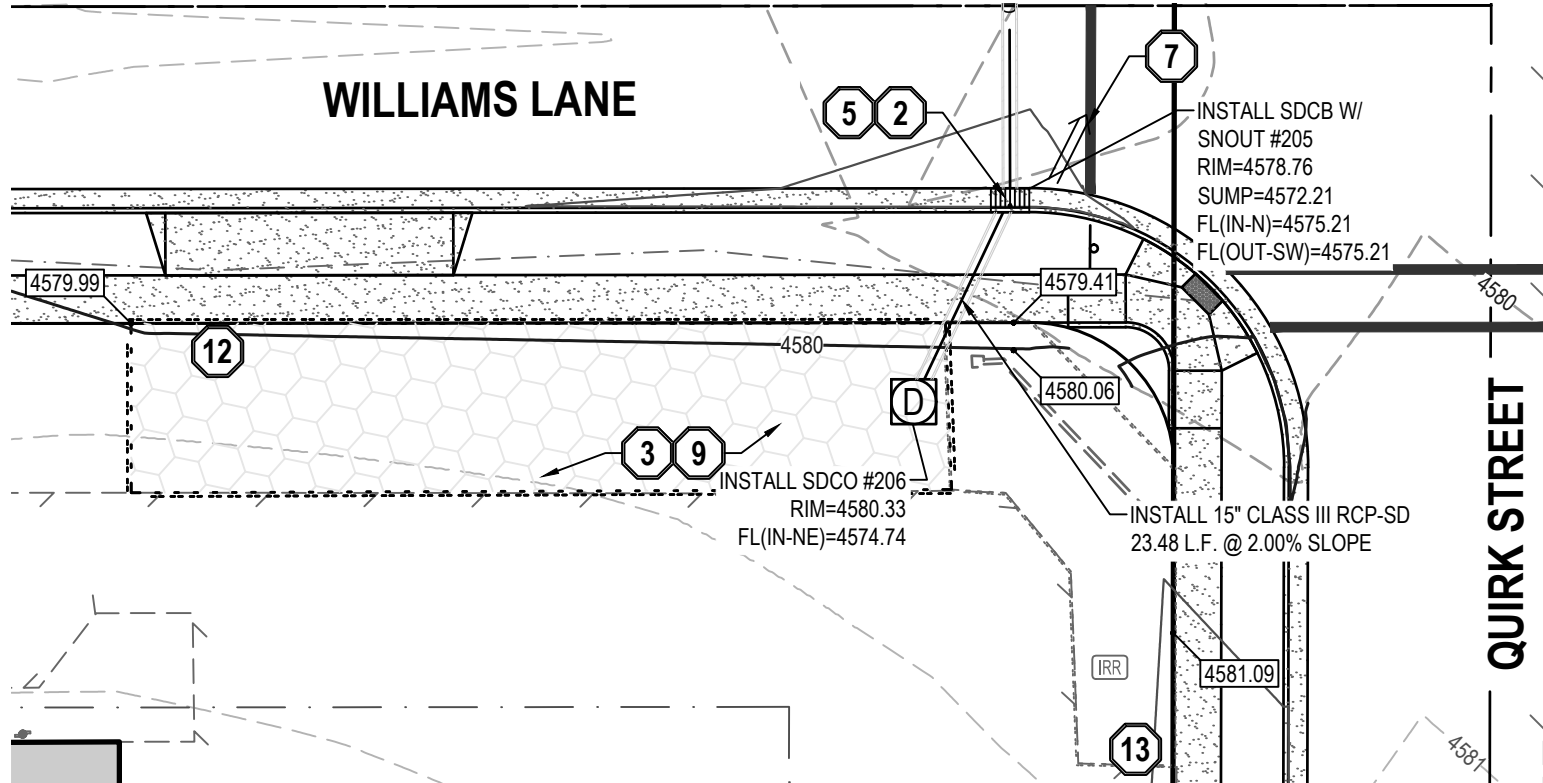
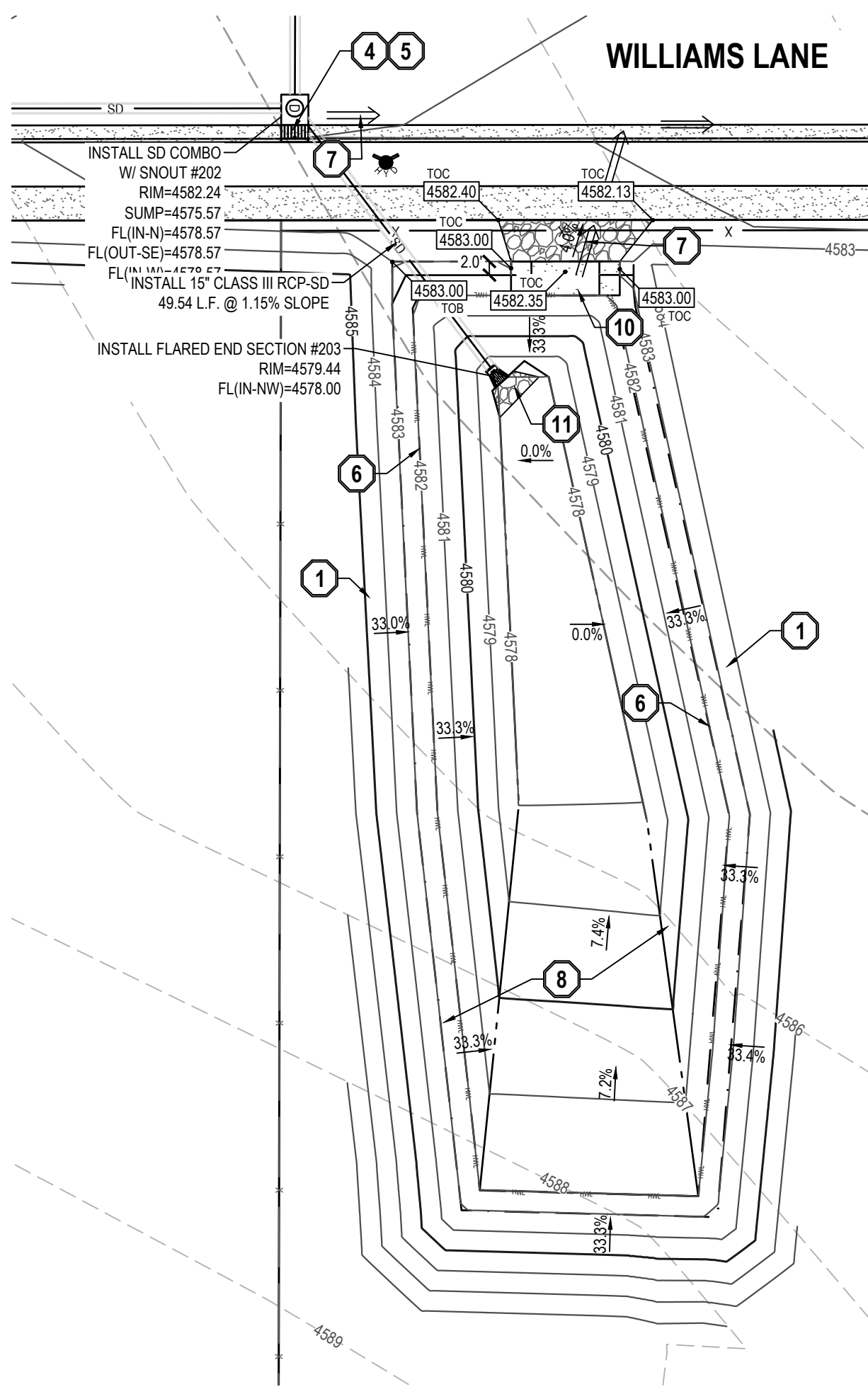
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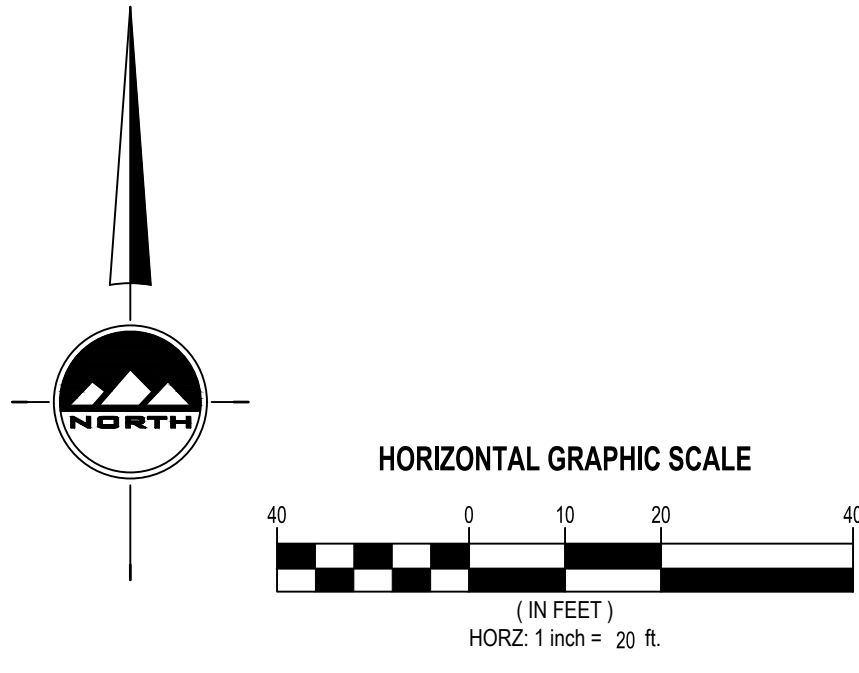
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- DAYLIGHT TO EXISTING GROUND WITH MAXIMUM 3:1 SLOPE.
  - CATCH BASIN PER CITY STANDARDS AND SPECIFICATIONS.
  - STORM BRIX UNDERGROUND RETENTION AREA. SEE C-202 AND ACO, INC DESIGN
  - COMBINATION INLET/CLEANOUT BOX PER CITY STANDARDS AND SPECIFICATIONS.
  - SNOUT 15F OR APPROVED EQUAL. CUT PIPE FLUSH WITH STRUCTURAL WALL. ENSURE PIPE/STRUCTURE INTERFACE IS SMOOTH AND FREE OF DEBRIS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. INSTALL ON SOUTH SIDE OF STORM DRAIN BOX.
  - HIGH-WATER ELEVATION
  - 100-YEAR FLOOD ROUTE
  - RETENTION BASIN I  
BASIN TOP OF POND = 4583.00  
SPILLWAY ELEVATION = 4582.50  
HIGH WATER ELEVATION = 4582.50  
BOTTOM OF POND = 4578.50  
VOLUME REQUIRED = 9,929 C.F.  
VOLUME PROVIDED = 10,520 C.F.
  - RETENTION BASIN II  
TOP OF UNDERGROUND RETENTION = 4975.99  
VOLUME REQUIRED = 5,846 C.F.  
VOLUME PROVIDED = 5,986 C.F.
  - CONCRETE SPILLWAY AND RIP RAP. SEE GRADING PLAN AND DETAIL 10D-500.
  - OUTLET RIPRAP PER SHEET D-511.
  - DRIVE WAY AND APPROACH TO BE INSTALLED BY LOT OWNER PER GRANTSVILLE CITY STANDARDS.
  - OWNER TO COORDINATE WITH GRANTSVILLE CITY ON EXISTING DRIVE APPROACHES.
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- ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
- ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
- ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
- THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
- GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
- RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.
- GSH MUST BE NOTIFIED PRIOR TO THE PLACEMENT OF STRUCTURAL SITE GRADING FILLS, FLOOR SLABS, FOOTINGS, AND PAVEMENTS TO VERIFY THAT ALL LOOSE/DISTURBED SOILS AND NON-ENGINEERED FILLS HAVE BEEN COMPLETELY REMOVED.



7/7/2021

Precipitation Frequency Data Server

NOAA Atlas 14, Volume 1, Version 5  
Location name: Grantsville, Utah, USA\*  
Latitude: 40.591°, Longitude: -112.4575°  
Elevation: 4384.13 ft\*\*  
\*\* source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Santa Perica, Sarah Dietz, Sarah Heem, Lilian Heller, Kazungu Matanda, Deborah Martin, Sandra Pawlows, Robert Roy, Carl Toppsall, Dale Ulrich, Fenglin Yan, Michael Yelke, Teri Zhao, Geoffrey Bonner, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchon

NOAA, National Weather Service, Silver Spring, Maryland

PF\_tabular | PF\_graphical | Maps & aerials

**PF tabular**

**PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)<sup>1</sup>**

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.44 (1.26-1.62)	1.82 (1.63-2.09)	2.53 (2.24-2.87)	3.17 (2.78-3.59)	4.15 (3.58-4.73)	5.33 (4.22-5.77)	6.06 (4.96-7.04)	7.25 (5.76-8.56)	9.12 (6.91-11.0)	10.8 (7.88-13.2)
10-min	1.09 (0.960-1.24)	1.39 (1.24-1.59)	1.92 (1.71-2.18)	2.41 (2.12-2.72)	3.16 (2.72-3.59)	3.82 (3.22-4.39)	4.61 (3.79-5.36)	5.52 (4.39-6.52)	6.94 (5.26-8.34)	8.23 (5.99-10.1)
15-min	0.904 (0.799-1.02)	1.15 (1.02-1.31)	1.59 (1.41-1.81)	1.99 (1.75-2.28)	2.61 (2.25-2.97)	3.16 (2.69-3.63)	3.81 (3.14-4.43)	4.56 (3.62-5.38)	5.73 (4.34-6.89)	6.80 (4.99-8.32)
30-min	0.608 (0.534-0.688)	0.774 (0.680-0.884)	1.07 (0.950-1.22)	1.34 (1.18-1.52)	1.67 (1.52-2.00)	2.13 (1.79-2.44)	2.57 (2.11-2.98)	3.07 (2.44-3.63)	3.86 (3.34-5.60)	4.58 (3.34-5.60)
60-min	0.376 (0.331-0.428)	0.479 (0.427-0.547)	0.662 (0.588-0.753)	0.829 (0.730-0.939)	1.09 (0.939-1.24)	1.32 (1.11-1.51)	1.59 (1.31-1.85)	1.90 (1.51-2.24)	2.39 (1.81-2.87)	2.83 (2.06-3.47)
2-hr	0.225 (0.204-0.250)	0.284 (0.258-0.319)	0.374 (0.341-0.419)	0.466 (0.411-0.529)	0.586 (0.517-0.656)	0.704 (0.608-0.794)	0.839 (0.698-1.0)	0.996 (0.808-1.16)	1.25 (0.958-1.45)	1.47 (1.09-1.78)
3-hr	0.171 (0.158-0.188)	0.212 (0.194-0.234)	0.271 (0.250-0.296)	0.322 (0.294-0.354)	0.405 (0.361-0.444)	0.475 (0.416-0.534)	0.562 (0.481-0.643)	0.665 (0.554-0.778)	0.834 (0.661-0.996)	0.988 (0.750-1.20)
6-hr	0.108 (0.100-0.117)	0.134 (0.124-0.144)	0.163 (0.152-0.176)	0.190 (0.178-0.204)	0.228 (0.209-0.248)	0.280 (0.234-0.282)	0.296 (0.262-0.324)	0.344 (0.298-0.394)	0.425 (0.357-0.505)	0.487 (0.408-0.607)
12-hr	0.067 (0.063-0.072)	0.082 (0.077-0.088)	0.100 (0.094-0.108)	0.114 (0.104-0.123)	0.134 (0.124-0.145)	0.160 (0.146-0.164)	0.185 (0.164-0.206)	0.222 (0.192-0.252)	0.252 (0.214-0.303)	0.282 (0.214-0.303)
24-hr	0.041 (0.038-0.044)	0.051 (0.047-0.055)	0.061 (0.056-0.066)	0.069 (0.064-0.074)	0.080 (0.074-0.086)	0.088 (0.081-0.095)	0.097 (0.089-0.104)	0.105 (0.105-0.114)	0.116 (0.106-0.114)	0.128 (0.112-0.154)
2-day	0.022 (0.020-0.024)	0.027 (0.025-0.029)	0.032 (0.030-0.035)	0.037 (0.034-0.040)	0.043 (0.040-0.046)	0.047 (0.044-0.051)	0.052 (0.048-0.056)	0.057 (0.052-0.061)	0.063 (0.057-0.068)	0.067 (0.061-0.078)
3-day	0.016 (0.015-0.017)	0.019 (0.018-0.021)	0.023 (0.022-0.025)	0.026 (0.024-0.028)	0.031 (0.029-0.033)	0.034 (0.031-0.037)	0.038 (0.035-0.040)	0.041 (0.038-0.044)	0.046 (0.042-0.050)	0.049 (0.045-0.055)
4-day	0.012 (0.012-0.013)	0.015 (0.014-0.017)	0.018 (0.017-0.020)	0.021 (0.020-0.023)	0.025 (0.023-0.026)	0.027 (0.025-0.029)	0.030 (0.028-0.033)	0.033 (0.030-0.036)	0.037 (0.034-0.040)	0.040 (0.036-0.044)
7-day	0.008 (0.008-0.009)	0.010 (0.010-0.011)	0.012 (0.011-0.013)	0.014 (0.013-0.015)	0.016 (0.015-0.017)	0.017 (0.016-0.019)	0.019 (0.018-0.021)	0.021 (0.019-0.022)	0.023 (0.021-0.024)	0.025 (0.023-0.027)
10-day	0.006 (0.006-0.007)	0.008 (0.007-0.008)	0.009 (0.009-0.010)	0.010 (0.010-0.011)	0.012 (0.011-0.013)	0.013 (0.012-0.014)	0.014 (0.013-0.015)	0.015 (0.014-0.017)	0.017 (0.016-0.018)	0.018 (0.016-0.019)
20-day	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.006 (0.006-0.006)	0.007 (0.007-0.008)	0.007 (0.007-0.008)	0.008 (0.008-0.009)	0.009 (0.009-0.010)	0.009 (0.009-0.011)	0.010 (0.010-0.011)	0.011 (0.010-0.011)
30-day	0.003 (0.003-0.003)	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.006 (0.006-0.006)	0.006 (0.006-0.006)	0.007 (0.007-0.007)	0.007 (0.007-0.007)	0.008 (0.008-0.008)	0.008 (0.008-0.008)	0.009 (0.009-0.009)
45-day	0.003 (0.002-0.003)	0.003 (0.003-0.003)	0.004 (0.004-0.004)	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.006 (0.006-0.006)	0.006 (0.006-0.006)	0.006 (0.006-0.006)	0.006 (0.006-0.007)
60-day	0.002 (0.002-0.003)	0.003 (0.003-0.003)	0.003 (0.003-0.004)	0.004 (0.004-0.004)	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.006 (0.005-0.006)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).  
Numbers in parentheses are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.  
Please refer to NOAA Atlas 14 document for more information.

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NOTE: USE LOT 213 CALCULATIONS FOR LOT 209-213

Study Summary Statistics		LOT - 213	
No. of Lots	2500		
Roof SF/lot	2500		
Drive SF/lot	1000		
Total Lots Hardscape, SF	3500		
Total Road Hardscape SF	0		
Total Hardscape, SF	3500		
Total Area, SF	22429		
Landscape Area, SF	18929		
Weighted Average C	0.26		

**Retention Calculations (100-year storm)**

Basin Tributary Area	22,429	SF
Runoff coefficient C:	0.259	
Basin Area	1,000	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs

Infiltration Rate per GSH Job No. 3218-002-21  
Rate = 12 minutes per inch = 5 in/hr

1.667 Factor Safety rate/3

Time (min)	i (in/hr)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
5	6.06	245	12	233
10	4.61	373	23	349
15	3.81	462	35	427
30	2.56	620	69	551
60	1.59	770	139	631
120	0.84	814	278	536
180	0.56	819	417	402
360	0.30	858	834	24
720	0.17	974	1,667	(693)
1440	0.10	1,124	3,334	(2,210)

Required Retention:	631
Provided Retention:	1,341

Study Summary Statistics

Basin I

No. of Lots	11
Roof SF/lot	2500
Drive SF/lot	120
Total Lots Hardscape, SF	35420
Total Road Hardscape, SF	27778
Total Hardscape, SF	63196
Total Area, SF	257993
Landscape Area, SF	194797
Weighted Average C	0.32

Retention Calculations (100-year storm)

Basin Tributary Area	257,993	SF
Runoff coefficient C:	0.321	
Basin Area	5,204	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs

Infiltration Rate per GSH Job No. 3218-002-21

Rate = 12 minutes per inch = 5 in/hr

1.667 Factor Safety rate/3

Time (min)	i (in/hr)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
5	6.06	3,460	60	3,400
10	4.61	5,315	120	5,194
15	3.81	6,587	181	6,406
30	2.56	8,847	361	8,486
60	1.59	10,989	723	10,266
120	0.84	11,611	1,446	10,165
180	0.56	11,680	2,169	9,511
360	0.30	12,233	4,338	7,896
720	0.17	13,892	8,675	5,217
1440	0.10	16,034	17,350	(1,316)
		Required Retention:	10,266	
		Provided Retention:	10,250	

Catchment Calculations (10-year storm)

Time of Concentration:	30 min
Rainfall Intensity I:	1.34 in/hr
Meaning N:	0.013

Catchment	Area (SF)	C	Flow (CFS)	Destination
1	63,243	0.321	0.631	201
2	116,225	0.321	1.159	202
3	76,675	0.321	0.765	207

Pipe Design (10-year storm)

Pipe	Tributary Basins	Surface Flow (CFS)	Upstream Pipes	Pipe Flow (CFS)	Total Flow (CFS)	Pipe Slope	Diameter (IN)	Full Flow Capacity (CFS)	% of Full-Capacity
207-208	3	0.765	None	0.000	0.765	1.80%	15	6,690	8.8%
202-208	-	0.000	207-208	0.765	0.765	0.81%	15	5,829	13.1%
201-202	2	1.159	None	0.000	1.159	0.50%	15	4,580	25.3%
202-203	1	0.631	201-202, 202-208	1.923	2.554	1.15%	15	6,946	36.8%

Retention Basin Drainage Calculations (100-year storm)			
Basin Tributary Area	257,993	SF	
Runoff coefficient C:	0.321		
Basin Area	5,204	SF	
Allowable Discharge Rate	-	cfs/acre	
Total Discharge	-	cfs	

Infiltration Rate per GSH Job No. 3218-002-21      1.667      Factor Safety  
Rate = 12 minutes per inch = 5 in/hr      rate/3

Time (min)	Time (days)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
0	0.000	10,266	0	10,266
5	0.003	10,266	60	10,206
10	0.007	10,206	120	10,086
15	0.010	10,085	181	9,905
30	0.021	9,905	361	9,543
60	0.042	9,543	723	8,820
120	0.083	8,820	1,446	7,374
180	0.125	7,374	2,169	5,206
360	0.250	5,206	4,338	868
720	0.500	868	8,675	(7,807)
1440	1.00	(7,807)	17,350	(25,157)

Study Summary Statistics		Basin II	
	No. of Lots	2	
	Roof SF/lot	2500	
	Drive SF/lot	14214	
	Total Lots Hardscape, SF	33428	
	Total Road Hardscape SF	15478	
	Total Hardscape, SF	48906	
	Total Area, SF	69539	
	Landscaped Area, SF	20633	
	Weighted Average C	0.64	

**Retention Calculations (100-year storm)**

Basin Tributary Area	69,539	SF
Runoff coefficient C:	0.642	
Basin Area	1,000	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs

Infiltration Rate per GSH Job No. 3218-002-21  
Rate = 12 minutes per inch = 5 in/hr

2 Factor Safety  
rate/3

Time (min)	i (in/hr)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
5	6.06	1,880	12	1,868
10	4.61	2,862	23	2,839
15	3.81	3,547	35	3,512
30	2.56	4,764	69	4,695
60	1.59	5,918	139	5,779
120	0.84	6,253	278	5,975
180	0.56	6,290	417	5,874
360	0.30	6,588	834	5,755
720	0.17	7,481	1,667	5,814
1440	0.10	8,635	3,334	5,301
			Required Retention:	5,975
			Provided Retention:	
			Provided Sump Retention:	5,986
			Total Retention:	5,986





#### ACO StormBrixx System Optimizer

Project Title  
Blue Spruce Subdivision

Notes / Tank Reference  
SD Infiltration  
2 Layer (SD)  
2 Access locations

Assumptions

Ground Improvement may be required  
Traffic - Car park loading  
Asphalt surfacing

Invert Depth: 7 ft 0 in

#### Tank parameters - SD

Length	Width	Depth	Total Gross Volume
10.6ft 3.891m	17.7ft 6.896m	2.8ft 11.884m	8547.29ft³
			Total Net Volume
			5477.37ft³

SD tank has a void ratio of 0.97



Selected	Product Code	Product Description	Quantity
Main Components			
✓	314090	StormBrixx SD Half Module	485 pcs.
✓	314091	StormBrixx SD Side Panel	126 pcs.
✓	314092	StormBrixx SD Top Cover	484 pcs.
✓	314093	StormBrixx SD Layer Connector	243 pcs.
	314094	StormBrixx SD Half Layer Top Cover Plate	pcs.
	314098	StormBrixx SD Half Layer Side Panel	pcs.

Page 1

Selected	Product Code	Product Description	Quantity
Access			
	138741	StormBrixx SD Remote Access Unit	2 pcs.
✓	314076	StormBrixx Remote Access Plate	2 pcs.
✓	314038	StormBrixx Inspection Shaft	10 pcs.
	314039	StormBrixx Inspection Shaft with Socket	pcs.
	27018	Vertical Inspection Point Connector	pcs.
SD and HD horizontal pipe connector			
	93139	Horizontal Pipe Connector SDR35 - 4 inch (102mm) pipe	pcs.
	93140	Horizontal Pipe Connector SDR35 - 6 inch (152mm) pipe	pcs.
	93141	Horizontal Pipe Connector SDR35 - 8 inch (203mm) pipe	pcs.
	93142	Horizontal Pipe Connector SDR35 - 12 inch (305mm) pipe	pcs.
✓	93144	Horizontal Pipe Connector SDR35 - 15 inch (381mm) pipe	1 pcs.
	93145	Horizontal Pipe Connector SCH40 - 4 inch (102mm) pipe	pcs.
	93146	Horizontal Pipe Connector SCH40 - 6 inch (152mm) pipe	pcs.
	93147	Horizontal Pipe Connector SCH40 - 8 inch (203mm) pipe	pcs.
	93142	Horizontal Pipe Connector SCH40 - 12 inch (305mm) pipe	pcs.
	93144	Horizontal Pipe Connector SCH40 - 15 inch (381mm) pipe	pcs.
Covers load class D 400			
✓	314043	Access Chamber Ductile Iron Cover (Load Class D400)	2 pcs.
	314053	Access Chamber Ductile Iron Ventilated Cover (Load Class D400)	pcs.
	314044	Inspection Point Ductile Iron Cover (Load Class D400)	pcs.
Covers load class D 400			
		Non-woven geotextile	ft² (1.58 cverlap)
		GEOMEMBRANE ROLL	ft² (1.58 cverlap)
✓		Infiltration geotextile	\$185.82 ft² (1.58 cverlap)
			2 rolls (4.5x100m)

Estimated Assembly Time: 8hr 59mins 53secs

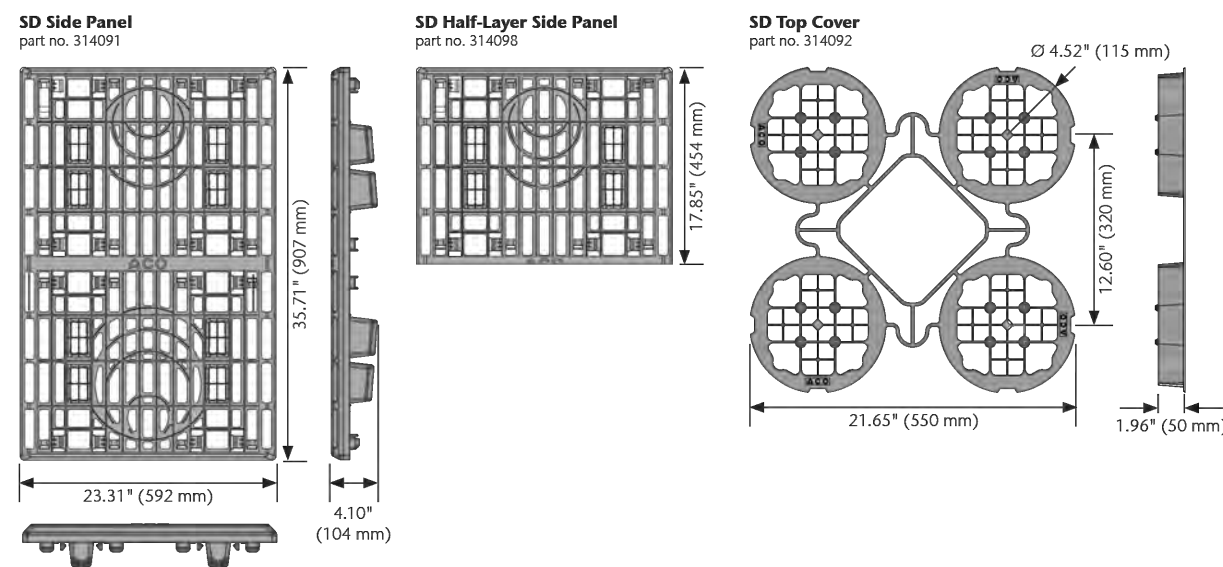
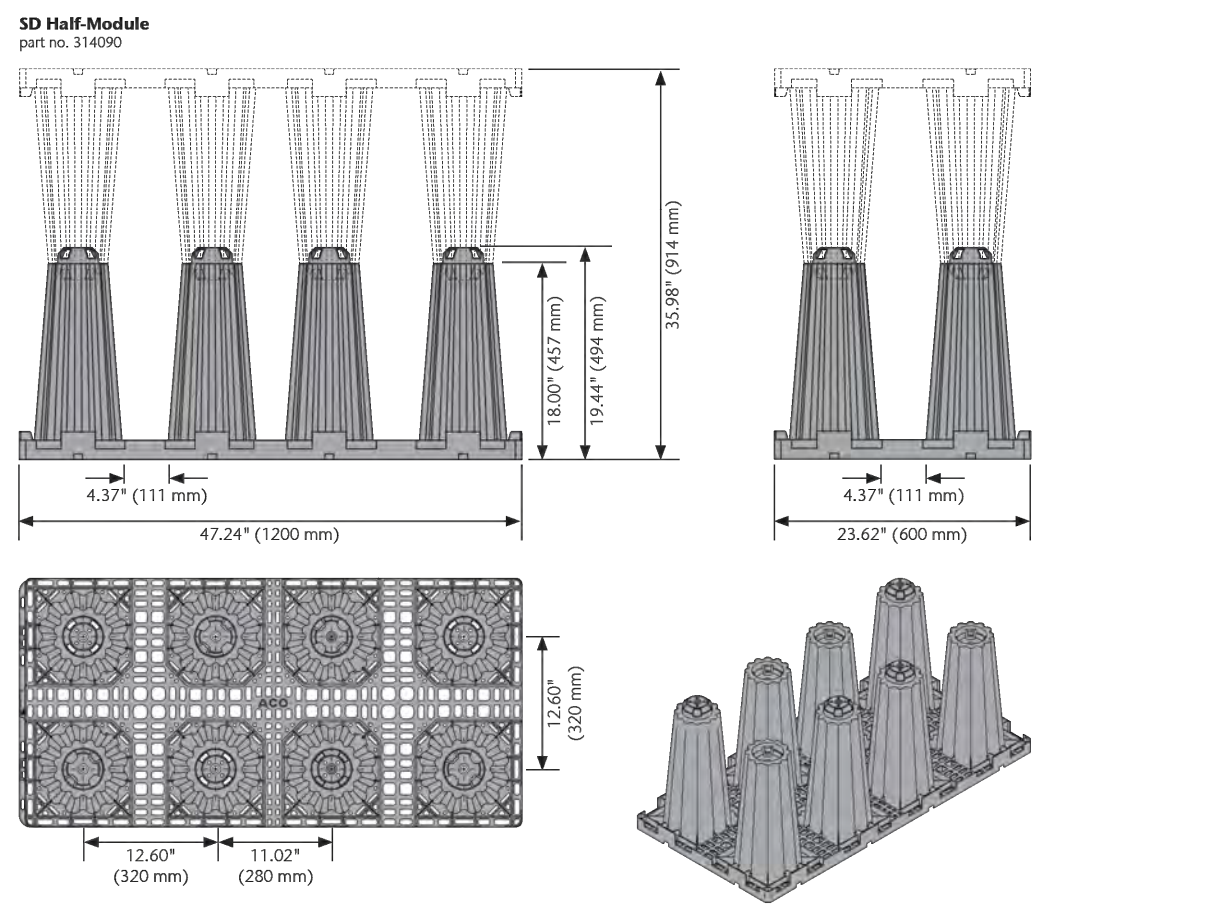
Assumptions  
Assembly rate of the StormBrixx system is estimated to be 2.35 seconds per cubic foot (1.5 mins/m³) for SD and 3.4 seconds per cubic foot (2 mins/m³) for HD.  
The assembly time is based on two workers, and one machinery operator lifting pallets into the hole. It does not include hole excavation, base preparation and compaction, nor laying of the geotextile membranes. It is the assembly time for building the StormBrixx tank only and does not include pipe connections.

Disclaimer  
Assembly times are accurate to the best of ACO Inc.'s knowledge, testing and observation. These times should be used for guidance only. Every site installation will be different and local conditions may vary. Installing contractor should determine the accuracy of installed times accordingly.

WEST SALES OFFICE  
825 W. BECHCRAFT ST.  
CASA GRANDE, AZ 85122  
Tel: (888) 490-9552  
Fax: (520) 421-9899

Page 2

#### ACO StormBrixx® SD Stormwater Detention/Infiltration/Retention System



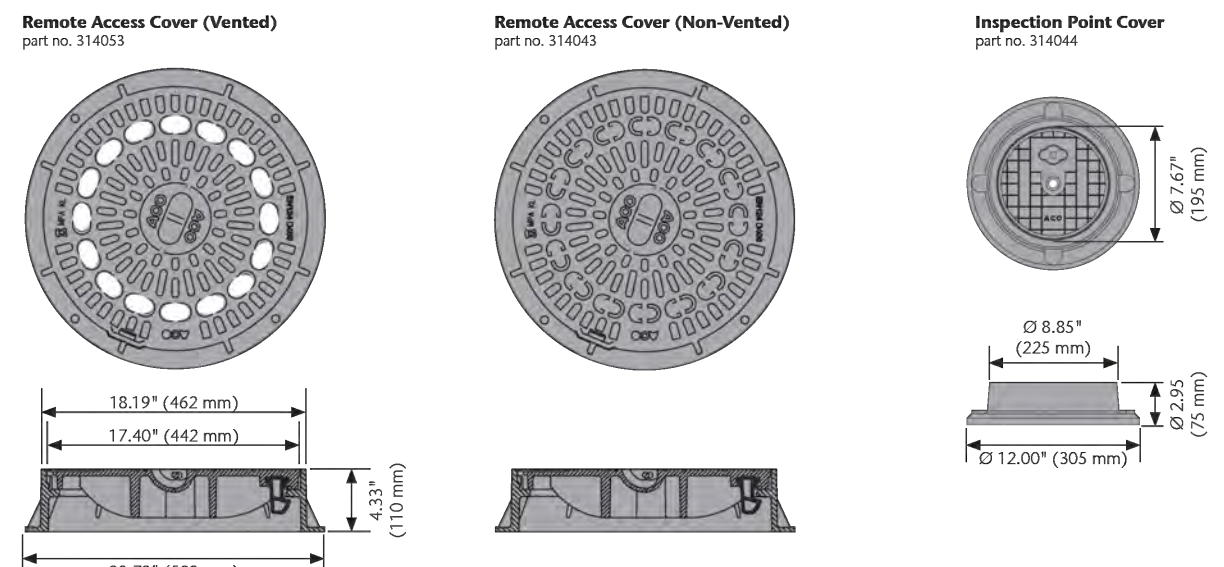
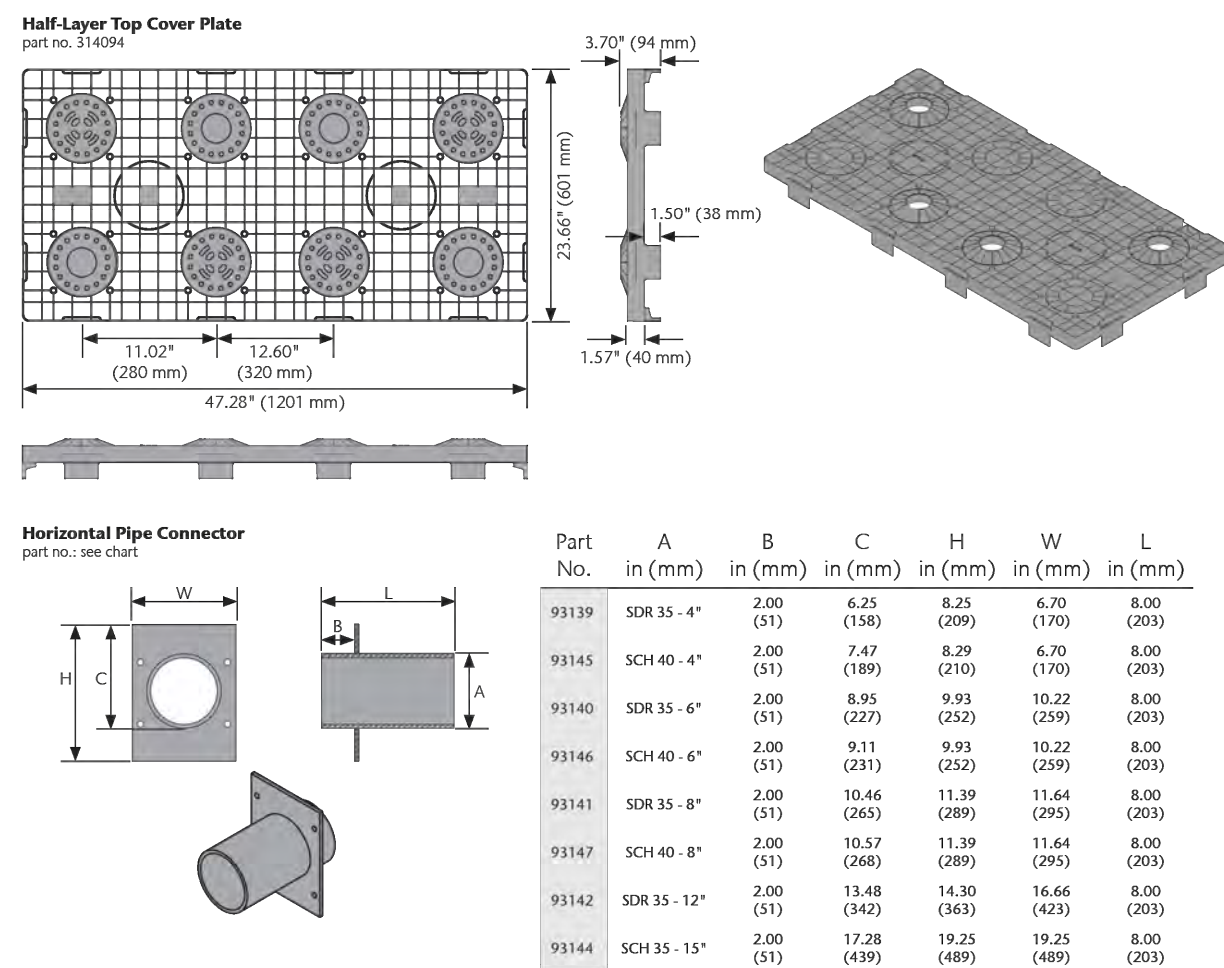
West Tel: (888) 490-9552  
East Tel: (500) 543-4764

1

www.acostormbrixx.us  
info@acousa.com

ACO Specification Information

#### ACO StormBrixx® SD Stormwater Detention/Infiltration/Retention System



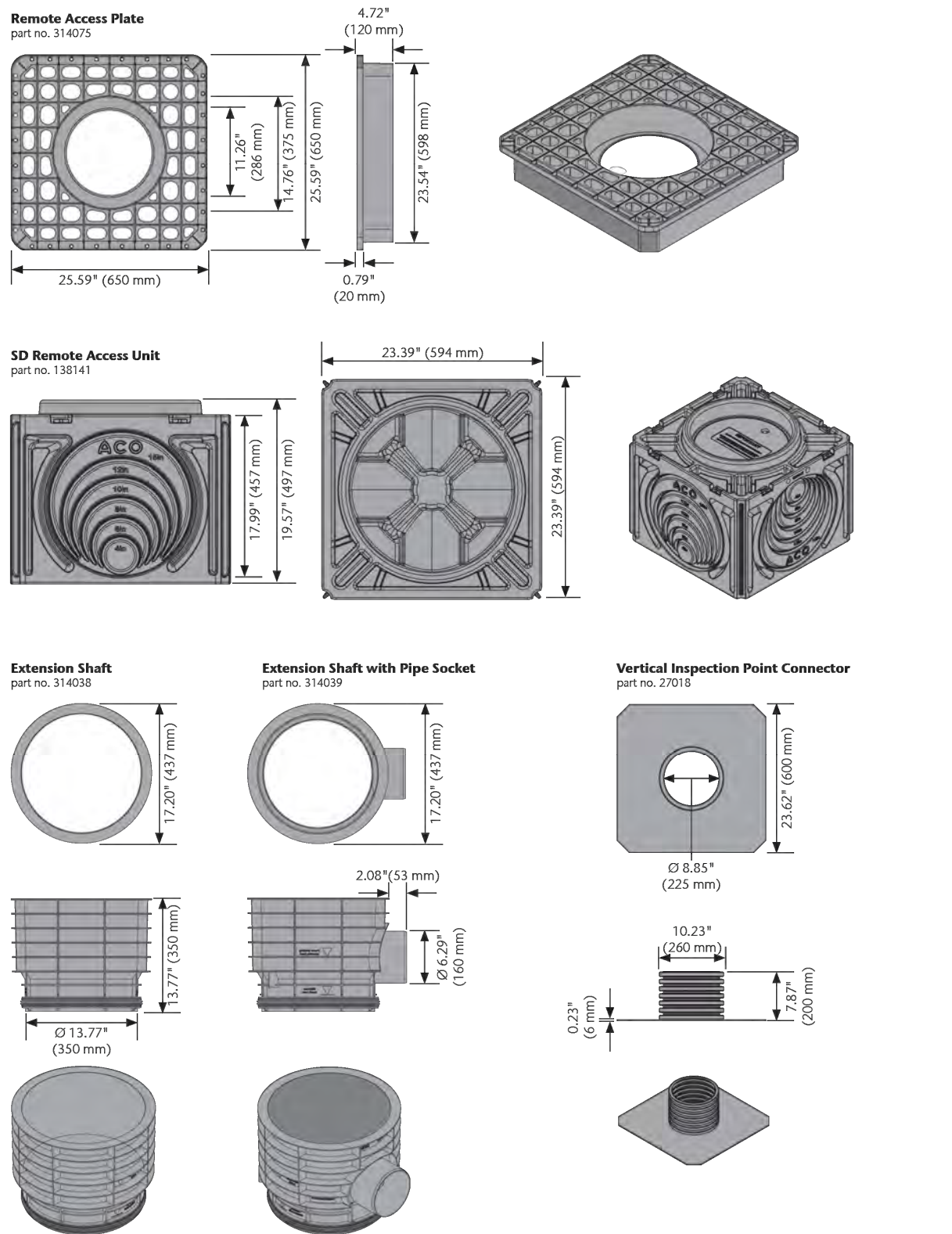
West Tel: (888) 490-9552  
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2

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ACO Specification Information

#### ACO StormBrixx® SD Stormwater Detention/Infiltration/Retention System



West Tel: (888) 490-9552  
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#### ACO StormBrixx® SD Stormwater Detention/Infiltration/Retention System

ACO StormBrixx SD Parts Table	Part No.	Length in (mm)	Width in (mm)	Depth in (mm)	Weight lbs (kg)
SD Half Module	314090	47.24 (1200)	23.62 (600)	19.45 (494)	21.60 (9.80)
SD Side Panel	314091	35.71 (907)	23.31 (592)	1.57 (40)	7.20 (3.30)
SD Half-Layer Side Panel	314098	17.85 (454)	23.31 (592)	1.57 (40)	3.40 (1.54)
SD Top Cover	314092	21.65 (550)	21.65 (550)	1.96 (50)	1.60 (0.70)
Half-Layer Top Cover Plate	314094	47.25 (1200)	23.63 (600)	3.70 (94)	7.70 (3.50)
SD Remote Access Unit	138141	23.39 (594)	23.39 (594)	19.57 (497)	40.00 (18.12)
SD Layer Connector	314093	2.11 (54)	1.75 (44)	1.05 (27)	0.03 (0.02)
Remote Access Plate	314075	25.59 (650)	25.59 (650)	4.72 (120)	10.78 (4.90)
Remote Access Cover - Ductile Iron (Load Class D400)	314043	-	Ø 20.79 (528)	4.34 (110)	86.46 (39.30)
Remote Access Ventid Cover - Ductile Iron (Load Class D400)	314053	-	Ø 20.79 (528)	4.34 (110)	83.60 (38.00)
Inspection Point Cover - Ductile Iron (Load Class D400)	314044	-	Ø 8.85 (225)	2.95 (75)	34.54 (15.70)
Extension Shaft	314038	-	Ø 17.21 (437)	13.78 (350)	4.84 (2.60)
Extension Shaft with Pipe Socket	314039	-	Ø 17.21 (437)	13.78 (350)	6.16 (2.80)
Vertical Inspection Point Connector	27018	-	Ø 8.85 (225)	7.87 (200)	5.52 (2.50)
Horizontal Pipe Connectors					
SDR 35 - 4"	93139		4.00" (102)		1.9 (0.87)
SDR 40 - 4"	93145		4.00" (102)		1.9 (0.87)
SDR 35 - 6"	93140		6.00" (152)		3.2 (1.49)
SCH 40 - 6"	93146	8.00 (203)	6.00" (152)		3.20 (1.49)
SDR 35 - 8"	93141		8.00" (203)		5.52 (2.50)
SCH 40 - 8"	93147		8.00" (203)		5.52 (2.50)
SDR 35 - 12"	93142		12.00" (305)		5.52 (2.50)
SDR 35 - 15"	93144		15.00" (381)		5.52 (2.50)

#### ACO, Inc.

West Sales Office  
825 W. Bechcraft Street  
Casa Grande, AZ 85122  
Tel: (520) 421-9888  
Toll-Free: (888) 490-9552  
Fax: (520) 421-9899

Northeast Sales Office  
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Mentor, OH 44060  
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Toll-Free: (800) 543-4764  
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Southeast Sales Office  
4211 Pleasant Road  
Fort Mill, SC 29708  
Tel: (800) 543-4764  
Toll-Free: (800) 543-4764  
Fax: (803) 802-1063

info@acousa.com  
www.acousa.com

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All reasonable care has been taken in compiling the information in this document. All recommendations and suggestions on the use of ACO products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to ensure that each product is fit for its intended purpose and that the actual conditions of use are suitable. ACO, Inc. reserves the right to change products and specifications without notice.

ACO, creating the future of drainage



West Tel: (888) 490-9552  
East Tel: (500) 543-4764

4

www.acostormbrixx.us  
info@acousa.com

ACO Specification Information



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LAYTON  
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CEDAR CITY  
Phone: 435.865.1453

RICHFIELD  
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FOR:  
ICON DEVELOPMENT, LLC  
3410 NORTH MOYLE LANE  
ERDA, UTAH, 84074

CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

BLUE SPRUCE SUBDIVISION  
FINAL  
QUIRK STREET  
GRANTSVILLE CITY, UTAH



STORM BRIXX DESIGN

PROJECT NUMBER  
T1216E

PRINT DATE  
2022-09-02

DRAWN BY  
C. CHILD

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
C. CHILD

C-202



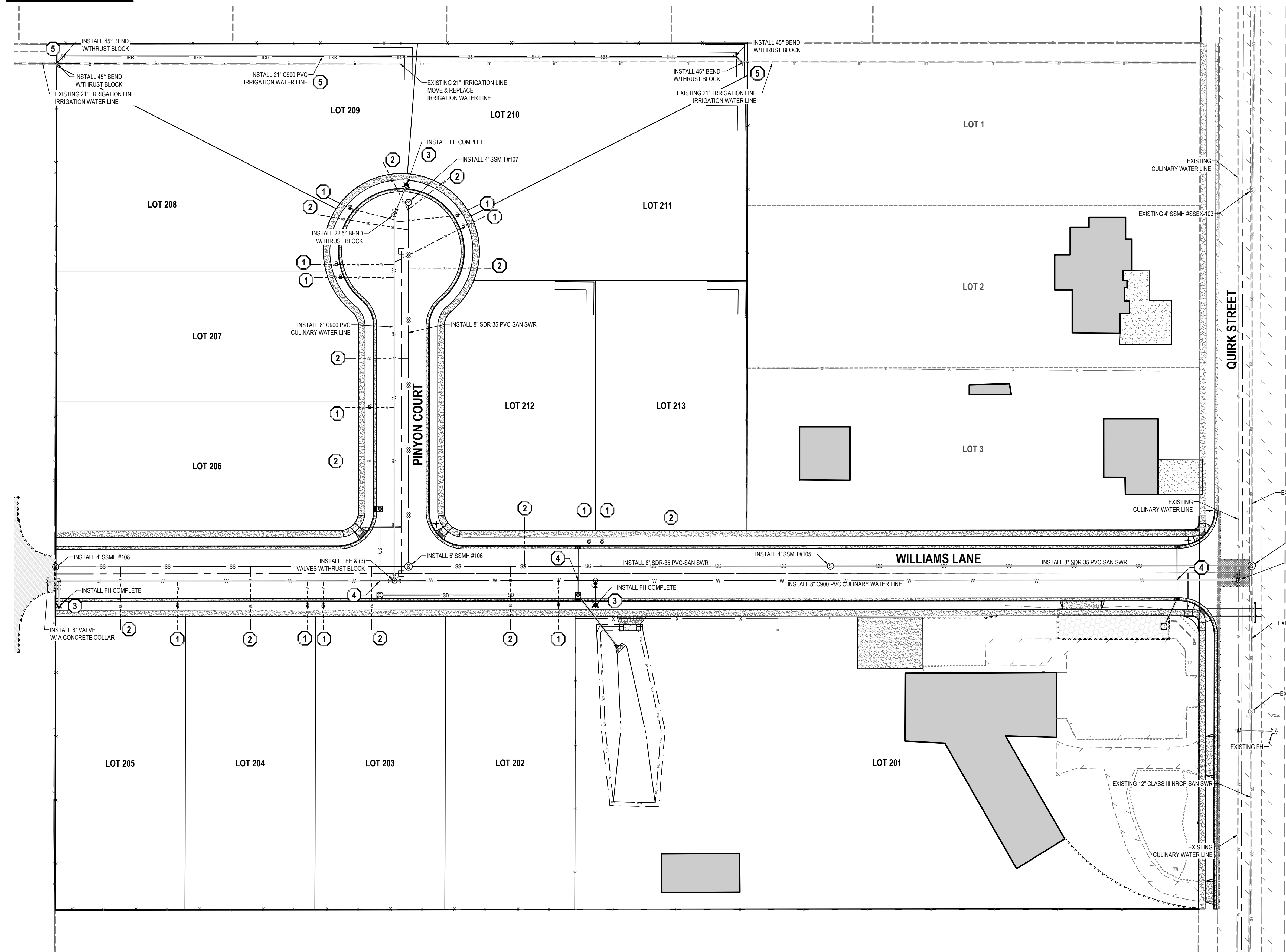
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BENCHMARK

NORTH QUARTER CORNER OF SECTION 7,  
TOWNSHIP 3 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN  
(2.5" BRASS TOOLEE COUNTY SURVEY  
MONUMENT ON 4" PIPE, DATED 1986)  
ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)



- GENERAL NOTES
1.

ALL WORK TO COMPLY WITH THE GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
2.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
3.

ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY STANDARD PLANS AND SPECIFICATIONS.
4.

ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY OR APWA STANDARD PLANS AND SPECIFICATIONS.
5.

NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
6.

DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
7.

PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION.
8.

THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
9.

THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
10.

THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
11.

GRADING PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEER AT 435-884-1661.
12.

RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM GRANTSVILLE CITY PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT-OF-WAY, OR ON ANY STATE ROADS.

- SCOPE OF WORK:
- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

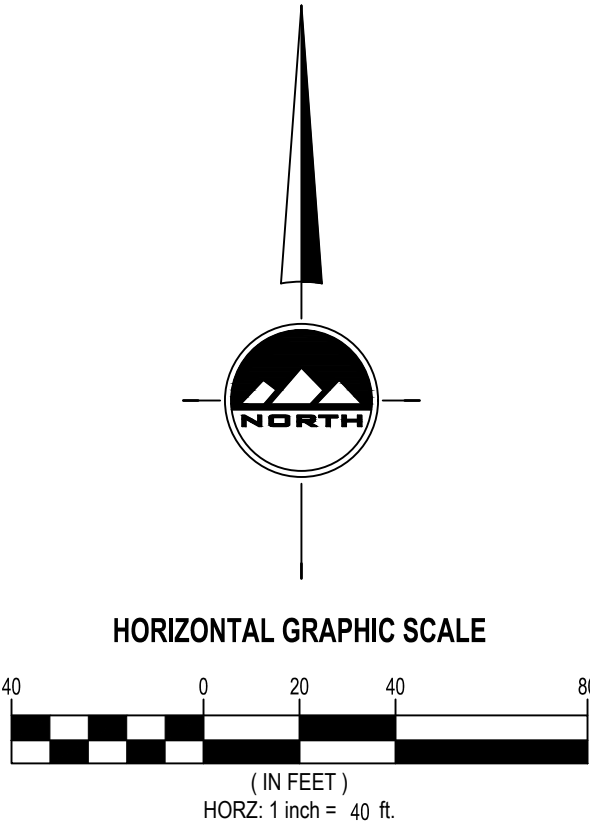
INSTALL 3/4" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 3/4" METER SET PER GRANTSVILLE CITY STANDARD PLAN, LOCATED APPROX. 5' FROM OPPOSITE LOT CORNER OF SECONDARY WATER SERVICE LATERAL TO BE EXTENDED 15' FROM BACKSIDE OF SIDEWALK. CONTRACTOR TO MAINTAIN 15' OF SEPARATION BETWEEN INTERSECTING PIPE LINES PER APWA STANDARD PLAN #541, #542 AND #551. TYPICAL.
- 2

INSTALL 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN #431. CONTRACTOR TO MAINTAIN 15' OF SEPARATION BETWEEN INTERSECTING PIPE LINES. TYPICAL.
- 3

FIRE HYDRANT ASSEMBLY COMPLETE PER CITY STANDARDS AND SPECIFICATIONS. PAINT CURB RED 15' BOTH DIRECTIONS FROM HYDRANT.
- 4

CONTRACTOR TO MAINTAIN 15' OF SEPARATION BETWEEN INTERSECTING PIPE LINES. LOOP CULINARY WATER LINE PER GRANTSVILLE CITY AND APWA PLAN #543.1, #543.2, #562 STANDARDS AND SPECIFICATIONS.
- 5

COORDINATE WITH GRANTSVILLE IRRIGATION TO UPGRADE AND MOVE IRRIGATION LINE TO CENTER OF EXISTING EASEMENT.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

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CONTACT:  
SEAN PERKINS  
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BLUE SPRUCE SUBDIVISION

FINAL

QUIRK STREET

GRANTSVILLE CITY, UTAH

REGISTERED PROFESSIONAL ENGINEER

2-09-08

10924116-2202

COREY J. CHILD

STATE OF UTAH

NO.	DATE	REVISION	BY
1		FOR REVIEW	
2			
3			
4			
5			
6			
7			
8			

UTILITY PLAN

PROJECT NUMBER  
T1216E

PRINT DATE  
2022-09-02

DRAWN BY  
C. CHILD

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
C. CHILD

C-300



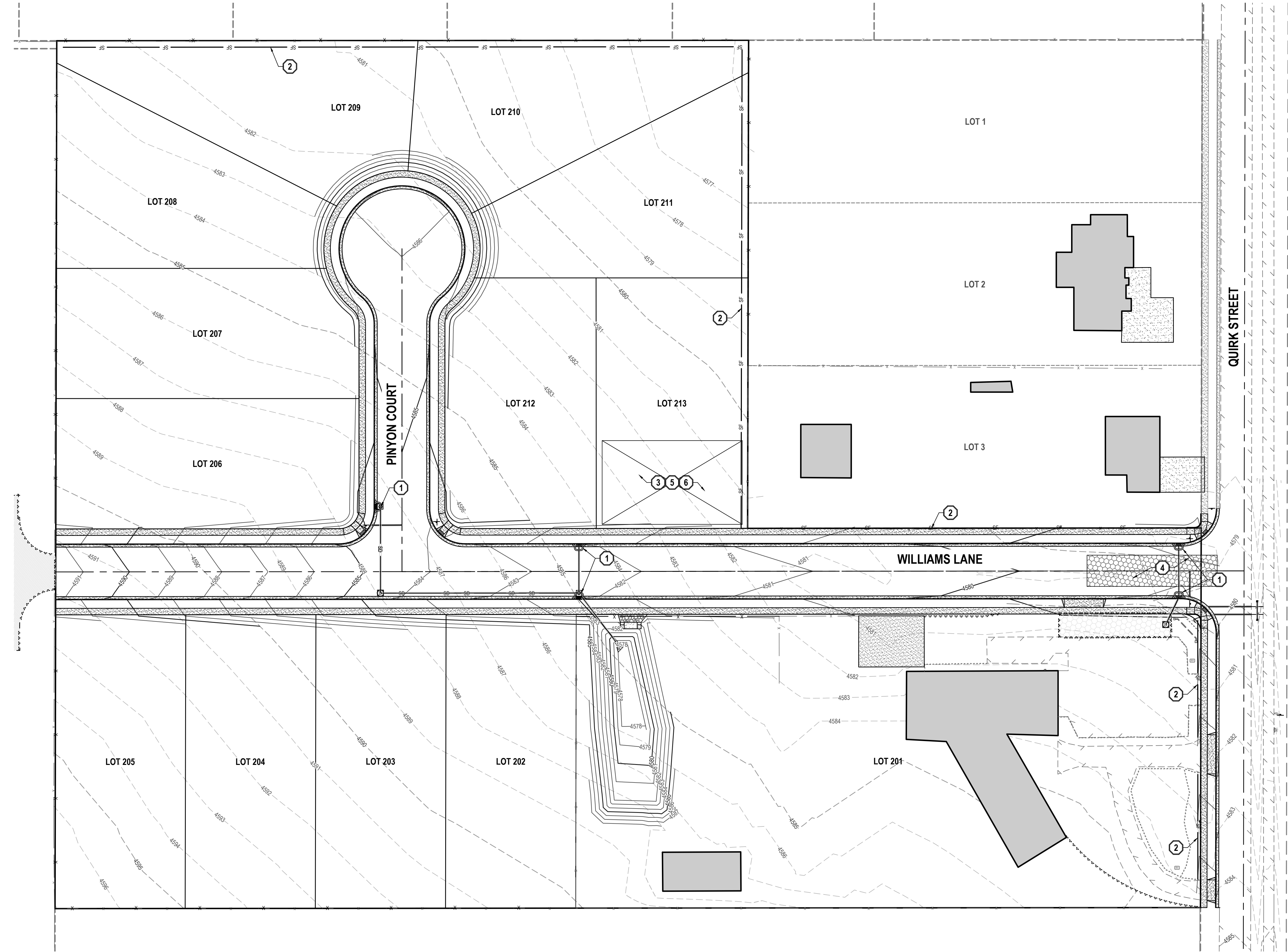
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BENCHMARK

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MONUMENT ON 4" PIPE, DATED 1986)  
ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)



- GENERAL NOTES
1.

THIS PLAN IS DESIGNED AS A FIRST APPRAISAL OF NECESSARY MEANS TO PROTECT THE WATERS OF THE STATE FROM POTENTIAL POLLUTION. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO ADD WARRANTED BEST MANAGEMENT PRACTICES (BMP'S) AS NECESSARY, MODIFY THOSE SHOWN AS APPROPRIATE, AND DELETE FROM THE PROJECT THOSE FOUND TO BE UNNECESSARY. FEDERAL AND STATE LAW ALLOWS THESE UPDATES TO BE MADE BY THE OWNER/OPERATOR ONSITE AND RECORDED BY THE OWNER/OPERATOR ON THE COPY OF THE SWPPP KEPT ONSITE.
2.

DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. HOWEVER, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3.

RESEED DISTURBED LAND WITH NATIVE GRASS MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE TO STABILIZE SOILS IF LAND IS NOT TO BE RE-WORKED WITHIN 14 CALENDAR DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
4.

DETAILS SHOWN ARE TO BE EMPLOYED TO PROTECT RUNOFF AS APPROPRIATE DURING CONSTRUCTION. NOT ALL DETAILS ARE NECESSARY AT ALL PHASES OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE APPROPRIATE BEST MANAGEMENT PRACTICES AT THE APPROPRIATE PHASE OF CONSTRUCTION. SEE SWPPP FOR BMP IMPLEMENTATION SCHEDULE.
5.

VARIOUS BEST MANAGEMENT PRACTICES HAVE BEEN SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE AND RECONFIGURE THESE BMP'S TO OTHER LOCATIONS IF PREFERRED, PROVIDED THE INTENT OF THE DESIGN IS PRESERVED.
6.

NOT ALL POSSIBLE BMP'S HAVE BEEN SHOWN. THE CONTRACTOR IS RESPONSIBLE TO APPLY CORRECT MEASURES TO PREVENT THE POLLUTION OF STORM WATER PER PROJECT SWPPP.
7.

A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE.

- SCOPE OF WORK:
- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

INLET PROTECTION PER DETAIL 3/D-500.
- 2

SILT FENCE PER DETAIL 4/D-500.
- 3

PORTABLE TOILET PER DETAIL 6/D-500.
- 4

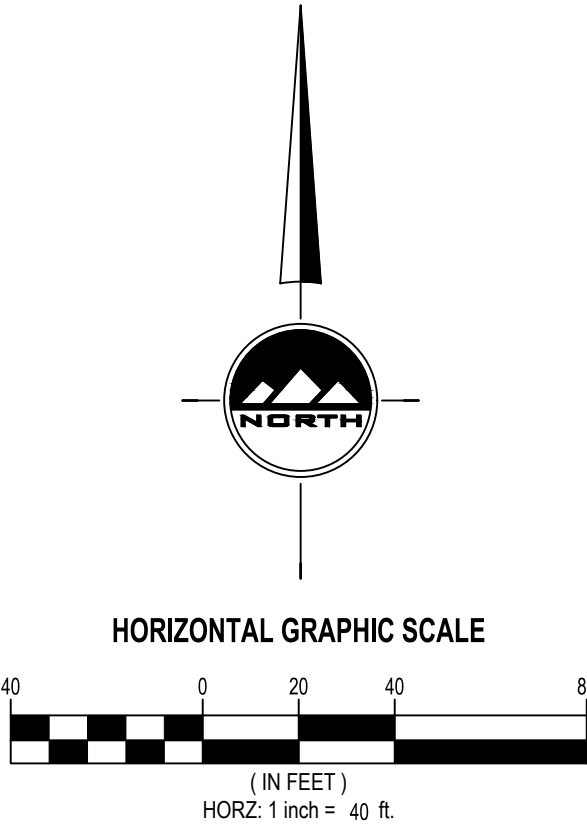
VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 5/D-500.
- 5

SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, STAGING, DUMPSTER, AND MATERIAL STORAGE AREA.
- 6

SUGGESTED STOCKPILE AREA.
- 7

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

REVISION SCHEDULE			
NUMBER	DATE	AUTHOR	COMPANY REPRESENTATIVE SIGNATURE
1			
2			
3			
4			
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6			
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8			
9			
10			
11			
12			



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ICON DEVELOPMENT, LLC  
3410 NORTH MOYLE LANE  
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CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

BLUE SPRUCE SUBDIVISION

FINAL

QUIRK STREET

GRANTSVILLE CITY, UTAH

2-09-02

10924116-2202

COREY J. CHILD

STATE OF UTAH

NO.

DATE

REVISION

BY

1

2

3

4

5

6

7

8

EROSION CONTROL PLAN

PROJECT NUMBER  
T1216E

PRINT DATE  
2022-09-02


DRAWN BY  
C. CHILD

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
C. CHILD

C-400

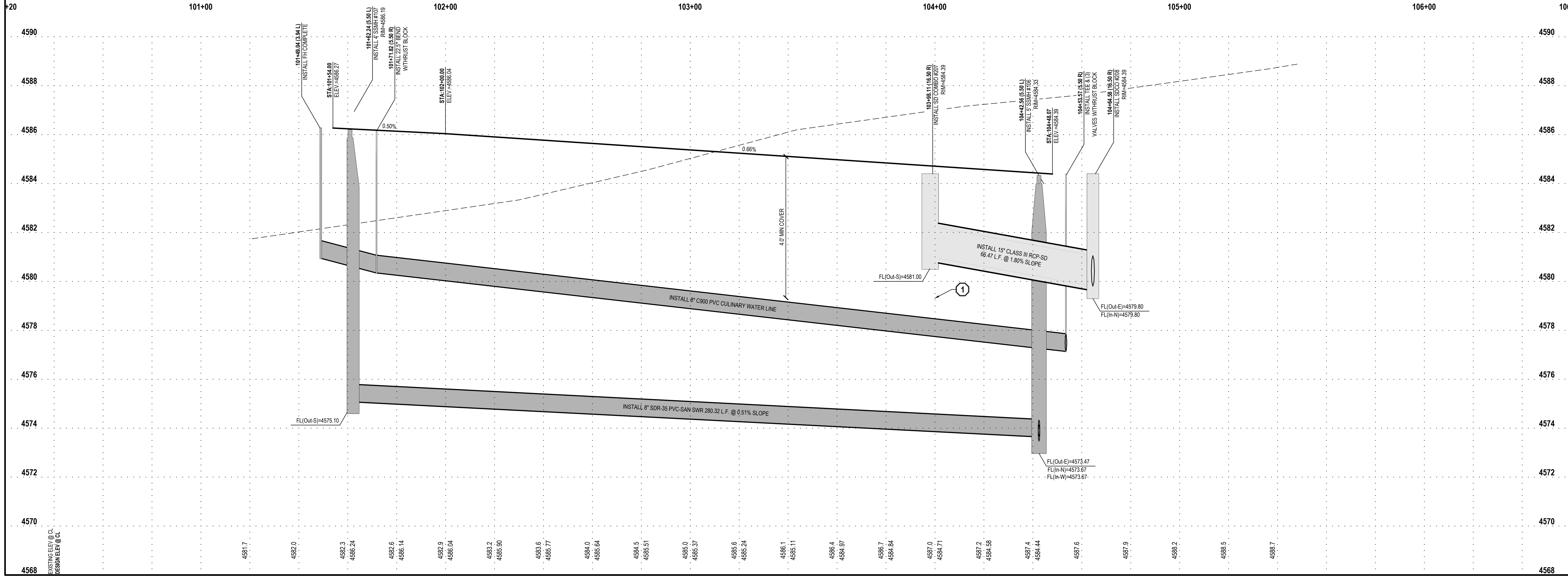
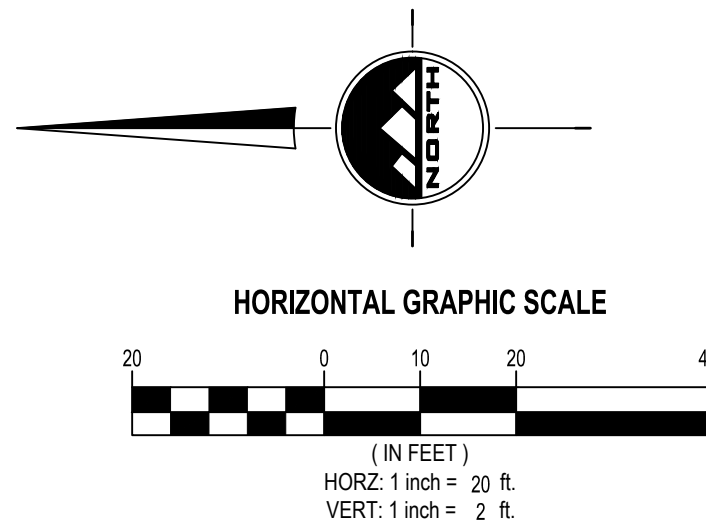
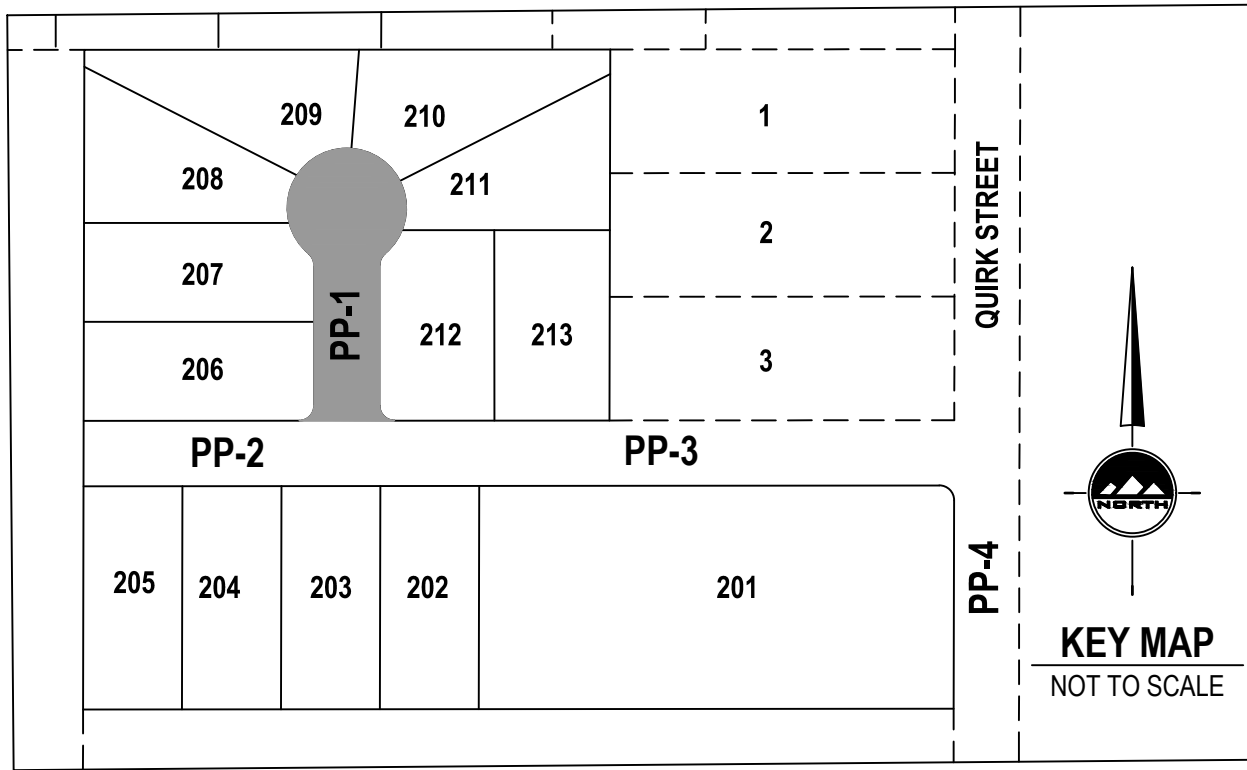
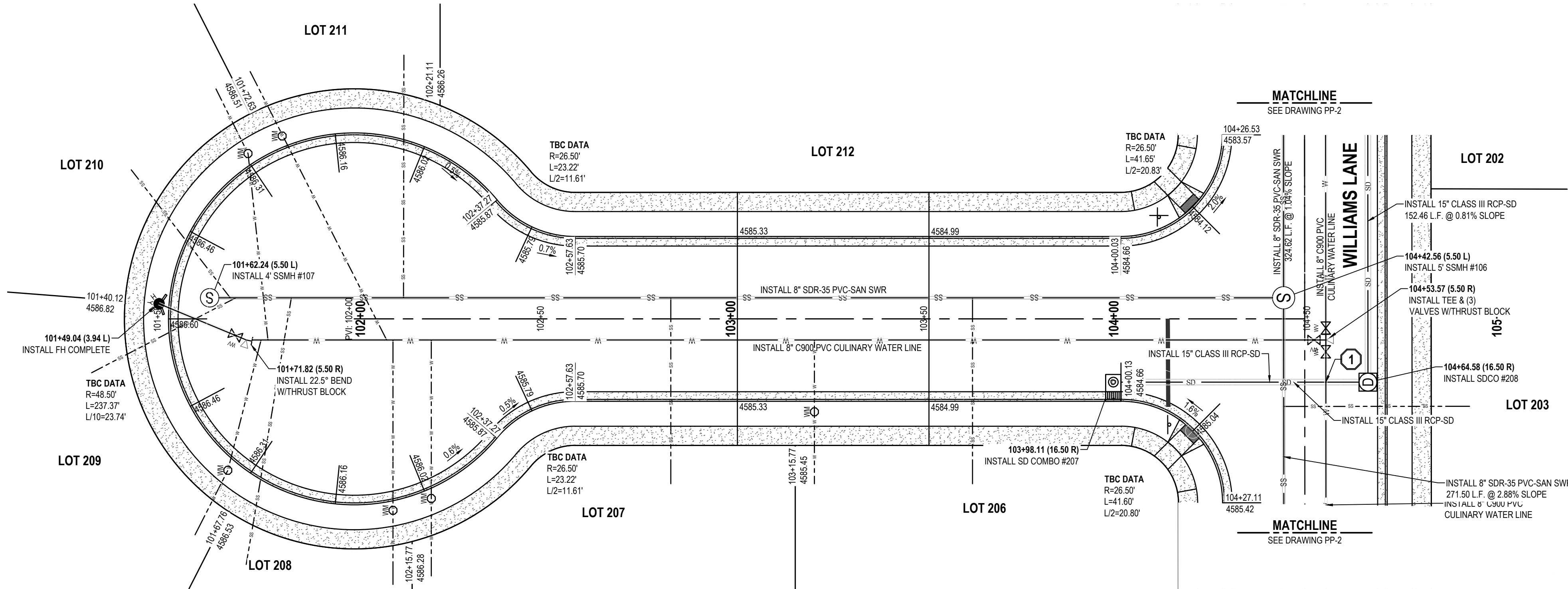





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**BENCHMARK**

NORTH QUARTER CORNER OF SECTION 7,  
TOWNSHIP 3 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN  
(2.9" BRASS TOOLE COUNTY SURVEY  
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ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)





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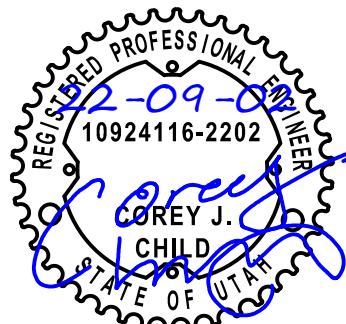
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PHONE: 435-850-8436

**BLUE SPRUCE SUBDIVISION**

**FINAL**

**QUIRK STREET**

**GRANTSVILLE CITY, UTAH**

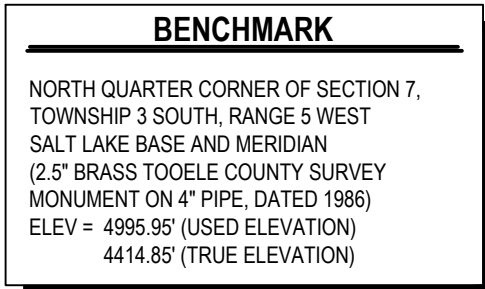


**STREET PLAN AND PROFILE**

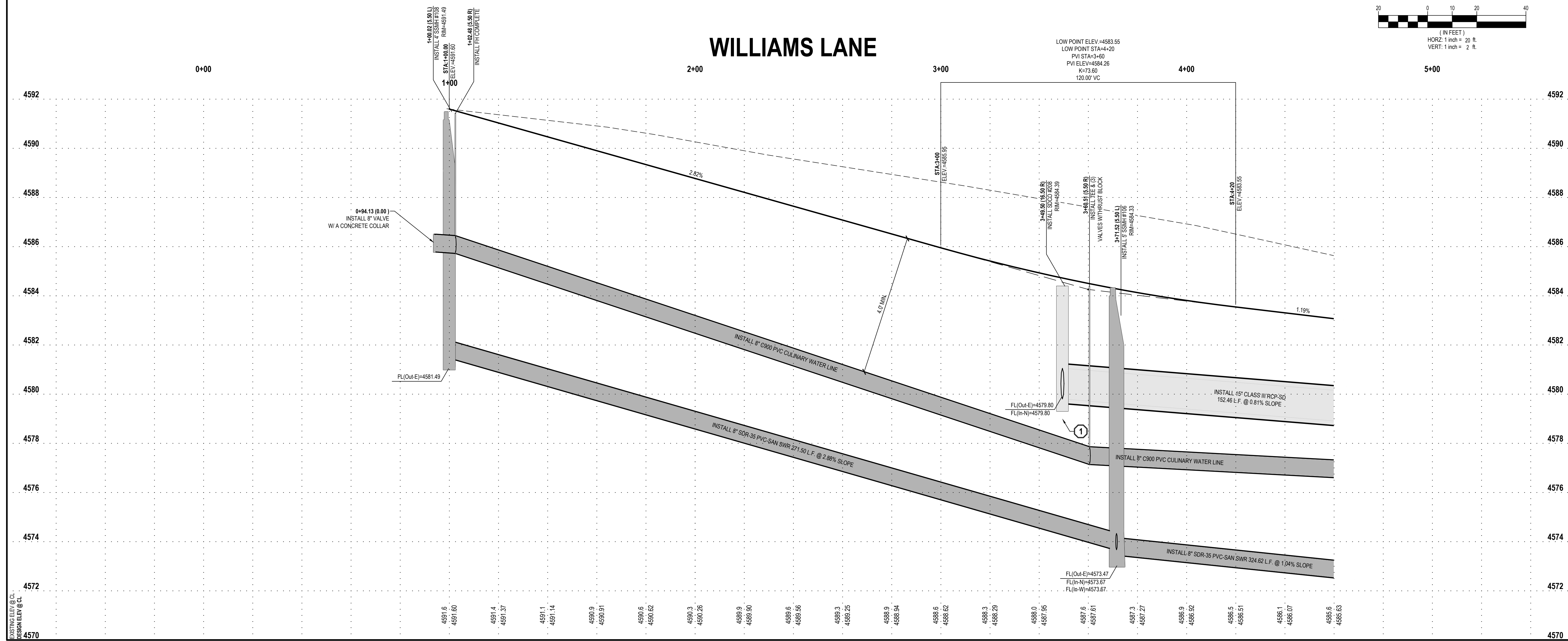
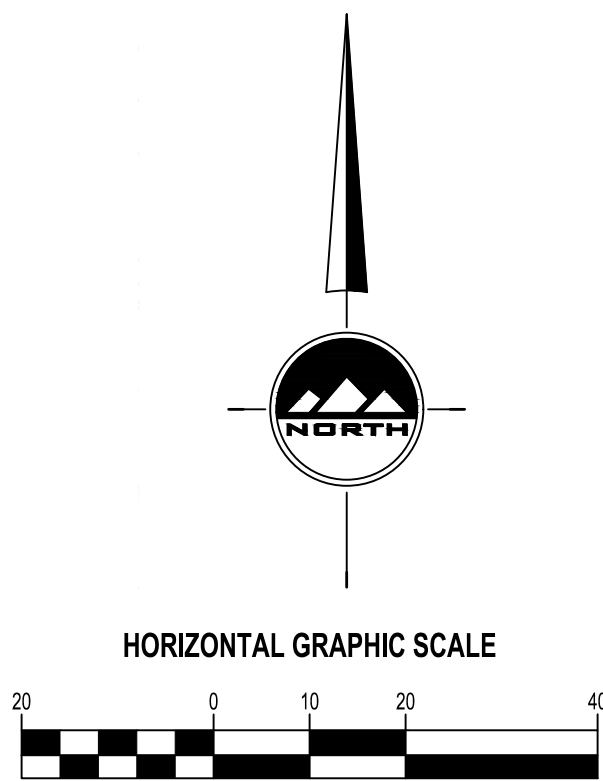
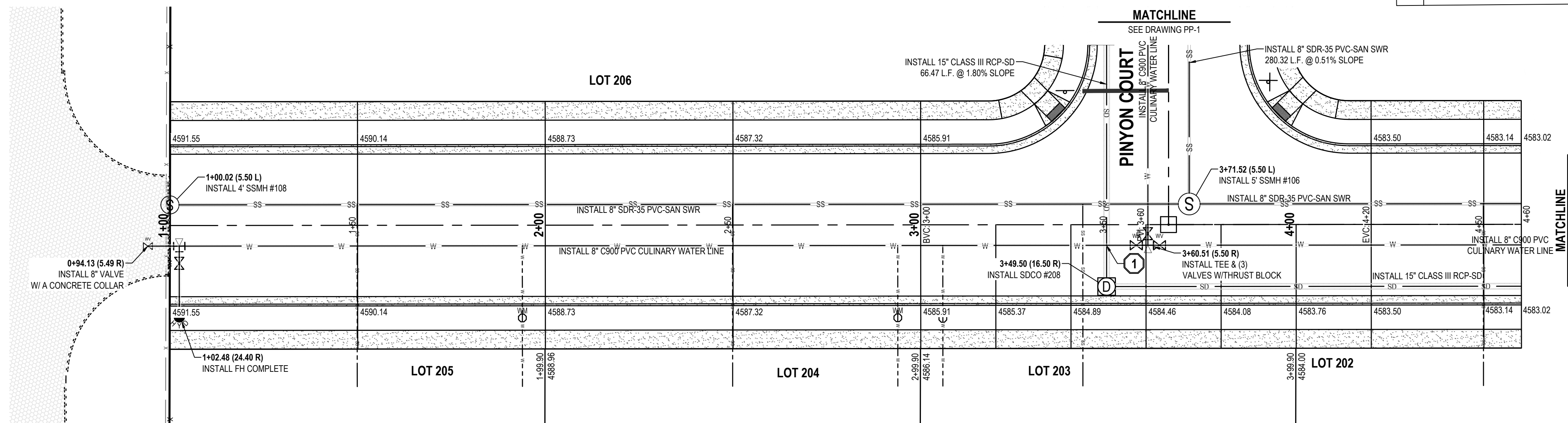
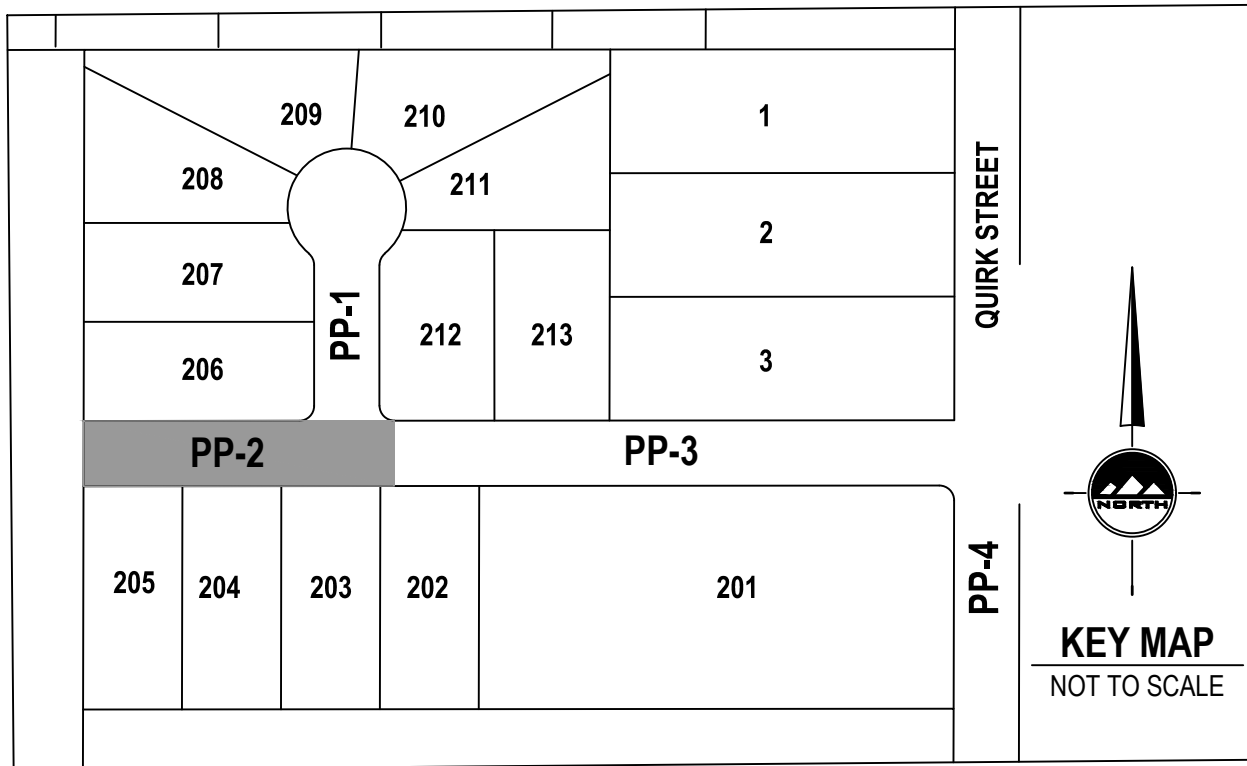
PROJECT NUMBER: T1216E  
PRINT DATE: 10924116-2202  
DRAWN BY: C. CHILD  
CHECKED BY: J. CLEGG  
PROJECT MANAGER: C. CHILD

**PP-1**





1 CONTRACTOR TO MAINTAIN 18" OF SEPARATION BETWEEN INTERSECTING PIPE LINES. LOOP CULINARY WATER LINE PER GRANTSVILLE CITY AND APWA PLAN #543.1, #543.2, #562 STANDARDS AND SPECIFICATIONS.



CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

**BLUE SPRUCE SUBDIVISION  
FINAL  
QUIRK STREET  
GRANTSVILLE CITY, UTAH**



## STREET PLAN AND PROFILE

PROJECT NUMBER  
T1216E

PRINT DATE

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C. CHILD

CHECKED BY  
J. CLEG

PROJECT MANAGER  
C. CHILD

# PP-2





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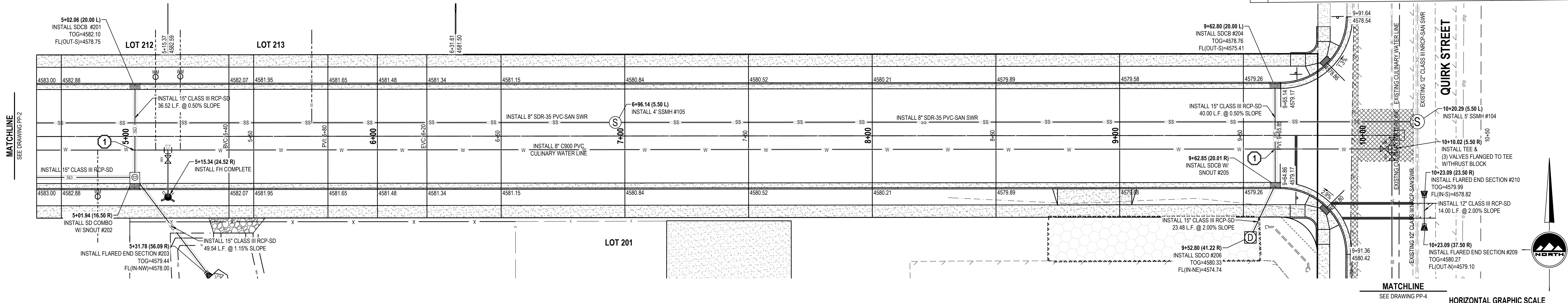
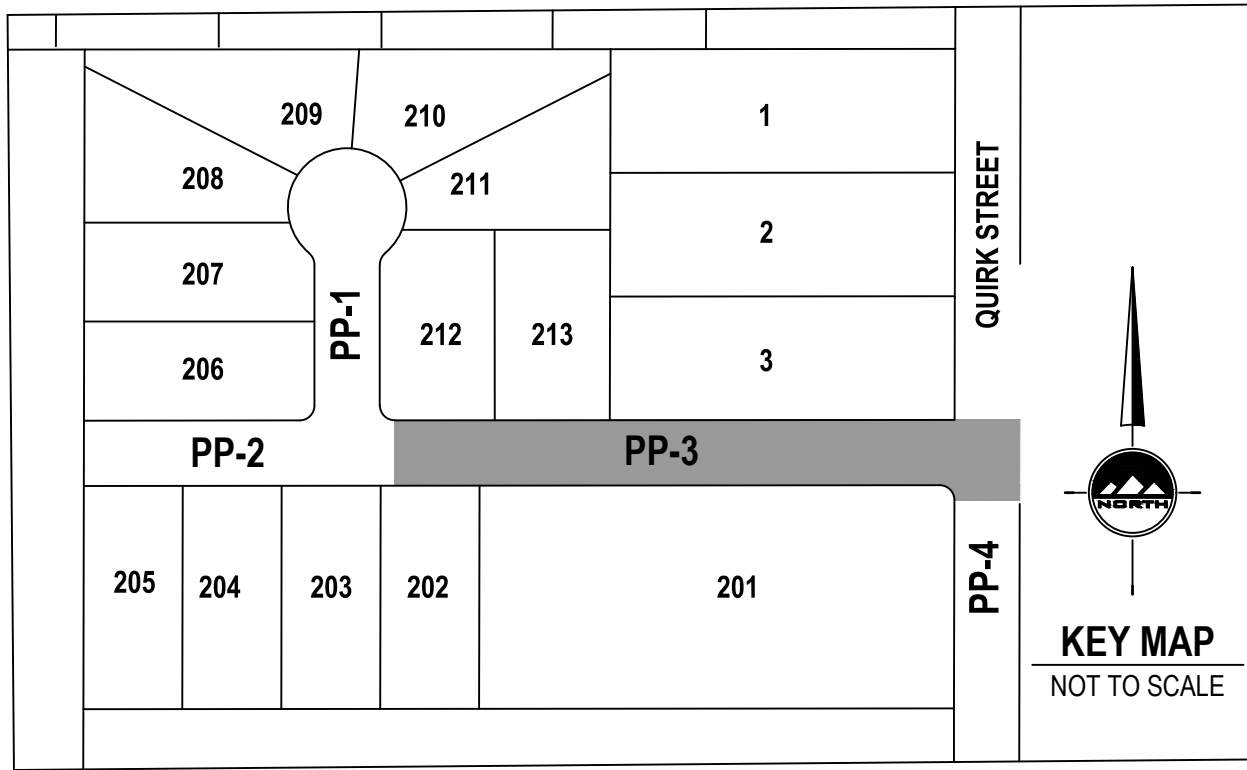
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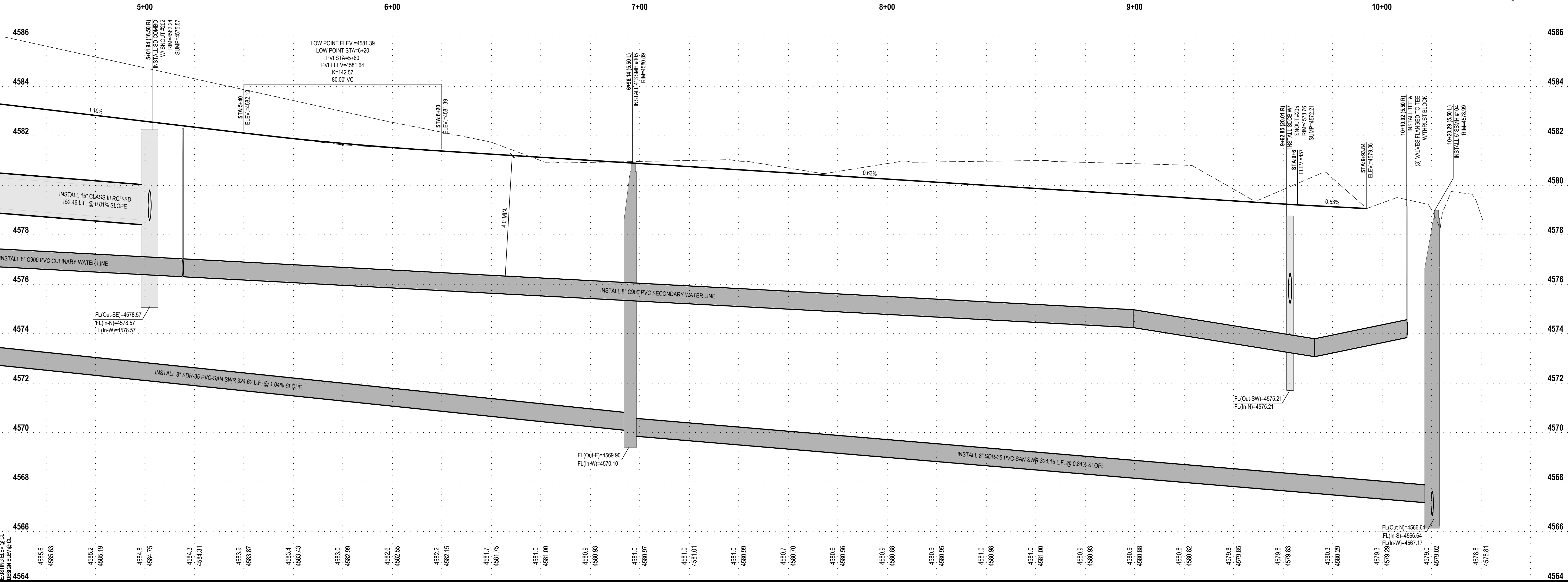
NORTH QUARTER CORNER OF SECTION 7,  
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MONUMENT ON 4" PIPE, DATED 1986)  
ELEV = 4995.95' (USED ELEVATION)  
4414.85' (TRUE ELEVATION)


**SCOPE OF WORK:**  
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER  
THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS  
NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS.

1 CONTRACTOR TO MAINTAIN 18" OF SEPARATION BETWEEN INTERSECTING  
PIPE LINES. LOOP CULINARY WATER LINE PER GRANTSVILLE CITY AND APWA  
PLAN #543.1, #543.2, #562 STANDARDS AND SPECIFICATIONS.



WILLIAMS LANE





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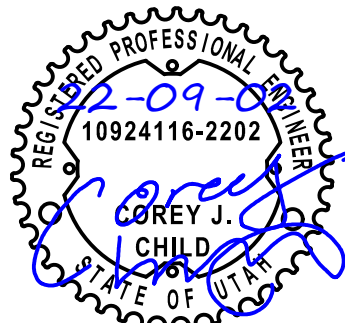
CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

**BLUE SPRUCE SUBDIVISION**

**FINAL**

**QUIRK STREET**

**GRANTSVILLE CITY, UTAH**



10924116-2202

**STREET PLAN  
AND PROFILE**

PROJECT NUMBER  
T1216E

PRINT DATE

DRAWN BY  
C. CHILD

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
C. CHILD

**PP-3**



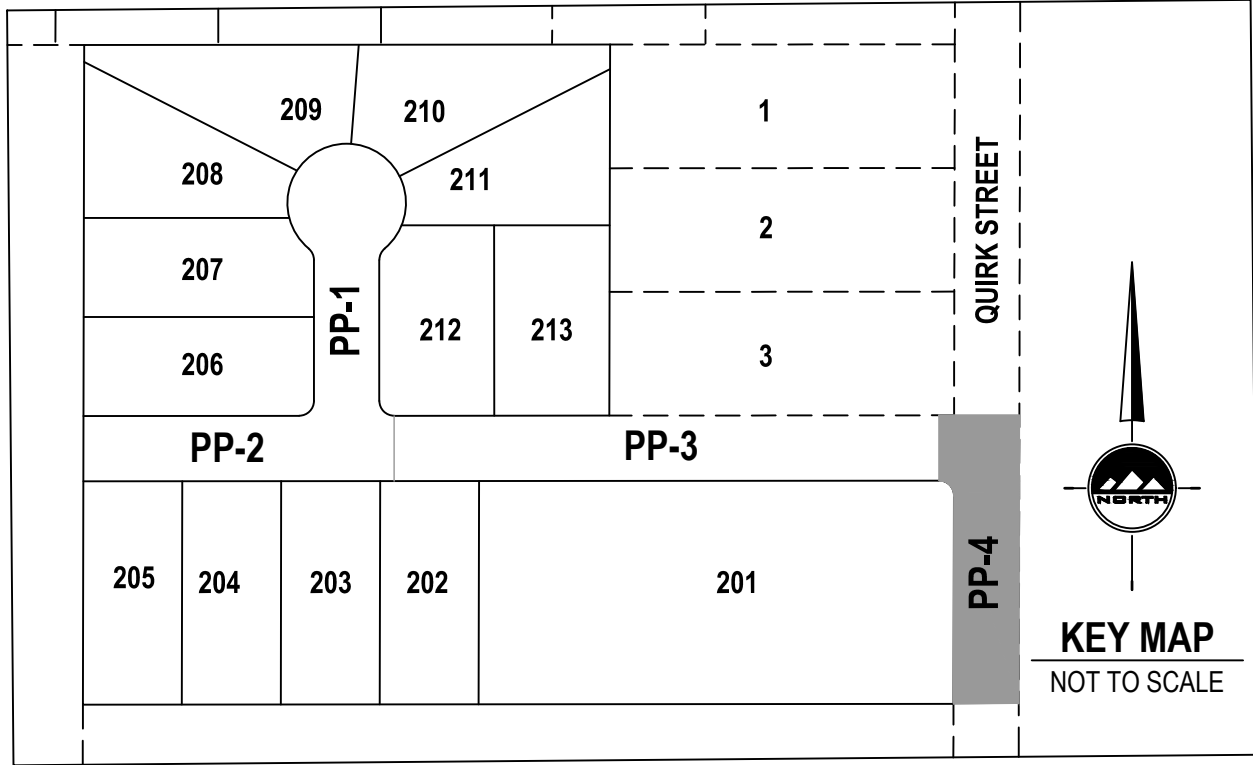
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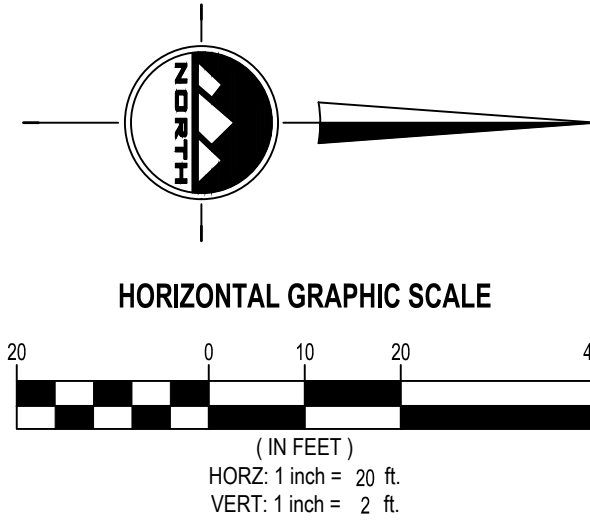
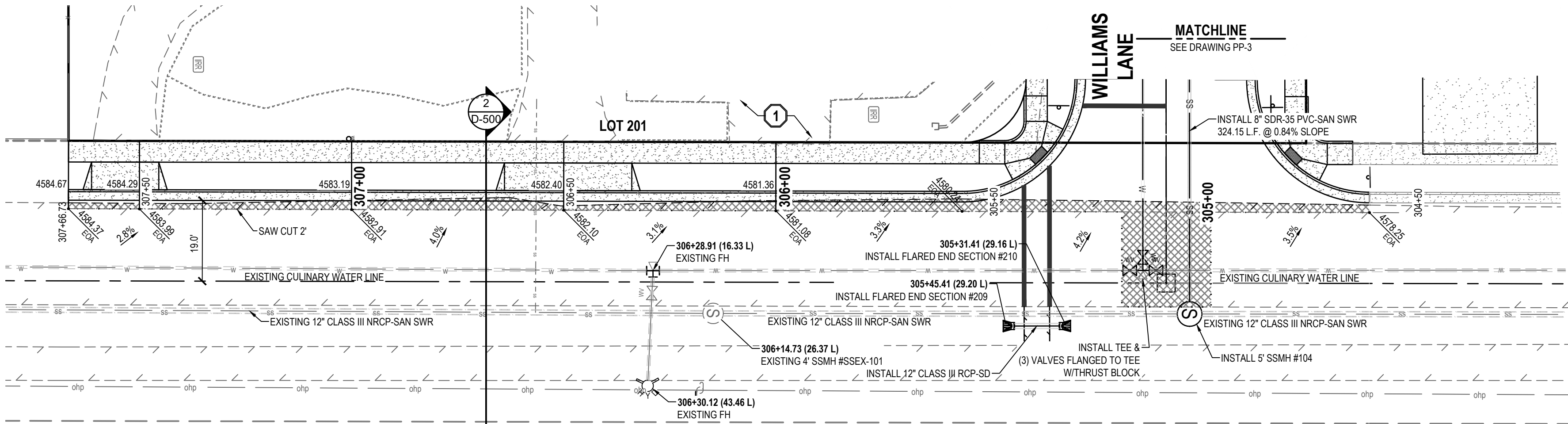
Phone: 435.896.2983

**SCOPE OF WORK:**  
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS.

- 1 THIS ENTRANCE NEEDS TO BE CLOSED OFF AT THE SIDEWALK. IF IT IS NEEDED FOR PARKING TURNS THEN INSTALL BOLLARDS IN PAVEMENT TO PREVENT TRAVEL ONTO THE SIDEWALK.

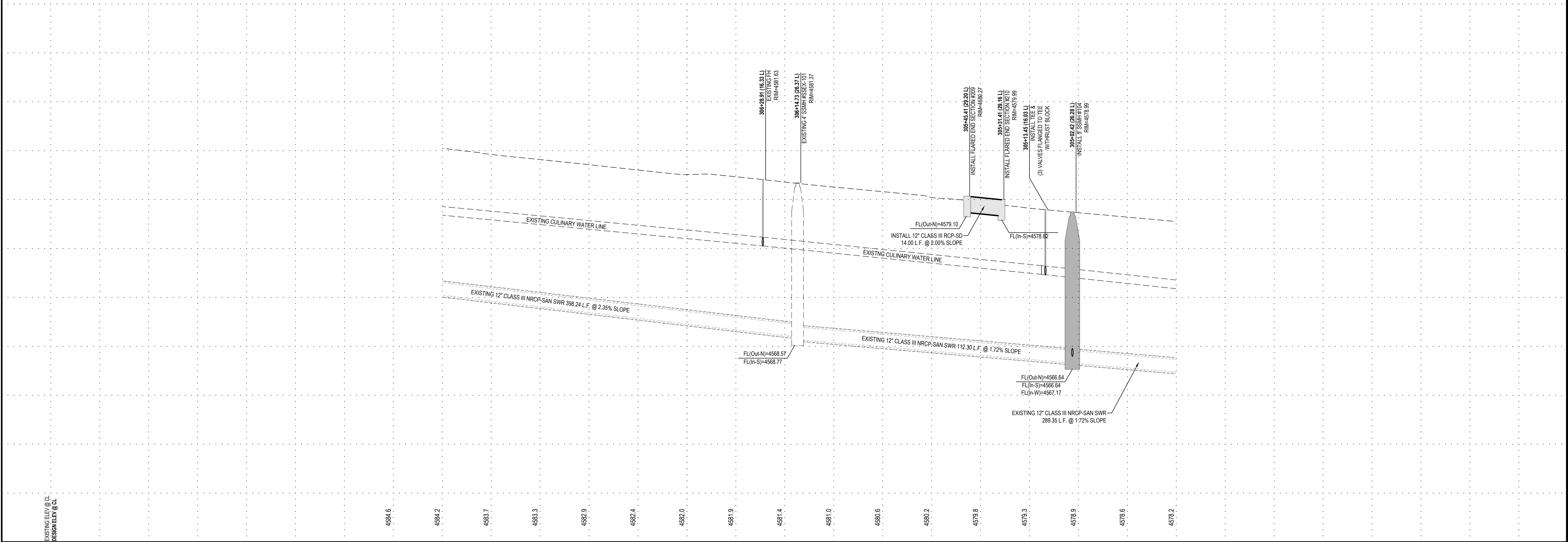
WWW.ENSIGNENG.COM

FOR:  
ICON DEVELOPMENT, LLC  
3410 NORTH MOYLE LANE  
ERDA, UTAH, 84074  
CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436



## QUIRK STREET

+40 309+00 308+00 307+00 306+00 305+00 304+00 303



## BLUE SPRUCE SUBDIVISION FINAL QUIRK STREET GRANTSVILLE CITY, UTAH



### STREET PLAN AND PROFILE

PROJECT NUMBER T1216E	PRINT DATE
DRAWN BY C. CHILD	CHECKED BY J. CLEGG
PROJECT MANAGER C. CHILD	

PP-4



# D-500







When type of maintenance is required?

Inspect rock outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage. Remove any debris that has collected on the outlet pad.

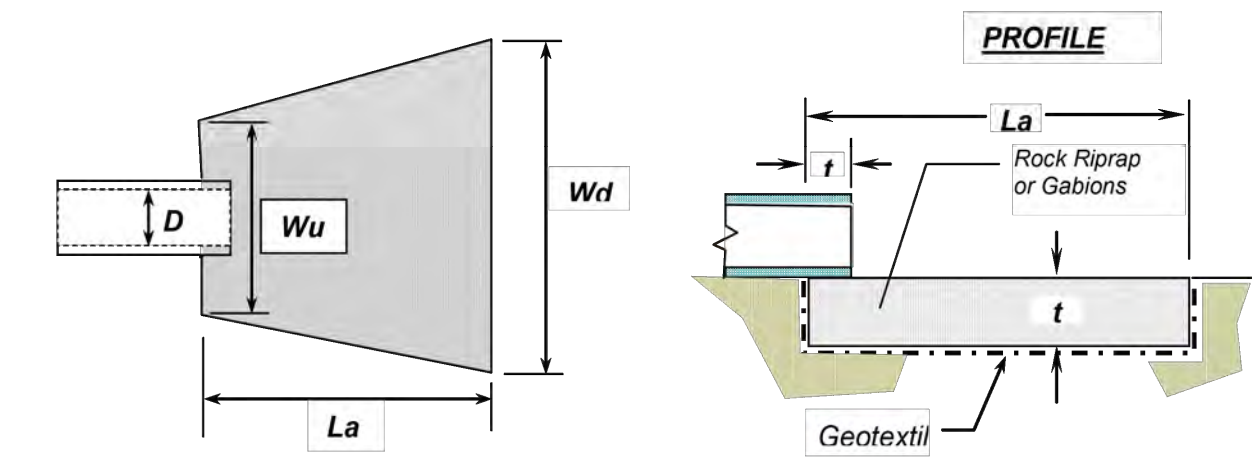


Figure 1 - Typical detail for rock outlet protection below a culvert

Culvert Size D, (inches)	Rock Size d <sub>ro</sub> (inches)	Apron Length La, (feet)	Upstream Width Wu, (feet)	Downstream Width Wd, (feet)	Thickness t, (inches)	Quantity (tons)
12	6	12	3	13	18	15
18	9	16	4.5	18	24	20
21	9	18	5	20	24	35
24	9	20	6	22	24	60
30	9	22	7.5	24	24	75
36	12	24	9	27	30	120
42	18	26	10.5	30	36	180
48	18	28	12	32	36	215

TABLE 1 - Rock outlet protection apron dimensions

Smallest Dimension in Inches					% of rocks small than size shown
Gabion Rock	6" d <sub>ro</sub>	9" d <sub>ro</sub>	12" d <sub>ro</sub>	18" d <sub>ro</sub>	
8	12	15	21	30	100
6	9	12	18	24	50-70
4	6	9	12	18	35-50
3	2	3	4	6	2-10

TABLE 2 - Required rock gradation

**NOTE:** After a fire many trees are weakened from burning around the base of the trunk. The trees can fall over or blow down without warning. Shallow rooted trees can also fall. Therefore be extremely alert when around burned trees.

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USDA NRCS 2012 Fact Sheet

## Rock Outlet Protection



### What is rock outlet protection?

A pad or apron of heavy rock placed at the outlet end of culverts or chutes.

### When is rock outlet protection used?

Rock outlet protection is installed where the energy at the outlets of culverts or chutes are sufficient to erode the receiving channel or area. This fact sheet does not apply to continuous rock linings of channels or streams. Pipes that dump water at the top of a slope, or down slopes steeper than 10 percent, or flow at rates greater than 10 feet per second require a site specific design that is beyond the scope of this fact sheet.

### How is rock outlet protection installed?

**Apron length:** Apron length (*La*) shall be determined from Table 1.

**Apron width:** The apron width is based on the diameter of the discharge pipe (*D*). The apron width will be *3D* at the upstream end (*Wu*), and the downstream width (*Wd*) will be equal to *(D + La)*. The apron shall extend across the channel bottom and up side slopes for a minimum height equal to the diameter of the pipe (*D*).

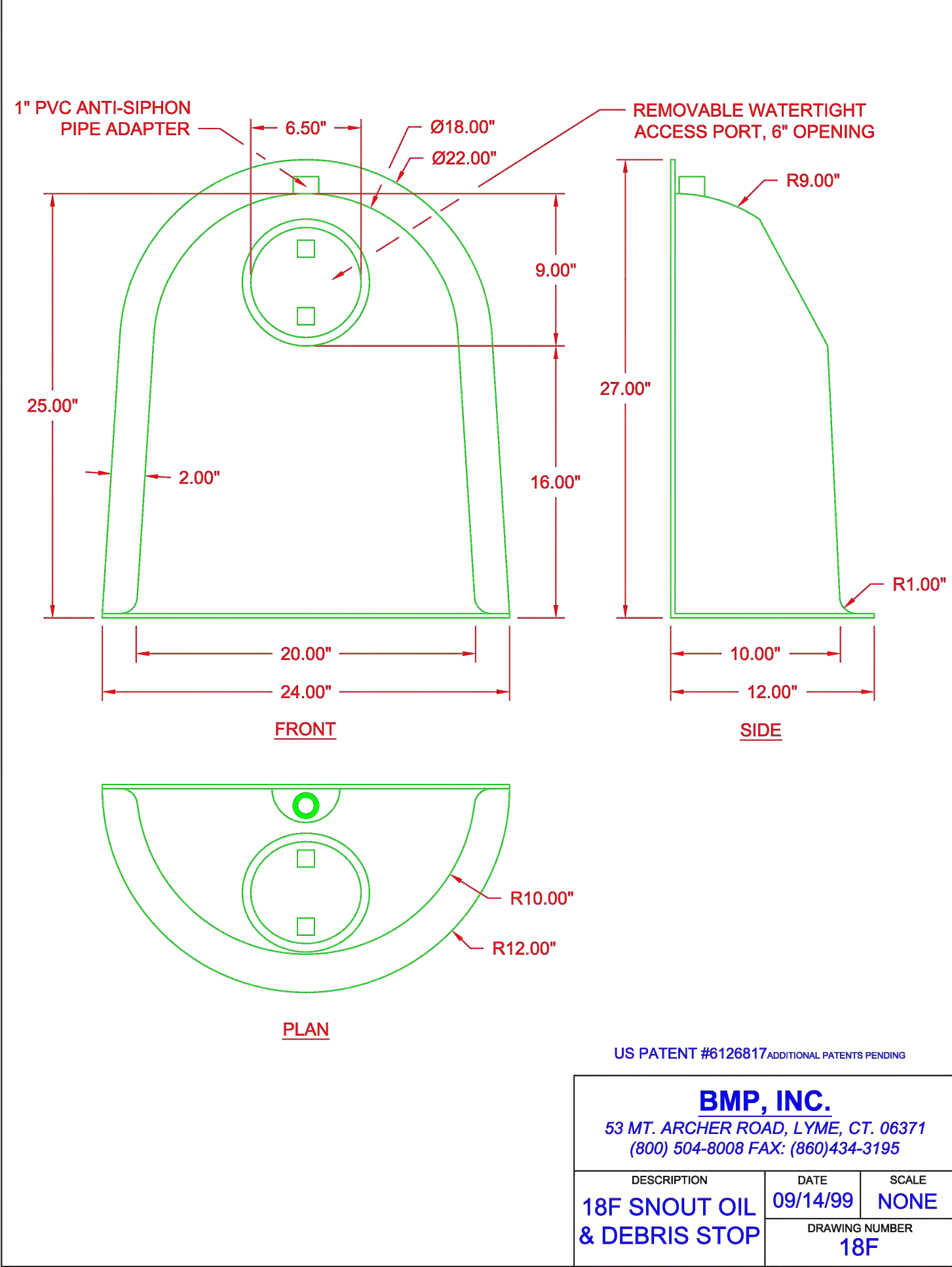
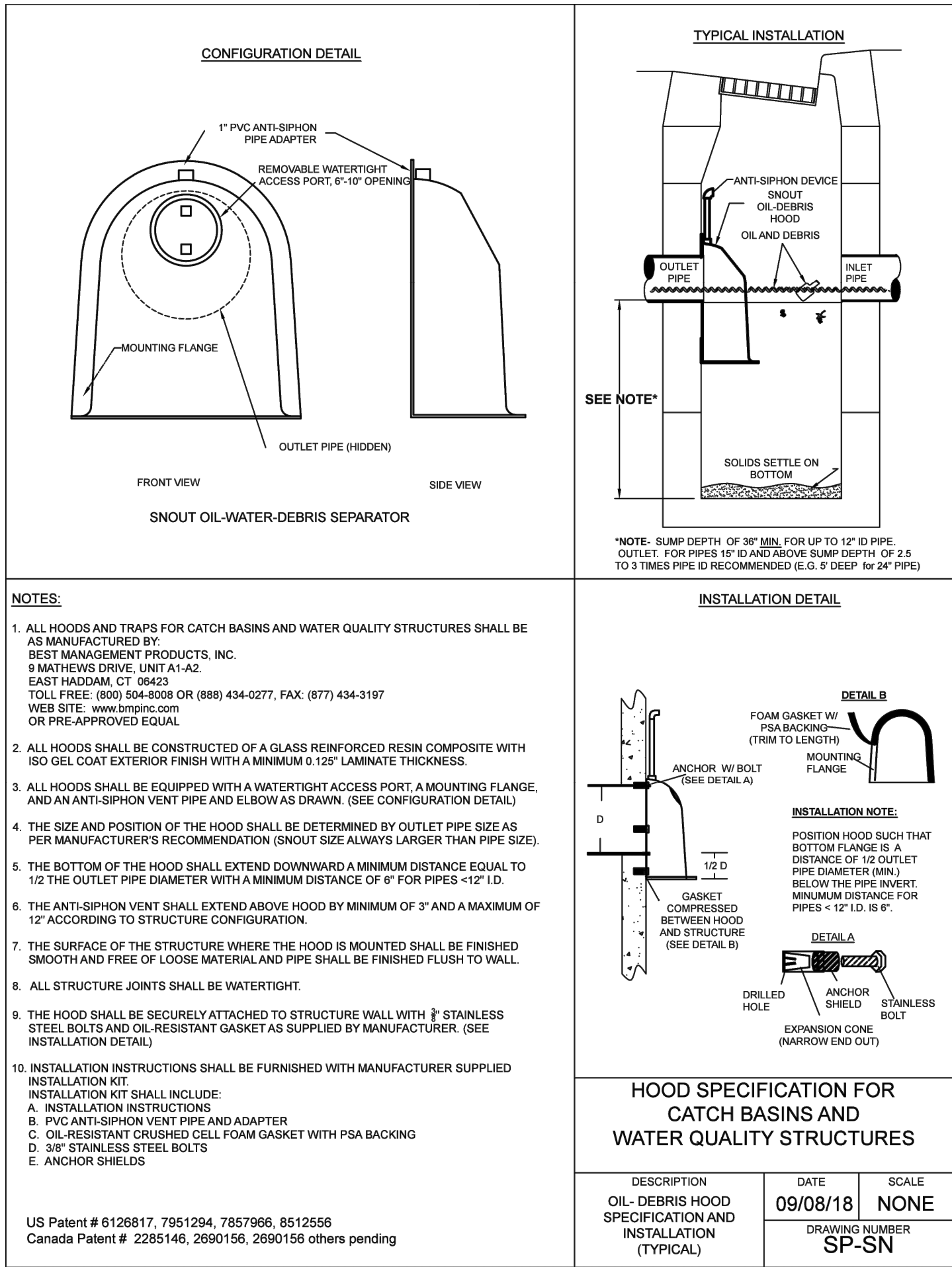
**Alignment:** The apron shall be located so that there are no bends in the horizontal alignment. The apron should be level over its length, and the elevation of the downstream end of the apron must be the same as the elevation of the receiving channel or adjacent ground.

**Thickness:** The required apron thickness is shown in Table 1.

**Gabions:** When a gabion mattress is used it shall be made of double twisted galvanized steel wire. Gabions shall be fabricated in such a manner that the sides, ends, and lid can be assembled at the construction site into mats a minimum of 12 inches thick.

**Materials:** Outlet protection may be done using rock riprap or gabion mattresses to construct the apron. The rock shall consist of field stone or rough unhewn quarry stone. The stone shall be hard and angular and of a quality that will not disintegrate on exposure to water or weathering. Broken concrete may be used provided it does not have any exposed steel or reinforcing bars, and that it is broken into blocky pieces such that the largest dimension of each piece is no more than 3 times the smallest dimension. The required rock size is shown in Tables 1 and 2. In all cases a geotextile (filter fabric) shall be placed between the apron and the underlying soil to prevent soil movement into and through the riprap.

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USDA is an equal opportunity provider and employer



### TOOELE

169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

### SALT LAKE CITY

Phone: 801.255.0529

### LAYTON

Phone: 801.547.1100

### CEDAR CITY

Phone: 435.866.1453

### RICHFIELD

Phone: 435.896.2983

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FOR:  
ICON DEVELOPMENT, LLC  
3410 NORTH MOYLE LANE  
ERDA, UTAH, 84074

CONTACT:  
SEAN PERKINS  
PHONE: 435-850-8436

BLUE SPRUCE SUBDIVISION

FINAL

QUIRK STREET

GRANTSVILLE CITY, UTAH



NO.	DATE	REVISION	BY
1			
2			
3			
4			
5			
6			
7			
8			

### DETAILS

PROJECT NUMBER	PRINT DATE
T1216E	
DRAWN BY	CHECKED BY
C. CHILD	J. CLEGG
PROJECT MANAGER	
C. CHILD	

**NOTE:**  
ALL CONCRETE SURFACE IMPROVEMENTS SHALL  
BE CONSTRUCTED USING 4,500 PSI CONCRETE

D-502

## Street Sign Inconsistencies



With street name, and number.  
Correct

Street number not on sign.  
Incorrect

"Provide Signs, Letters and Brackets To Agency Specifications" - Utah Chapter American Public Works Assoc. Plan No. 292





# **AGENDA ITEM #7**

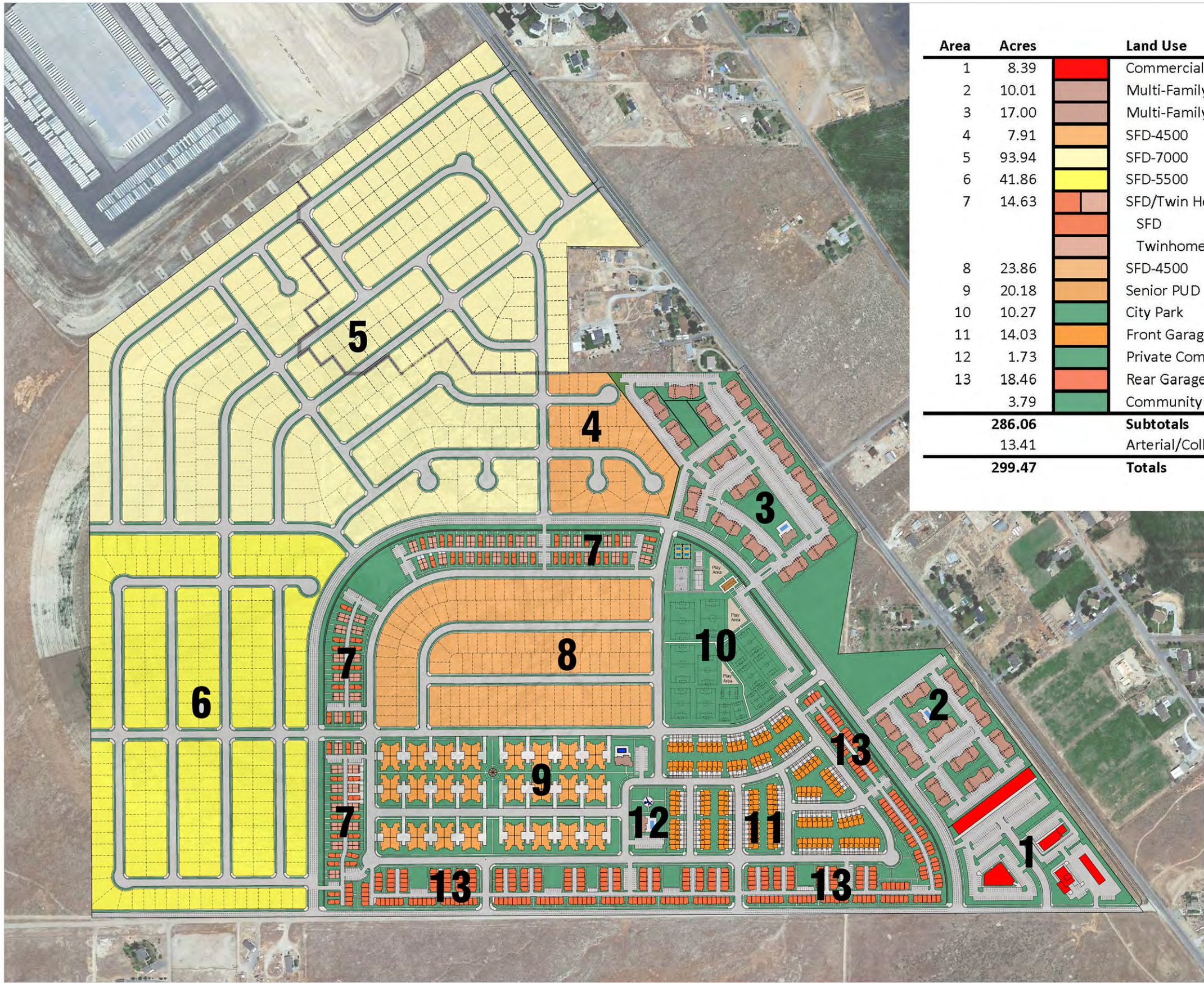
Consideration to recommend approval of the Final Plat for Provident Business Park.



# AGENDA ITEM #8

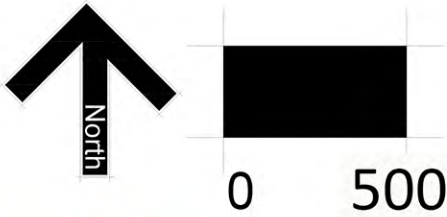
Discussion of Concept Plan for  
Deseret Highland





Area	Acres	Land Use	Commercial Square Feet	Common Open Space Acres	Density DU/Acre	No. of Lots/Units
1	8.39	Commercial	109,600			
2	10.01	Multi-Family Residential		4.50	15.0	150
3	17.00	Multi-Family Residential		6.99	15.0	250
4	7.91	SFD-4500			5.8	44
5	93.94	SFD-7000			3.9	364
6	41.86	SFD-5500			5.3	222
7	14.63	SFD/Twin Home PUD		3.66	10.2	149
		SFD				53
		Twinhomes				96
8	23.86	SFD-4500			7.0	166
9	20.18	Senior PUD		4.04	4.8	96
10	10.27	City Park		10.27		
11	14.03	Front Garage Townhome PUD		2.81	8.7	122
12	1.73	Private Community Center		1.73		
13	18.46	Rear Garage Townhome PUD		3.69	18.0	332
	3.79	Community Trail		3.79		
286.06		Subtotals	109,600	41.47		2,044
13.41		Arterial/Collector Streets				
299.47		Totals	109,600	41.47	6.8	2,044
				12.44%		

**The Highlands**  
**Master Planned Community**  
**Grantsville, UT**



August 4, 2022



# AGENDA ITEM #9

Discussion of Master  
Development Agreement for  
Harvest Meadows.



**WHEN RECORDED, RETURN TO:**

**Brett Coombs, Esq.**  
**Grantsville City Attorney**  
**429 East Main Street**  
**Grantsville City, Utah 84029**

**GRANTSVILLE CITY**  
**MASTER DEVELOPMENT AGREEMENT**  
**FOR**  
**HARVEST MEADOWS SUBDIVISION**

THIS MASTER DEVELOPMENT Agreement (“**Agreement**”) is made and entered as of the \_\_\_\_ day of \_\_\_\_\_, 2022, by and between Grantsville City, a municipal corporation of the State of Utah (“**City**”) and Andy Lewis, Greg DeHaan, and Scooter II, LLC, a limited liability company of the State of Utah (“**Developer**”).

**RECITALS**

A. The capitalized terms used in this Agreement and in these Recitals are defined in Section 1.2, below.

B. Developer owns and is developing the Property as a single-family residential subdivision. Developer and the City desire that the Property be developed in a unified and consistent fashion pursuant to the Preliminary Plat and Final Plat for each phase. The Parties desire to enter into this Agreement to specify the rights and responsibilities of the Developer to develop the Property as expressed in this Agreement and the rights and responsibilities of the City to allow and regulate such development pursuant to the requirements of this Agreement.

C. The Parties understand and intend that this Agreement is a “development agreement” within the meaning of, and entered into pursuant to the terms of Utah Code Ann. §10-9a-101 (2005) *et seq.* This Agreement conforms with the intent of the City’s General Plan and the Zoning.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Developer hereby agree to the following, incorporating by reference the prior recitals as if fully set forth herein:

**TERMS**



1. **Definitions.** As used in this Agreement, the words and phrases specified below shall have the following meanings:

- 1.1. **Agreement** means this Master Development Agreement including all of its Exhibits and Addenda, including Addenda added after this Agreement is executed.
- 1.2. **Applicant** means a person or entity submitting a Development Application.
- 1.3. **Buildout** means the completion of all of the development in each phase of the entire Project in accordance with this Agreement.
- 1.4. **City** means Grantsville City, a political subdivision of the State of Utah.
- 1.5. **City's Future Laws** means the ordinances, policies, standards, and procedures which may be in effect as of a particular time in the future when a Development Application is submitted for a part of the Project and which may or may not be applicable to the Development Application depending upon the provisions of this Agreement.
- 1.6. **Council** means the elected City Council of the City.
- 1.7. **Default** means a breach of this Agreement as specified herein.
- 1.8. **Developer** means Andy Lewis, Greg DeHaan, and Scooter II, LLC and his/its successors/assignees as permitted by this Agreement.
- 1.9. **Development** means the development of any portion of the Property pursuant to an approved Development Application.
- 1.10. **Development Application** means an application to the City for development of a portion of the Project or any other permit, certificate or other authorization from the City required for development of the Project.
- 1.11. **Final Plat** means the recordable map or other graphical representation of land prepared in accordance with Utah Code Ann. § 10-9a-603 (2019), and approved by the City, subdividing any portion of the Project.
- 1.12. **GLUDMC** means the Grantsville Land Use Management and Development Code.
- 1.13. **LUDMA** means the Land Use, Development, and Management Act, Utah Code Ann. § 10-9a-101 (2005), *et seq.*
- 1.14. **Maximum Residential Units** means the development on the Property of Harvest Meadows Subdivision, ninety-six (96) Residential Dwelling Units
- 1.15. **Notice** means any notice to or from any Party to this Agreement that is either required or permitted to be given to another party.
- 1.16. **Party/Parties** means, in the singular, Developer or the City; in the plural Developer and the City.
- 1.17. **Final Plat** means the final plat for the development of the Project, which has been approved by the City and which is attached as Exhibit "B."
- 1.18. **Project** means the residential subdivision to be constructed on the Property, in phases, pursuant to this Agreement with the associated Public Infrastructure and private facilities, and all of the other aspects approved as part of this Agreement.
- 1.19. **Property** means the real property owned by and to be developed by Developer more fully described in Exhibit A.
- 1.20. **Public Infrastructure** means those elements of infrastructure that are planned to be dedicated to the City or other public entities as a condition of the approval of a Development Application.



1.21. **Residential Dwelling Unit** means a structure or portion thereof designed and intended for use as attached residences as illustrated on the Final Plan.

1.22. **Zoning** means the R-1-21 zoning of the Property.

2. **Development of the Project.**

2.1. **Compliance with the Final Plat and this Agreement.** Development of the Project shall be in accordance with LUDMA, GLUDMC, the City's Future Laws (to the extent they are applicable as specified in this Agreement), the Preliminary Plat, the Final Plat and this Agreement.

2.2. **Maximum Residential Units.** At Buildout, Developer shall be entitled to have developed the Maximum Residential Units of the type and in the general location as shown on the Final Plat.

3. **Vested Rights.**

3.1. **Vested Rights Granted by Approval of this Agreement.** To the maximum extent permissible under the laws of Utah and the United States and at equity, the Parties intend that this Agreement grants to Developer all rights to develop the Project in fulfillment of this Agreement, LUDMA, GLUDMC, the Zoning of the Property, and the Final Plat except as specifically provided herein. The Parties specifically intend that this Agreement grant to Developer the "vested rights" identified herein as that term is construed in Utah's common law and pursuant to Utah Code Ann. § 10-9a-509 (2019).

3.2. **Exceptions.** The vested rights and the restrictions on the applicability of the City's Future Laws to the Project as specified in Section 3.1 are subject to the following exceptions:

3.2.1. **Developer Agreement.** The City's Future Laws or other regulations to which the Developer agrees in writing;

3.2.2. **State and Federal Compliance.** The City's Future Laws or other regulations which are generally applicable to all properties in the City and which are required to comply with State and Federal laws and regulations affecting the Project;

3.2.3. **Codes.** Any City's Future Laws that are updates or amendments to existing building, fire, plumbing, mechanical, electrical, dangerous buildings, drainage, or similar construction or safety related codes, such as the International Building Code, the APWA Specifications, AAHSTO Standards, the Manual of Uniform Traffic Control Devices or similar standards that are generated by a nationally or statewide recognized construction/safety organization, or by the State or Federal governments and are required to meet legitimate concerns related to public health, safety or welfare;

3.2.4. **Taxes.** Taxes, or modifications thereto, so long as such taxes are lawfully imposed and charged uniformly by the City to all properties, applications, persons and entities similarly situated; or,

3.2.5. **Fees.** Changes to the amounts of fees for the processing of Development Applications that are generally applicable to all development within the City (or a portion of the City as specified in the lawfully adopted fee schedule) and which are adopted pursuant to State law.

3.2.6. **Impact Fees.** Impact Fees or modifications thereto which are lawfully adopted, and imposed by the City pursuant to Utah Code Ann. Section 11-36a-101 (2011) *et seq.*



3.2.7. Planning and Zoning Modification. Changes by the City to its planning principles and design standards as permitted by Local, State or Federal law.

3.2.8. Compelling, Countervailing Interest. Laws, rules or regulations that the City's land use authority finds, on the record, are necessary to avoid jeopardizing a compelling, countervailing public interest pursuant to Utah Code Ann. § 10-9a-509(1)(a)(i) (2020).

4. **Term of Agreement.** Unless earlier terminated as provided for herein, the term of this Agreement shall be until January 31, 2027. If Developer has not been declared to be currently in Default as of January 31, 2027, then this Agreement shall be automatically extended until January 31, 2032. This Agreement shall also terminate automatically at Buildout.

5. **Addenda** Addendum No. 1 contains the provisions of this Agreement that are specific to the development of the Project. Any future phases of the Project may require added addenda. If there is a conflict between this Agreement and Addendum No. 1 or any future addenda, then Addendum No. 1 and the future addenda shall control.

6. **Public Infrastructure.**

6.1. **Construction by Developer.** Developer, at Developer's cost and expense, shall have the right and the obligation to construct or cause to be constructed and install all Public Infrastructure reasonably and lawfully required as a condition of approval of this Development Application pursuant to GLUDMC. Such construction must meet all applicable standards and requirements and must be approved by the City's Engineer and Public Works Director.

6.2. **Responsibility Before Acceptance.** Developer shall be responsible for all Public Infrastructure covered by this Agreement until final inspection of the same has been performed by the City, and a final acceptance and release has been issued by the City. The City shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage happening or occurring to the Public Infrastructure, nor shall any officer or employee thereof, be liable for any persons or property injured by reason of said Public Infrastructure; all of such liabilities shall be assumed by the Developer.

6.3. **Warranty.** Developer shall repair any defect in the design, workmanship or materials in all Public Infrastructure which becomes evident during a period of one year following the acceptance of the improvements by the City Council or its designee (Durability Testing Period). If during the Durability Testing Period, any Public Infrastructure shows unusual depreciation, or if it becomes evident that required work was not done, or that the material or workmanship used does not comply with accepted standards, said condition shall, within a reasonable time, be corrected.

6.4. **Timing of Completion of Public Infrastructure.** In accordance with the diligence requirements for the various types of approvals as described in the GLUDMC, construction of the required Public Infrastructure for each phase shall be completed within one year after the City Council grants final plat approval for that phase and prior to recordation of the mylar for that phase. Upon a showing of good and sufficient cause by Developer the City shall, in accordance with the provisions of GLUDMC, extend the time of performance if requested prior to expiration of the completion date.

6.5. **Bonding.** In connection with any Development Application, Developer shall provide bonds or other development security, including warranty bonds, to the extent



required by GLUDMC, unless otherwise provided by Utah Code § 10-9a-101, *et seq.* (2005), as amended. The Applicant shall provide such bonds or security in a form acceptable to the City or as specified in GLUDMC. Partial releases of any such required security shall be made as work progresses based on GLUDMC.

6.6. **City Completion.** The Developer agrees that in the event he does not: (a) complete all improvements within the time period specified under paragraph two above, or secure an extension of said completion date, (b) construct said improvements in accordance with City standards and as set forth in Paragraph one above, or (c) pay all claimants for material and labor used in the construction of said improvements, the City shall be entitled to declare the developer(s) in default, request and receive the funds held by the guarantor as surety and utilize the monies obtained to install or cause to be installed any uncompleted improvements and/or to pay any outstanding claims, as applicable. Provided however, that the City shall not be responsible for any work beyond the amount of funds so provided. Any funds remaining after completion of the improvements shall be returned to the Guarantor. The Developer further agrees to be personally liable for any cost of improvements above the amount made available under the terms of this agreement.

7. **Upsizing/Reimbursements to Developer.**

7.1. **Upsizing.** The City shall not require Developer to “upsized” any future Public Infrastructure (i.e., to construct the infrastructure to a size larger than required to service the Project) unless financial arrangements reasonably acceptable to Developer are made to compensate Developer for the incremental or additive costs of such upsizing to the extent required by law.

8. **Default.**

8.1. **Notice.** If Developer or the City fails to perform their respective obligations hereunder or to comply with the terms hereof, the Party believing that a Default has occurred shall provide Notice to the other Party.

8.2. **Contents of the Notice of Default.** The Notice of Default shall:

8.2.1. **Specific Claim.** Specify the claimed event of Default;

8.2.2. **Applicable Provisions.** Identify with particularity the provisions of any applicable law, rule, regulation or provision of this Agreement that is claimed to be in Default; and

8.2.3. **Optional Cure.** If the City chooses, in its discretion, it may propose a method and time for curing the Default which shall be of no less than thirty (30) days duration, if weather conditions permit.

8.3. **Remedies.** Upon the occurrence of any Default, and after notice as required above, then the parties may have the following remedies:

8.3.1. **Law and Equity.** All rights and remedies available at law and in equity, including, but not limited to, injunctive relief and/or specific performance.

8.3.2. **Security.** The right to draw on any security posted or provided in connection with the Project and relating to remedying of the particular Default.

8.3.3. **Future Approvals.** The right to withhold all further reviews, approvals, licenses, building permits and/or other permits for development of the Project in the case of a default by Developer until the Default has been cured.

8.4. **Public Meeting.** Before any remedy in Section 8.3 may be imposed by the City,



the party allegedly in Default shall be afforded the right to attend a public meeting before the City Council and address the City Council regarding the claimed Default.

8.5. **Default of Assignee.** A default of any obligations expressly assumed by an assignee shall not be deemed a default of Developer.

8.6. **Limitation on Recovery for Default – No Damages against the City.** Anything in this Agreement notwithstanding, Developer shall not be entitled to any claim for any monetary damages as a result of any breach of this Agreement and Developer waives any claims thereto. The sole remedy available to Developer and any assignee shall be that of specific performance.

9. **Notices.** All notices required or permitted under this Agreement shall, in addition to any other means of transmission, be given in writing by certified mail and regular mail to the following address:

**To the Developer:**  
Greg DeHaan

**To the City:**

Grantsville City  
Attn: Mayor  
429 East Main Street  
Grantsville, Utah 84029

10. **Dispute Resolution.** Any disputes shall be resolved pursuant to Addendum No. 2.

11. **Incorporation of Recitals and Exhibits.** All Recitals and Exhibits are hereby incorporated into this Agreement.

12. **Headings.** The captions used in this Agreement are for convenience only and are not intended to be substantive provisions or evidences of intent.

13. **No Third-Party Rights/No Joint Venture.** This Agreement does not create a joint venture relationship, partnership or agency relationship between the City, or Developer. Except as specifically set forth herein, the parties do not intend this Agreement to create any third-party beneficiary rights.

14. **Assignability.** The rights and responsibilities of Master Developer under this Agreement may be assigned in whole or in part, respectively, by Developer with the consent of the City as provided herein.

14.1. **Sale of Lots.** Developer's selling or conveying lots in any approved subdivision shall not be deemed to be an assignment.

14.2. **Related Entity.** Developer's transfer of all or any part of the Property to any entity "related" to Developer (as defined by regulations of the Internal Revenue Service in Section 165), Developer's entry into a joint venture for the development of the Project or Developer's pledging of part or all of the Project as security for financing shall also not be deemed to be an assignment. Developer shall give the City Notice of any event specified in this sub-section within ten (10) days after the event has occurred. Such Notice shall include providing the City with all necessary contact information for the newly responsible



party.

14.3. **Process for Assignment.** Developer shall give Notice to the City of any proposed assignment and provide such information regarding the proposed assignee that the City may reasonably request in making the evaluation permitted under this Section. Such Notice shall include providing the City with all necessary contact information for the proposed assignee. Unless the City objects in writing within twenty (20) business days of notice, the City shall be deemed to have approved of and consented to the assignment. The City shall not unreasonably withhold consent.

14.4. **Partial Assignment.** If any proposed assignment is for less than all of Master Developer's rights and responsibilities then the assignee shall be responsible for the performance of each of the obligations contained in this MDA to which the assignee succeeds. Upon any such approved partial assignment Master Developer shall not be released from any future obligations as to those obligations which are assigned but shall remain jointly and severally liable with assignee(s) to perform all obligations under the terms of this Agreement which are specified to be performed by Developer.

14.5. **Complete Assignment.** Developer may request the written consent of the City of an assignment of Developer's complete interest in this Agreement, which consent shall not be unreasonably withheld. In such cases, the proposed assignee shall have the qualifications and financial responsibility necessary and adequate, as required by the City, to fulfill all obligations undertaken in this Agreement by Developer. The City shall be entitled to review and consider the ability of the proposed assignee to perform, including financial ability, past performance and experience. After review, if the City gives its written consent to the assignment, Developer shall be released from its obligations under this Agreement for that portion of the Property for which such assignment is approved.

15. **No Waiver.** Failure of any Party hereto to exercise any right hereunder shall not be deemed a waiver of any such right and shall not affect the right of such party to exercise at some future date any such right or any other right it may have.

16. **Severability.** If any provision of this Agreement is held by a court of competent jurisdiction to be invalid for any reason, the Parties consider and intend that this Agreement shall be deemed amended to the extent necessary to make it consistent with such decision and the balance of this Agreement shall remain in full force and affect.

17. **Force Majeure.** Any prevention, delay or stoppage of the performance of any obligation under this Agreement which is due to strikes, labor disputes, inability to obtain labor, materials, equipment or reasonable substitutes therefor; acts of nature, governmental restrictions, regulations or controls, judicial orders, enemy or hostile government actions, wars, civil commotions, fires or other casualties or other causes beyond the reasonable control of the Party obligated to perform hereunder shall excuse performance of the obligation by that Party for a period equal to the duration of that prevention, delay or stoppage.

18. **Time is of the Essence.** Time is of the essence to this Agreement and every right or responsibility shall be performed within the times specified.

19. **Appointment of Representatives.** To further the commitment of the Parties to cooperate in the implementation of this Agreement, the City and Developer each shall designate and appoint a representative to act as a liaison between the City and its various departments and the Developer. The initial representative for the City shall be the City Manager. The initial representative for



Developer shall be Andy Lewis. The Parties may change their designated representatives by Notice. The representatives shall be available at all reasonable times to discuss and review the performance of the Parties to this Agreement and the development of the Project.

20. **Applicable Law.** This Agreement is entered into in Tooele County in the State of Utah and shall be construed in accordance with the laws of the State of Utah irrespective of Utah's choice of law rules.

21. **Venue.** Any action to enforce this Agreement shall be brought only in the Third District Court, Tooele County in and for the State of Utah.

22. **Entire Agreement.** This Agreement, and all Exhibits thereto, documents referenced herein, is the entire agreement between the Parties and may not be amended or modified except either as provided herein or by a subsequent written amendment signed by all Parties.

23. **Mutual Drafting.** Each Party has participated in negotiating and drafting this Agreement and therefore no provision of this Agreement shall be construed for or against any Party based on which Party drafted any particular portion of this Agreement.

24. **No Relationship.** Nothing in this Agreement shall be construed to create any partnership, joint venture or fiduciary relationship between the parties.

25. **Amendment.** This Agreement may be amended only in writing signed by the parties hereto.

26. **Recordation and Running with the Land.** This Agreement shall be recorded in the chain of title for the Project. This Agreement shall be deemed to run with the land.

27. **Priority.** This Agreement shall be recorded against the Property senior to any respective covenants and any debt security instruments encumbering the Property.

28. **Authority.** The Parties to this Agreement each warrant that they have all of the necessary authority to execute this Agreement. Specifically, on behalf of the City, the signature of the Mayor of the City is affixed to this Agreement lawfully binding the City pursuant to Resolution No. 2022-24 adopted by the City on May 4<sup>th</sup>, 2022.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by and through their respective, duly authorized representatives as of the day and year first herein above written.

DEVELOPER  
ANDY LEWIS CONSTRUCTION

GRANTSVILLE CITY

By: \_\_\_\_\_  
Its: \_\_\_\_\_

By: Jesse Wilson  
Its: City Manager



DEVELOPER  
GREG DeHAAN

\_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_

DEVELOPER  
SCOOTER II, LLC

\_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_

Approved as to form and legality:

Attest:

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
City Recorder

**CITY ACKNOWLEDGMENT**

STATE OF UTAH                    )  
  :ss.  
COUNTY OF TOOELE         )

On the \_\_\_\_\_ day of \_\_\_\_\_, 2022 personally appeared before me Jesse Wilson who being by me duly sworn, did say that he is the Mayor of Grantsville City, a political subdivision of the State of Utah, and that said instrument was signed in behalf of the City by authority of its City Council and said Mayor acknowledged to me that the City executed the same.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Residing at: \_\_\_\_\_



**DEVELOPER ACKNOWLEDGMENT**

STATE OF UTAH                    )  
  :ss.  
COUNTY OF \_\_\_\_\_ )

On the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, personally appeared before me \_\_\_\_\_, who being by me duly sworn, did say that he/she is the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ and that the foregoing instrument was duly authorized by the company at a lawful meeting held by authority of its operating agreement and signed in behalf of said company.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Residing at: \_\_\_\_\_

**DEVELOPER ACKNOWLEDGMENT**

STATE OF UTAH                    )  
  :ss.  
COUNTY OF \_\_\_\_\_ )

On the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, personally appeared before me \_\_\_\_\_, who being by me duly sworn, did say that he/she is the \_\_\_\_\_ of \_\_\_\_\_, a Utah limited liability company and that the foregoing instrument was duly authorized by the company at a lawful meeting held by authority of its operating agreement and signed in behalf of said company.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Residing at: \_\_\_\_\_



**DEVELOPER ACKNOWLEDGMENT**

STATE OF UTAH                    )  
  :SS.  
COUNTY OF \_\_\_\_\_ )

On the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_, who being by me duly sworn, did say that he/she is the \_\_\_\_\_ of \_\_\_\_\_, a Utah limited liability company and that the foregoing instrument was duly authorized by the company at a lawful meeting held by authority of its operating agreement and signed in behalf of said company.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Residing at: \_\_\_\_\_



## TABLE OF EXHIBITS

Exhibit “A”	Legal Description of Property
Exhibit “B”	Final Plat
Addendum No. 1	Specific Project Terms
Addendum No. 2	Dispute Resolution Procedures

DRAFT



Exhibit "A"  
Legal Description of Property

DRAFT



Exhibit “B”  
Final Plat

DRAFT



**HARVEST MEADOWS SUBDIVISION  
ADDENDUM NO.1**

**TERMS**

1. **Definitions.** The capitalized terms used in this Addendum No. 1 shall have the meanings set forth in the MDA unless otherwise specified herein.
2. **Modifications to GLUDMA and Other City Standards.** The City has agreed to the following exceptions to the GLUDMA and Grantsville City Construction Standards and Specifications:
  - a. The Development complies with GLUDMA and other City Standards.
3. **Offsite Improvements:**
  - a. Street Improvements: The Developer shall construct a ADA accessible pedestrian crossing at the intersection of Quirk Street and Axe Handle Drive to connect with the existing trail located on the west side of Quirk Street as part of Phase 1. The pedestrian crossing includes a contiguous hard surface pathway from the intersection to the trail, cross walk stripping, and warning signage and pedestrian crossing signals with hand activated solar power LED flashing beacons.
4. **Open Space:**
  - a. The Developer shall provide Grantsville City a fee-in-leu for the raw ground (undeveloped) value of 6.35 acres also described as 10% of the total parcel acreage at a value of \$ 508,000 The funds shall be deposited with Grantsville City at an equivalent of \$ 5,291 per lot per phase (\$ 508,000 divided by 96 lots) prior to recording of each phase.
  - b. Grantsville City shall utilize the fee in leu open space funds provided by the Developer for procurement and/or improvement of open space, parks, and/or trails within ½ mile of the proposed development.
  - c. Grantsville City shall utilize the fee in leu open space funds provided by the Developer for procurement and/or improvement of open space, parks, and/or trails within ½ mile of the proposed development.
5. **Construction Coordination:**
  - a. The Developer shall provide the City 48 hours' notice to coordinate with the City prior to working on or around existing City water and sewer infrastructure.
  - b. All connections to City water and sewer infrastructure shall be inspected by the City prior to back-filling.
  - c. The Developer shall request inspections at least 48 hours prior to the day the Contractor desires the inspection to occur.
  - d. The Developer shall request disinfection testing at least 48 hours prior to the day the Contractor desires the testing to occur.



**Addendum No. 2**  
**(Dispute Resolution)**

1. **Meet and Confer.** The City and Developer/Applicant shall meet within fifteen (15) business days of any dispute under this Agreement to resolve the dispute.

2. **Mediation.**

2.1. Disputes Subject to Mediation. Disputes that are not subject to arbitration provided in Section 3 shall be mediated.

2.2. Mediation Process. If the City and Developer/Applicant are unable to resolve a disagreement subject to mediation, the Parties shall attempt within ten (10) business days to appoint a mutually acceptable mediator with knowledge of the legal issue in dispute. If the Parties are unable to agree on a single acceptable mediator they shall each, within ten (10) business days, appoint their own representative. These two representatives shall, between them, choose the single mediator. Developer/Applicant shall pay the fees of the chosen mediator. The chosen mediator shall within fifteen (15) business days from selection, or such other time as is reasonable under the circumstances, review the positions of the Parties regarding the mediation issue and promptly attempt to mediate the issue between the Parties. If the Parties are unable to reach an agreement, the Parties shall request that the mediator notify the Parties in writing of the resolution that the mediator deems appropriate. The mediator's opinion shall not be binding on the Parties.



# **AGENDA ITEM #10**

Discussion of Concept Plan for  
Desert Edge.



PROPERTY OVERVIEW

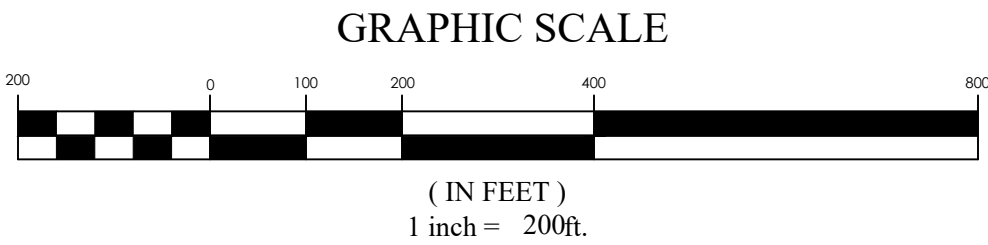
TOTAL ACREAGE	±148.7 ACRES
RESIDENTIAL ACREAGE	118.9 ACRES
COMMERCIAL ACREAGE	29.8 ACRES
ROW WIDTH	66'
ARTERIAL ROAD WIDTH	108'
CUL-DE-SAC RADIUS	60'
REQUIRED OPEN SPACE	10% OF TOTAL ACREAGE

	Townhomes	40' Lots	55' Lots	Total
Phase 1	54	109	39	202
Phase 2	0	100	41	141
Phase 3	128	10	24	162
Phase 4	0	182	13	195
Total	182	401	117	700

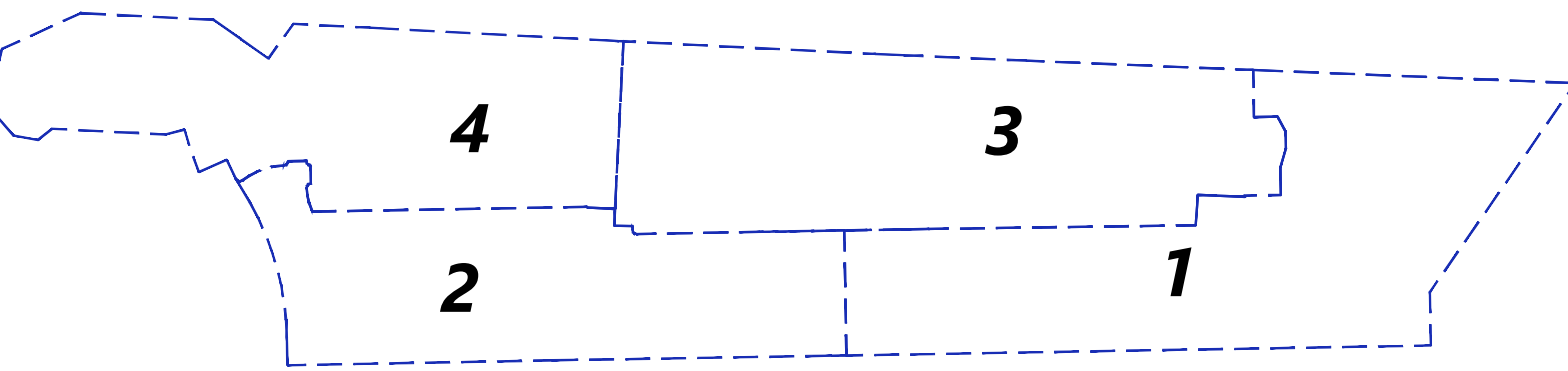
CONCEPT DESIGN

55' LOTS	117
40' LOTS	401
TOWNHOME UNITS	182
OPEN SPACE	15.0 ACRES (12.6%)
"USEABLE" OPEN SPACE	13.6 ACRES (11.4%)

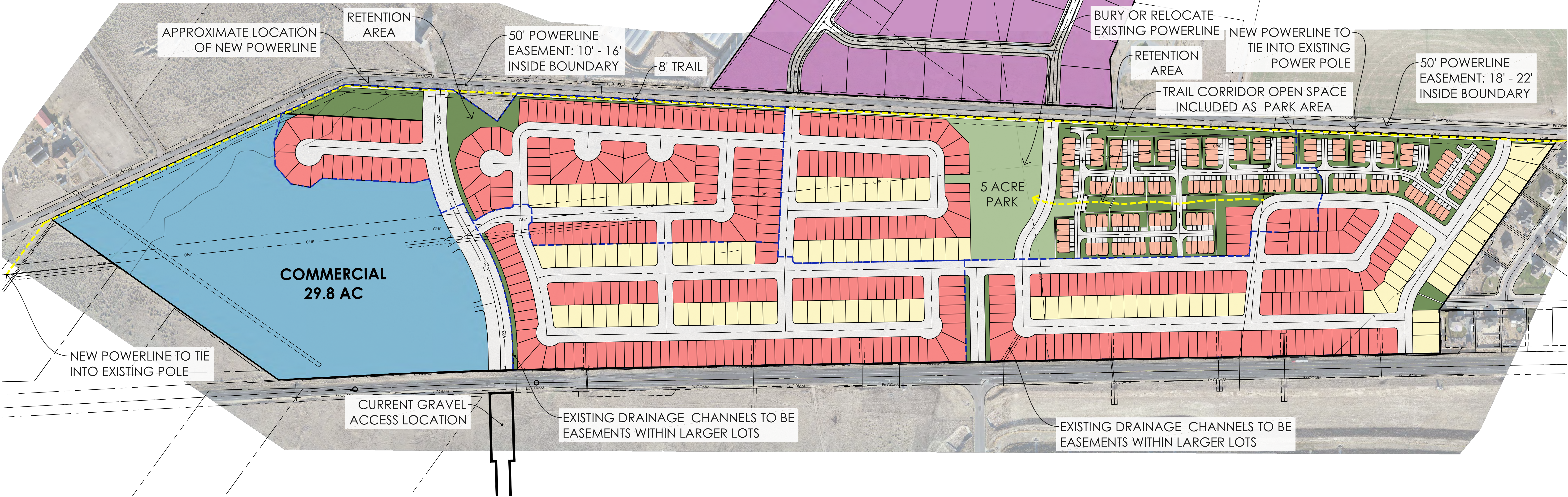
TOTAL UNITS	700
TOTAL DENSITY	5.9 UNITS/ACRE



PHASING PLAN



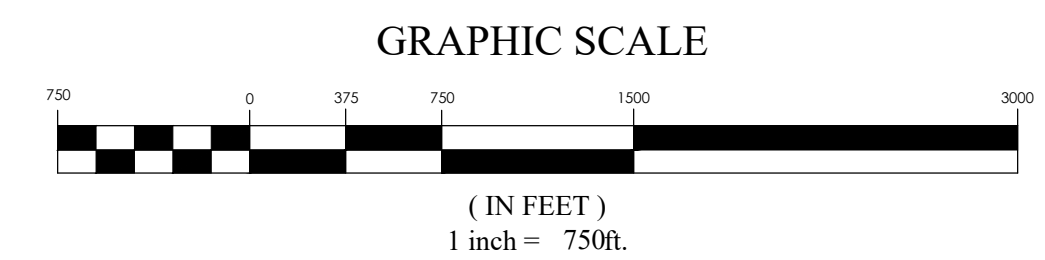
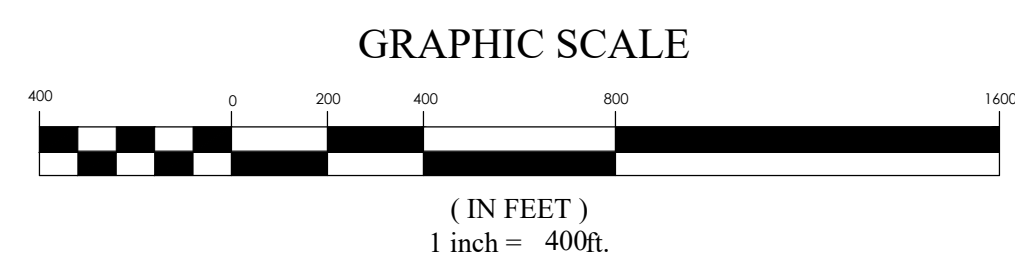
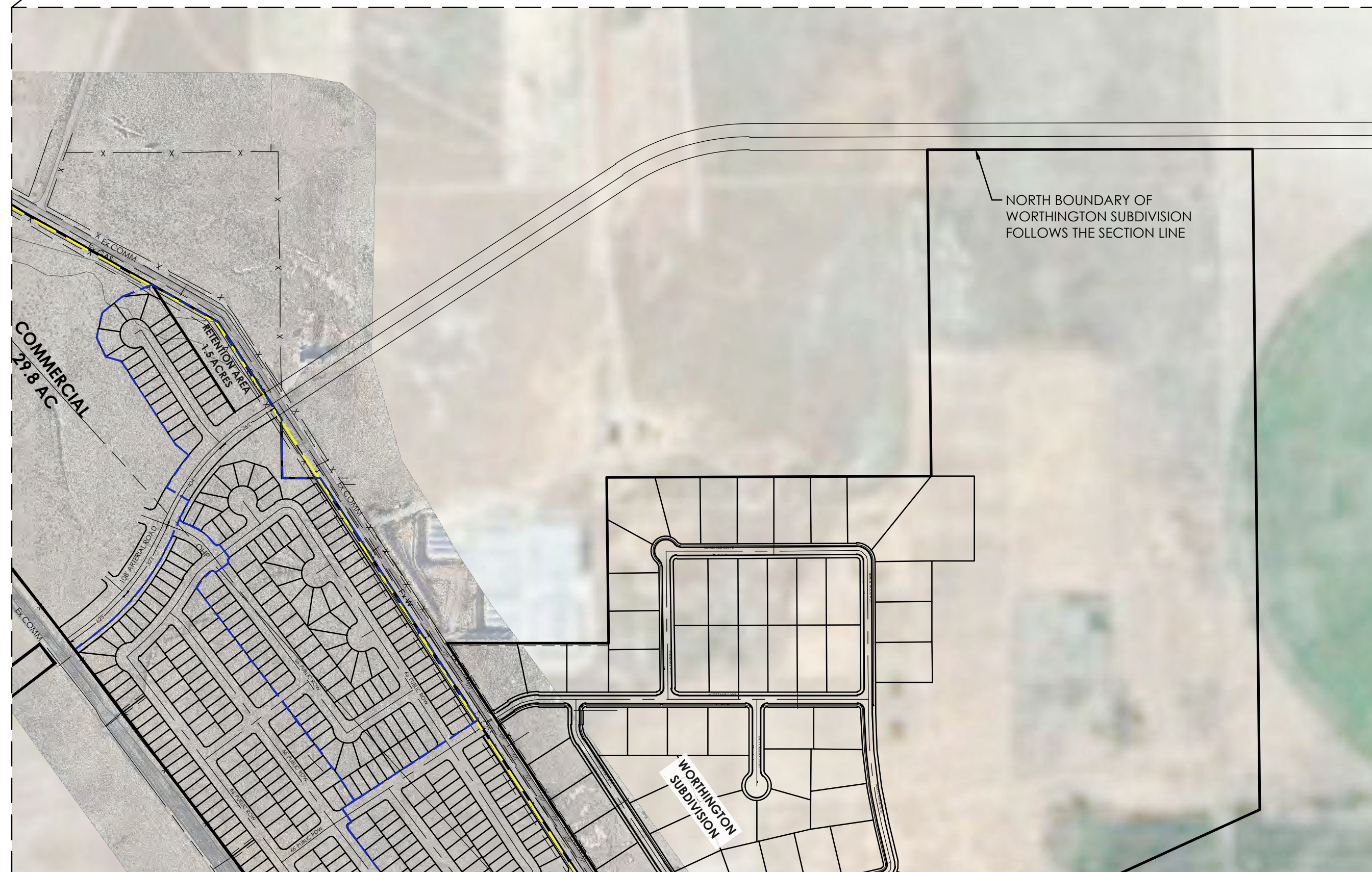
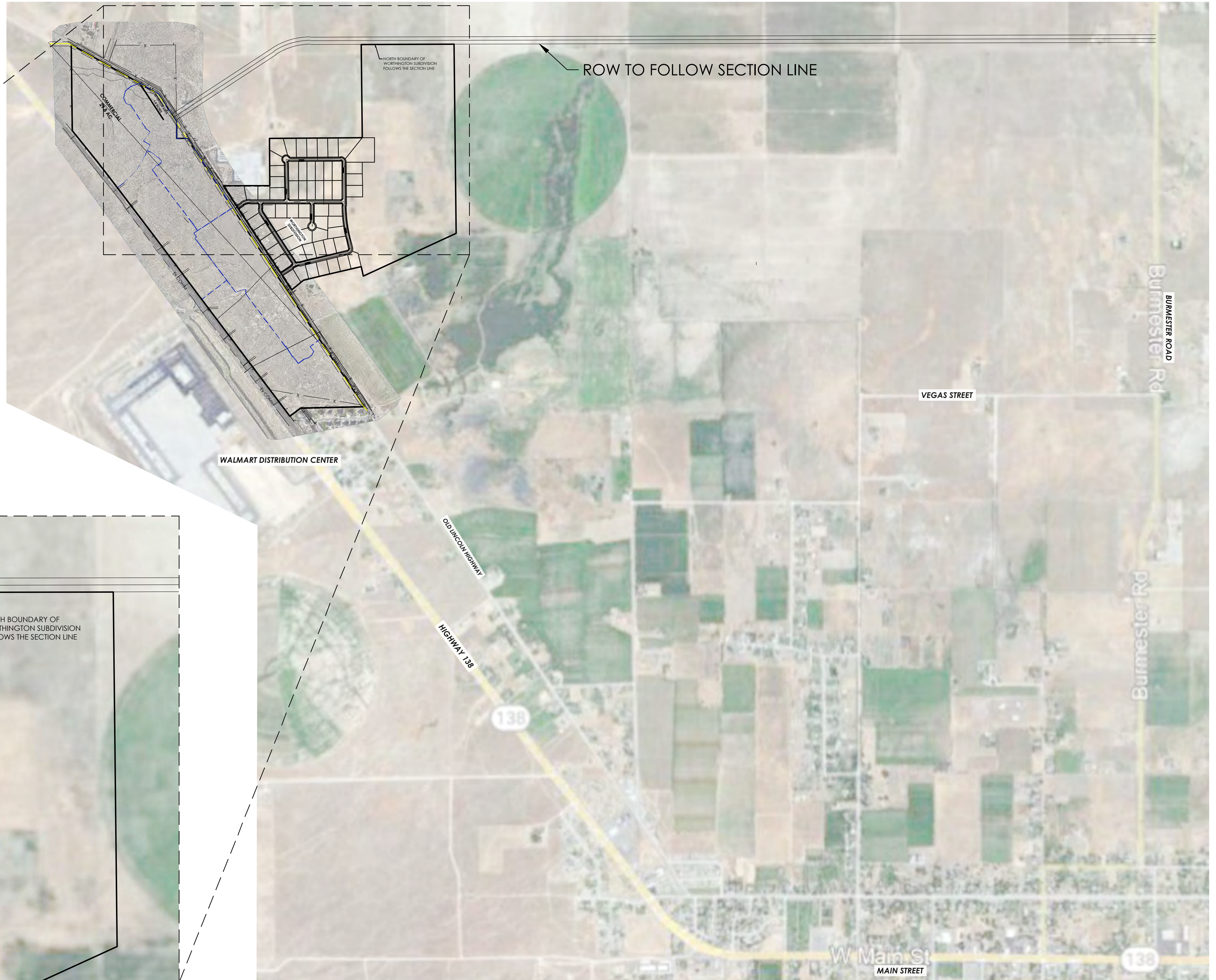
Note: the retention area located in phase 3 will be built in phase 1. Phases 1 & 2 will be built to allow time for relocation of power pole along Old Lincoln Highway, at which point phases 3 & 4 will be able to be built.



DESERT EDGE concept plan J

GRANTSVILLE CITY, TOOELE COUNTY  
9/29/2022  
21-0443





## DESERT EDGE concept arterial road overview

GRANTSVILLE CITY, TOOELE COUNTY

9/29/2022

21-0443



LGI SINGLE FAMILY PRODUCT EXAMPLES



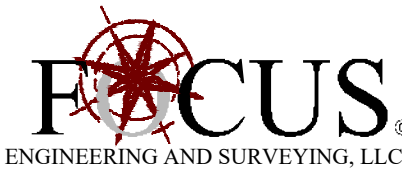
LGI TOWNHOME PRODUCT EXAMPLES



LGI PRODUCT EXAMPLES

GRANTSVILLE CITY, TOOELE COUNTY  
9/29/2022  
21-0443

Note: This plan is for illustrative purposes only. Boundaries may be based on parcels obtained through public GIS data. It is recommended that a survey be performed to determine actual boundary size and dimensions as well as other potential boundary conflicts.





# **AGENDA ITEM #11**

Discussion of Preliminary Plat for  
Alington Subdivision.



811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)

ELEV = 4601.53

ALINGTON SUBDIVISION PUD

PRELIMINARY PLAT SUBMITTAL

MAIN STREET  
GRANTSVILLE, UTAH

FOR REVIEW

NOT FOR CONSTRUCTION

DATE PRINTED  
September 20, 2022

INDEX OF DRAWINGS

1-2	SUBDIVISION PLAT	C-301	UTILITY PLAN	PP-3	PLAN AND PROFILE ALINGTON WAY
1-2	SUBDIVISION PLAT	C-302	UTILITY PLAN	PP-4	PLAN AND PROFILE MACEE LANE
C-001	GENERAL NOTES	C-303	UTILITY PLAN	PP-5	PLAN AND PROFILE LEWIS DRIVE
C-002	PRE-CONSTRUCTION GENERAL NOTES	C-304	UTILITY PLAN	PP-6	PLAN AND PROFILE LEWIS DRIVE
C-100	OVERALL SITE PLAN	C-400	EROSION CONTROL PLAN	PP-7	PLAN AND PROFILE LEWIS DRIVE
C-101	SITE PLAN	C-500	DETAILS	PP-8	PLAN AND PROFILE LEWIS DRIVE
C-102	GRADING AND DRAINAGE PLAN	C-501	DETAILS	PP-9	PLAN AND PROFILE ALYEXA WAY
C-103	UTILITY PLAN	C-502	DETAILS	PP-10	PLAN AND PROFILE ALYEXA WAY
C-200	OVERALL GRADING AND DRAINAGE PLAN	C-503	DETAILS	PP-11	PLAN AND PROFILE ALYEXA WAY
C-201	GRADING AND DRAINAGE PLAN	C-504	DETAILS	PP-12	PLAN AND PROFILE ALYEXA WAY
C-202	GRADING AND DRAINAGE PLAN	C-505	DETAILS	PP-13	PLAN AND PROFILE BROWN STREET
C-203	GRADING AND DRAINAGE PLAN	PP-0	PLAN AND PROFILE KEY MAP	PP-14	PLAN AND PROFILE KYLE STREET
C-300	OVERALL UTILITY PLAN	PP-1	PLAN AND PROFILE MAIN STREET	PP-15	PLAN AND PROFILE GORDON STREET
		PP-2	PLAN AND PROFILE MAIN STREET	PP-16	PLAN AND PROFILE COOK DRIVE

NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES TO 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 THE CIVIL ENGINEER 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 THE OWNER OR ENGINEER.

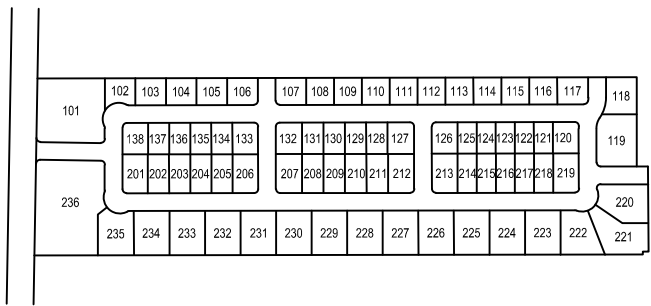
NOTICE TO DEVELOPER/ CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

UTILITY DISCLAIMER

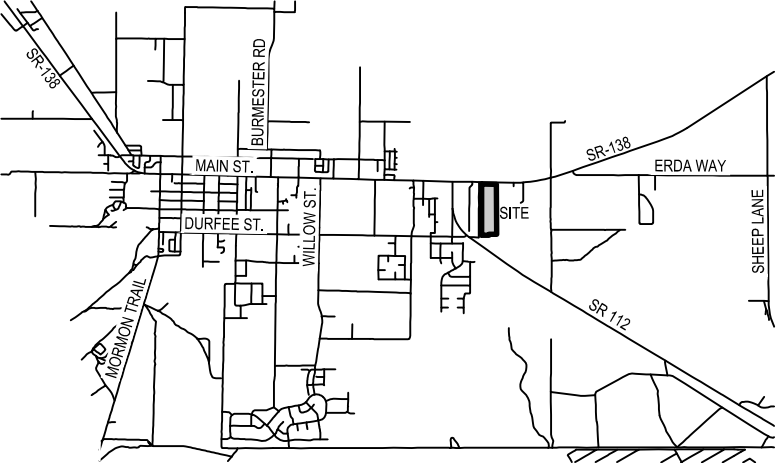
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

KEY MAP



NO SCALE

VICINITY MAP



NO SCALE

GENERAL NOTES

1.

ALL WORK SHALL CONFORM TO GRANTSVILLE CITY STANDARDS & SPECIFICATIONS.
2.

CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

NOTES:

- APPROVED BY CITY COUNCIL ON: \_\_\_\_\_.
- PRE-CONSTRUCTION MEETING DATE: \_\_\_\_\_.

APPROVED FOR CONSTRUCTION ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.

GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

APPROVED BY CITY ENGINEER, GRANTSVILLE CITY, UTAH  
FOR PUBLIC IMPROVEMENTS ONLY (SHEETS \_\_\_\_\_)

CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER FROM RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION THE PUBLIC INTEREST REQUIRES A MODIFICATION OR A DEPARTURE FROM THE CITY SPECIFICATIONS, OR THE APPROVED PLANS, THE CITY SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OR A DEPARTURE, AND TO SPECIFY THE MANNER WHICH THE SAME IS MADE.



**TOOELE**  
169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

**SALT LAKE CITY**  
Phone: 801.255.0529

**LAYTON**  
Phone: 801.547.1100

**CEDAR CITY**  
Phone: 435.866.1453

**RICHFIELD**  
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074

CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH



PRELIMINARY

COVER

PROJECT NUMBER  
T1265K

PRINT DATE  
11/11/2021

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

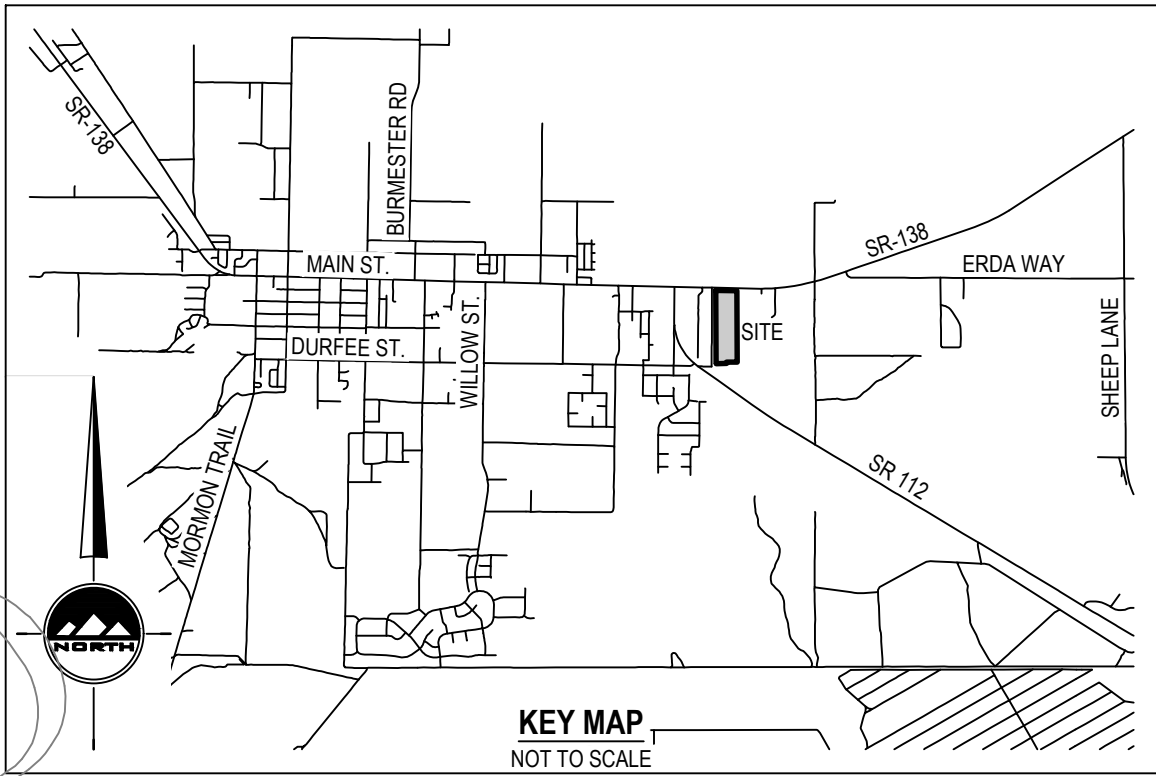
PROJECT MANAGER  
J. CLEGG

C-000



ALINGTON SUBDIVISION  
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER  
OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN,  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH



KEY MAP  
NOT TO SCALE

SURVEYOR'S CERTIFICATE

I, Douglas J Kinsman, do hereby certify that I am a Professional Land Surveyor, and that I hold certificate No. 334575 in accordance with Title 58, Chapter 22, Professional Engineers and Professional Land Surveyors Licensing Act. I certify that by authority of the owners I have completed a survey of the property described on this subdivision plat in accordance with Section 17-23-17, have verified measurements, and have subdivided said tract of land into lots, parcels, and streets, hereafter to be known as ALINGTON SUBDIVISION, and that the same has been correctly surveyed and monumented on the ground as shown on this plat. I further certify that all lots meet frontage width and area requirements of the applicable zoning ordinances.

OWNER'S DEDICATION AND CONSENT TO RECORD

Known all men by these present that the undersigned are the owner(s) of the hereon described tract of land and hereby cause the same to divided into lots and streets together with easements as set forth hereafter to be known as:

ALINGTON SUBDIVISION

The undersigned owner(s) hereby dedicate to Grantsville City all those parts or portions of said tract of land on said plat designated hereon as streets, the same to be used as public thoroughfares forever. The undersigned owner(s) also hereby convey to Grantsville City and to all public utility companies providing service to the hereon described tract a perpetual, non-exclusive easement over the public utility, and drainage easements shown on this plat, the same to be used for drainage and the installation, maintenance and operation of public utility service lines and facilities. The undersigned owner(s) also convey any other easements shown on this plat to the parties indicated and for the purposes shown hereon.

In witness whereof I / we have hereunto set my / our hand this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_\_\_.

By: Ironwood Real Estate  
Joseph White, Managing Member

By:

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH  
County of Tooele

J.S.

On the \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_\_\_, \_\_\_\_\_, personally appeared before me, the undersigned Notary Public, in and for said County of \_\_\_\_\_ in the State of Utah, who after being duly sworn, acknowledged to me that He/She is the \_\_\_\_\_ of \_\_\_\_\_, a Limited Liability Company and that He/She signed the Owner's Dedication freely and voluntarily for and in behalf of said Limited Liability Company for the purposes therein mentioned and acknowledged to me that said Corporation executed the same.

MY COMMISSION EXPIRES: \_\_\_\_\_

\_\_\_\_\_, RESIDING IN \_\_\_\_\_ COUNTY.  
NOTARY PUBLIC

ALINGTON SUBDIVISION  
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER  
OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN,  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH

TOOELE COUNTY RECORDER

RECORDED # \_\_\_\_\_  
STATE OF UTAH, COUNTY OF TOOELE, RECORDED AND FILED AT THE  
REQUEST OF: \_\_\_\_\_  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
FEE: \_\_\_\_\_  
TOOELE COUNTY RECORDER

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD	TANGENT
C1	15.00'	23.56'	90°00'00"	S45°59'24"W	21.21'	15.00'
C2	15.00'	23.79'	90°53'20"	S44°27'16"E	21.38'	15.23'
C3	15.00'	7.12'	27°11'29"	N76°30'20"E	7.05'	3.63'
C4	59.97'	60.36'	57°40'01"	S88°15'24"E	57.85'	33.02'
C5	59.97'	90.62'	86°34'38"	S16°08'04"E	82.24'	56.49'
C6 (TOTAL)	59.97'	150.98'	144°14'39"	N44°58'05"W	114.15'	185.92'
C7	15.00'	7.14'	27°16'12"	S13°31'08"W	7.07'	3.64'
C8	15.00'	23.59'	90°06'27"	S45°10'11"E	21.23'	15.03'
C9	15.00'	23.53'	89°53'33"	S44°49'49"W	21.19'	14.97'
C10	15.00'	20.86'	79°40'48"	S39°57'22"E	19.22'	12.52'
C11	67.00'	12.19'	10°25'39"	S85°00'35"E	12.18'	6.11'
C12	133.00'	65.05'	28°01'27"	N76°12'42"W	64.41'	33.19'
C13	133.00'	16.37'	7°03'15"	N58°40'21"W	16.36'	8.20'
C14 (TOTAL)	133.00'	81.43'	35°04'41"	S72°41'04"E	80.16'	42.03'
C15	67.00'	41.13'	35°10'08"	N72°43'48"W	40.48'	21.23'
C16	15.00'	23.50'	89°45'18"	S44°48'29"W	21.17'	14.94'
C17	133.00'	8.84'	3°48'26"	S88°24'39"E	8.84'	4.42'
C18	15.00'	24.51'	93°36'32"	N46°41'18"E	21.87'	15.98'
C19	15.00'	23.51'	89°46'58"	N45°00'27"W	21.17'	14.94'
C20	15.00'	23.61'	90°10'14"	S45°00'57"W	21.24'	15.04'
C21	15.00'	23.63'	90°14'42"	S45°11'31"E	21.26'	15.06'
C22	15.00'	29.02'	110°51'16"	N55°29'48"W	24.70'	21.77'
C23	60.00'	43.92'	41°56'18"	N89°57'17"W	42.94'	22.99'
C24	60.00'	50.00'	47°44'41"	N45°06'48"W	48.56'	26.55'
C25	60.00'	43.25'	41°18'04"	N0°35'25"W	42.32'	22.61'
C26 (TOTAL)	60.00'	93.92'	89°40'59"	S66°04'57"E	84.62'	59.67'
C27	15.00'	5.27'	20°07'47"	N9°59'43"E	5.24'	2.66'
C28	15.00'	7.63'	29°08'42"	N14°38'31"W	7.55'	3.90'
C29	60.00'	85.10'	81°15'55"	N11°25'06"E	78.14'	51.49'
C30	60.00'	60.85'	58°06'42"	N81°06'24"E	58.28'	33.34'
C31 (TOTAL)	60.00'	145.96'	139°22'37"	S40°28'27"W	112.54'	162.10'
C32	15.00'	5.25'	20°03'41"	S79°52'05"E	5.23'	2.65'
C33	15.00'	23.33'	89°06'40"	N45°32'44"E	21.05'	14.77'
C34	15.00'	23.56'	90°00'00"	N44°00'36"W	21.21'	15.00'
C35	15.00'	23.53'	89°53'33"	N44°49'49"E	21.19'	14.97'
C36	15.00'	23.60'	90°09'15"	S45°08'47"E	21.24'	15.04'
C37	15.00'	23.59'	90°06'27"	N45°10'11"W	21.23'	15.03'
C38	15.00'	23.52'	89°50'45"	S44°51'13"W	21.18'	14.96'
C39	15.00'	23.33'	89°53'33"	N44°49'49"E	21.19'	14.97'
C40	15.00'	26.60'	90°09'15"	S45°08'47"E	21.24'	15.04'
C41	15.00'	23.59'	90°06'27"	N45°10'11"W	21.23'	15.03'
C42	15.00'	23.52'	89°50'45"	S44°51'13"W	21.18'	14.96'

CENTERLINE CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD	TANGENT
CL1	100.00'	6.64'	3°48'26"	N88°24'39"W	6.64'	3.32'
CL2	100.00'	54.74'	31°21'43"	N70°49'35"W	54.06'	28.07'
CL3 (TOTAL)	100.00'	61.38'	35°10'08"	N72°43'48"W	60.42'	31.69'
CL4	100.00'	43.02'	24°39'02"	S67°28'15"E	42.69'	21.85'
CL5	100.00'	18.20'	10°25'39"	S85°00'35"E	18.17'	9.13'
CL6 (TOTAL)	100.00'	61.22'	35°04'41"	S72°41'04"E	60.27'	31.60'

LINE TABLE		
LINE	BEARING	LENGTH
L1	S60°47'08"W	60.00'
L2	S20°09'45"W	60.00'
L3	S27°05'25"E	59.97'
L4	S62°50'46"E	59.97'
L5	S20°55'26"E	60.00'
L6	S69°56'23"E	60.00'

ROCKY MOUNTAIN POWER NOTES:

- PURSUANT TO UTAH CODE ANN. § 54-3-27 THIS PLAT CONVEYS TO THE OWNER(S) OR OPERATORS OF UTILITY FACILITIES A PUBLIC UTILITY EASEMENT ALONG WITH ALL THE RIGHTS AND DUTIES DESCRIBED THEREIN.
- PURSUANT TO UTAH CODE ANN. § 17-28A-603(4)(C)(II) ROCKY MOUNTAIN POWER ACCEPTS DELIVERY OF THE RUE AS DESCRIBED IN THIS PLAT AND APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS AND APPROXIMATES THE LOCATION OF THE PUBLIC UTILITY EASEMENTS, BUT DOES NOT WARRANT THEIR PRECISE LOCATION. ROCKY MOUNTAIN POWER MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT AFFECT ANY RIGHT THAT ROCKY MOUNTAIN POWER HAS UNDER:
  - A RECORDED EASEMENT OR RIGHT-OF-WAY
  - THE LAW APPLICABLE TO PRESCRIPTIVE RIGHTS
  - TITLE 54, CHAPTER 6A, DAMAGE TO UNDERGROUND UTILITY FACILITIES OR
  - ANY OTHER PROVISION OF LAW.

DOMINION ENERGY APPROVES THIS PLAT SOLELY FOR THE PURPOSE OF CONFIRMING THAT THE PLAT CONTAINS PUBLIC UTILITY EASEMENTS. DOMINION ENERGY MAY REQUIRE OTHER EASEMENTS IN ORDER TO SERVE THIS DEVELOPMENT. THIS APPROVAL DOES NOT CONSTITUTE ABROGATION OR WAIVER OF ANY OTHER EXISTING RIGHTS, OBLIGATIONS OR LIABILITIES PROVIDED BY LAW OR EQUITY. THIS APPROVAL DOES NOT CONSTITUTE ACCEPTANCE, APPROVAL OR ACKNOWLEDGMENT OF ANY TERMS CONTAINED IN THE PLAT, INCLUDING THOSE SET IN THE OWNERS DEDICATION AND THE NOTES AND DOES NOT CONSTITUTE A GUARANTEE OF PARTICULAR TERMS OF NATURAL GAS SERVICE. FOR FURTHER INFORMATION PLEASE CONTACT DOMINION'S RIGHT-OF-WAY DEPARTMENT AT 1-800-366-8532.

CENTURYLINK \_\_\_\_\_ DATE \_\_\_\_\_

ROCKY MOUNTAIN POWER \_\_\_\_\_ DATE \_\_\_\_\_

DOMINION ENERGY \_\_\_\_\_ DATE \_\_\_\_\_

COMCAST \_\_\_\_\_ DATE \_\_\_\_\_

SHEET 1 OF 2

PROJECT NUMBER : 11265K  
MANAGER : J. CLEGG  
DRAWN BY : R. FISH  
CHECKED BY : D. KINSMAN  
DATE : 9/20/22



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Phone: 435.865.1453  
RICHFIELD  
Phone: 435.895.2983

<b>TOOELE COUNTY TREASURER</b> I HEREBY CERTIFY THAT PROPERTY TAXES DUE AND OWNING HAVE BEEN PAID IN FULL THIS _____ DAY OF _____, 20____, FOR PARCEL NO. _____ TOOELE COUNTY TREASURER	<b>CITY MAYOR APPROVAL</b> APPROVED THIS _____ DAY OF _____, 20____, BY THE GRANTSVILLE CITY MAYOR _____ GRANTSVILLE CITY MAYOR ATTEST: GRANTSVILLE CITY RECORDER	<b>CITY ATTORNEY'S APPROVAL</b> APPROVED THIS _____ DAY OF _____, 20____, BY THE GRANTSVILLE CITY ATTORNEY _____ GRANTSVILLE CITY ATTORNEY
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<b>CITY FIRE DEPARTMENT APPROVAL</b> APPROVED THIS _____ DAY OF _____, 20____, BY THE GRANTSVILLE CITY FIRE DEPT. _____ GRANTSVILLE CITY FIRE CHIEF	<b>GRANTSVILLE CITY PUBLIC WORKS APPROVAL</b> APPROVED THIS _____ DAY OF _____, 20____, BY THE GRANTSVILLE CITY PUBLIC WORKS. _____ GRANTSVILLE CITY PUBLIC WORKS DIRECTOR	<b>PLANNING COMMISSION APPROVAL</b> APPROVED THIS _____ DAY OF _____, 20____, BY THE GRANTSVILLE CITY PLANNING COMMISSION. _____ CHAIR, GRANTSVILLE CITY PLANNING COMMISSION	<b>TOOELE COUNTY SURVEY DEPARTMENT</b> APPROVED THIS _____ DAY OF _____, 20____, BY THE TOOELE COUNTY SURVEY DEPARTMENT. _____ RECORD OF SURVEY FILE #20XX-XXXX TOOELE COUNTY SURVEY DEPT. DIRECTOR	<b>ENGINEER'S CERTIFICATE</b> I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN THIS OFFICE. GRANTSVILLE CITY ENGINEER DATE _____	<b>DEVELOPER</b> IRONWOOD REAL ESTATE LLC 1392 PASS CANYON ROAD ERDA, UT 84074 JOE WHITE 435-830-3642
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ALINGTON SUBDIVISION  
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER  
OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN,  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH



PRELIMINARY

For Review  
2020 MAY 2 5:04:11 PM

ALINGTON SUBDIVISION  
PRELIMINARY PLAT

LOCATED IN THE SOUTHWEST QUARTER  
OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN,  
GRANTSVILLE CITY, TOOELE COUNTY, UTAH

TOOELE COUNTY RECORDER

RECORDED # \_\_\_\_\_  
STATE OF UTAH, COUNTY OF TOOELE, RECORDED AND FILED AT THE  
REQUEST OF: \_\_\_\_\_  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
FEES: \_\_\_\_\_ TOOELE COUNTY RECORDER

DEVELOPER  
IRONWOOD REAL ESTATE LLC  
1392 PASS CANYON ROAD  
ERDA, UT 84074  
JOE WHITE  
435-830-3642

SHEET 2 OF 2  
PROJECT NUMBER: T1265K  
MANAGER: J. CLEGG  
DRAWN BY: R. FISH  
CHECKED BY: D. KINSMAN  
DATE: 9/20/22



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FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074  
CONTACT:  
JOE WHITE  
PHONE: 801-500-0862

ALINGTON SUBDIVISION

PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

LICENSED PROFESSIONAL ENGINEER

Jacob M. Clegg

12565K

9/20/2022

STATE OF UTAH

PRELIMINARY

GENERAL NOTES	
PROJECT NUMBER T1265K	PRINT DATE 11/11/2021
DRAWN BY J.CID	CHECKED BY J. CLEGG
PROJECT MANAGER J. CLEGG	

C-001

GRANTSVILLE GENERAL NOTES

- ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS. ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CURB, GUTTER, AND SIDEWALK, FOUND TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TOOELE COUNTY SURVEYORS REQUIREMENTS.
- ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SNOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL PROVIDE PIPE ZONE MATERIAL TO BE PLACED.
- REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
- WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR MORE DETAILS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPODES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
- ALL CITY MAINTAINED UTILITIES INCLUDING, WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
- CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
- PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATER LINES, IRRIGATION, STREET LIGHTING, AND POWER. AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS. NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE: 1 DXF COPY, 1 PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
- FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPs WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOT SEPARATOR.
- ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
- TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORICULTURE.
- WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT A COLLECTOR STREET SIDEWALK, THE DEVELOPMENT SHALL ALSO PROVIDE A SIDEWALK UNDERNEATH THE PUBLICLY OWNED CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
- CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO, SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATERWAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
- CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND TOP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

GRANTSVILLE CITY GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

GRANTSVILLE CITY TRAFFIC NOTES

- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCRoACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCRoACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICAADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
- ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 10B (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A "Z" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
- SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
- ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
- PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE 1/2 INCH FOR RESURFACING AND COLLECTED ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3% AIR VOIDS.
- POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
- ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPING, GRANULAR AND FLOWABLE. 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS POMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS POMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
- ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

GRANTSVILLE CITY WATER NOTES

- THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
- ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
- FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPERS EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
- FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPERS EXPENSE) AND INSTALLED BY DEVELOPER.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
- GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY, REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
- WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
- CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER) IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPERS EXPENSE.
- ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
- ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
- NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
- ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE.
- ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
- LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
- ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
- MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
- APWA PLAN 562, CITY REQUIRES STAINLESS STEEL, TE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL. TE-DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
- WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
- CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.

GRANSTVILLE CITY FIRE DEPARTMENT NOTES

- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A W.W.A. APPROVED.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5' MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT. WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR, THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
- ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV IS/NT FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF ITS CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
- POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
- ROADS AND ACCESSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
- ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
B	BEGINNING OF TRENCH PRACTICES
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
C	CURVE
CB	CATCH BASIN
CF	CURB FACE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EOA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GV	GATE VALVE
HC	HANDICAP
HP	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
MN	MINIMUM
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
PIV	POST INDICATOR VALVE
PRC	POINT OF REVERSE CURVATURE
PRO	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROOF DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SIDEWALK
SWL	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TGO	TOP OF GRATE
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TYP	TYPICAL
VC	VERTICAL CURVE
WIV	WALL INDICATOR VALVE
WL	WATER LINE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

LEGEND

	SECTION CORNER		EXISTING EDGE OF ASPHALT
	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
	PROPOSED MONUMENT		EXISTING STRIPING
	EXISTING REBAR AND CAP		PROPOSED STRIPING
	SET ENSIGN REBAR AND CAP		EXISTING FENCE
	EXISTING WATER METER		PROPOSED FENCE
	PROPOSED WATER METER		EXISTING FLOW LINE
	EXISTING WATER MANHOLE		PROPOSED FLOW LINE
	PROPOSED WATER MANHOLE		GRADE BREAK
	EXISTING WATER BOX		EXISTING STORM DRAIN LINE
	EXISTING WATER VALVE		PROPOSED STORM DRAIN LINE
	PROPOSED WATER VALVE		ROOF DRAIN LINE
	EXISTING FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE HYDRANT		HIGHWATER LINE
	PROPOSED FIRE DEPARTMENT CONNECTION		EXISTING SANITARY SEWER
	EXISTING SECONDARY WATER VALVE		PROPOSED SANITARY SEWER LINE
	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN. SWR. SERVICE LINE
	EXISTING IRRIGATION BOX		EXISTING LAND DRAIN LINE
	EXISTING IRRIGATION VALVE		PROPOSED LAND DRAIN LINE
	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN SERVICE LINE
	EXISTING SANITARY SEWER MANHOLE		EXISTING CULINARY WATER LINE
	PROPOSED SANITARY SEWER MANHOLE		PROPOSED CULINARY WATER LINE
	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE LINE
	EXISTING STORM DRAIN CLEAN OUT BOX		EXISTING SECONDARY WATER LINE
	PROPOSED STORM DRAIN CLEAN OUT BOX		PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX		PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN		EXISTING IRRIGATION LINE
	PROPOSED STORM DRAIN CATCH BASIN		PROPOSED IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX		EXISTING OVERHEAD POWER LINE
	PROPOSED STORM DRAIN COMBO BOX		EXISTING ELECTRICAL LINE
	EXISTING STORM DRAIN CLEAN OUT		EXISTING GAS LINE
	EXISTING STORM DRAIN CULVERT		EXISTING TELEPHONE LINE
	PROPOSED STORM DRAIN CULVERT		ACCESSIBLE ROUTE
	TEMPORARY SAG INLET PROTECTION		SAW CUT LINE
	TEMPORARY IN-LINE INLET PROTECTION		STRAW WATTLE
	ROOF DRAIN		TEMPORARY BERM
	EXISTING ELECTRICAL MANHOLE		TEMPORARY SILT FENCE
	EXISTING ELECTRICAL BOX		LIMITS OF DISTURBANCE
	EXISTING TRANSFORMER		EXISTING WALL
	EXISTING UTILITY POLE		PROPOSED WALL
	EXISTING LIGHT		EXISTING CONTOURS
	PROPOSED LIGHT		PROPOSED 0.5' CONTOURS
	EXISTING GAS METER		BUILDABLE AREA WITHIN SETBACKS
	EXISTING GAS MANHOLE		PUBLIC DRAINAGE EASEMENT
	EXISTING GAS VALVE		EXISTING ASPHALT TO BE REMOVED
	EXISTING TELEPHONE MANHOLE		PROPOSED ASPHALT
	EXISTING TELEPHONE BOX		EXISTING CURB AND GUTTER
	EXISTING TRAFFIC SIGNAL BOX		PROPOSED CURB AND GUTTER
	EXISTING CABLE BOX		PROPOSED REVERSE PAN CURB AND GUTTER
	EXISTING BOLLARD		TRANSITION TO REVERSE PAN CURB
	PROPOSED BOLLARD		TYPE D MOUNTABLE CURB AND GUTTER
	EXISTING SIGN		CONCRETE TO BE REMOVED
	PROPOSED SIGN		EXISTING CONCRETE
	EXISTING SPOT ELEVATION		PROPOSED CONCRETE
	PROPOSED SPOT ELEVATION		STAMPED CONCRETE</





**TOOELE**  
169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

**SALT LAKE CITY**  
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**LAYTON**  
Phone: 801.547.1100

**CEDAR CITY**  
Phone: 435.865.1453

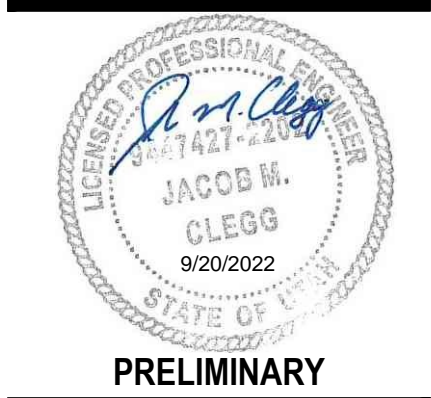
**RICHFIELD**  
Phone: 435.896.2983

**WWW.ENSIGNENG.COM**

FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074

CONTACT:  
JOE WHITE  
PHONE: 801-800-0862

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH



**GRANTSVILLE GENERAL  
PRECONSTRUCTION NOTES**

PROJECT NUMBER  
T1265K  
PRINT DATE  
11/11/2021  
DRAWN BY  
J.CID  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
J. CLEGG

**C-002**

#### Chain of Communication

- First Contact: Brad Pace Public Works Inspector
- Second Contact: Glen Millward (Water), Markus Seat (Sewer), Travis Daniels (Fire Chief), Jason Smith (Assistant Fire Chief).

Please communicate through e-mail to maintain a written record.

#### Main Construction Contact

Project Foreman:

#### Construction Schedule

- Construction starts:
- Please provide a construction schedule. Helps City to plan for what is happening. Provide to James and he will disseminate to others.

#### Construction Staking

- Surveying & Staking:
- We are having some alignment issues on City utilities please make sure you get adequate staking.

#### Geotechnical

- Does the Contractor have a copy of the Geotechnical Report and is he familiar with the requirements?
- Does the City Inspector have a copy of the Geotechnical Report and is he familiar with the requirements? The City Inspectors will be given a copy.
- Geo-tech shall monitor the excavation and determine the locations that require additional granular sub-base and specify the depth required. City would like a drawings showing the areas that require additional work.
- Who will do soils, compaction testing?

#### Submittals

- The Contractor shall provide submittals for material to the City for approval prior to purchase of materials and installation. The City wants to check that the materials meet spec before they are ordered so they don't get rejected when they have been installed. Submit to Christy Montierth in Public Works.  
The City is fine with the materials that have previously been used.

#### Sewer

- Pipe Material: PVC ASTM D-3034 SDR-35
- Follow OSHA requirements for trenching (4' vertical with 1:1 sloping or stepping or use trench boxes).
- Sewer laterals per city standard. (APWA 431).
- Utah requirement of 10' horizontal separation between sewer and water laterals.
- 18" minimum vertical separation between water and sewer.
- Crushed Rock ¾-inch minus in pipe zone (3/8-inch rounded pea gravel is not allowed by the city).
- Sewer laterals, gravel bedding to be extended to dwelling.
- Native soils may be used above the pipe zone if they are suitable to the city and can meet compaction requirements (blending may be required).
- Offset tees for sewer laterals; gasket type.
- Compaction - 95% in roads, 90% off-road (ASTM D-1557, Modified Proctor)
- Installation as per ASTM D-2321
- All precast manholes to be provided with rubber boots and stainless-steel bands at pipe penetrations.
- Interior pipe penetrations in all sewer manholes shall be grouted.
- Tracer wire extending from main to lateral stub on all laterals and extended to surface at stub marker. Include an extra 30-feet to extend along the service to the dwelling.
- Stamp (When Wet) or pin (Do Not Grind) gutter both at the lip and top of curb an "S" at all service laterals (Two places for each service). Make sure these are located above the laterals in the proper locations.
- Extend utility lateral stub markers beyond the 15-foot PU&DE (15-feet behind back of walk).
- End of sewer laterals shall be plugged.

Testing:

- Air Test mandatory - certification required.
- Vacuum test required for the manholes.
- Video inspection after flushing - The City does not need to observe the video inspection. Video record to be provided for City review.
- Please provide the City 48 hours' notice prior to testing.

#### Emergency Services

- Install silt fence five feet out around fire hydrants and electrical transformers after their installation. This helps maintain a clear space around them and makes them visible if emergency services are needing to find them during construction.
- Install temporary signage at the beginning of work on the site.
- Park only on one side of access roads so emergency access is clear.
- Coordinate with Fire Chief for his inspections. Roads: face of curb to face of curb is proper distance and hydrants are properly placed. The height of the hydrants will also be inspected. 18" above ground from the pumper nozzle.
- Paint red curb ten feet either direction fire hydrants.

#### Culinary Water

- Pipe Material: PVC C900 DR18
- Use bedding sand for backfill in the pipe zone (City needs to preapprove sand bedding.) City wants cleaned washed sand. The City wants a bucket ahead of time so the City can wet it and see if it sets up like concrete or not. It can't set up like concrete. They can pull from the Staker pit but the sand needs to be washed. The City can provide an example for what they are looking for.
- Water laterals sand bedding needs to go to the dwelling.
- Native soils may be used above the pipe zone if they are suitable to the city and can meet compaction requirements (blending may be required)
- Valves shall be clustered in intersections
- Valves & temp. blow-off are located at the dead-end main of phase lines to allow for flushing, isolation and continued service to existing connections when future phases are constructed.
- Meter and services shall be ¾-inch polyethylene SDR11 IPS. Install service laterals and meters within 5-feet of lot lines (as close to lot line as practicable), one on each side of common lot line (alternate with secondary water).
- Use 150# corp stops.
- 10' horizontal separation of water and sewer lateral per state requirements. Water lateral to be located upslope of sewer lateral to the extent practicable.
- 18" minimum vertical separation between water and sewer.
- 10' horizontal separation of water and stormwater.
- Meter Barrels shall be 21-inch diameter white corrugated polyethylene
- Meter to be installed 18 to 22 inches below the lid.
- Place sand around the water service setter bases and above to stabilize setter and provide insulation. Gravel is not allowed.
- Tapping saddles shall be brass with double stainless steel or brass straps wrapped with polysock.
- Use dual check and heavy-duty angle valves for all services.
- Install tracer wire and locating tape above water main.
- Install tracer wire from main connection through meter pit to stub marker with 30' excess to extend to the dwelling.
- Stamp (When Wet) or pin (Do Not Grind) gutter both at the lip and top of curb with a "W" at all service laterals (2 places each service). Make sure these are located above the laterals in the proper locations.
- Thrust blocks need to be inspected by the City prior to backfill. Size based on test pressures
- Make sure fire hydrants need to be installed to the proper height to help the break a way function works.
- Hydro finders must be installed.

Testing:  
• Hydrostatic Pressure Test: 200 psi for a minimum of 2 hours for main only and 150 psi if testing with tapping saddles and corporations in place - Inspector (Glen Millward or assigned City Inspector) must be present for the entire duration of the test.

- Disinfection:
- Hypochlorite powder
  - Chlorine residuals will be tested once by the City, but any retests will be performed by the contractor/developer
  - Only one series of Bac-T testing will be performed by the City to accept water lines and any retests will be performed by the contractor/developer (preliminary investigative tests by the contractor/developer are encouraged) The City needs to do the grab on any samples.
    - Per AWWA C651, Bac-T testing shall be completed for every 1,200 feet of new water main, at the end of the line, and at each branch. Two consecutive sample sets shall be collected at the aforementioned locations at least 24 hours apart.

The City will not swing meter boxes to accommodate the driveway. Think about the lateral locations before locating the dwelling.

#### Storm Water

- Pipe Material:
- Reinforced Concrete (RCP) and/or ADS N-12-WT
  - Installation and compaction to follow manufacturers recommendations.
  - All catch basin boxes include a sump. For boxes with snouts the sump depth is based upon the snout model manufactures recommendation. For all other boxes the depth is 12" below the flow line of the pipes.

#### Franchise Utilities

- Gas: Dominion
- Power: Rocky Mountain Power
- Cable: Comcast
- Phone: Century Link
- Please install stubs for future phases for franchised utilities so that new streets and concrete don't have to be cut to extend to a future phase.

#### Surface Improvements

- Pavement:
- ½" or ¾-inch asphalt aggregate (1/2" is the City preference). The City Standard pavement section is 3-inch Asphalt on 6-inch UBC on 8-inch Granular Borrow. (Fabric)
  - Marshall mix required prior to paving
  - Road base and cross-section per approved drawings.
  - Provide proper signage per Utah MUTCD.
  - Provide stops bars at stop signs.
  - ADA truncated dome inserts need to be yellow in ped ramps. The spacing is required to be 2" to front of ramp and no more than 2" off the sides of the walking path.
  - Install "No Parking" signs in temporary turnarounds. Homeowners are parking vehicles in them.

Concrete:

- Air test every 50 yards unless results are out of spec (5% - 7%)
- 3 cylinders every 50 yards
- 4,500 psi concrete for all surface improvements.
- Sidewalk section is 6" PCC on 6" UBC.

Earthwork:

- Provide compaction and sieve analysis on all initial proctors and new material.
- Compaction tests every 100 feet of pipe trench. Vary depths to provide results throughout strata.
- Road work and base - both shoulders and centerline with a maximum of 200' between tests.
- Proof roll trenches, subgrade, and base
- Minimum of four compaction tests around each manhole and cleanout.
- Use APWA Detail 255 for pipe trench patching.

#### Testing and QA/QC

- 48-hour notice is required prior to any testing. Make sure the test is scheduled.
- Inspector(s) representing the city must be present for all testing including those performed by an independent agency.
- Public Works hours are 7 am to 3:30 pm Monday through Friday. However, the City will work with Contractor if Contractor is working outside these hours.
- Compact fill in 8" lifts.

#### Construction Water

- Contractor shall obtain water for construction from a city approved fire hydrant using a hydrant meter rented from the city. There is a \$1600 refundable deposit for hydrant meters and a charge of \$6 per 1000 gallons for all water used. \$75 a month rental charge.
- Please don't damage the meters and don't take anything off the meter.

#### Erosion Control / Storm Water System Protection

- Minimize potential for off-site run-off
- Minimize disturbed areas.
- Keep working area wetted to minimize dust.
- Provide silt fence to prevent sediment transport downstream.
- Contain all sediment on site.
- Maintain BMPs as per SWPPP.
- SWPPP to be on-site at all times.
- Proof of coverage under UPDES required
  - City will need a copy of the NOI.
- The City is on Compliance Go. Make sure updates are loaded in Compliance Go. Add the City Public Works e-mail contact. Have a RSI and PTOE on site.
- The City will check with the contractor after an event.
- The City will share inspection reports with the Contractor.
- Inspect after rainfall and other events (weather, and construction around BMPs) that may affect BMPs.
- Make sure to follow the SWPPP as shown on the plans.
- Provide vegetative cover on completed or long-term temporary grading within 14 days.
- Put the SWPPP sign on site and visible so the State can see it on a drive by.
- 

#### Construction Debris Disposal

- Maintain a work site that is clean as possible and properly dispose of debris and trash.
- No garbage pits allowed
- No on-site concrete washout allowed unless hauled from site at end of project or other provisions are made.

#### Site Safety

- Conform to OSHA Standards.
- Close trenches at night.
- Secure open trenches and plug lines.

#### Security

- Secure construction equipment when not in use.

#### Sanitation

- Clean and properly maintained Port-A-John(s) on site at all times.

#### Hazardous Material Storage on Site

- If there are hazardous materials on site, make sure the City has approved it and that it has secondary containment. The Fire Chief needs to know what is on site, how it is secured and where it is located.

#### Site Access

- As shown on the SWPPP don't deviate from it.

#### Construction Observation

- City personnel will inspect regularly as needed.

#### Construction Drawings

- Keep an accurate set of As-Builts.
- Provide copies of As-Builts at completion of project prior to occupancy.
- Make sure changes in as-builts are bubbled and clear as what changes have occurred.
- City has storm basin plan certification the designing engineer needs to sign and stamp.
- Provide digital set of As-Builts (PDF, DWG and Shape Files are required.) for City prior to occupancy.
- City will provide a list of items required in the shape file.
- Kristy will provide her requirements for the construction drawings.
- If there are questions about the plans and conditions on the ground first request the design engineer's interpretation and bring that interpretation to the City when questions come up. The onsite inspectors cannot make approvals to changes, document changes.

Don't print any plans until all of the changes have been made and you have received a copy of the signed plans from Braydee Baugh.

- Provide Braydee Baugh with one 24x36 and Four 11x17's.



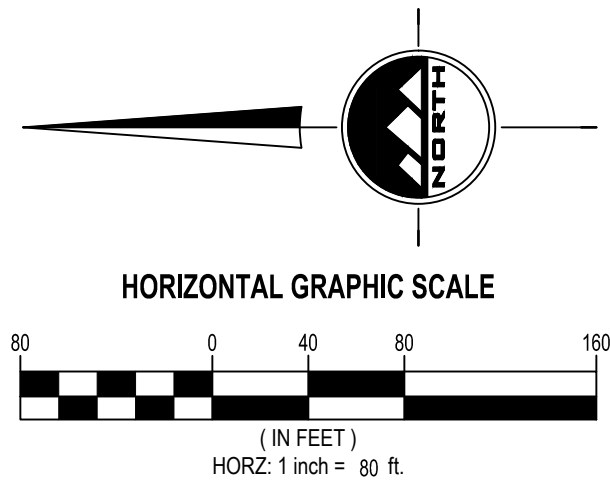
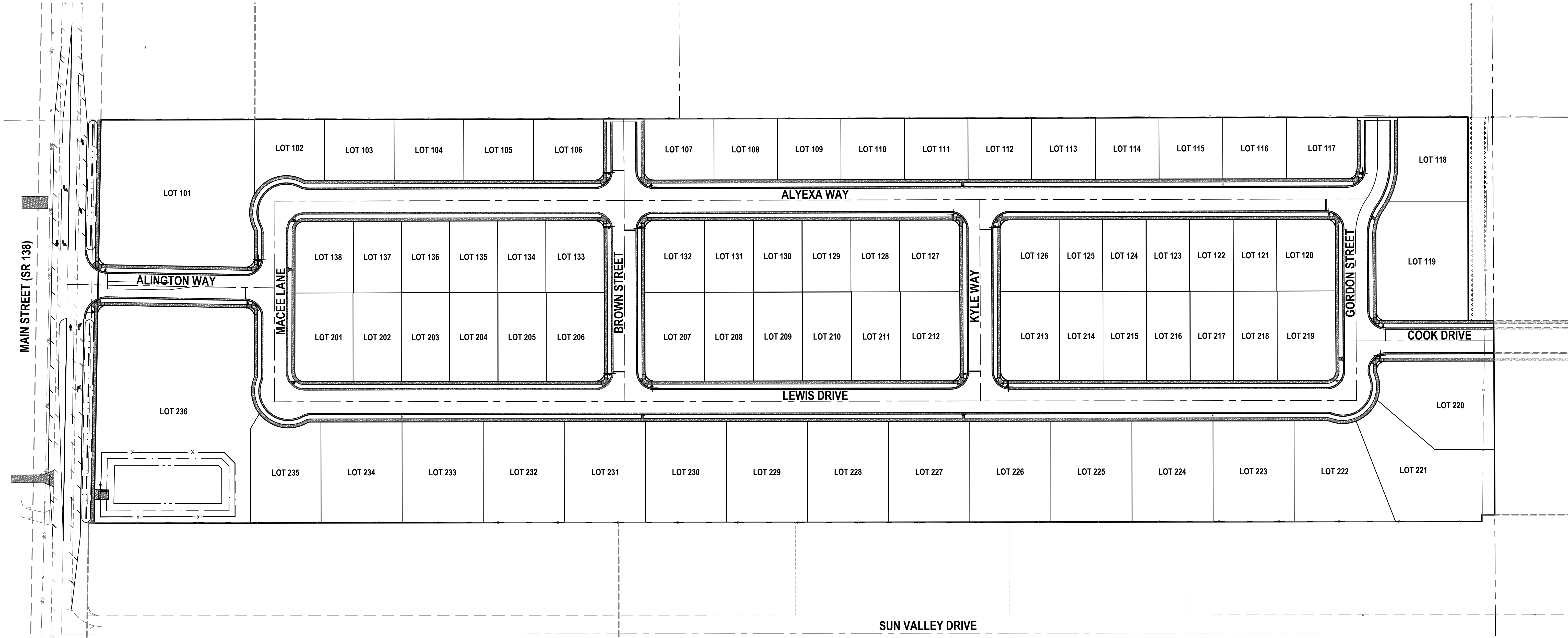
811

Know what's below.  
Call before you dig.

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)  
  
ELEV = 4601.53



- GENERAL NOTES**
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  - SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
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EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

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Tooele, UT. 84074  
Phone: 435.843.3590

SALT LAKE CITY

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LAYTON

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RICHFIELD

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FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074  
CONTACT:  
JOE WHITE  
PHONE: 435-630-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

Jacob M. Clegg

JACOB M.  
CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

OVERALL SITE PLAN

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

C-100



811

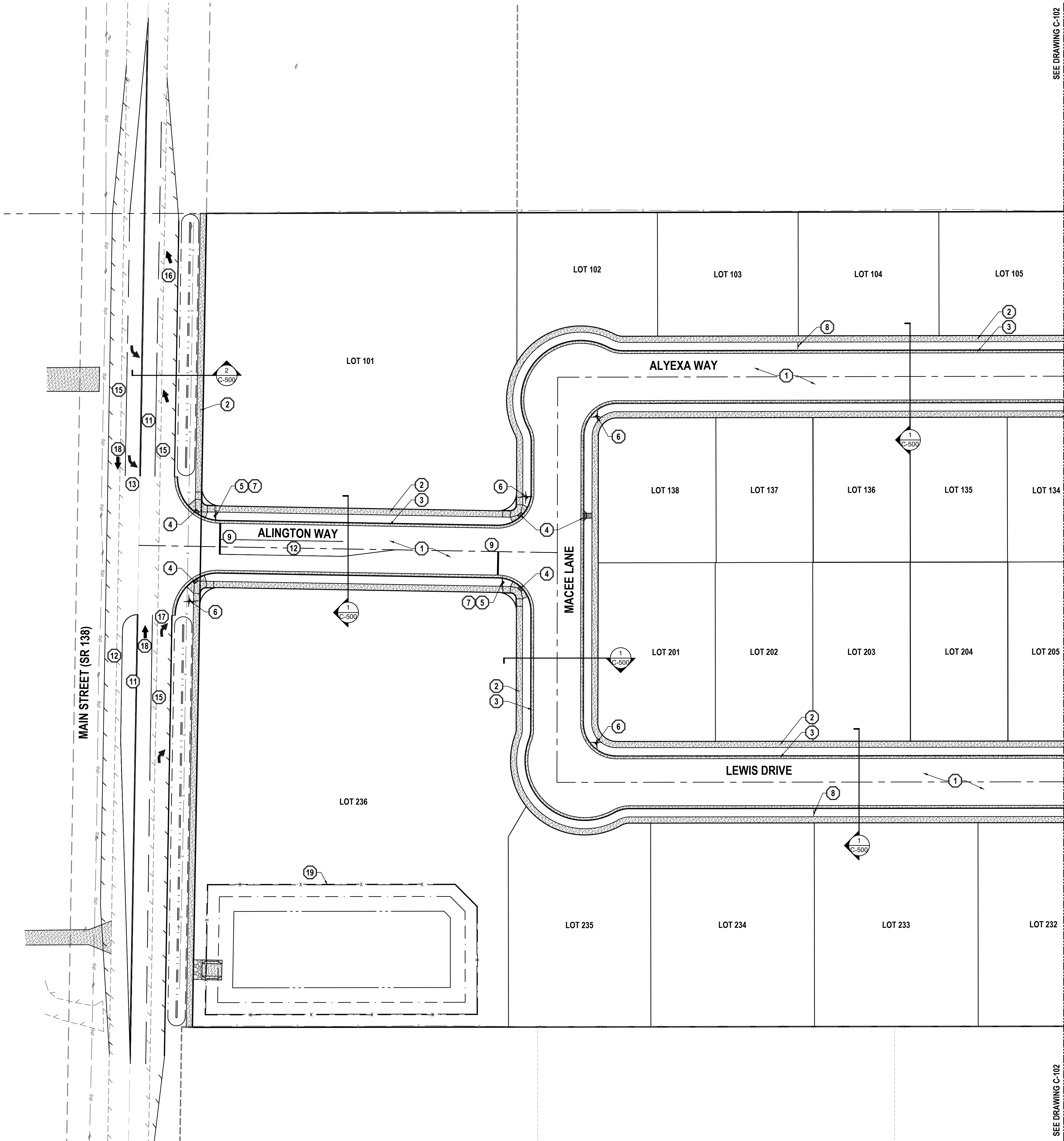
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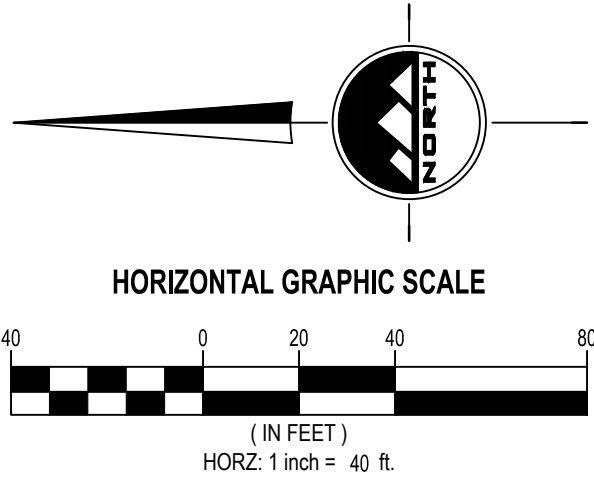
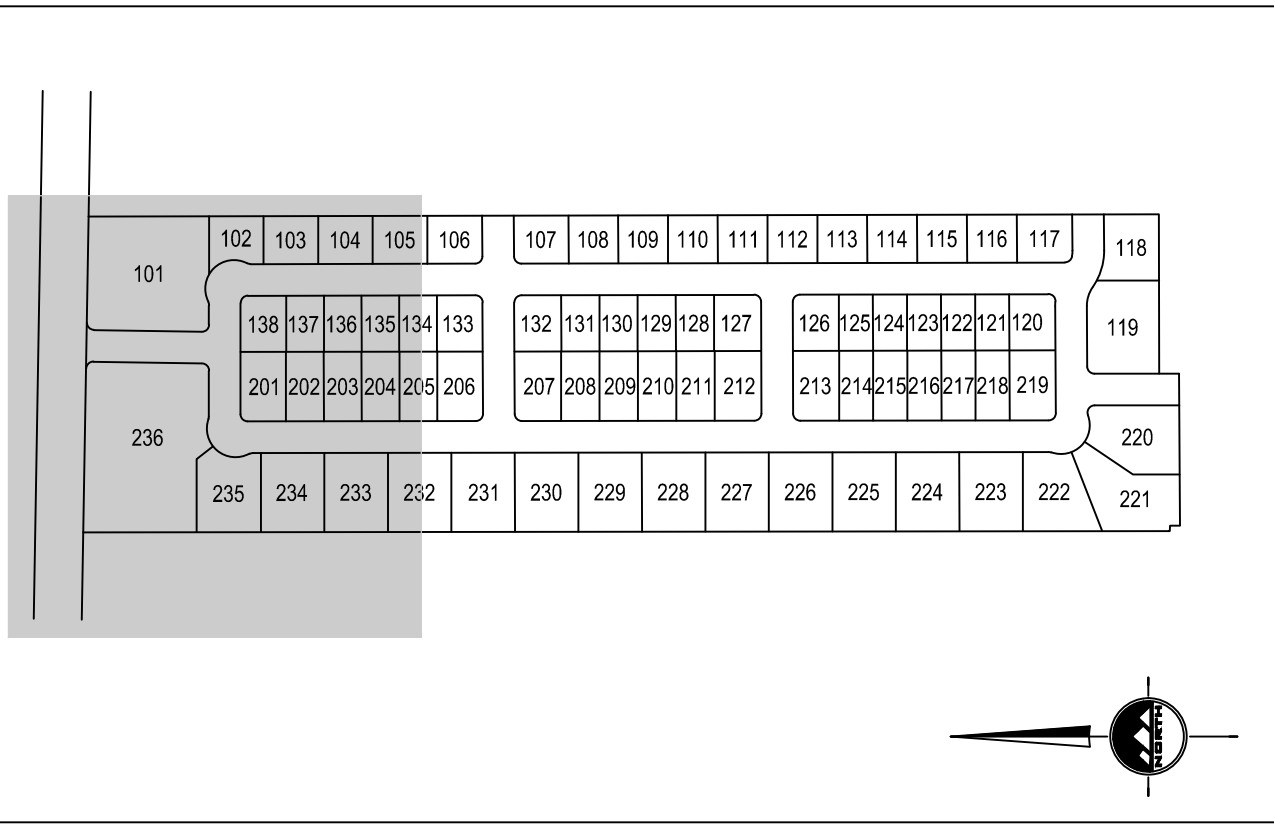
BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
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PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
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  - 6" THICK CONCRETE SIDEWALK PER APWA MODIFIED STANDARD PLAN NO. 231.
  - 30" TYPE "A" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205.
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  - "CROSS TRAFFIC DOES NOT STOP" SIGN MUTCD W4-4P.
  - "CHILDREN AT PLAY" SIGN MUTCD W9-12.
  - 8" WIDE SOLID STOP BAR PER MUTCD STANDARD PLANS
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  - SOLID YELLOW LINE PER MUTCD STANDARDS AND SPECIFICATIONS.
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  - SOLID WHITE LINE PER MUTCD STANDARDS AND SPECIFICATIONS.
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PHONE: 435-830-3642

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PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

PRELIMINARY

SITE PLAN

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

C-101



811

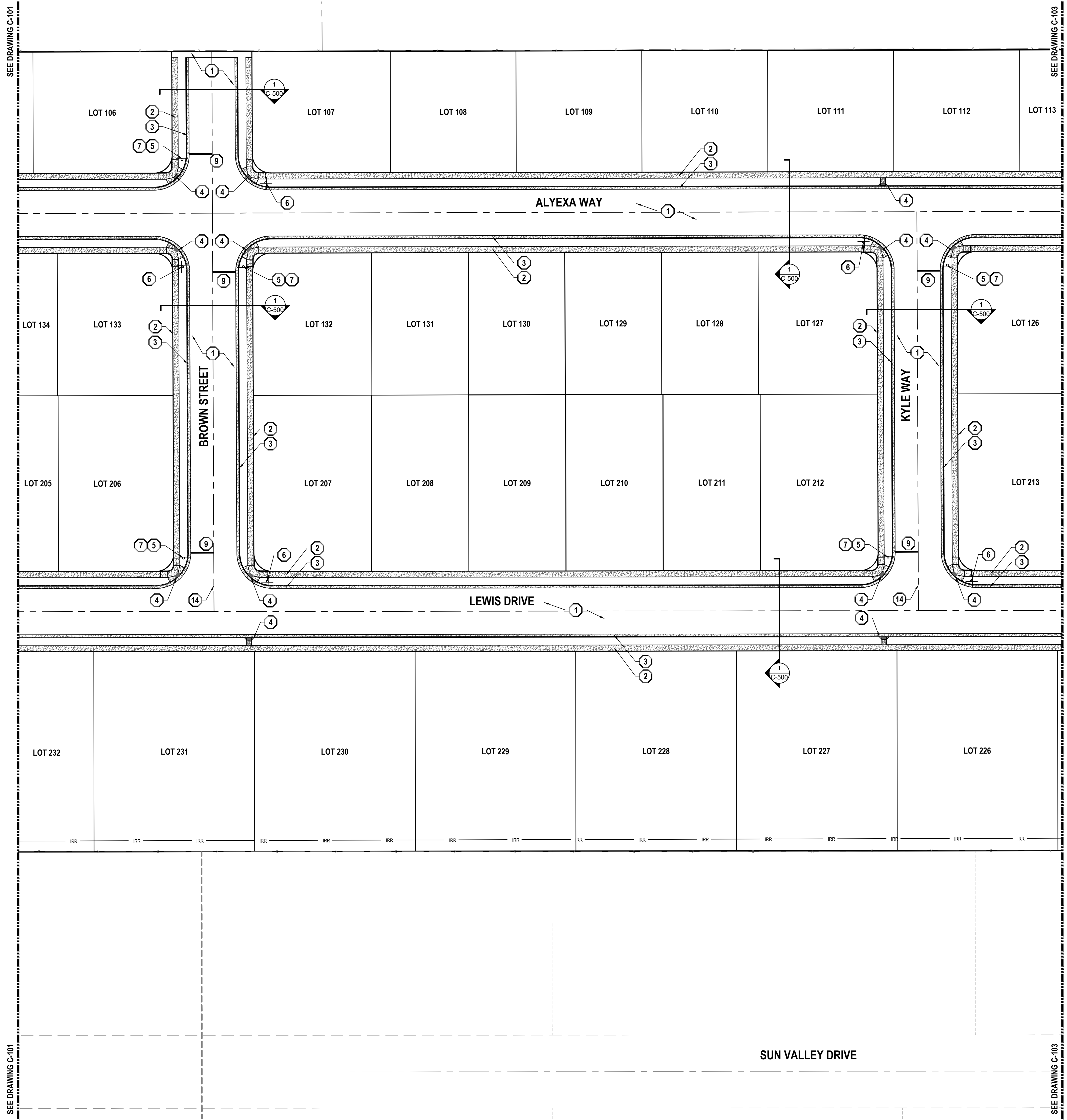
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BENCHMARK

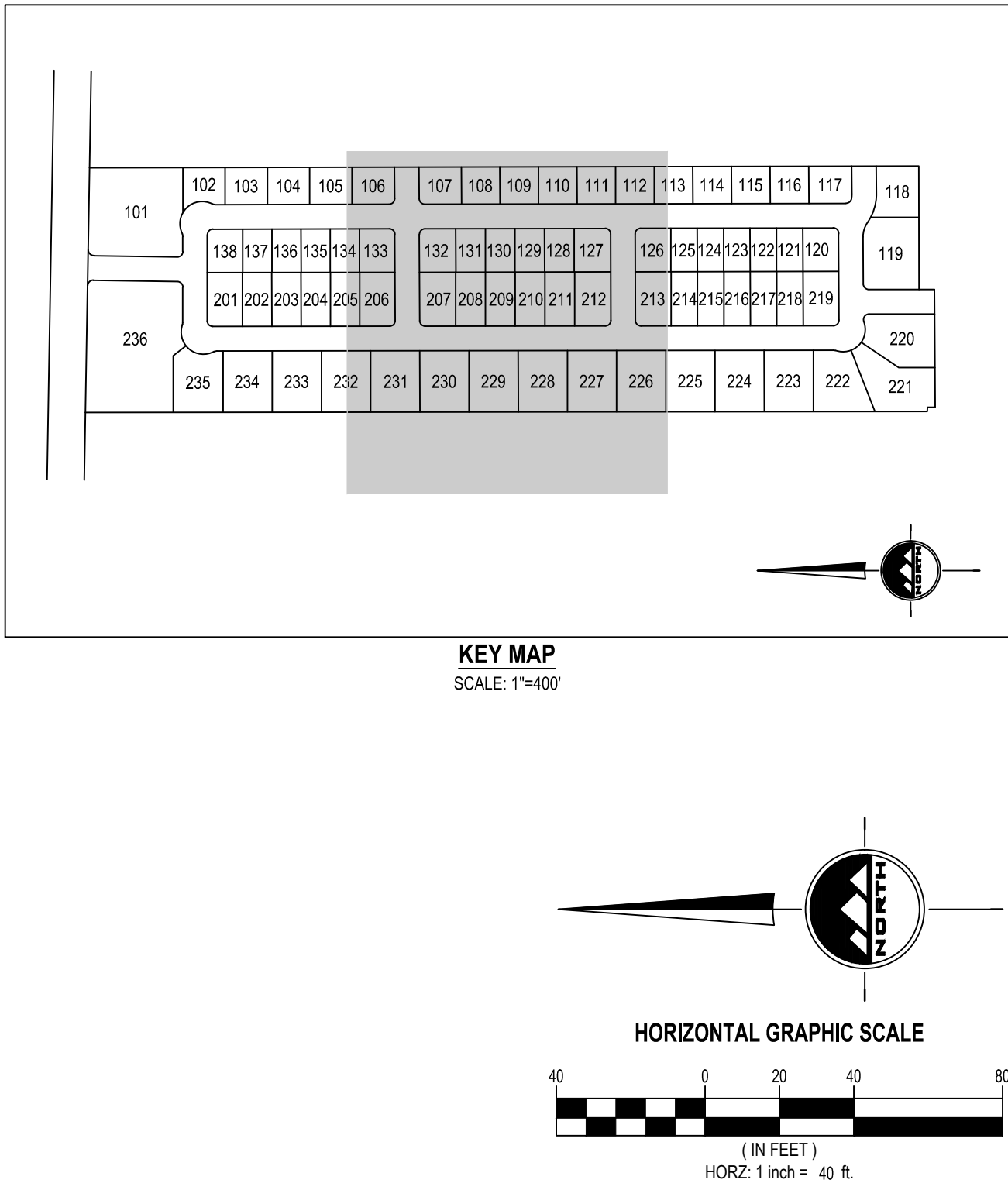
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ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

LICENSED PROFESSIONAL ENGINEER  
JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

SITE PLAN

PROJECT NUMBER  
T1265K  
PRINT DATE  
9/20/2022  
DRAWN BY  
J.CID  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
J. CLEGG

C-102



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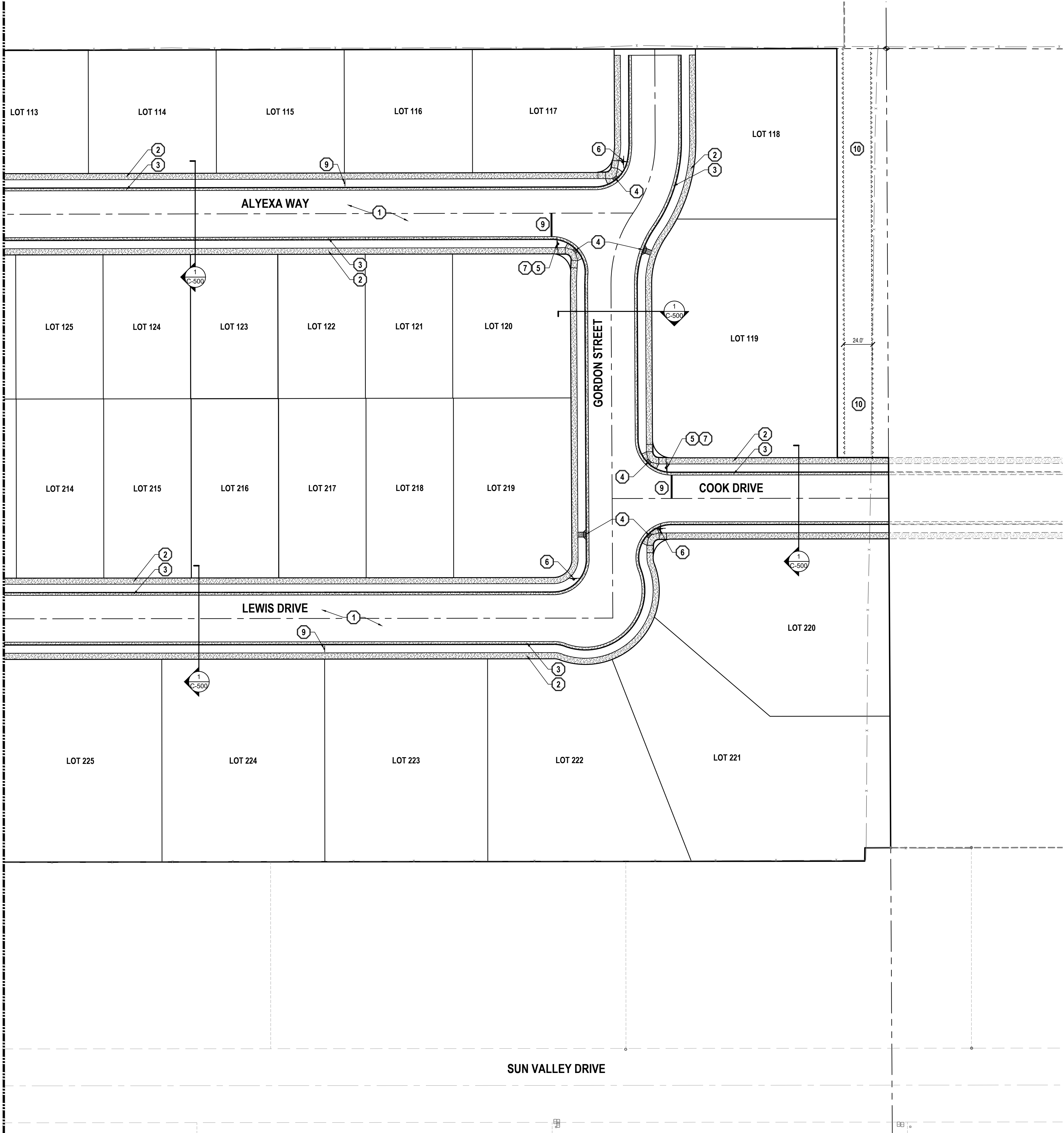
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ELEV = 4601.53

BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
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SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)  
  
ELEV = 4601.53

SEE DRAWING C-102

SEE DRAWING C-102



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"STOP" SIGN PER MUTCD R1-1. "ALL WAY" SIGN AT 3 AND 4 WAY INTERSECTION.
- 6

STREET INTERSECTION IDENTIFICATION PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS
- 7

"CROSS TRAFFIC DOES NOT STOP" SIGN MUTCD W4-4P.
- 8

"CHILDREN AT PLAY" SIGN MUTCD W9-12.
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8" WIDE SOLID STOP BAR PER MUTCD STANDARD PLANS
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SOLID DOUBLE YELLOW LINE PER MUTCD STANDARDS AND SPECIFICATIONS.
- 12

SOLID YELLOW LINE PER MUTCD STANDARDS AND SPECIFICATIONS.
- 13

LEFT TURNING ARROW PER MUTCD STANDARDS AND SPECIFICATIONS.
- 14

4'-0" WATERWAY PER APWA STANDARD PLAN NO. 211.
- 15

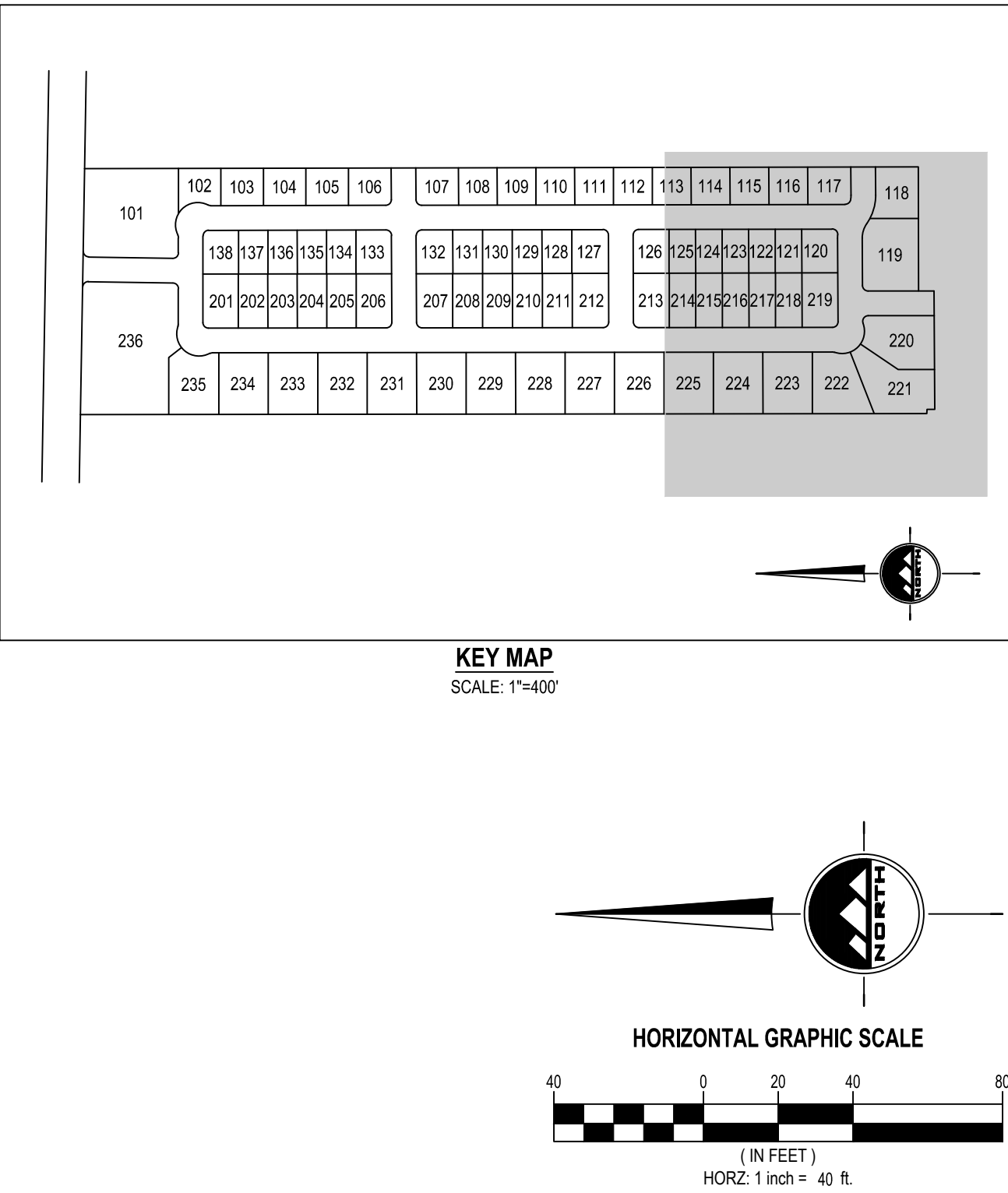
SOLID WHITE LINE PER MUTCD STANDARDS AND SPECIFICATIONS.
- 16

MERGE ARROW PER MUTCD STANDARDS AND SPECIFICATIONS.
- 17

RIGHT TURNING ARROW PER MUTCD STANDARDS AND SPECIFICATIONS.
- 18

THROUGH ARROW PER MUTCD STANDARDS AND SPECIFICATIONS.
- 19

INSTALL CHAIN LINK FENCE.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



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102 103 104 105 106

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ALINGTON SUBDIVISION

PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

Licensed Professional Engineer  
JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

SITE PLAN

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

C-103



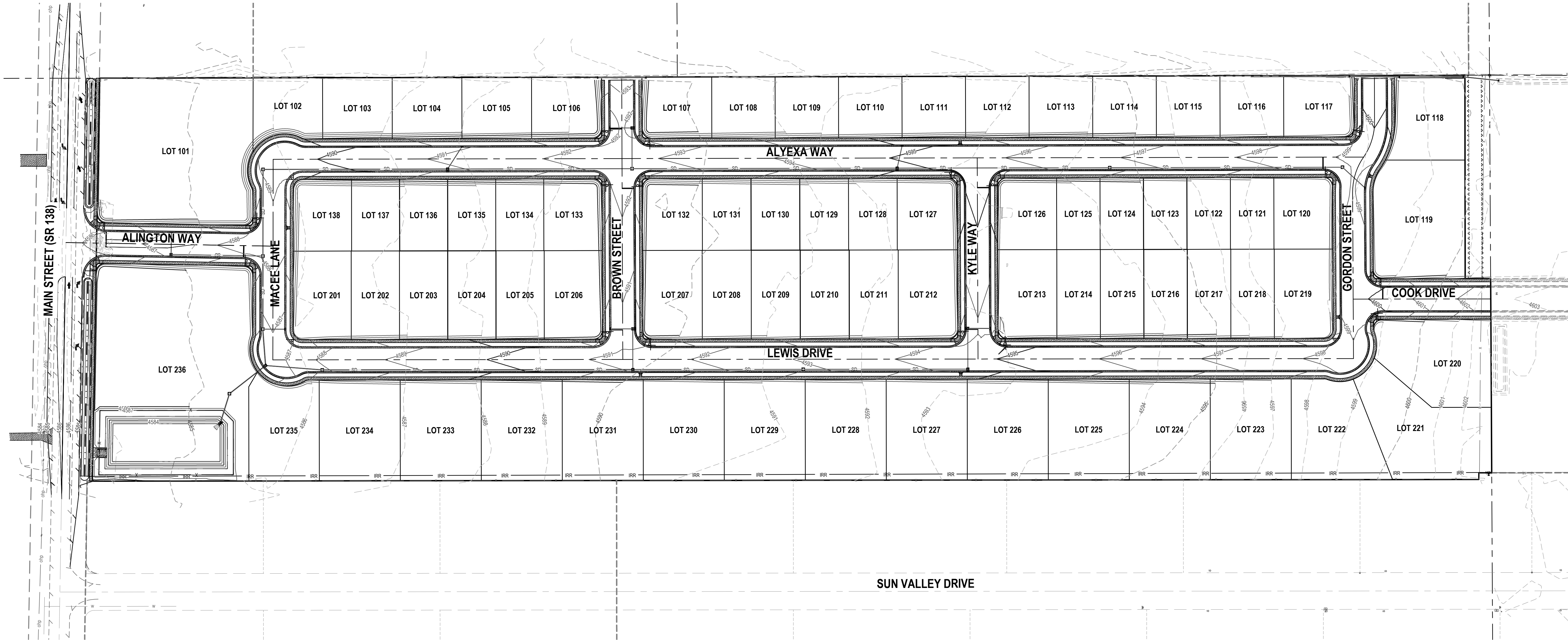
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BENCHMARK

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5.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
6.

ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY OR APWA STANDARD PLANS AND SPECIFICATIONS.
7.

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ALINGTON SUBDIVISION

PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

Jacob M. Clegg

JACOB M. CLEGG

9/20/2022

STATE OF UTAH

PRELIMINARY

OVERALL GRADING  
AND DRAINAGE PLAN

PROJECT NUMBER T1265K	PRINT DATE 9/20/2022
DRAWN BY J.CID	CHECKED BY J. CLEGG
PROJECT MANAGER J. CLEGG	

C-200

The figure shows a north arrow pointing towards the top of the page. Below the north arrow is a horizontal graphic scale bar. The scale bar is marked with 0, 40, 80, and 160 feet. Below the scale bar, the text reads: (IN FEET) HORIZ: 1 inch = 80 ft.



811

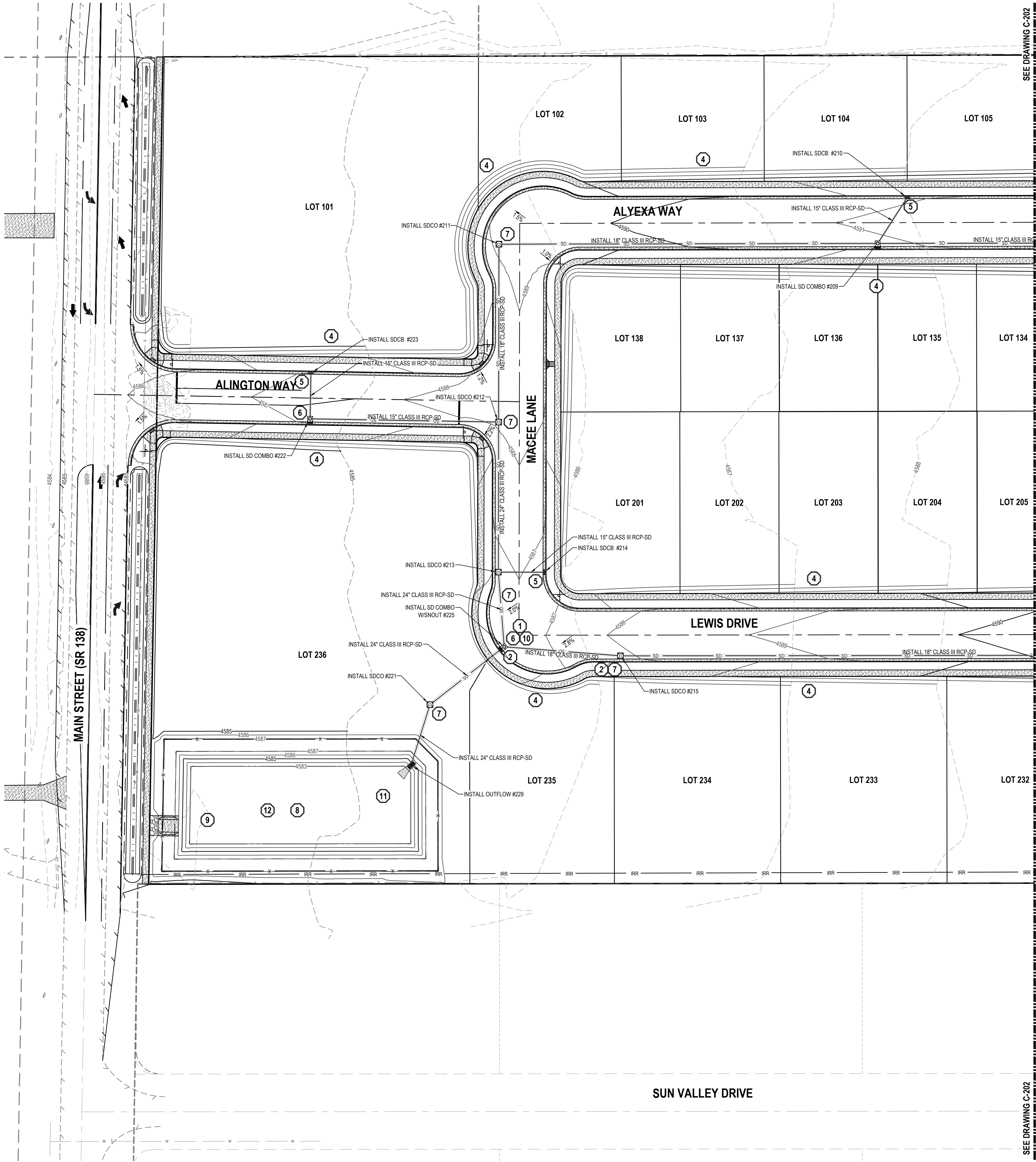
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- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1

NOT USED
- 2

SHOULDER 12\"/>
- 3

OUTLET RIPRAP, SEE NRCS SPECIFICATIONS ON SHEET C-400
- 4

DAYLIGHT TO EXISTING GROUND WITH MAXIMUM 3:1 SLOPE.
- 5

CATCH BASIN PER APWA STANDARD PLAN NO. 315.1 AND SPECIFICATIONS.
- 6

COMBINATION INLET/CLEANOUT BOX PER APWA STANDARD PLAN NO. 316 AND SPECIFICATIONS.
- 7

CLEANOUT BOX PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS.
- 8

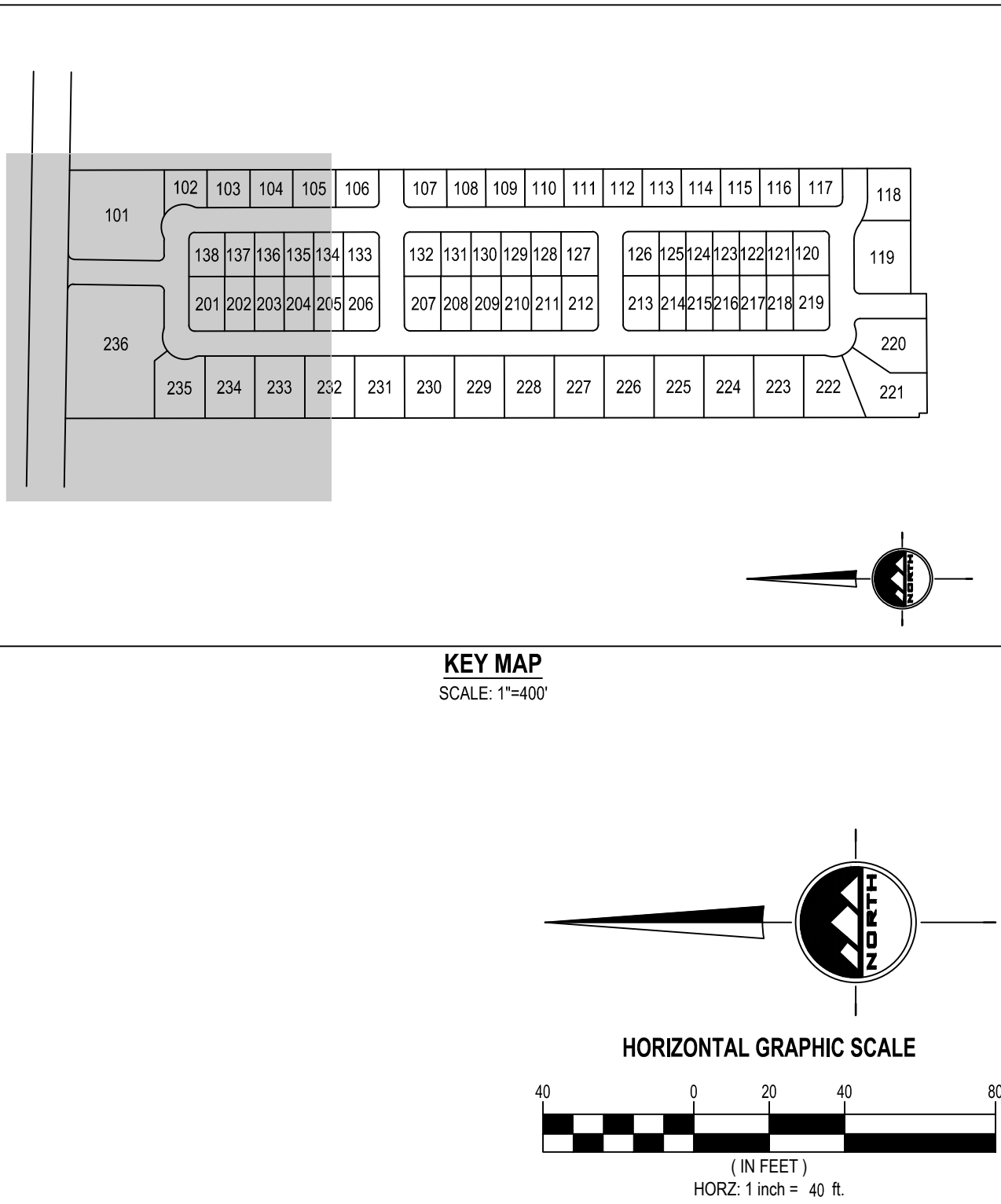
DETENTION BASIN (SEE DETAIL 3/C-500)  
TOP OF BERM ELEVATION = 4587.0  
SPILLWAY ELEVATION = 4586.0  
HIGH WATER ELEVATION = 4585.0  
BOTTOM OF BASIN ELEVATION = 4581.0  
VOLUME REQUIRED = 36,344 CU. FT.  
VOLUME PROVIDED = 39,020 CU. FT.
- 9

OVERFLOW CONCRETE SPILLWAY PER DETAIL 4/C-500.
- 10

DUE TO THE ANGLE AT WHICH THE PIPES COME INTO THE STORM DRAIN BOXES AND SOFTWARE CONSTRAINTS, PIPES APPEAR TO BE COMING OUT OF OR IN THE CORNER. THIS IS NOT TRULY HOW THE PIPES ARE TO BE INSTALLED, THEY ARE TO BE INSTALLED IN THE SIDE OF THE STORM DRAIN BOXES PER MANUFACTURER'S STANDARDS AND SPECIFICATIONS.
- 11

OUTFLOW STRUCTURE PER DETAIL 5/C-500.
- 12

BASIN NOT MAINTAINED BY CITY.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



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EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

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CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION

PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

Jacob M. Clegg

LICENSED PROFESSIONAL ENGINEER  
#1421  
JACOB M.  
CLEGG  
9/20/2022  
STATE OF UTAH

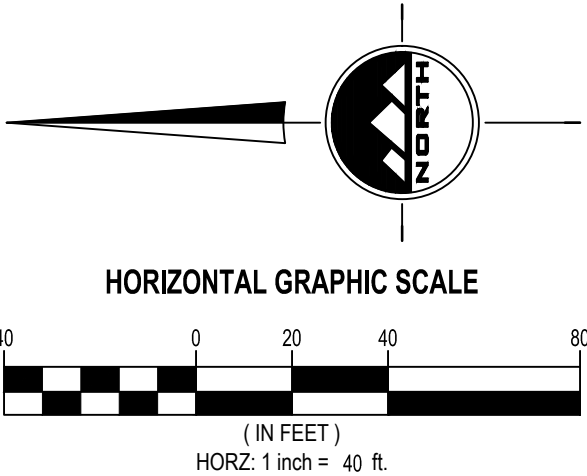
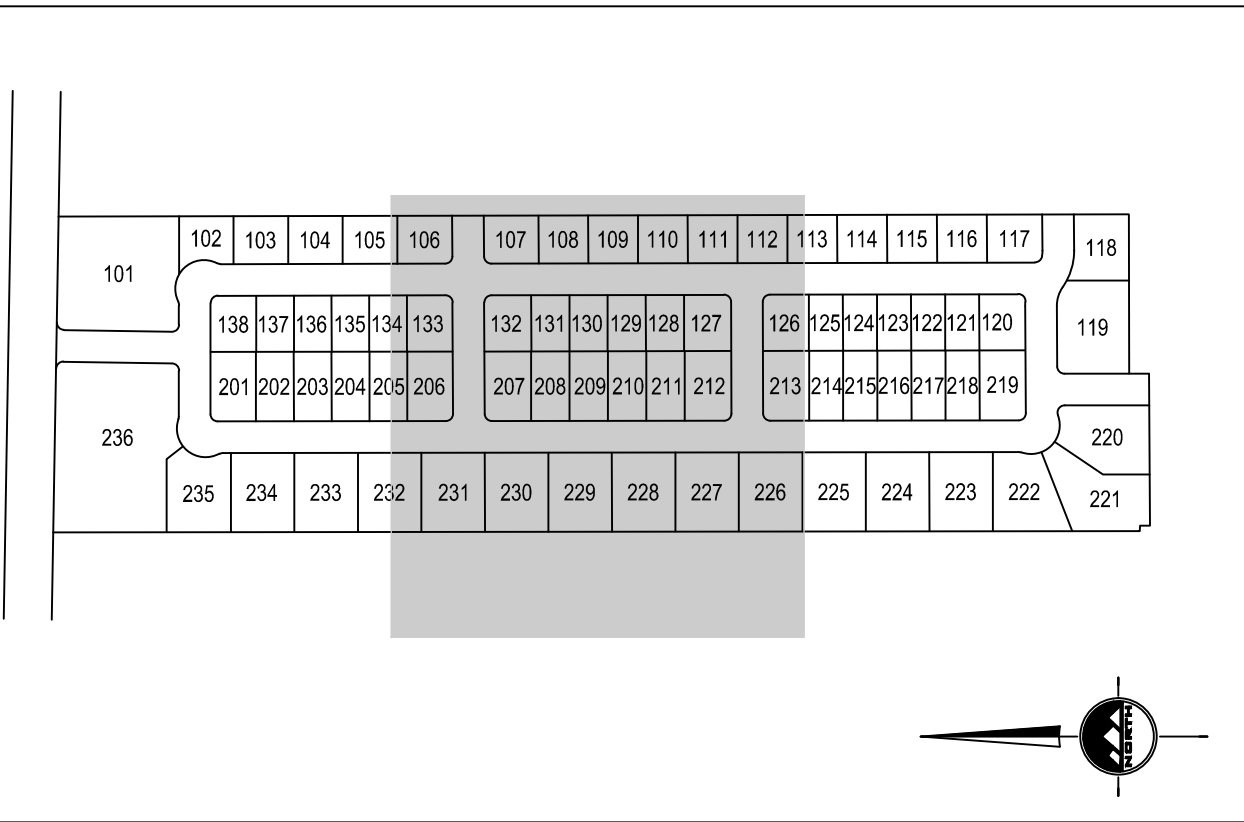
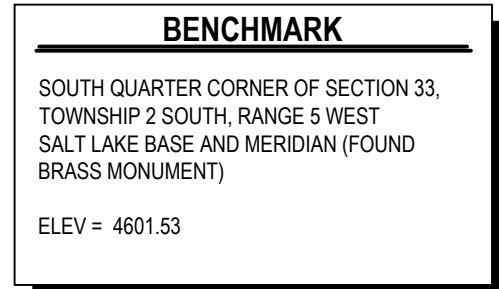
PRELIMINARY

GRADING AND  
DRAINAGE PLAN

PROJECT NUMBER  
T1265K  
PRINT DATE  
9/20/2022  
DRAWN BY  
J.CID  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
J. CLEGG

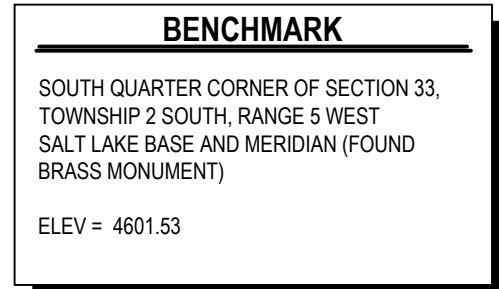
C-201



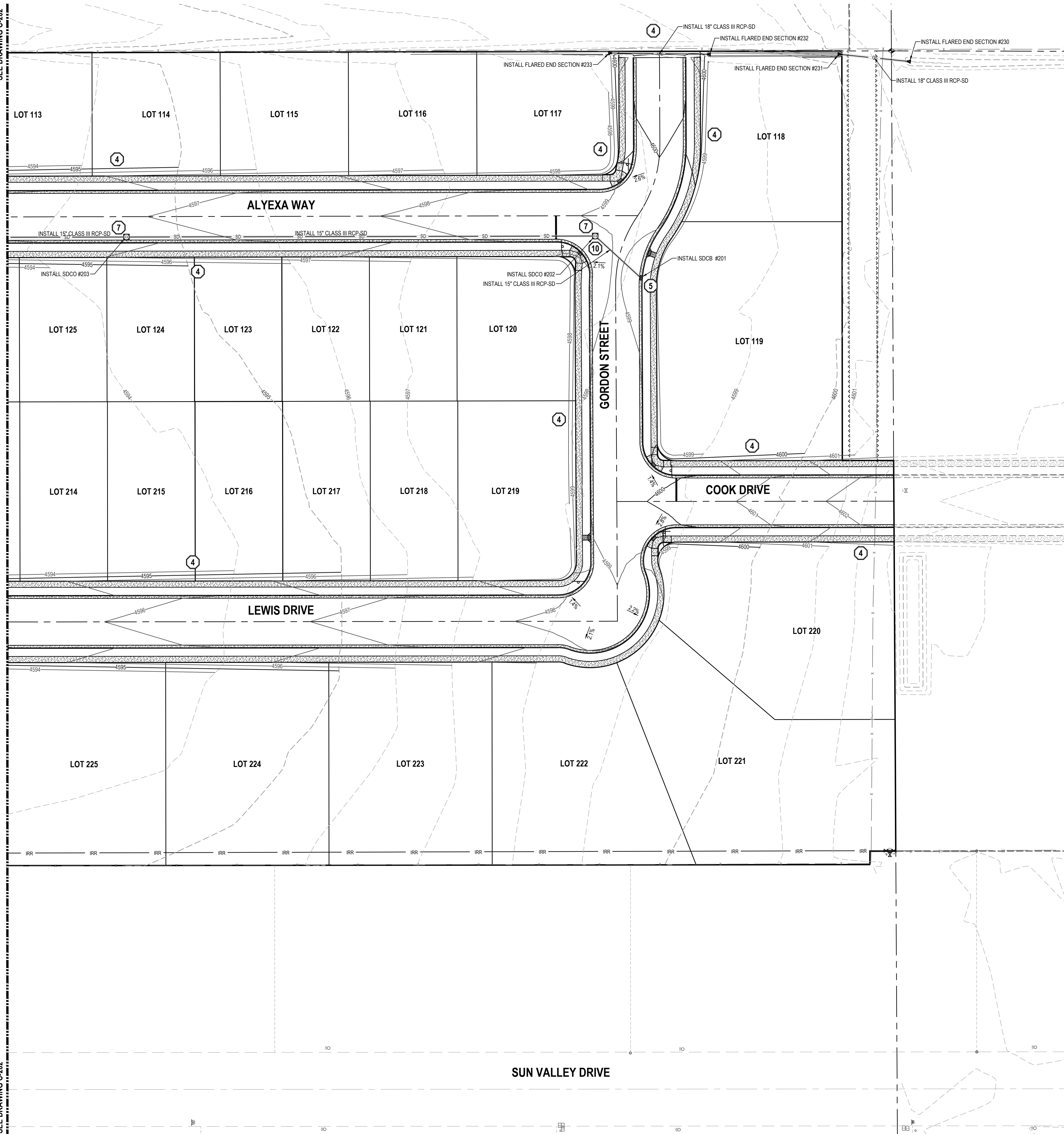


# C-202





SEE DRAWING C-202



**C-203**



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BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)  
ELEV = 4601.53



- GENERAL NOTES**
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EN SIGN

THE STANDARD IN ENGINEERING

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JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

Jacob M. Clegg

JACOB M. CLEGG

9/20/2022

STATE OF UTAH

PRELIMINARY

OVERALL UTILITY PLAN

PROJECT NUMBER T1265K	PRINT DATE 9/20/2022
DRAWN BY J.CID	CHECKED BY J. CLEGG
PROJECT MANAGER J. CLEGG	

C-300



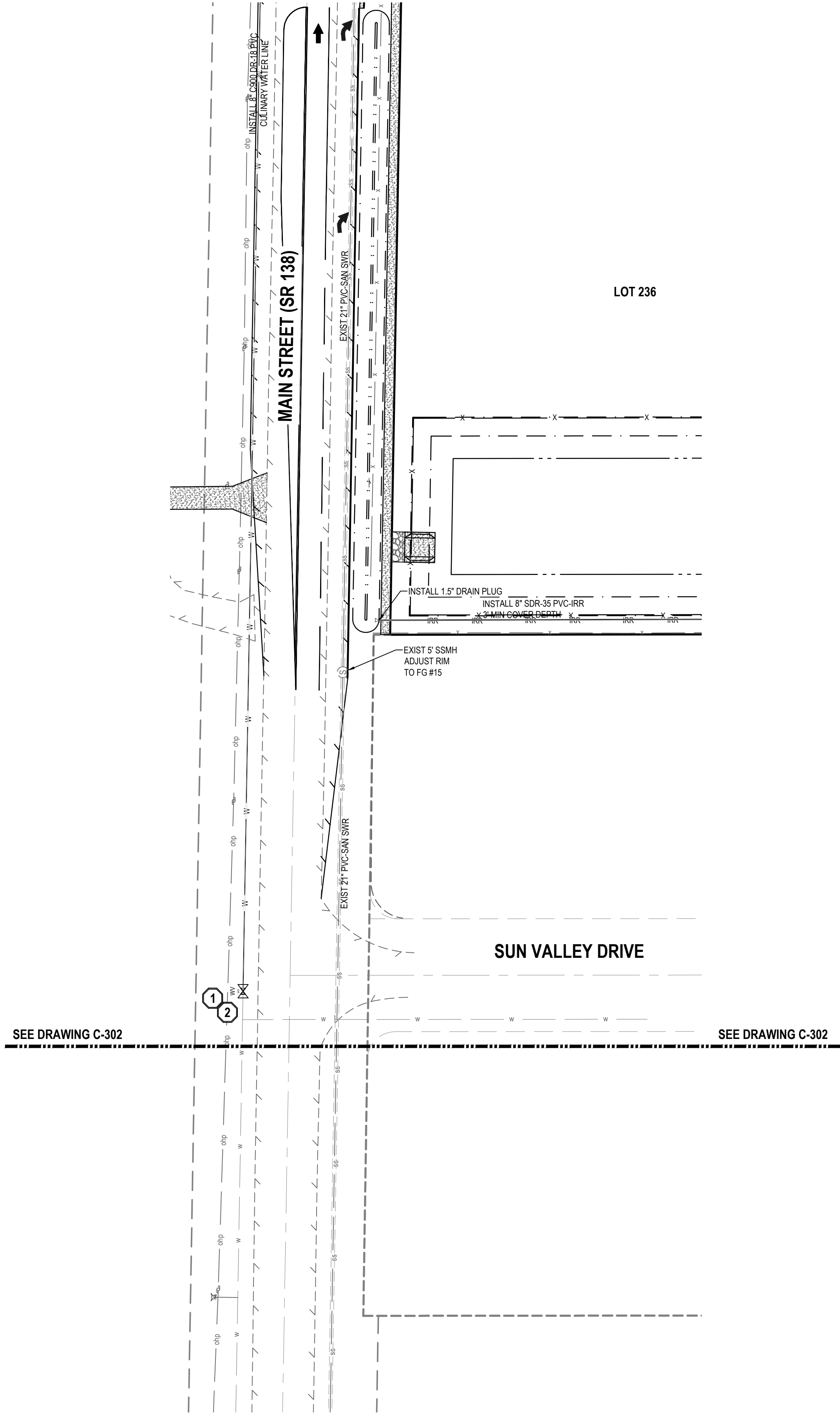
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BENCHMARK

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TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)  
  
ELEV = 4601.53



GENERAL NOTES

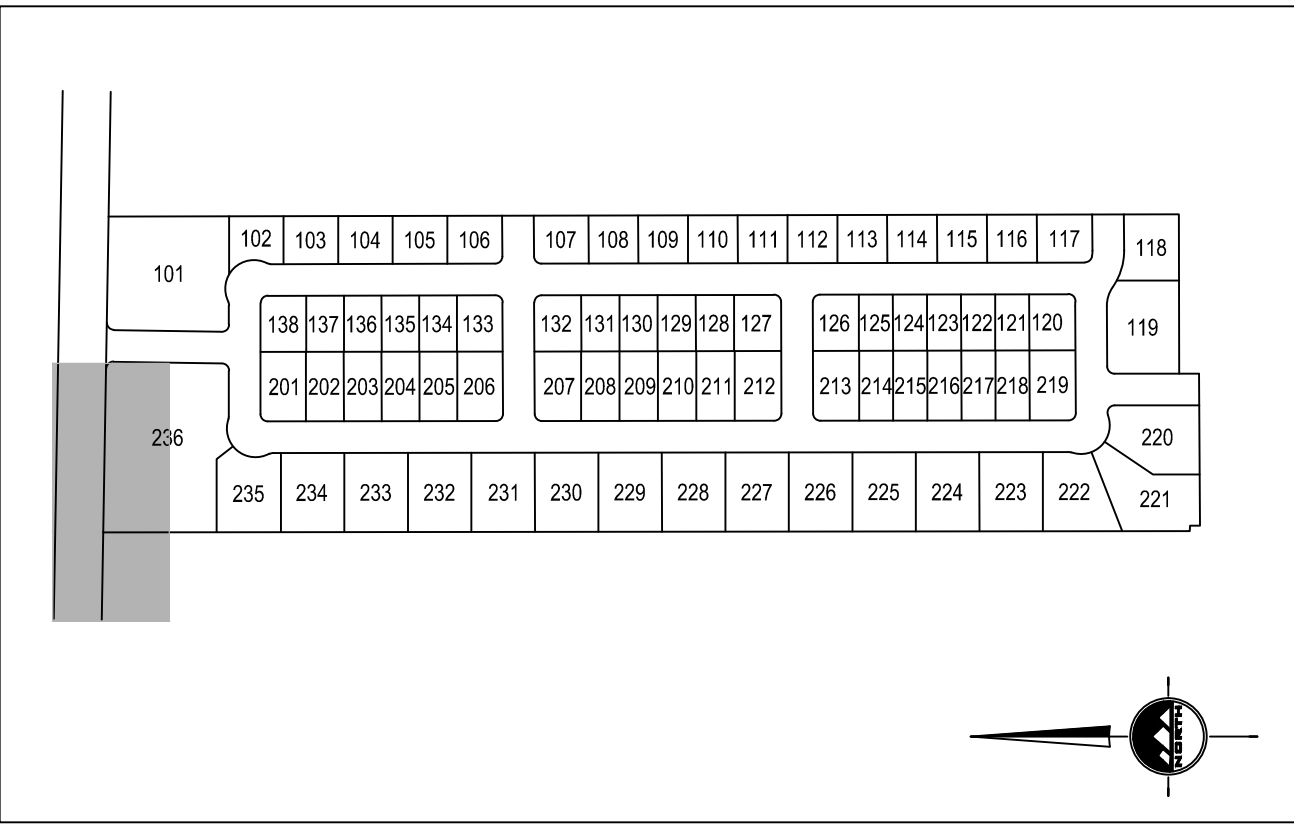
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SCOPE OF WORK:

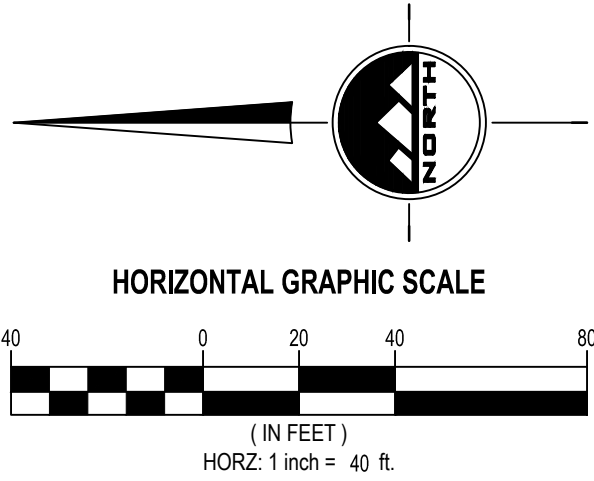
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- CONNECT TO EXISTING CULINARY WATERLINE PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- APPROXIMATE LOCATION OF EXISTING CULINARY WATERLINE. CONTRACTOR TO FIELD VERIFY LOCATION AND CONTACT PROJECT ENGINEER IF CONFLICT EXISTS.
- C-900 PVC CULINARY WATERLINE. INSTALL THRUST BLOCKING AND FITTINGS ON ALL TEES AND BEND PER APWA PLAN NO. 561 AND SPECIFICATIONS. INSTALLATION AND TRENCHING PER APWA STANDARDS AND SPECIFICATIONS.
- FIRE HYDRANT ASSEMBLY COMPLETE PER APWA STANDARD PLAN NO. 511 AND SPECIFICATIONS.
- INSTALL 4" WASHOUT VALVE PER APWA PLAN NO. 571 AND SPECIFICATIONS.
- CONNECT TO EXISTING SEWER MAIN PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- SANITARY SEWER MANHOLE PER APWA PLAN NO. 402, 411, 413 AND SPECIFICATIONS.
- GAS LINE DEPTH AND LOCATION TO BE FIELD VERIFIED BY CONTRACTOR.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



KEY MAP  
SCALE: 1"=400'



TOOELE

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LAYTON

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RICHFIELD

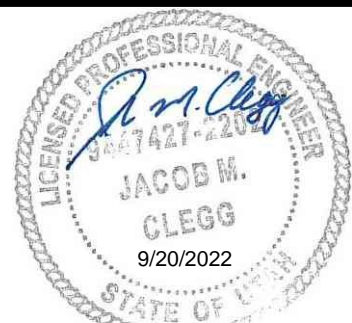
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FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074

CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH



PRELIMINARY

UTILITY PLAN

PROJECT NUMBER  
T1265K  
DRAWN BY  
J.CID  
PROJECT MANAGER  
J. CLEGG  
PRINT DATE  
9/20/2022  
CHECKED BY  
J. CLEGG

C-301



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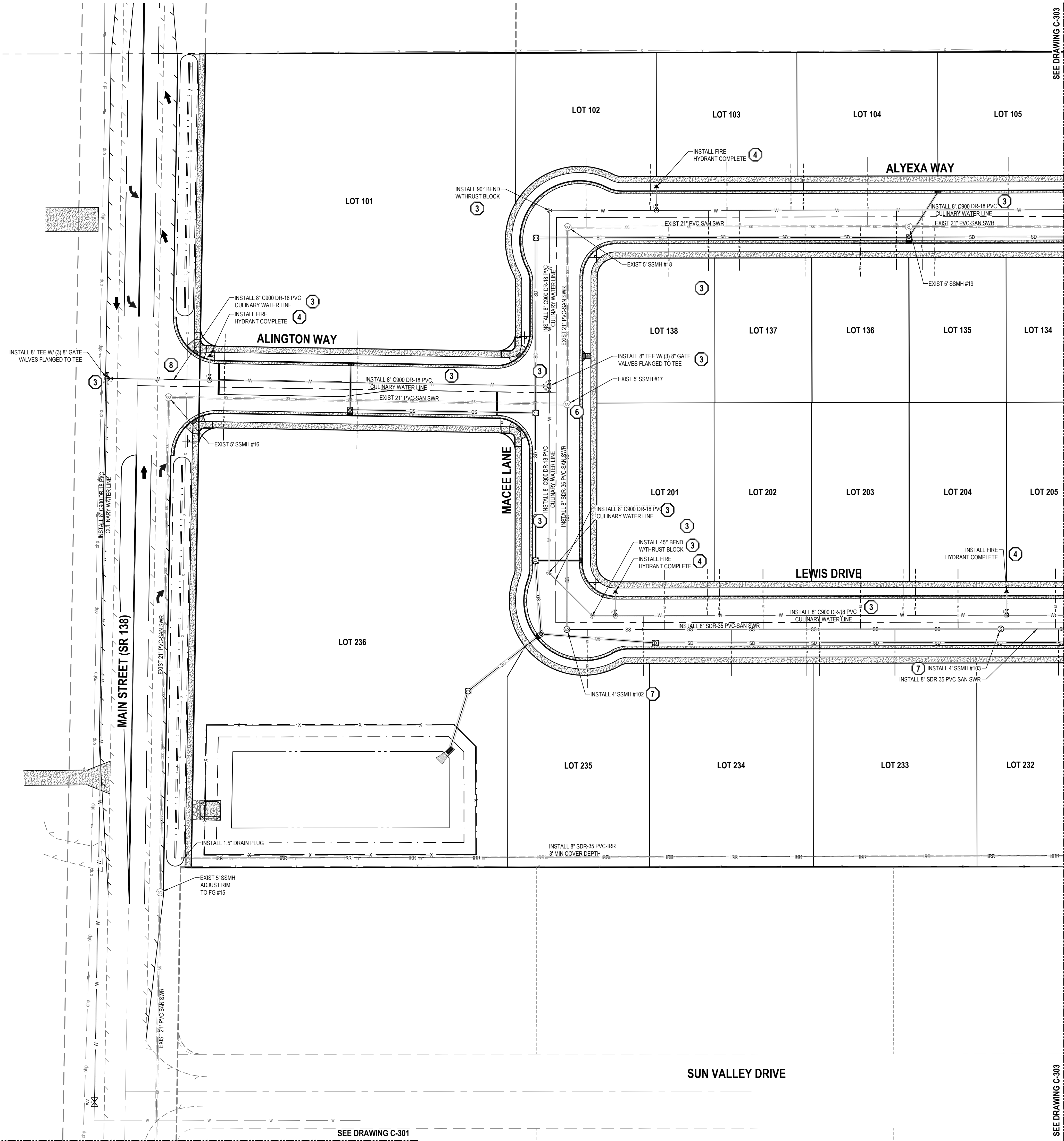
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ELEV = 4601.53

BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)



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- 4

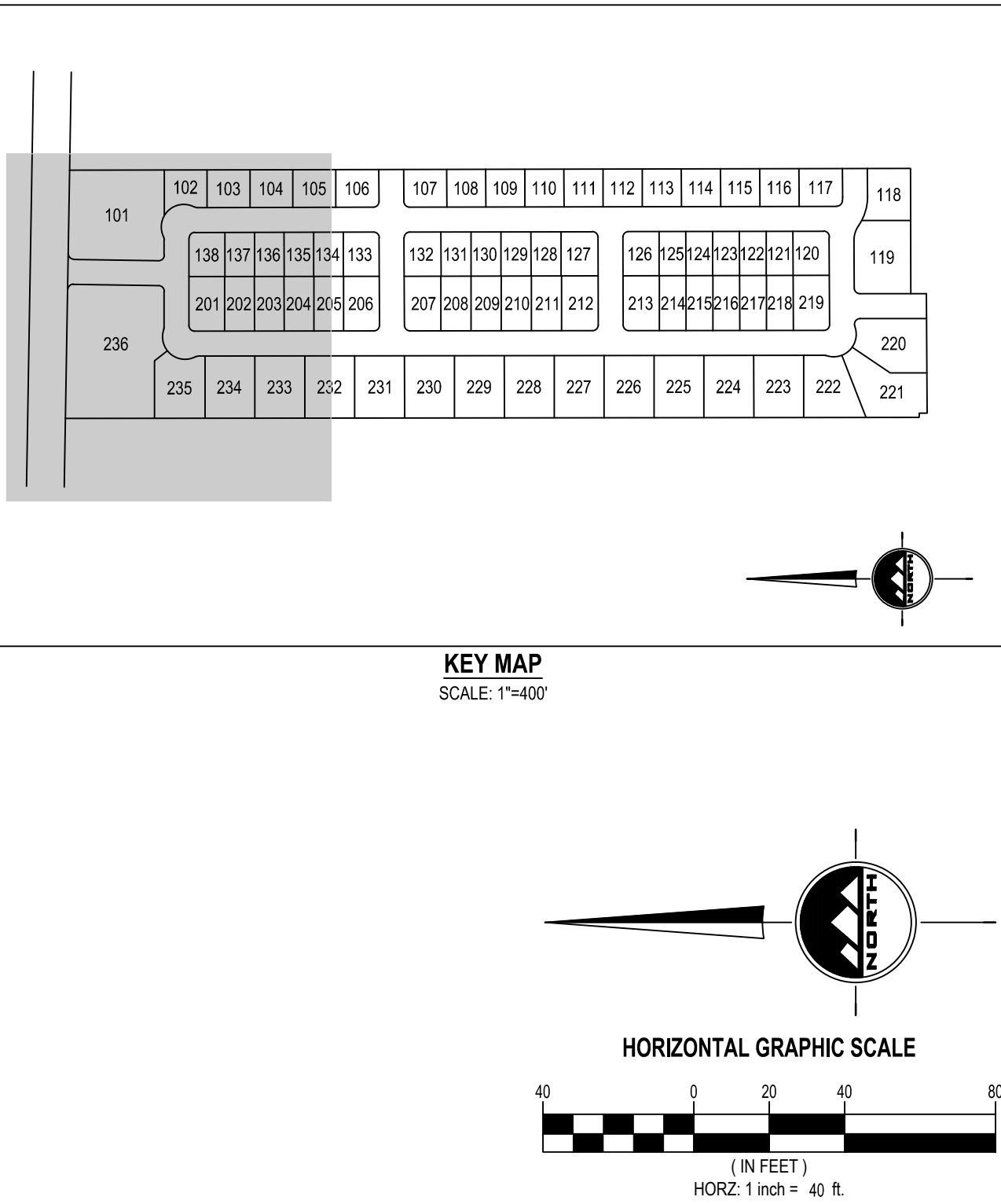
FIRE HYDRANT ASSEMBLY COMPLETE PER APWA STANDARD PLAN NO. 511 AND SPECIFICATIONS.
- 5

INSTALL 4" WASHOUT VALVE PER APWA PLAN NO. 571 AND SPECIFICATIONS.
- 6

CONNECT TO EXISTING SEWER MAIN PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
- 7

SANITARY SEWER MANHOLE PER APWA PLAN NO. 402, 411, 413 AND SPECIFICATIONS.
- 8

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EN SIGN

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LICENSED PROFESSIONAL ENGINEER  
#241427-2  
JACOB M.  
CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

UTILITY PLAN

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

C-302



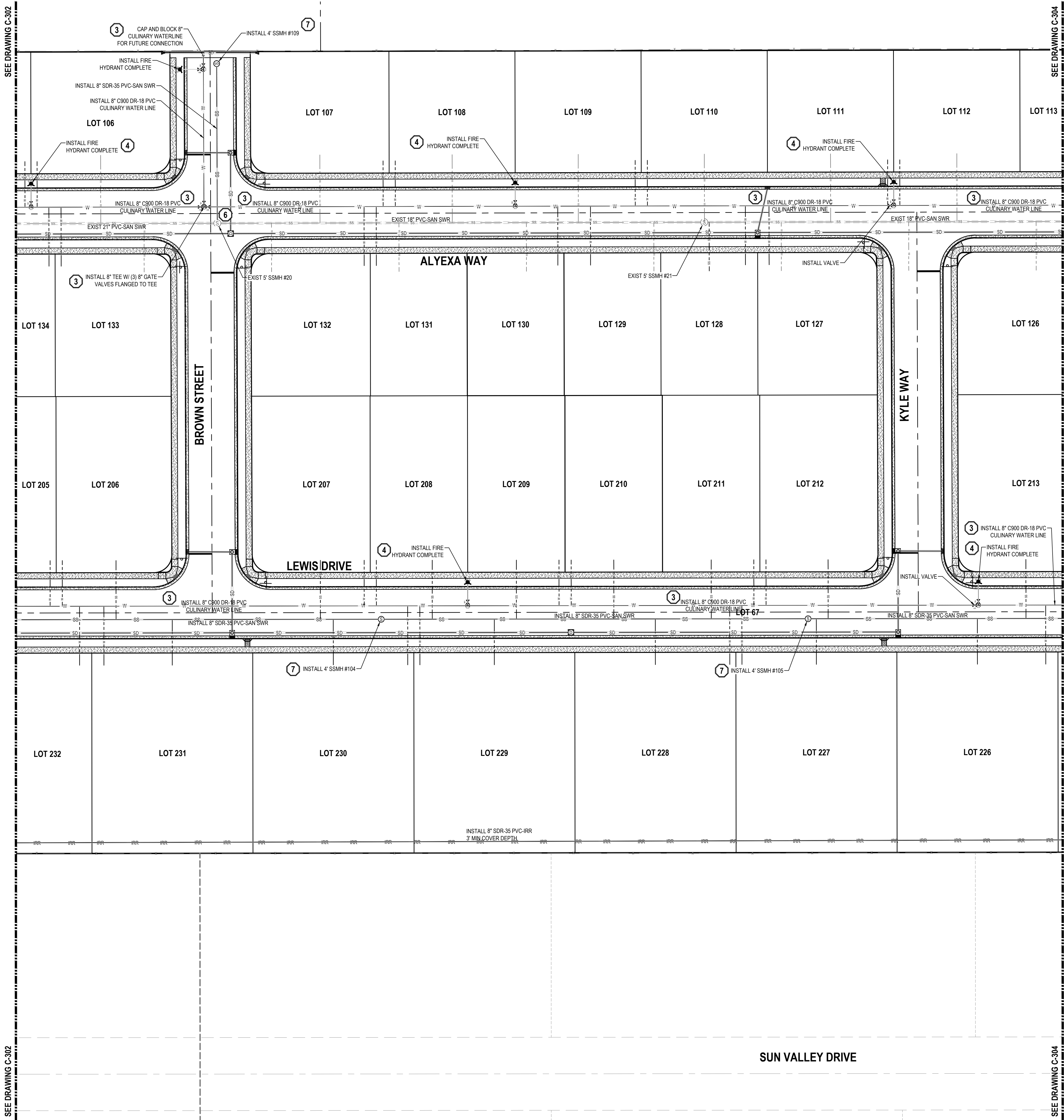
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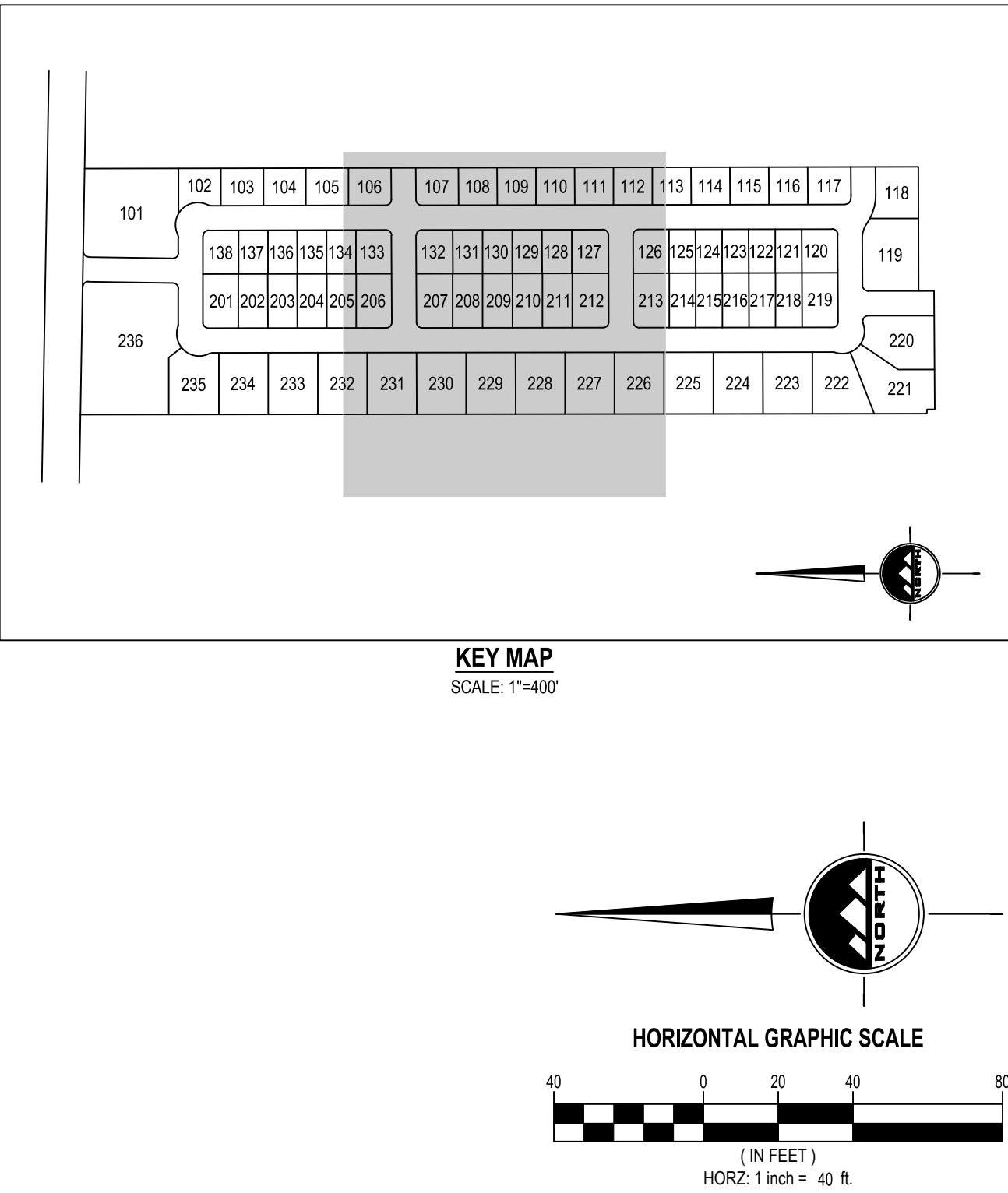
BENCHMARK

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  - EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
  - ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY STANDARD PLANS AND SPECIFICATIONS.
  - ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GRANTSVILLE CITY OR APWA STANDARD PLANS AND SPECIFICATIONS.
  - DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
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  - THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
  - NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
  - THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
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- SCOPE OF WORK:**  
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- CONNECT TO EXISTING CULINARY WATERLINE PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
  - APPROXIMATE LOCATION OF EXISTING CULINARY WATERLINE. CONTRACTOR TO FIELD VERIFY LOCATION AND CONTACT PROJECT ENGINEER IF CONFLICT EXISTS.
  - C-900 PVC CULINARY WATERLINE. INSTALL THRUST BLOCKING AND FITTINGS ON ALL TEES AND BEND PER APWA PLAN NO. 561 AND SPECIFICATIONS. INSTALLATION AND TRENCHING PER APWA STANDARDS AND SPECIFICATIONS.
  - FIRE HYDRANT ASSEMBLY COMPLETE PER APWA STANDARD PLAN NO. 511 AND SPECIFICATIONS.
  - INSTALL 4" WASHOUT VALVE PER APWA PLAN NO. 571 AND SPECIFICATIONS.
  - CONNECT TO EXISTING SEWER MAIN PER GRANTSVILLE CITY'S STANDARDS AND SPECIFICATIONS.
  - SANITARY SEWER MANHOLE PER APWA PLAN NO. 402, 411, 413 AND SPECIFICATIONS.
  - GAS LINE DEPTH AND LOCATION TO BE FIELD VERIFIED BY CONTRACTOR.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

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SALT LAKE CITY

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LAYTON

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CEDAR CITY

Phone: 435.866.1453

RICHFIELD

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FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074  
CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

Jacob M. Clegg

LICENSED PROFESSIONAL ENGINEER  
#21421-2  
JACOB M.  
CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

UTILITY PLAN

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

C-303



811

Know what's below.  
Call before you dig.

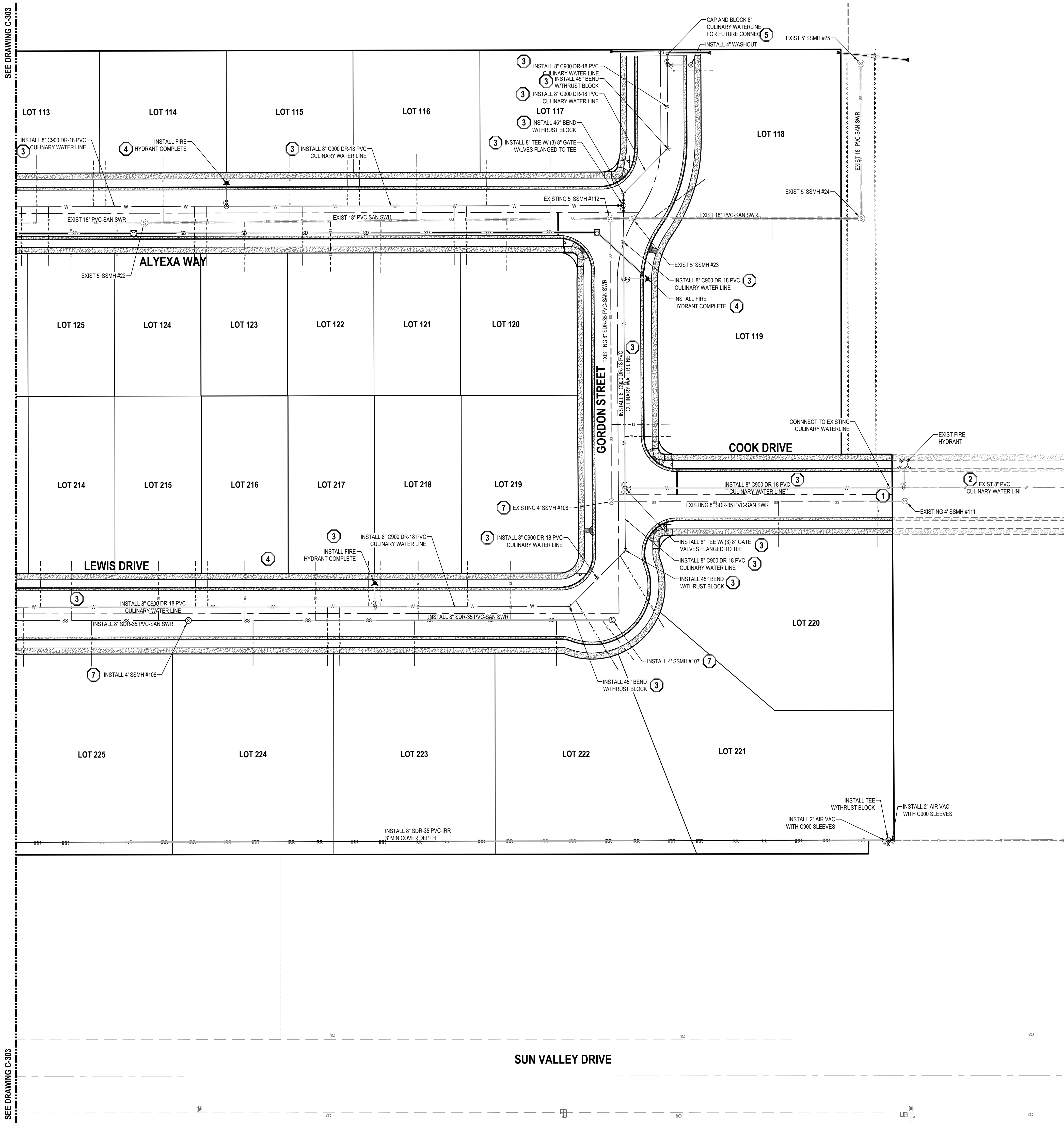
CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

ELEV = 4601.53

BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)

SEE DRAWING C-303

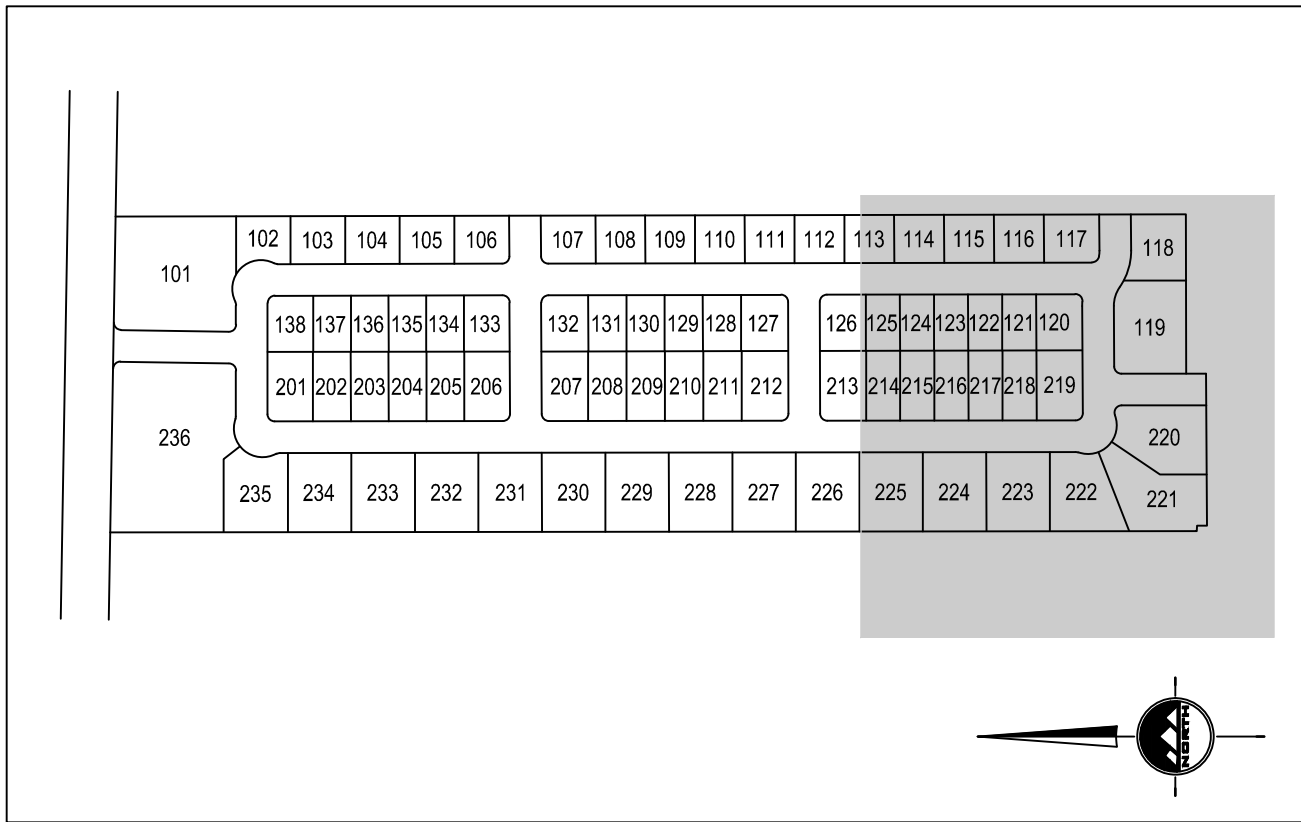


GENERAL NOTES

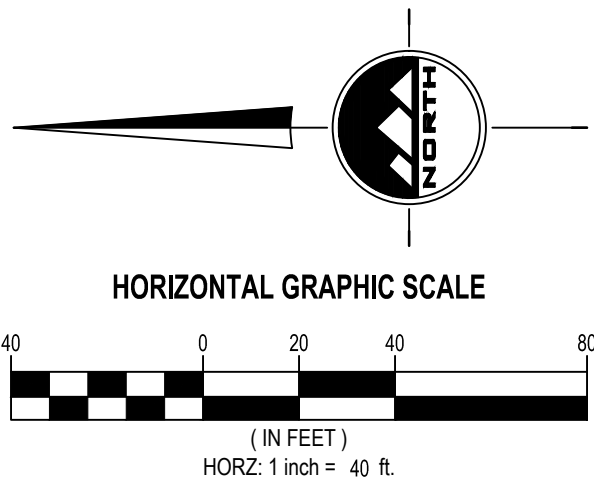
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  - GAS LINE DEPTH AND LOCATION TO BE FIELD VERIFIED BY CONTRACTOR.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



KEY MAP  
SCALE: 1"=400'



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Tooele, UT. 84074  
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**SALT LAKE CITY**  
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**LAYTON**  
Phone: 801.547.1100

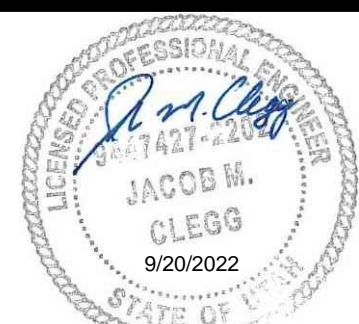
**CEDAR CITY**  
Phone: 435.866.1453

**RICHFIELD**  
Phone: 435.896.2983

[WWW.ENSGNENG.COM](http://WWW.ENSGNENG.COM)

FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074  
CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH



PRELIMINARY

UTILITY PLAN

PROJECT NUMBER  
T1265K  
DRAWN BY  
J.CID  
PROJECT MANAGER  
J. CLEGG  
PRINT DATE  
9/20/2022  
CHECKED BY  
J. CLEGG

C-304



811

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Call before you dig.

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BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
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SALT LAKE BASE AND MERIDIAN (FOUND  
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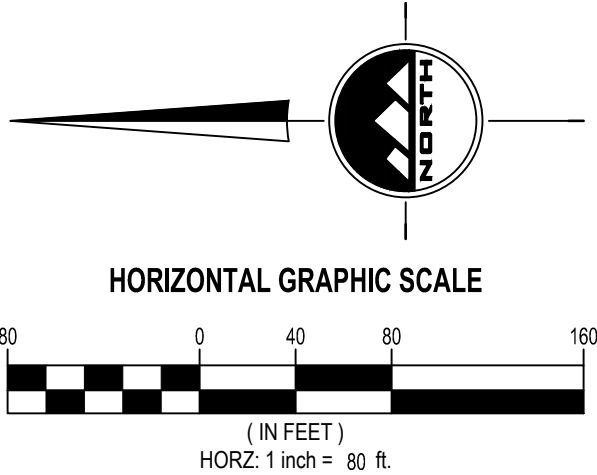
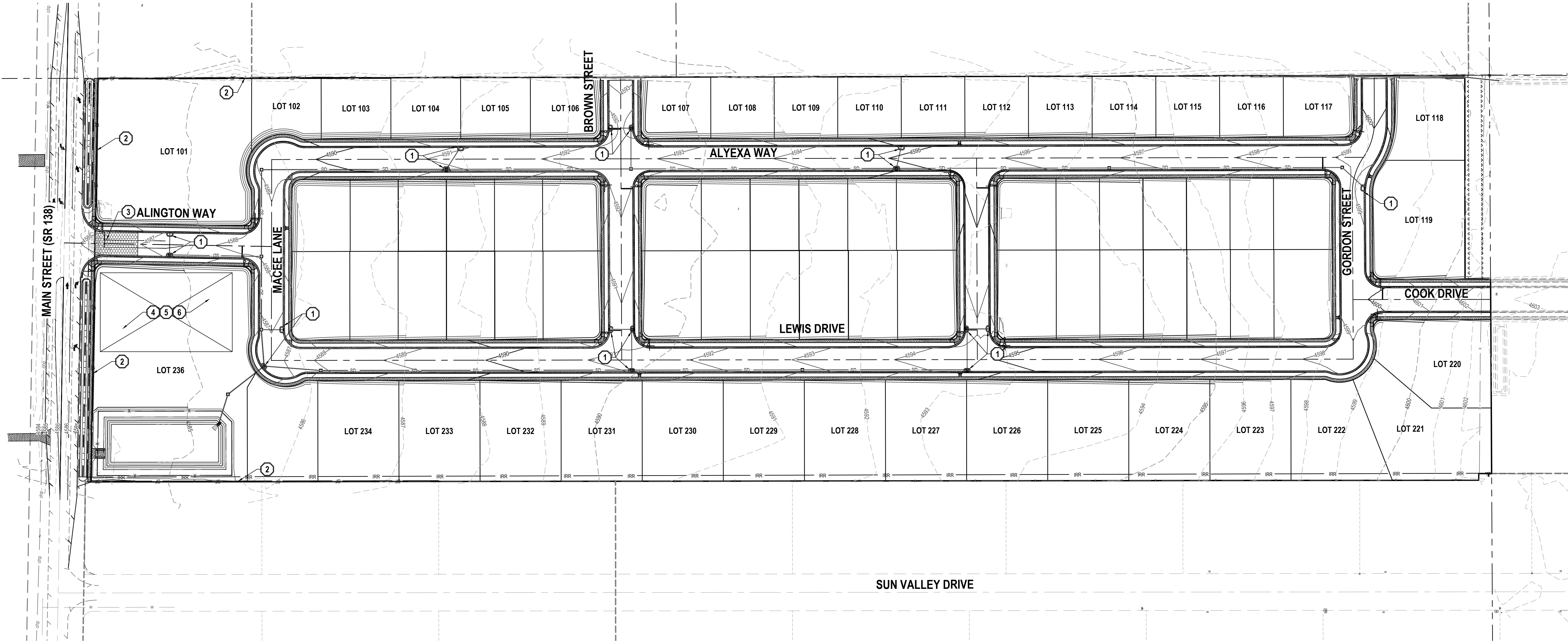
GENERAL NOTES

- THIS PLAN IS DESIGNED AS A FIRST APPRAISAL OF NECESSARY MEANS TO PROTECT THE WATERS OF THE STATE FROM POTENTIAL POLLUTION. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO ADD WARRANTED BEST MANAGEMENT PRACTICES (BMPs) AS NECESSARY. MODIFY THOSE SHOWN AS APPROPRIATE, AND DELETE FROM THE PROJECT THOSE FOUND TO BE UNNECESSARY. FEDERAL AND STATE LAW ALLOWS THESE UPDATES TO BE MADE BY THE OWNER/OPERATOR ONSITE AND RECORDED BY THE OWNER/OPERATOR ON THE COPY OF THE SWPPP KEPT ONSITE.
- DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. HOWEVER, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- RESEED DISTURBED LAND WITH NATIVE GRASS MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE TO STABILIZE SOILS IF LAND IS NOT TO BE RE-WORKED WITHIN 14 CALENDAR DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
- DETAILS SHOWN ARE TO BE EMPLOYED TO PROTECT RUNOFF AS APPROPRIATE DURING CONSTRUCTION. NOT ALL DETAILS ARE NECESSARY AT ALL PHASES OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE APPROPRIATE BEST MANAGEMENT PRACTICES AT THE APPROPRIATE PHASE OF CONSTRUCTION. SEE SWPPP FOR BMP IMPLEMENTATION SCHEDULE.
- VARIOUS BEST MANAGEMENT PRACTICES HAVE BEEN SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE AND RECONFIGURE THESE BMPs TO OTHER LOCATIONS IF PREFERRED, PROVIDED THE INTENT OF THE DESIGN IS PRESERVED.
- NOT ALL POSSIBLE BMPs HAVE BEEN SHOWN. THE CONTRACTOR IS RESPONSIBLE TO APPLY CORRECT MEASURES TO PREVENT THE POLLUTION OF STORM WATER PER PROJECT SWPPP.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- INLET PROTECTION PER DETAIL 6/C-500.
- SILT FENCE PER DETAIL 7/C-500.
- VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 8/C-500.
- PORTABLE TOILET PER DETAIL 9/C-500.
- SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, STAGING, DUMPSTER, AND MATERIAL STORAGE AREA.
- SUGGESTED STOCKPILE AREA.



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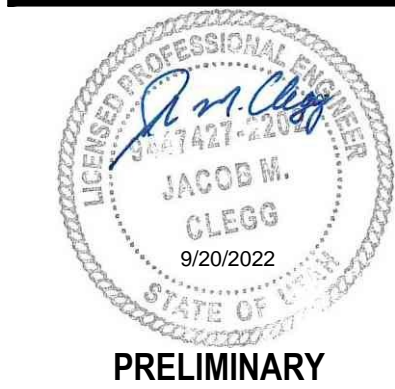
**RICHFIELD**  
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074

CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH



EROSION  
CONTROL PLAN

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

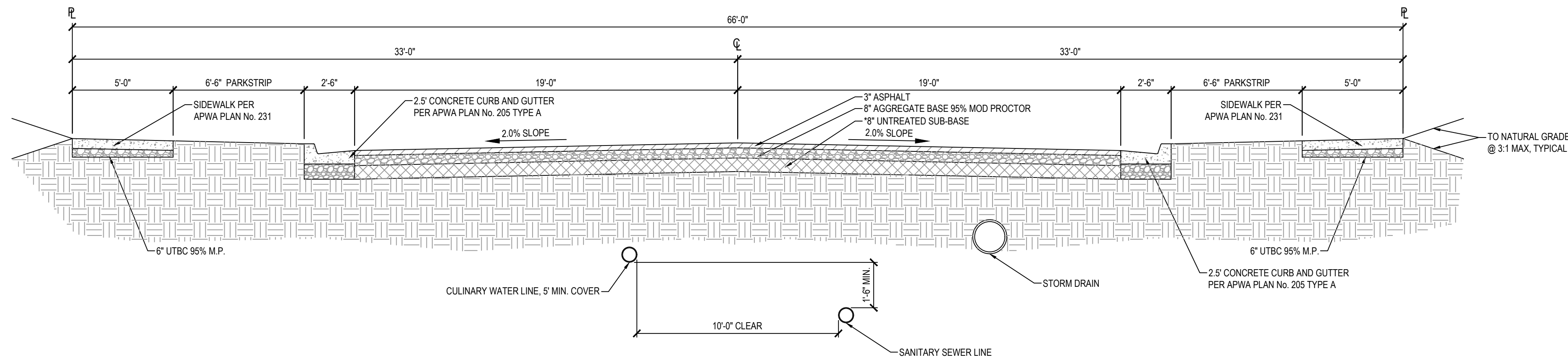
DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

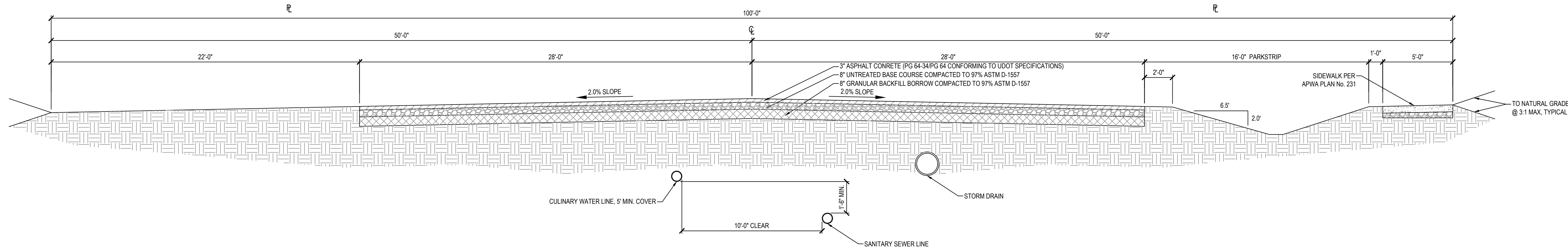
C-400





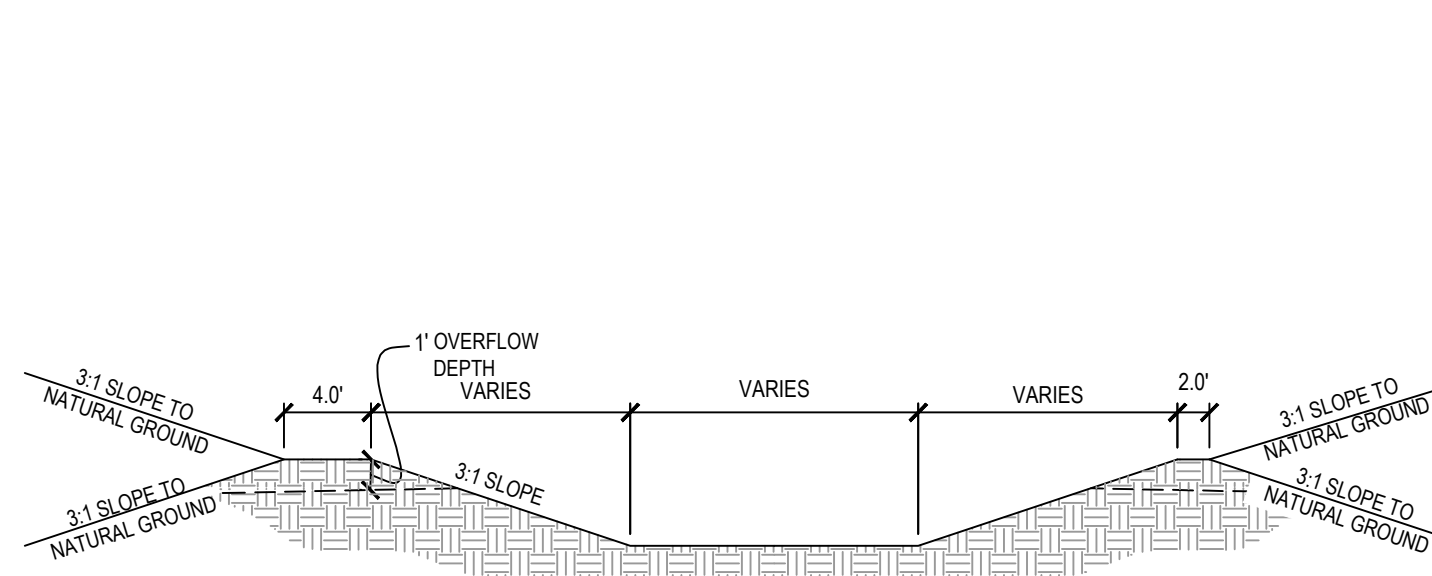
1 TYPICAL 66 FOOT ROAD CROSS SECTION

SCALE: NONE



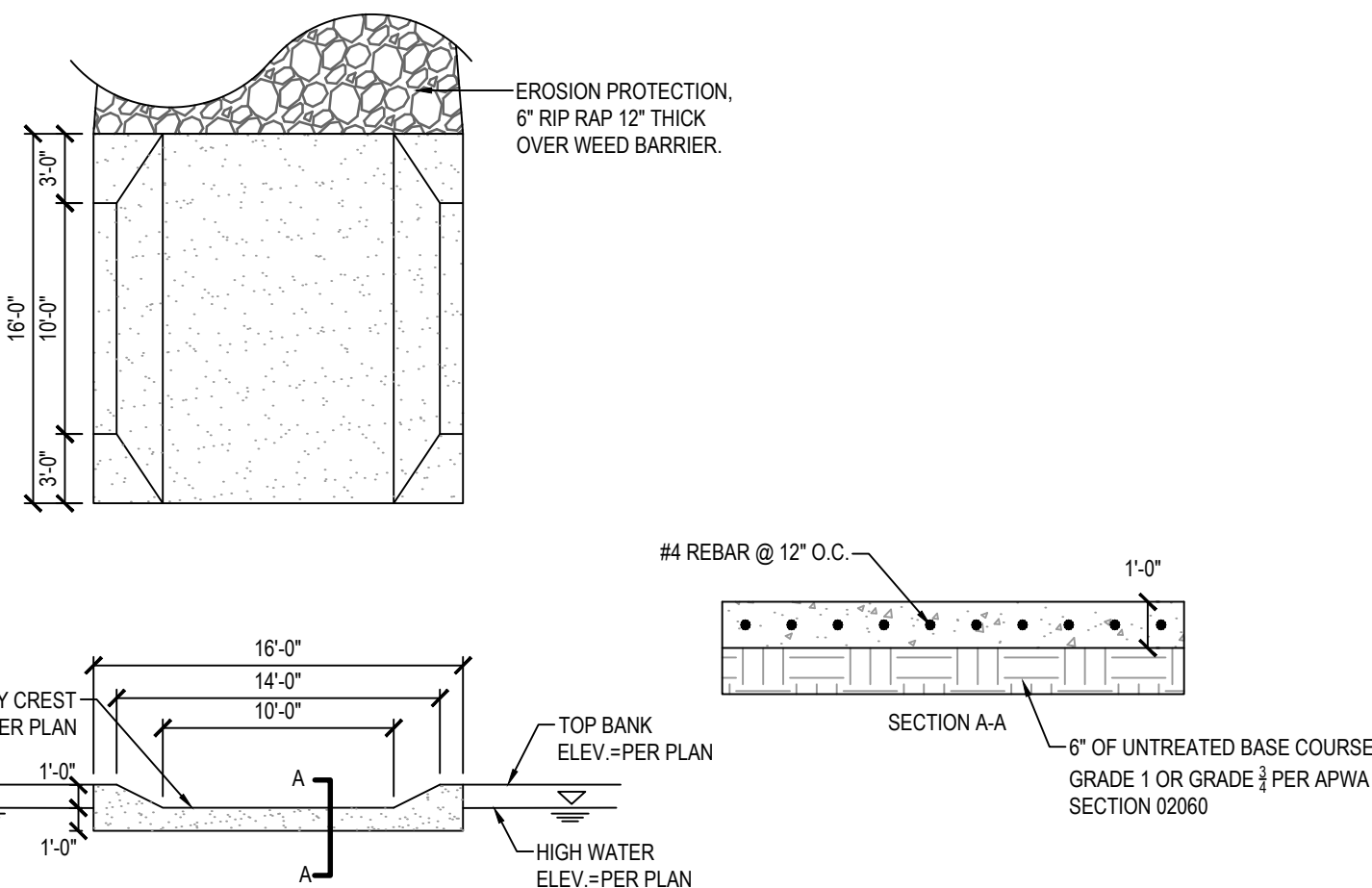
2 TYPICAL 100 FOOT ROAD CROSS SECTION

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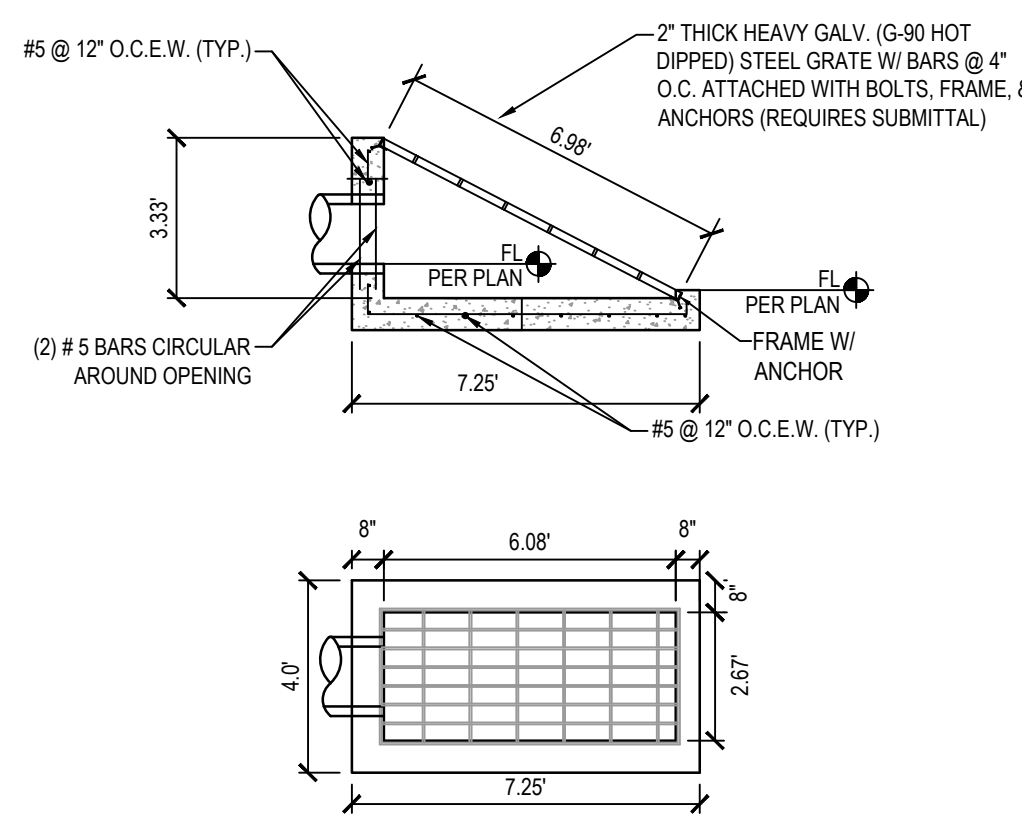
3 RETENTION BASIN LAYOUT

SCALE: NONE



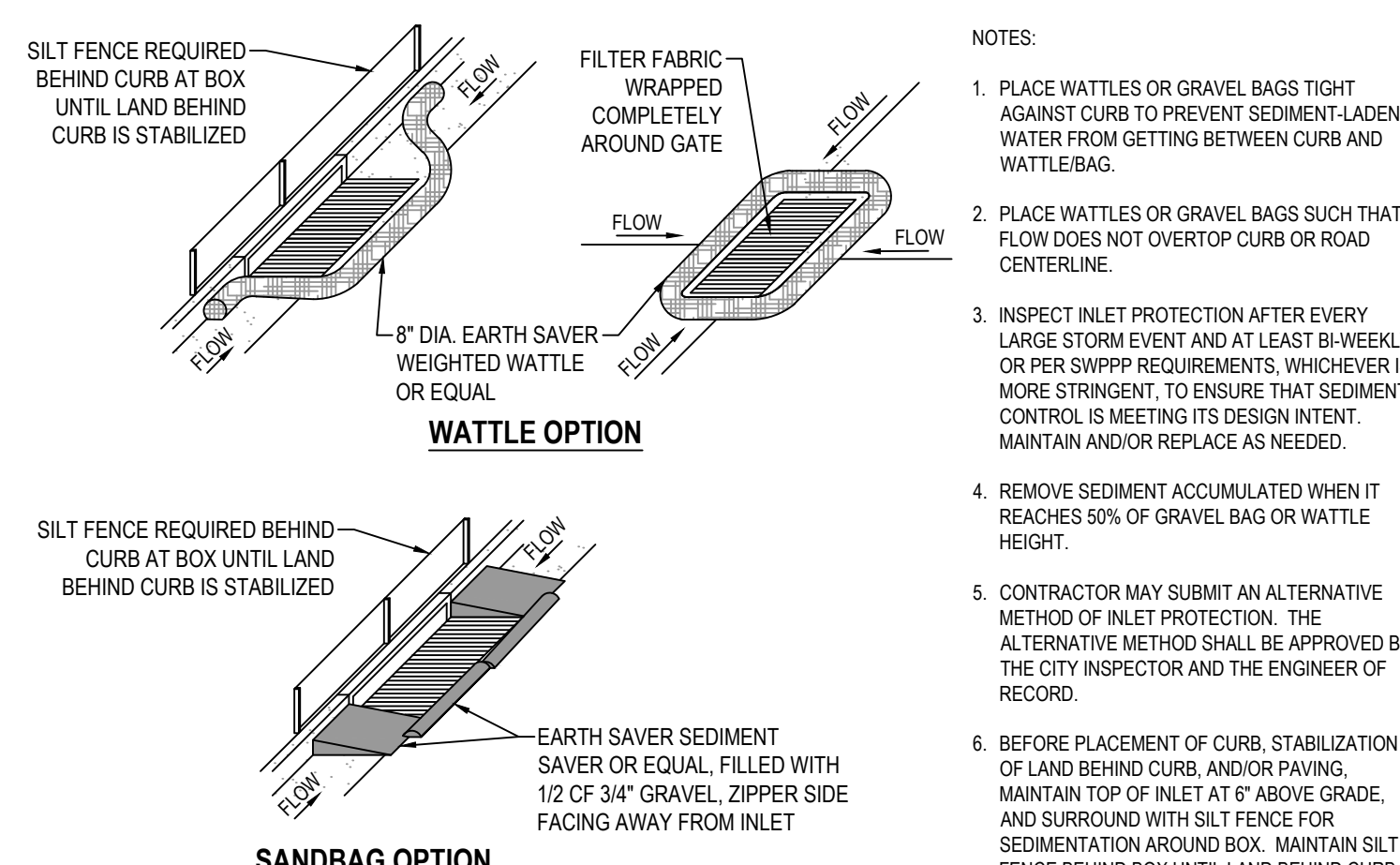
4 CONCRETE SPILLWAY

SCALE: NONE



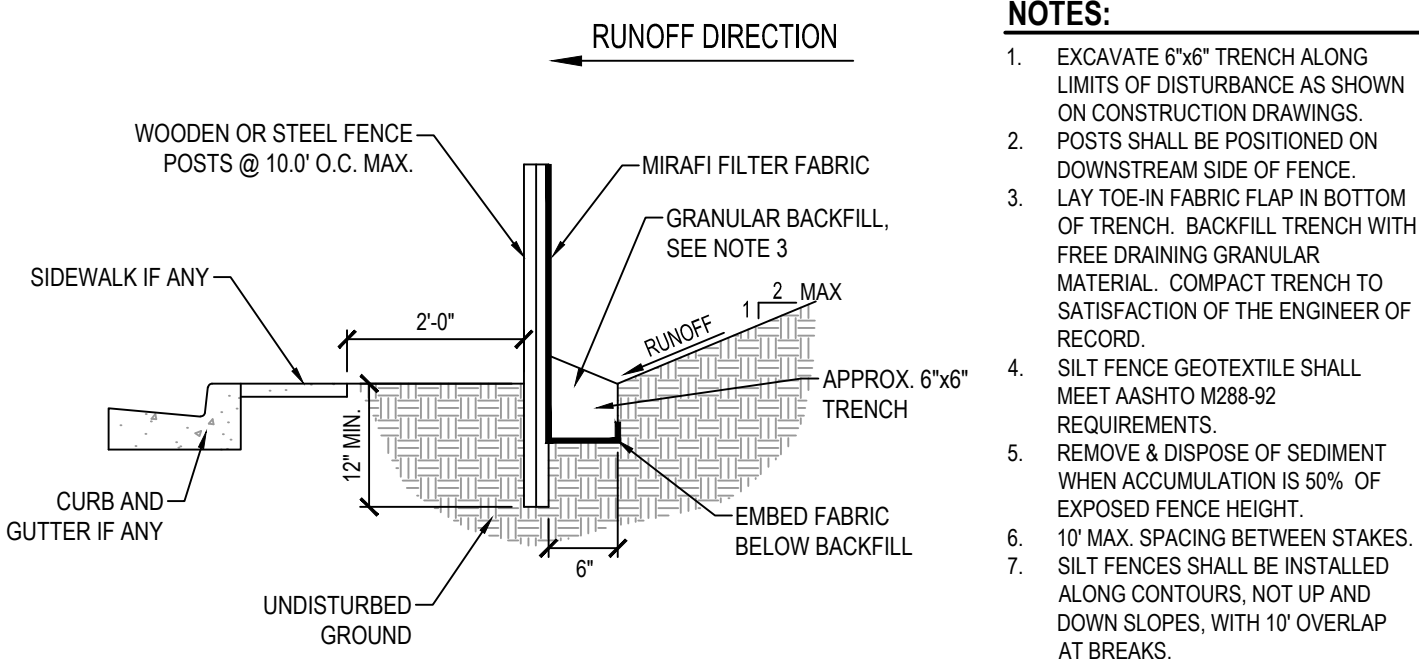
5 SLOPED OUTLET STRUCTURE

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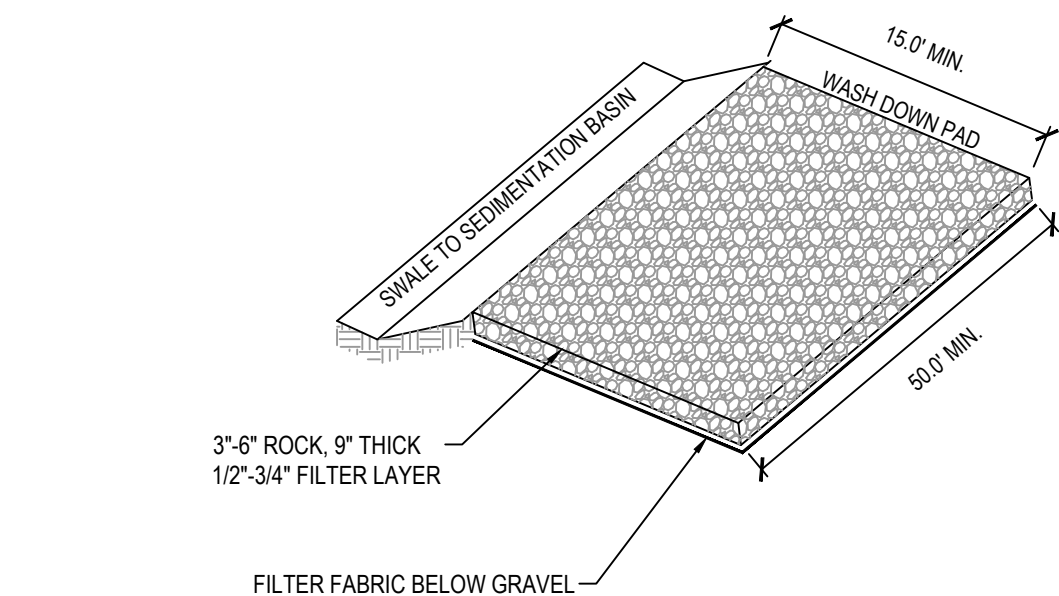
6 SAG INLET PROTECTION

SCALE: NONE



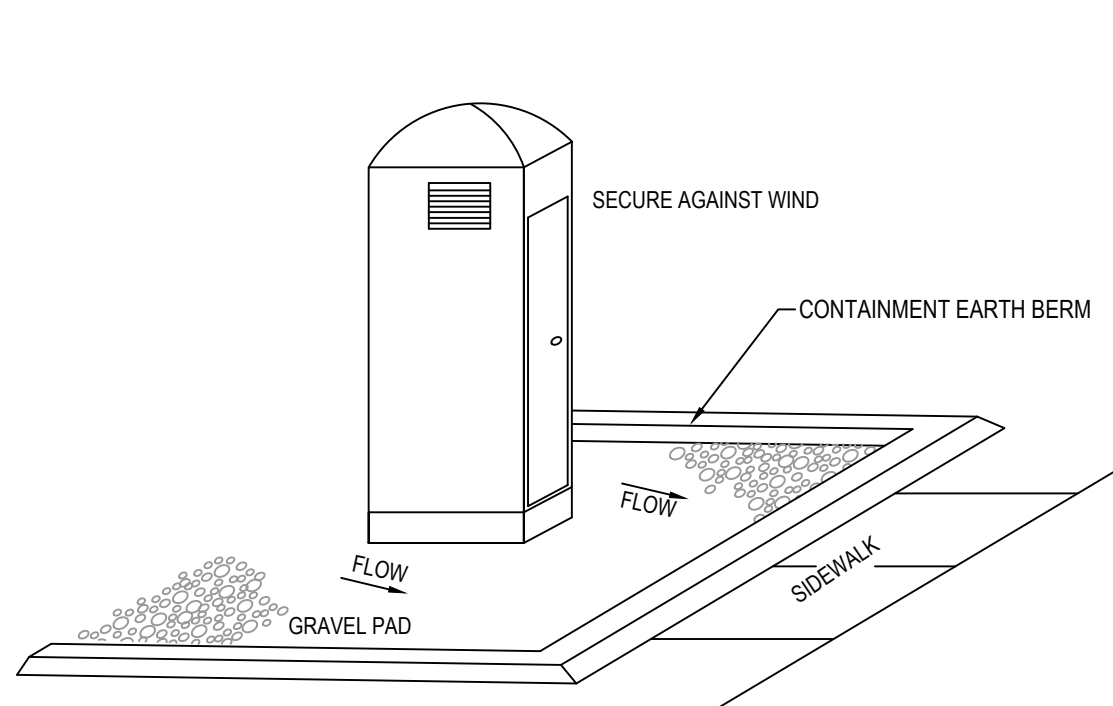
7 TEMPORARY SILT FENCE

SCALE: NONE



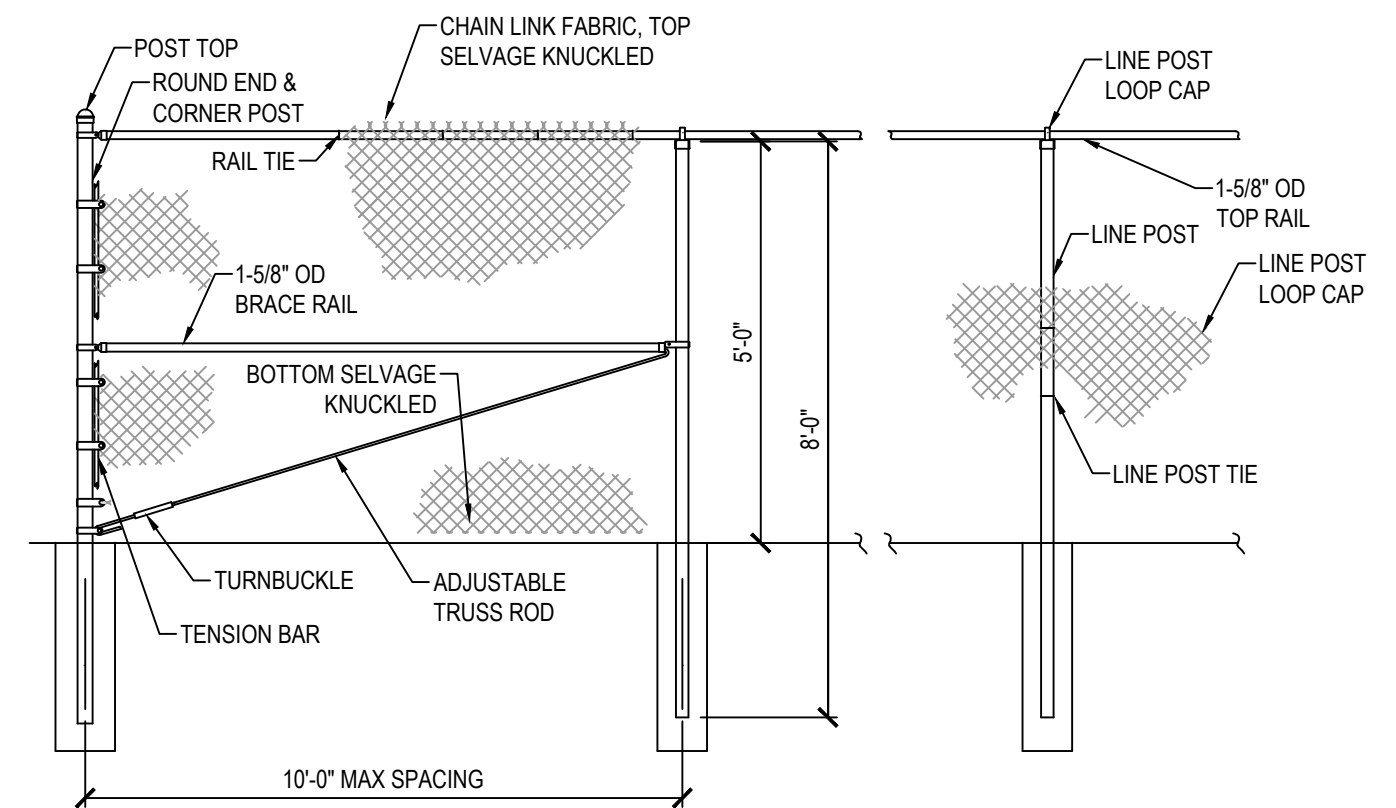
8 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NONE



9 PORTABLE TOILET

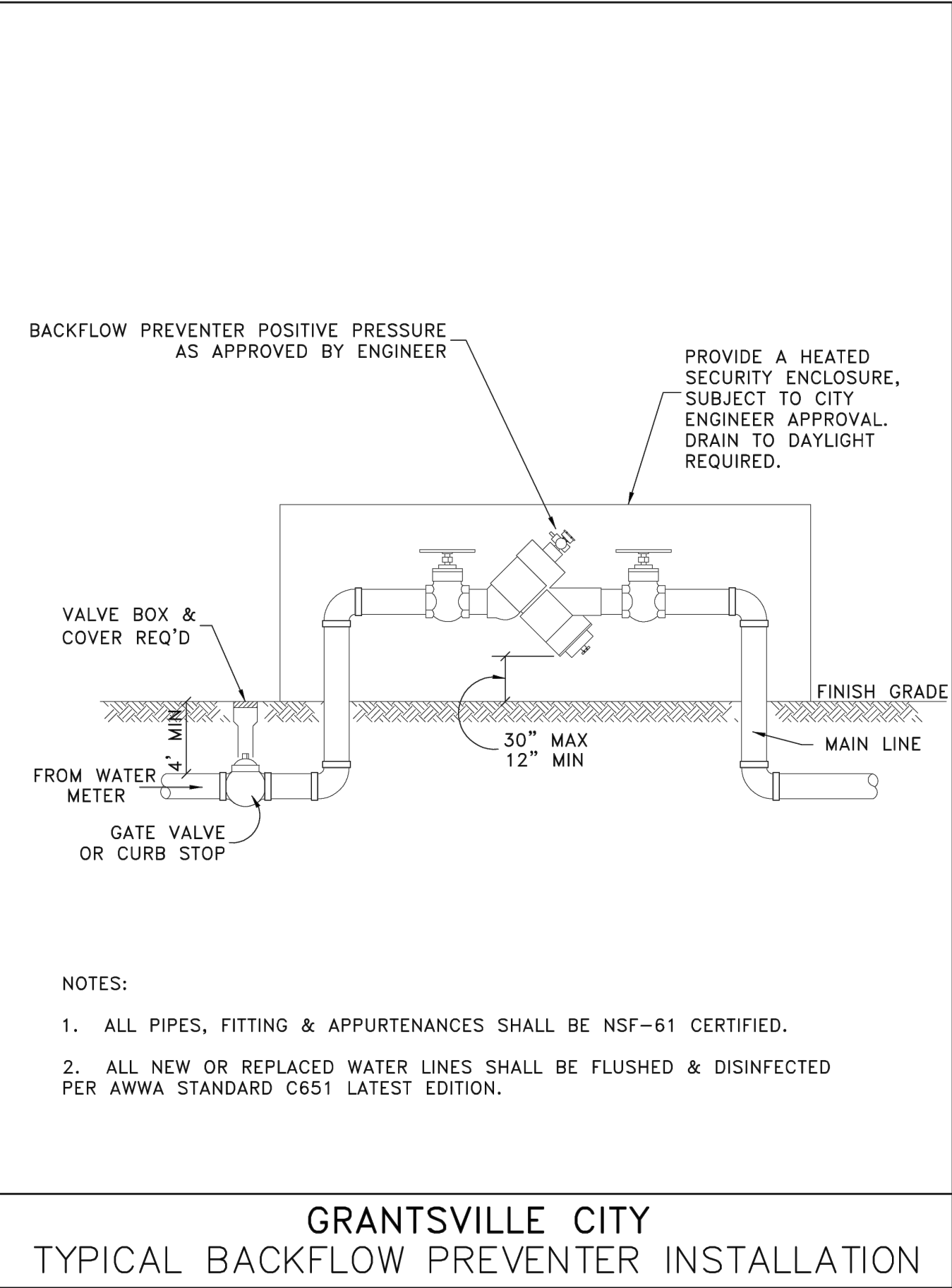
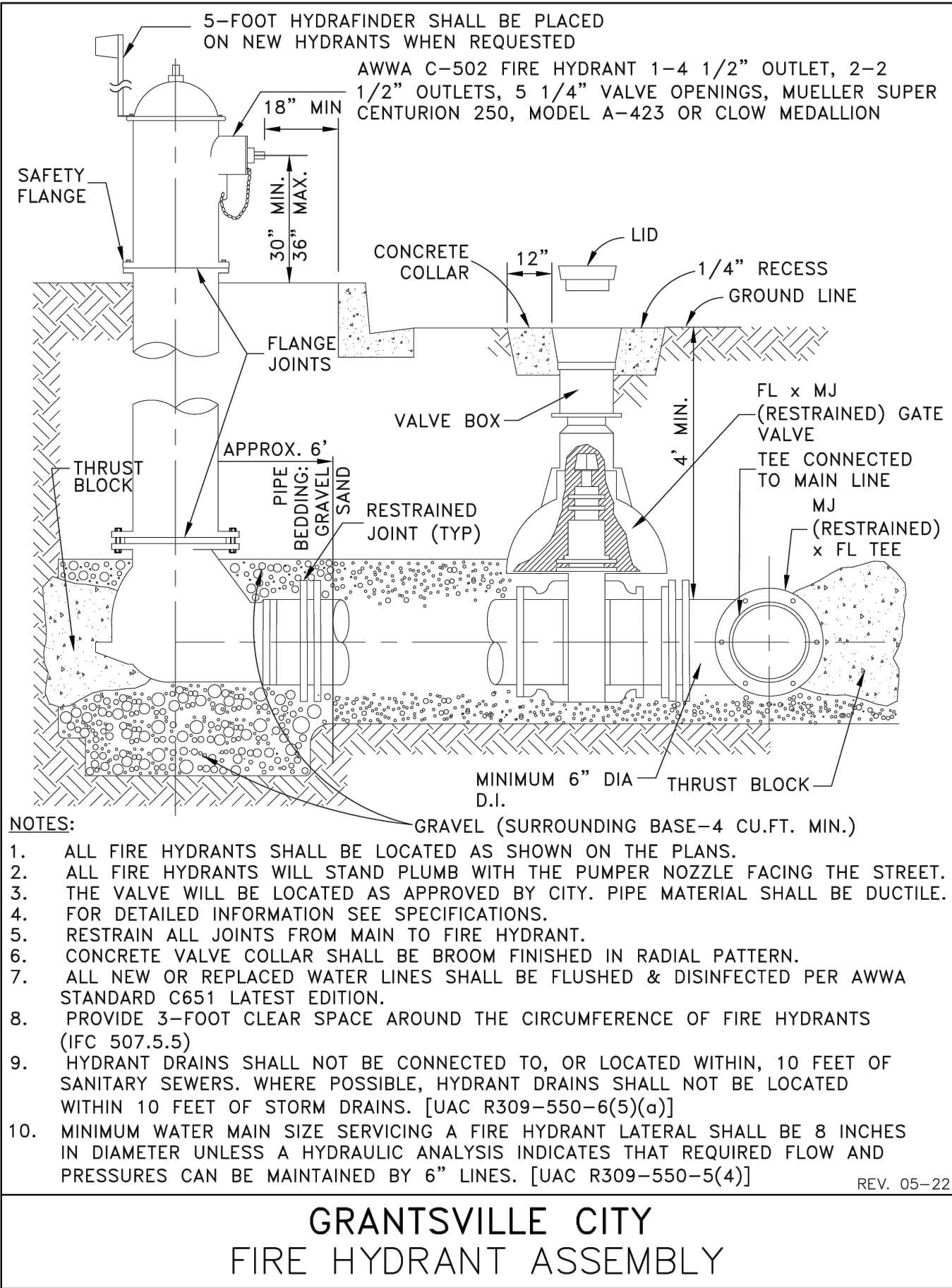
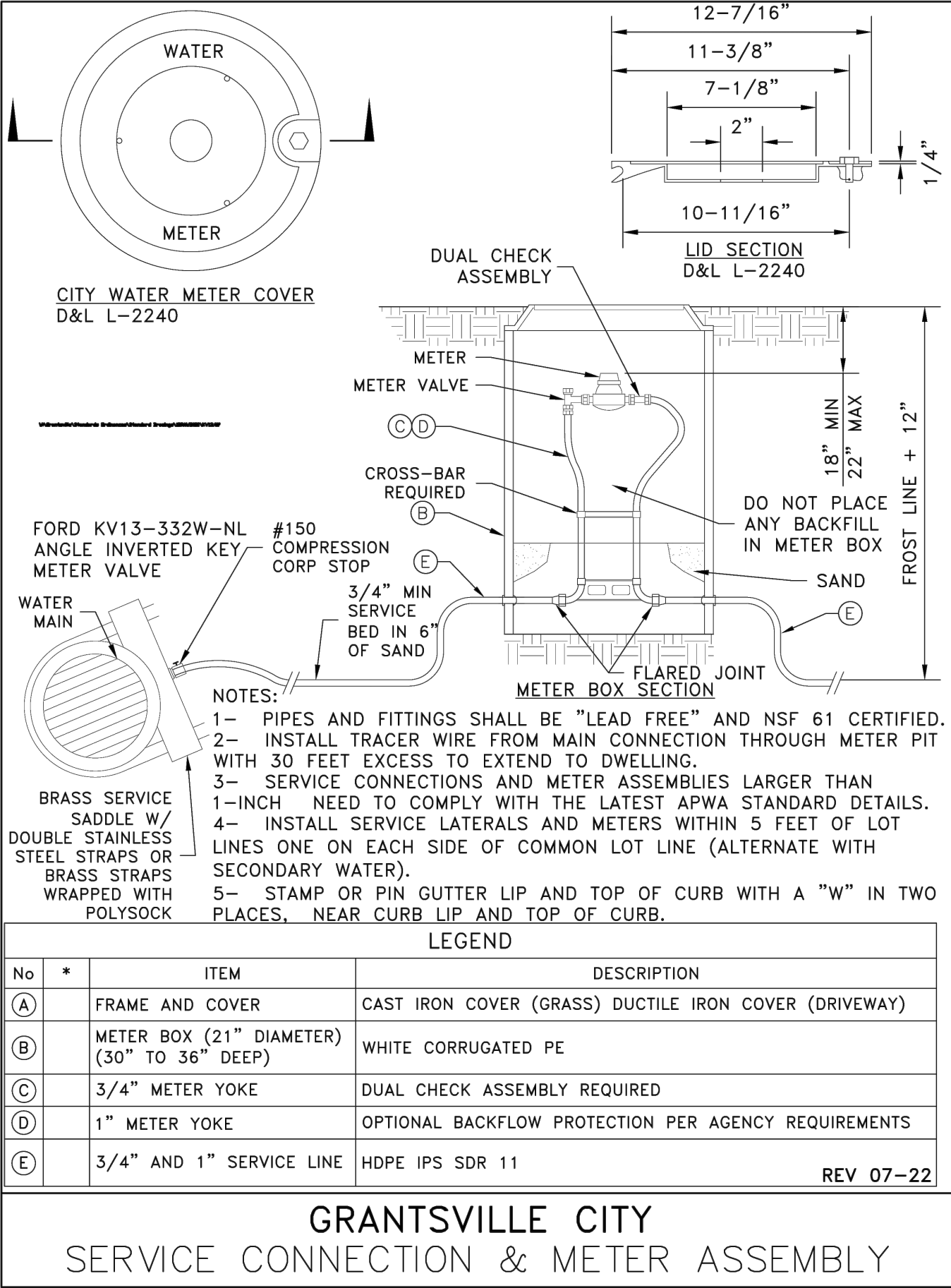
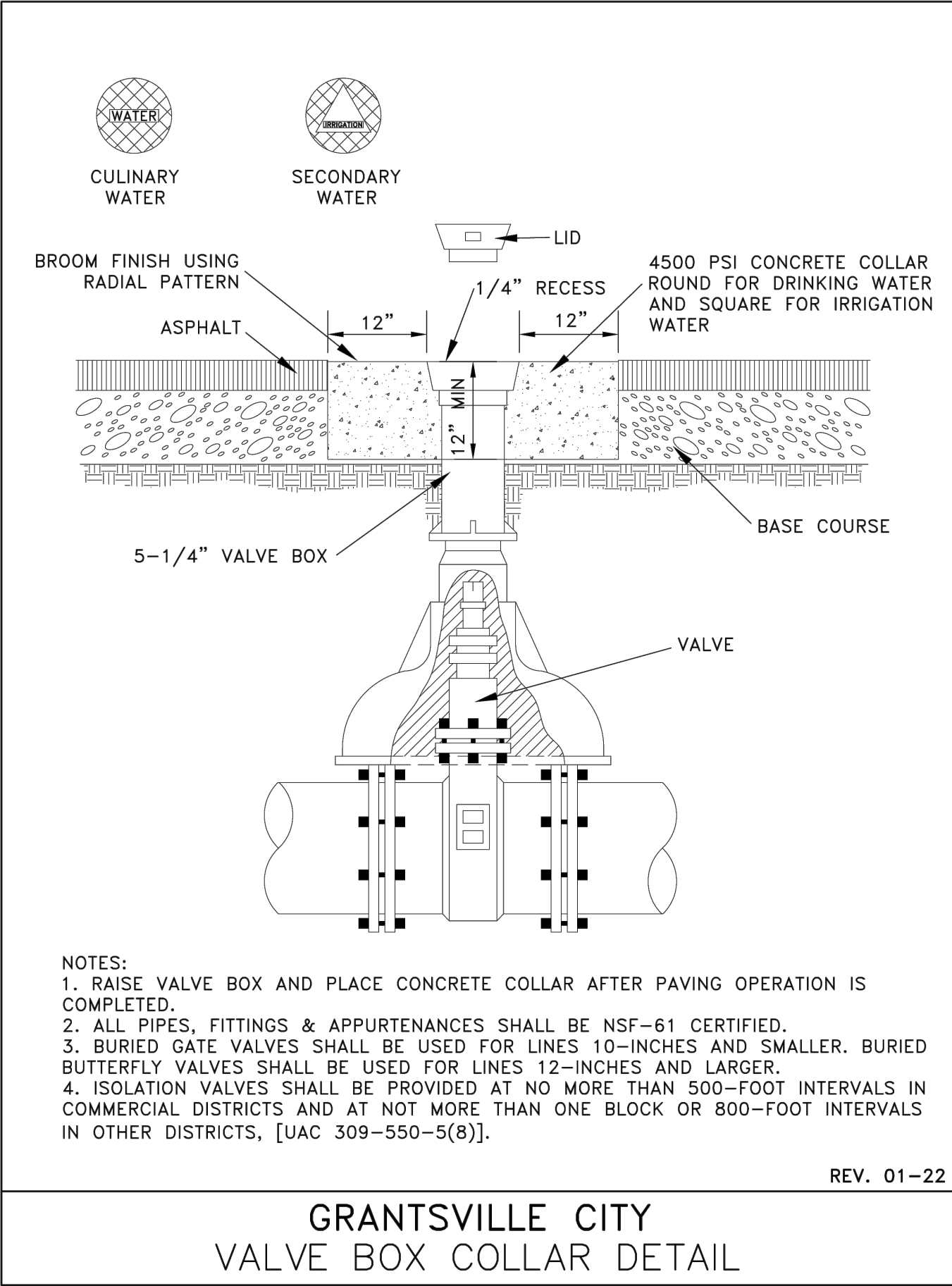
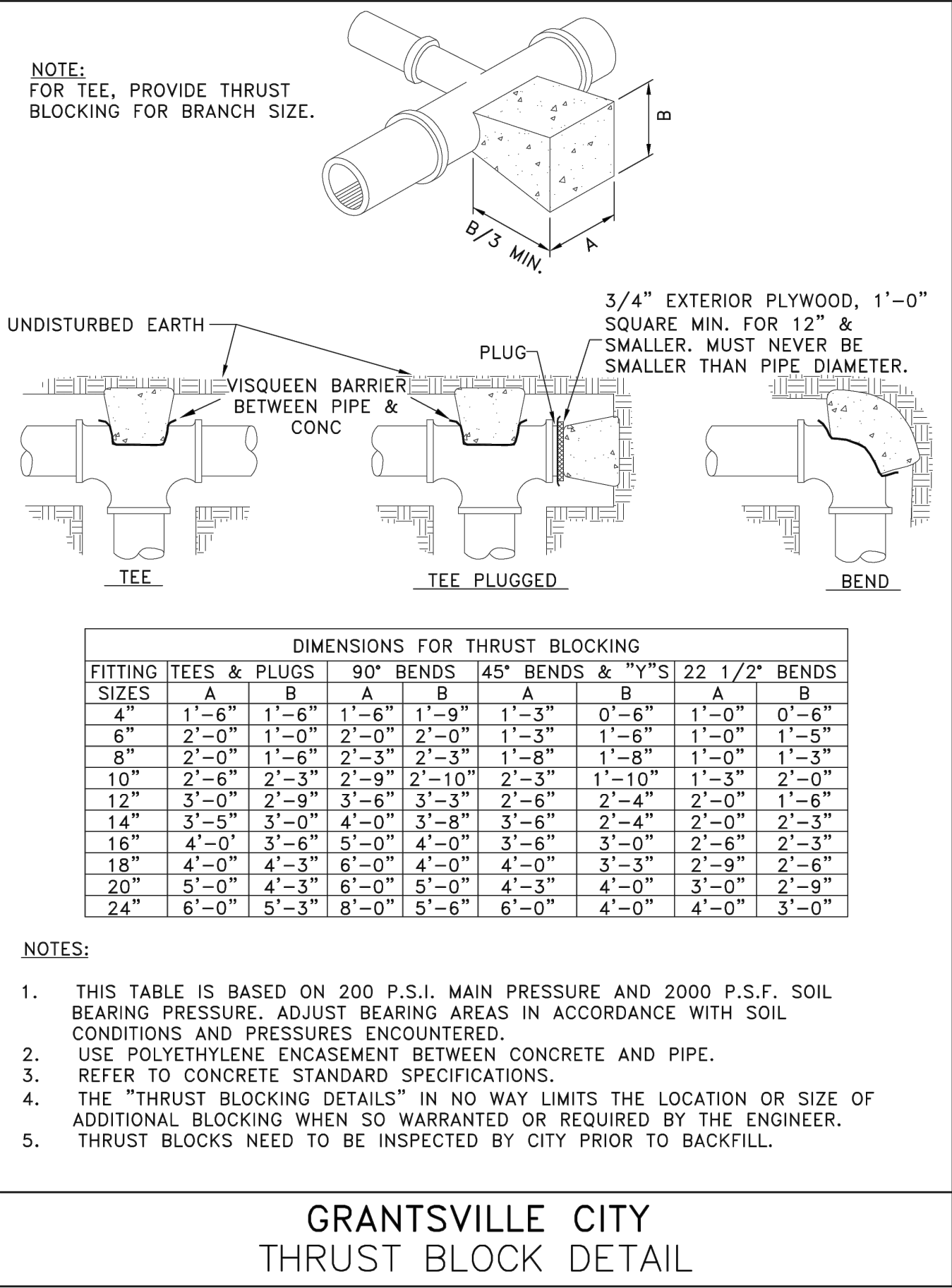
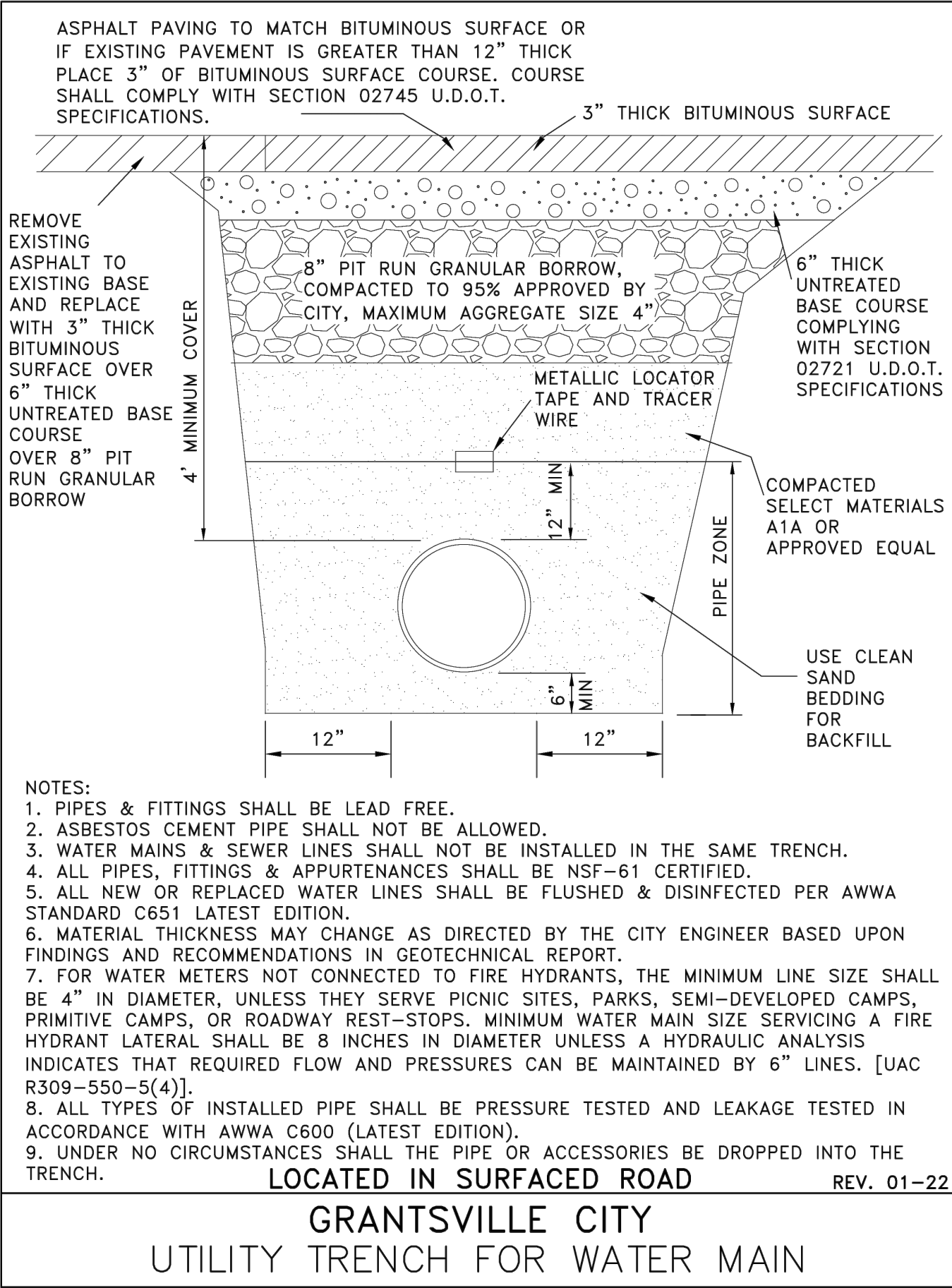
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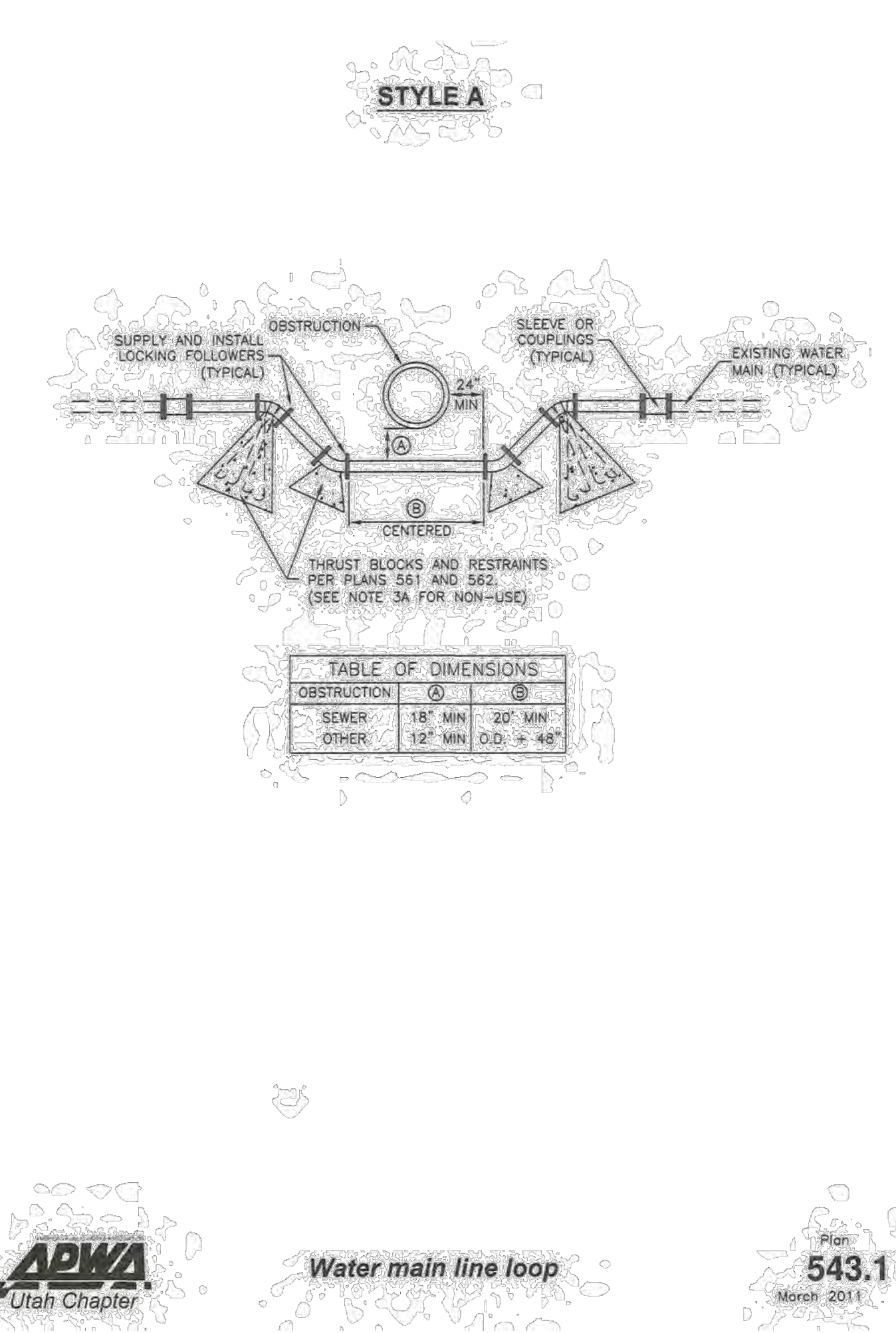
10 FENCE SECTION ELEVATION

SCALE: NONE





APWA PLAN #	GRANTSVILLE CITY CHANGES
205.1 - CURB AND GUTTER	TYPE "A" ONLY
231 - SIDEWALK	6" MIN CONCRETE THICKNESS 6" MIN BASE COURSE
235.2 - CORNER CURB CUT ASSEMBLY	6" PPC ON 6" UBC
238 - DETECTABLE WARNING SURFACE	STYLE "T" ONLY YELLOW COLOR TILE
255 - BITUMINOUS PAVEMENT T-PATCH	TRENCH BACKFILL TO BE A1A MATERIAL.
292 - STREET NAME SIGNPOST	USE NEW CITY LOGO W/ STREET NAME & GRID NUMBER ON SIGN
315.1 - CATCH BASIN	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT
316 - COMBINATION CATCH BASIN AND CLEANOUT BOX	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT
341.1 - PRECAST MANHOLE	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT
341.2 - PRECAST MANHOLE	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT
381 - TRENCH BACKFILL	TRENCH BACKFILL TO BE A1A MATERIAL.
382 - PIPE ZONE BACKFILL	WATER DESIGN - REFER TO GRANTSVILLE UTILITY TRENCH FOR WATER DETAIL SEWER DESIGN - SHOULD BE 3/4" MINUS BEDDING CRUSHED DRAIN ROCK. PER UTAH CODE R309-550-8(2)
411 - SANITARY SEWER MANHOLE	24" BASE COURSE UNLESS GEOTECH SAY DIFFERENT



**ENSIGN**  
THE STANDARD IN ENGINEERING

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CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

**ALINGTON SUBDIVISION**

**PRELIMINARY PLAT SUBMITTAL**

**MAIN STREET**

**GRANTSVILLE, UTAH**

**PRELIMINARY**

**DETAILS**

PROJECT NUMBER: T1265K  
PRINT DATE: 9/20/2022  
DRAWN BY: J.CID  
CHECKED BY: J. CLEGG  
PROJECT MANAGER: J. CLEGG

**C-501**

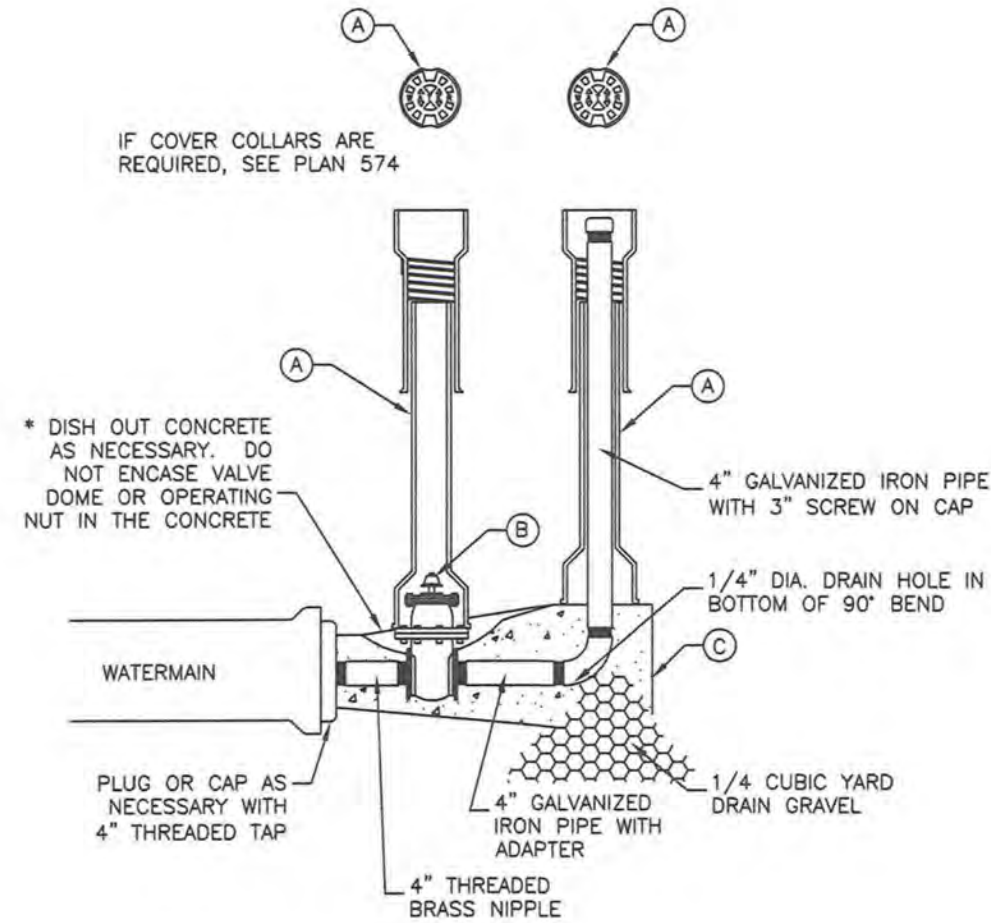


Plan  
**211**  
July 2011Plan  
**402**  
April 1997Plan  
**413**  
September 2001Plan  
**431**  
January 2011



4" washout valve

- GENERAL**
  - Before backfilling, secure inspection of installation by ENGINEER.
  - Water mains 12-inches and larger will require a special washout assembly design.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  - Concrete: Class 4000, APWA Section 03 30 04.
- EXECUTION**
  - Pour concrete against undisturbed soil.
  - Apply tape wrap to the exterior of all galvanized pipe per AWWA C209.
  - Place plastic sheet at least 6 mils thick over drain gravel to prevent silting.
  - After installation of washout valve assembly, verify the washout valve riser drains to gravel.
  - Backfill and Base Course Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater of a modified proctor density, APWA Section 31 23 26.



LEGEND		
No.	ITEM	DESCRIPTION
(A)	VALVE BOX WITH LID	2 PIECE CAST IRON
(B)	4" GATE VALVE WITH SCREW ENDS	2" x 2" OPERATING NUT
(C)	CONCRETE THRUST BLOCK	PLAN 561

571



4" Washout valve

Plan  
571  
February 2011



# Rock Outlet Protection



**What is rock outlet protection?**

A pad or apron of heavy rock placed at the outlet end of culverts or chutes.

**When is rock outlet protection used?**

Rock outlet protection is installed where the energy at the outlets of culverts or chutes are sufficient to erode the receiving channel or area. This fact sheet does not apply to continuous rock linings of channels or streams. Pipes that dump water at the top of a slope, or down slopes steeper than 10 percent, or flow at rates greater than 10 feet per second require a site specific design that is beyond the scope of this fact sheet.

**How is rock outlet protection installed?**

**Apron length:** Apron length ( $L_a$ ) shall be determined from Table 1.

**Apron width:** The apron width is based on the diameter of the discharge pipe, ( $D$ ). The apron width will be  $3D$  at the upstream end ( $W_u$ ), and the downstream width ( $W_d$ ) will be equal to  $(D + L_a)$ . The apron shall extend across the channel bottom and up side slopes for a minimum height equal to the diameter of the pipe, ( $D$ ).

**Alignment:** The apron shall be located so that there are no bends in the horizontal alignment. The apron should be level over its length, and the elevation of the downstream end of the apron must be the same as the elevation of the receiving channel or adjacent ground.

**Thickness:** The required apron thickness is shown in Table 1.

**Gabions:** When a gabion mattress is used it shall be made of double twisted galvanized steel wire. Gabions shall be fabricated in such a manner that the sides, ends, and lid can be assembled at the construction site into mats a minimum of 12 inches thick.

**Materials:** Outlet protection may be done using rock riprap or gabion mattresses to construct the apron. The rock shall consist of field stone or rough unheven quarry stone. The stone shall be hard and angular and of a quality that will not disintegrate on exposure to water or weathering. Broken concrete may be used provided it does not have any exposed steel or reinforcing bars, and that it is broken into blocky pieces such that the largest dimension of each piece is no more than 3 times the smallest dimension. The required rock size is shown in Tables 1 and 2. In all cases a geotextile (filter fabric) shall be placed between the apron and the underlying soil to prevent soil movement into and through the riprap.

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USDA is an equal opportunity provider and employer

USDA NRCS 2012 Fact Sheet

USDA NRCS 2012 Fact Sheet - rock outlet protection

**When type of maintenance is required?**

Inspect rock outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage. Remove any debris that has collected on the outlet pad.

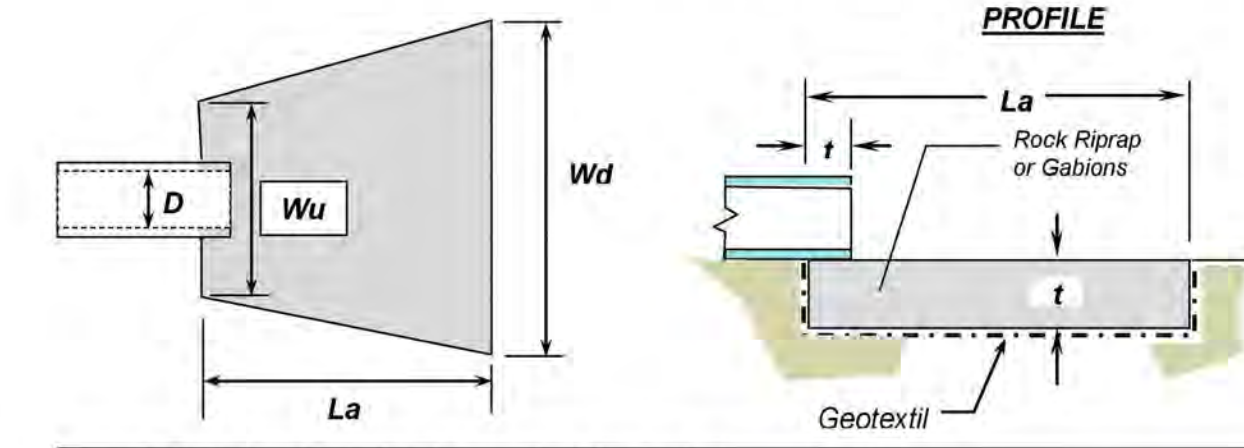


Figure 1 - Typical detail for rock outlet protection below a culvert

Culvert Size D, (inches)	Rock Size d <sub>u</sub> , (inches)	Apron Length L <sub>a</sub> , (feet)	Upstream Width W <sub>u</sub> , (feet)	Downstream Width W <sub>d</sub> , (feet)	Thickness t, (inches)	Quantity (tons)
12	6	12	3	13	18	15
18	9	16	4.5	18	24	20
21	9	18	5	20	24	35
24	9	20	6	22	24	60
30	9	22	7.5	24	24	75
36	12	24	9	27	30	120
42	18	26	10.5	30	36	180
48	18	28	12	32	36	215

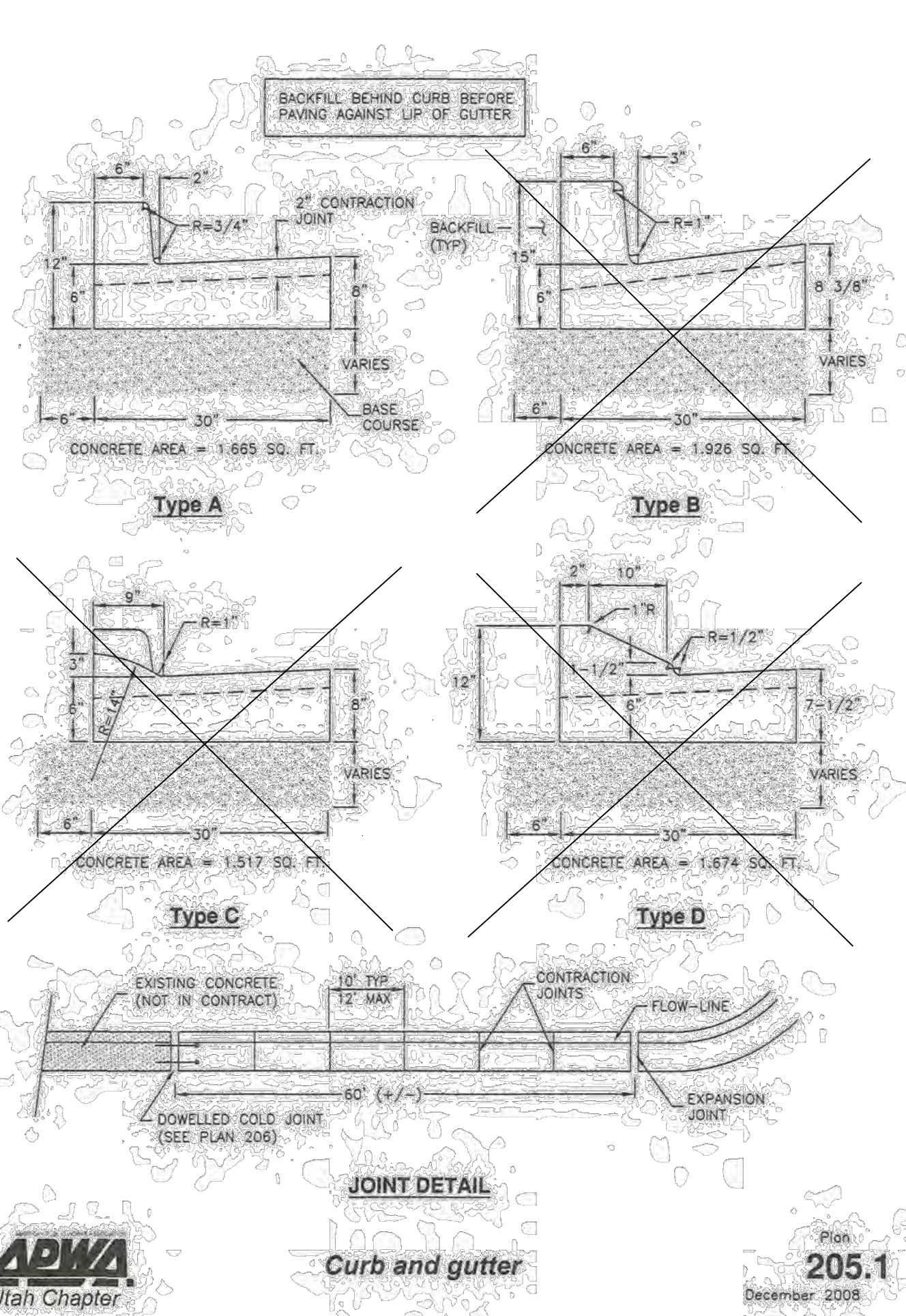
TABLE 1 - Rock outlet protection apron dimensions

Smallest Dimension in Inches					% of rocks small than size shown
Gabion Rock	6" d <sub>u</sub>	9" d <sub>u</sub>	12" d <sub>u</sub>	18" d <sub>u</sub>	
8	12	15	21	30	100
6	9	12	18	24	50-70
4	6	9	12	18	35-50
3	2	3	4	6	2-10

TABLE 2 - Required rock gradation

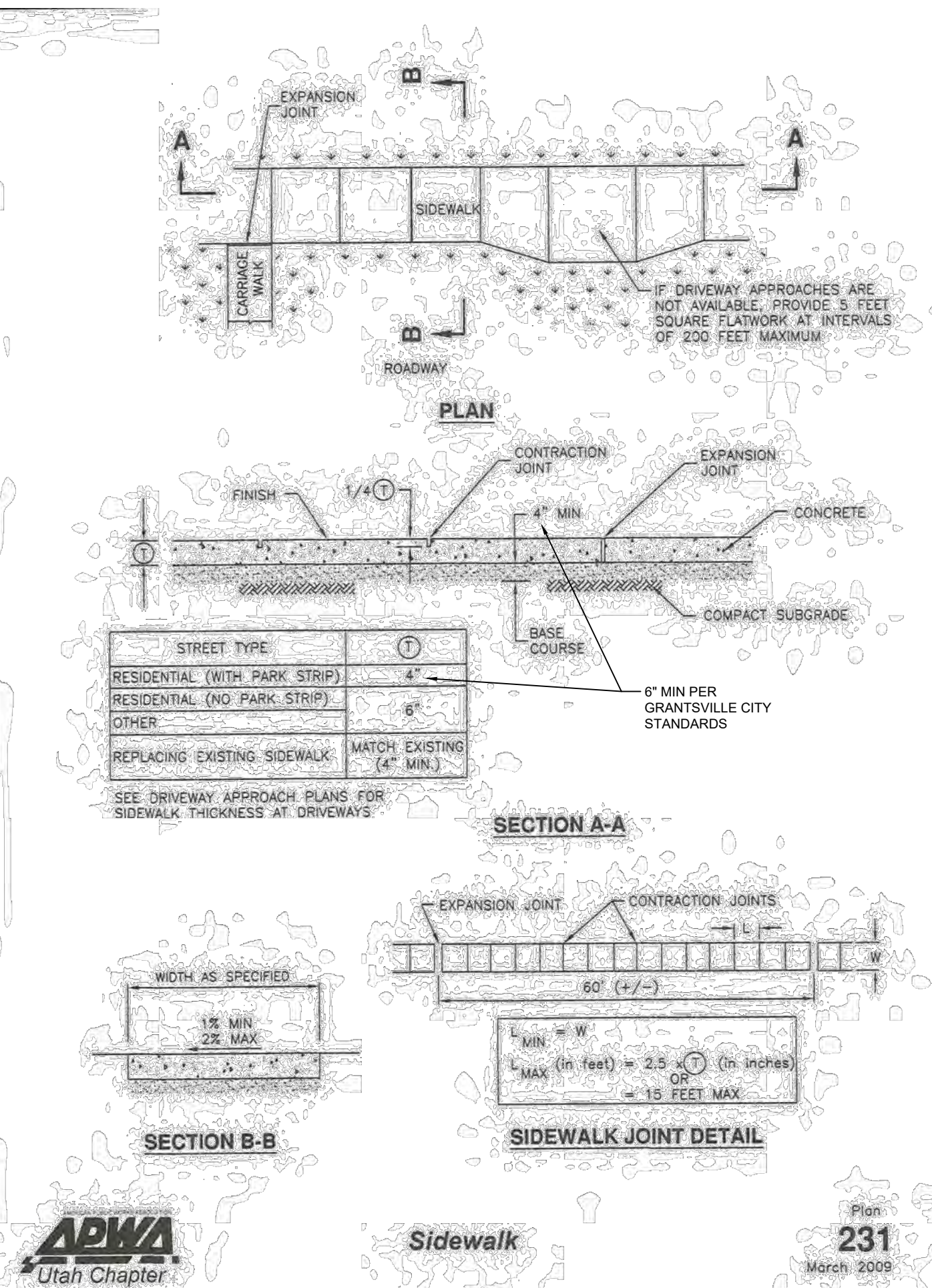
**NOTE:** After a fire many trees are weakened from burning around the base of the trunk. The trees can fall over or blow down without warning. Shallow rooted trees can also fall. Therefore be extremely alert when around burned trees.

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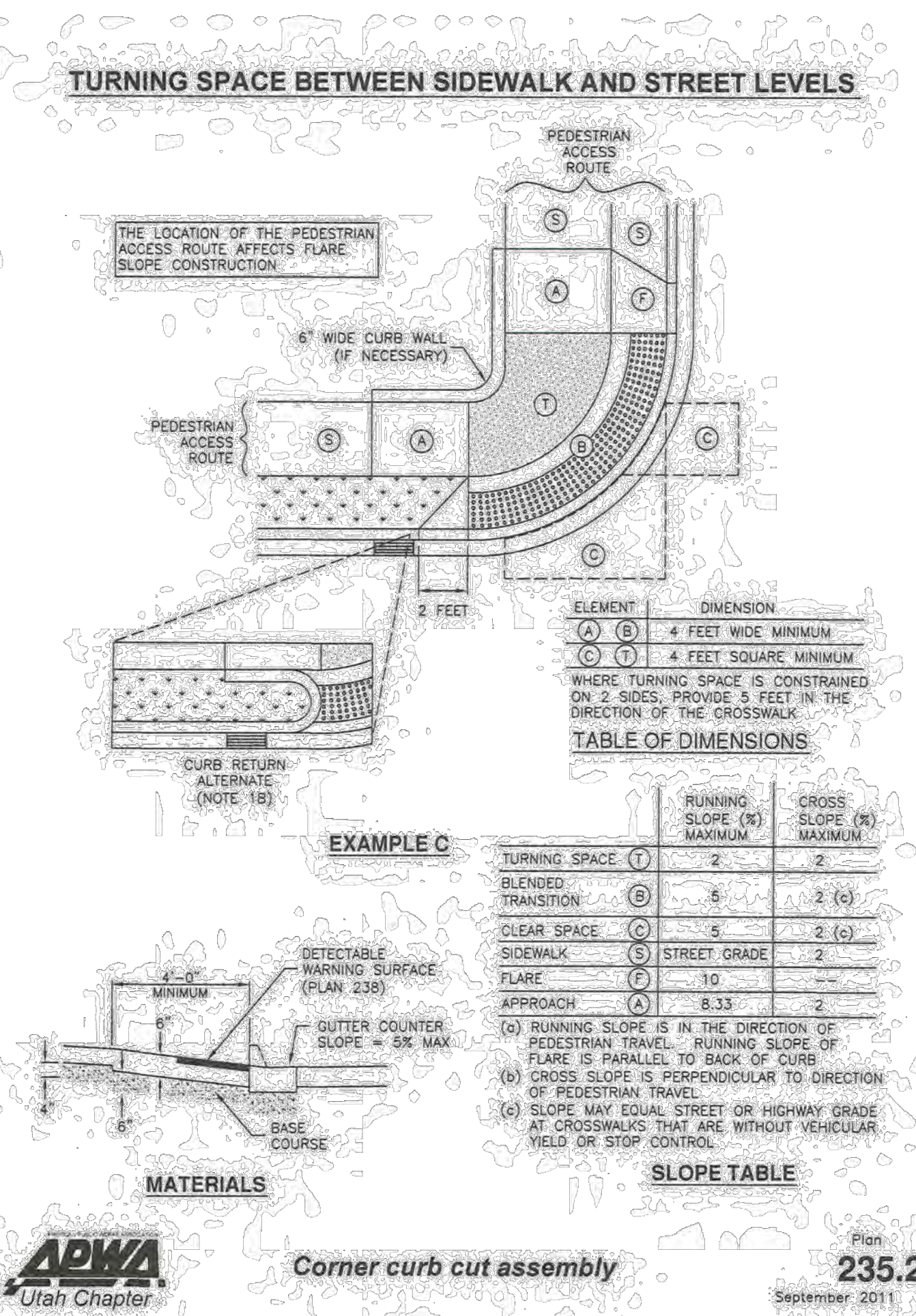
Curb and gutter

Plan  
205.1  
December 2008



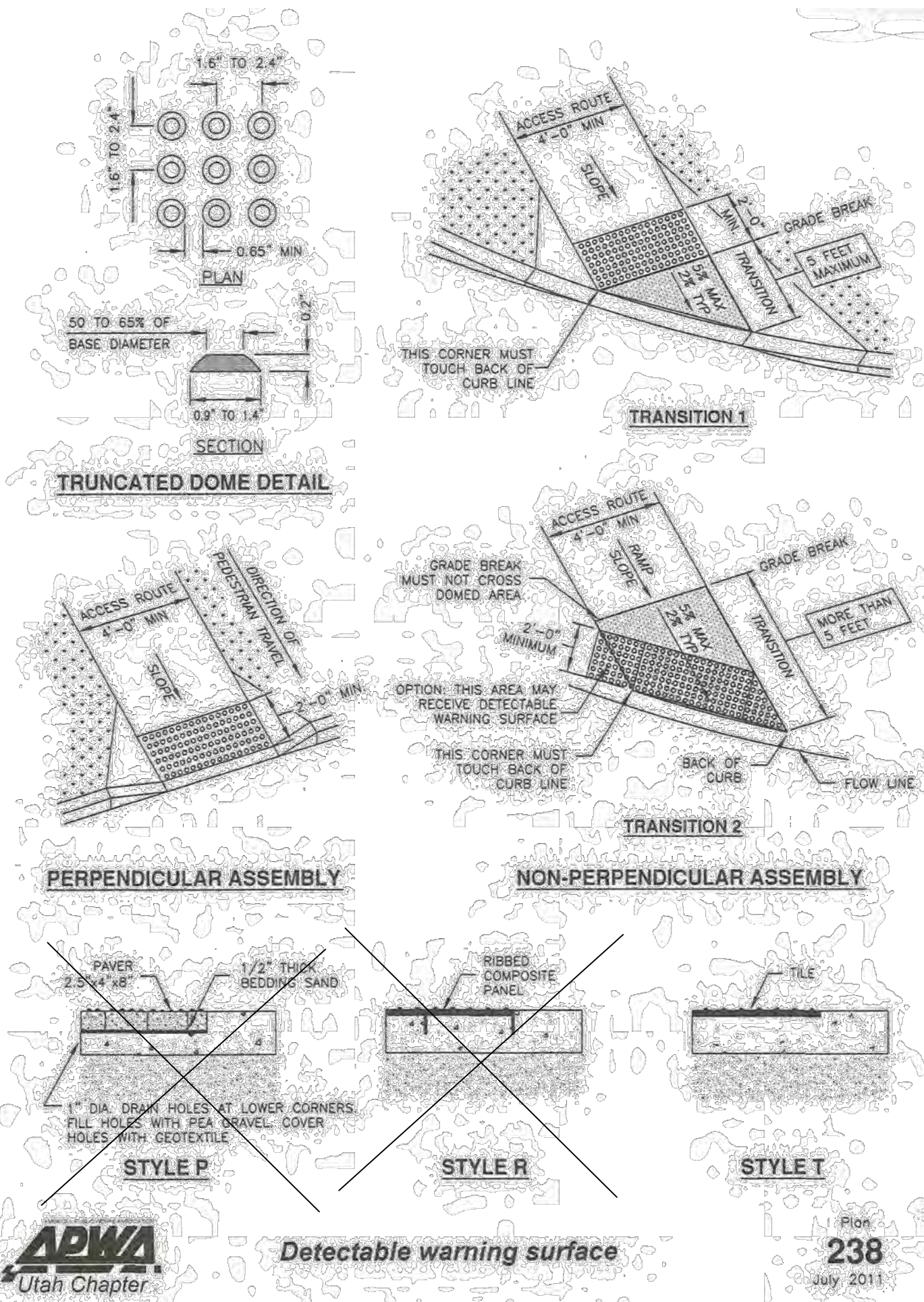
Sidewalk

Plan  
231  
March 2009



Corner curb cut assembly

Plan  
235.2  
September 2011



Detectable warning surface

Plan  
238  
July 2011



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Phone: 435.865.1453

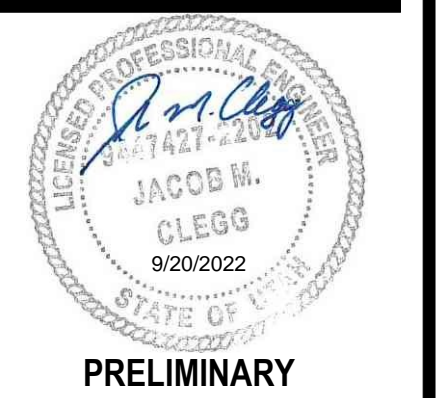
**RICHFIELD**  
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CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

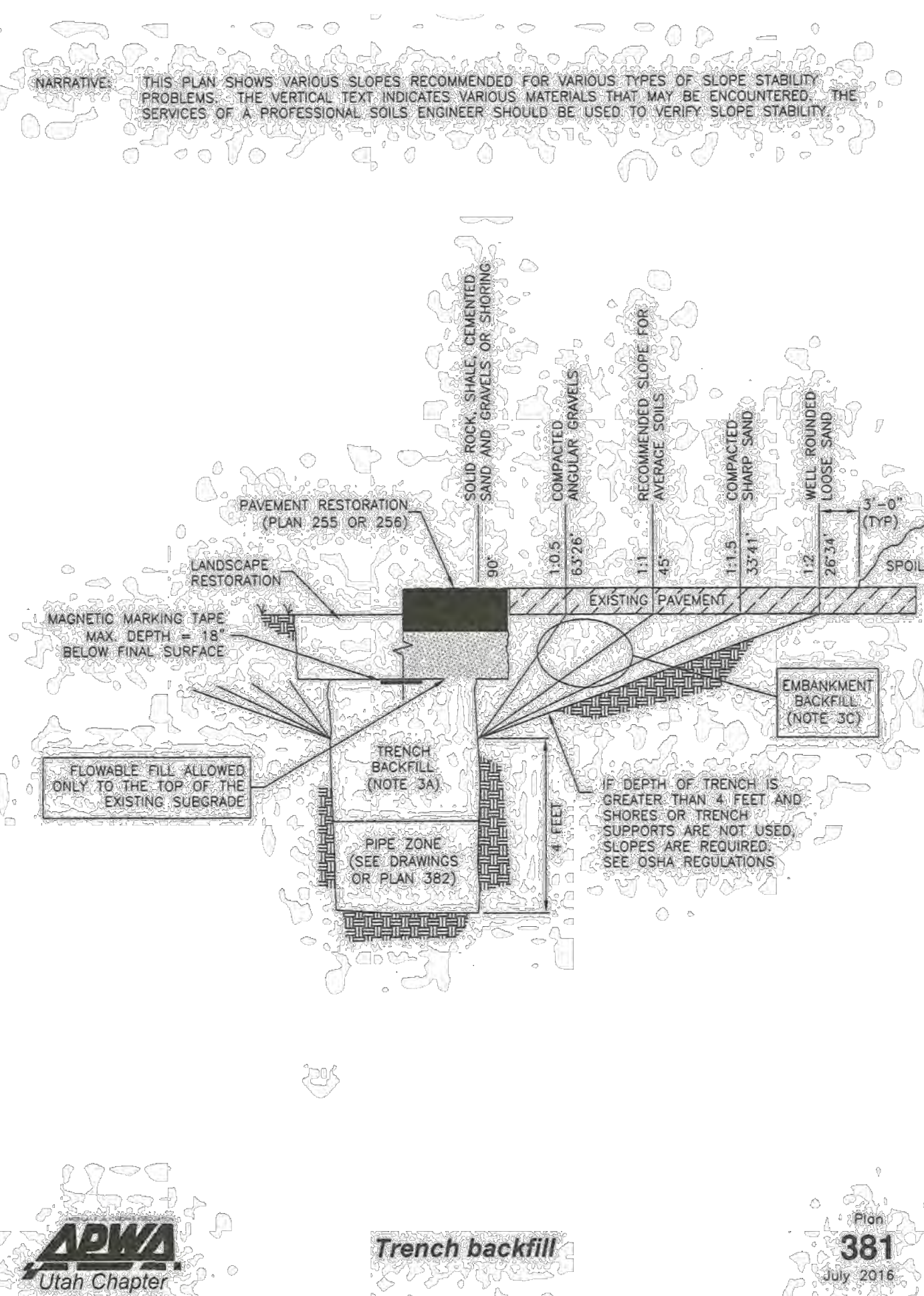
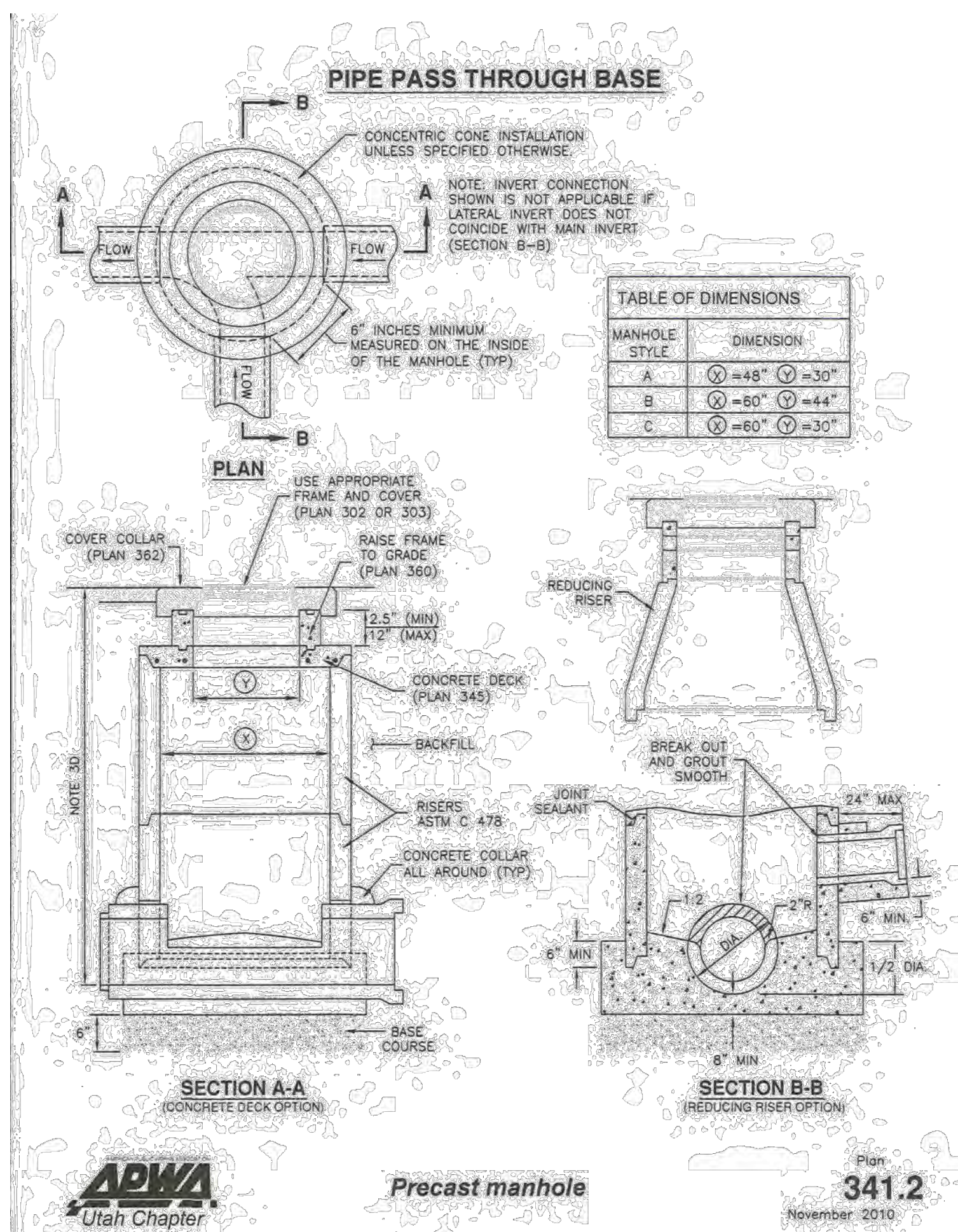
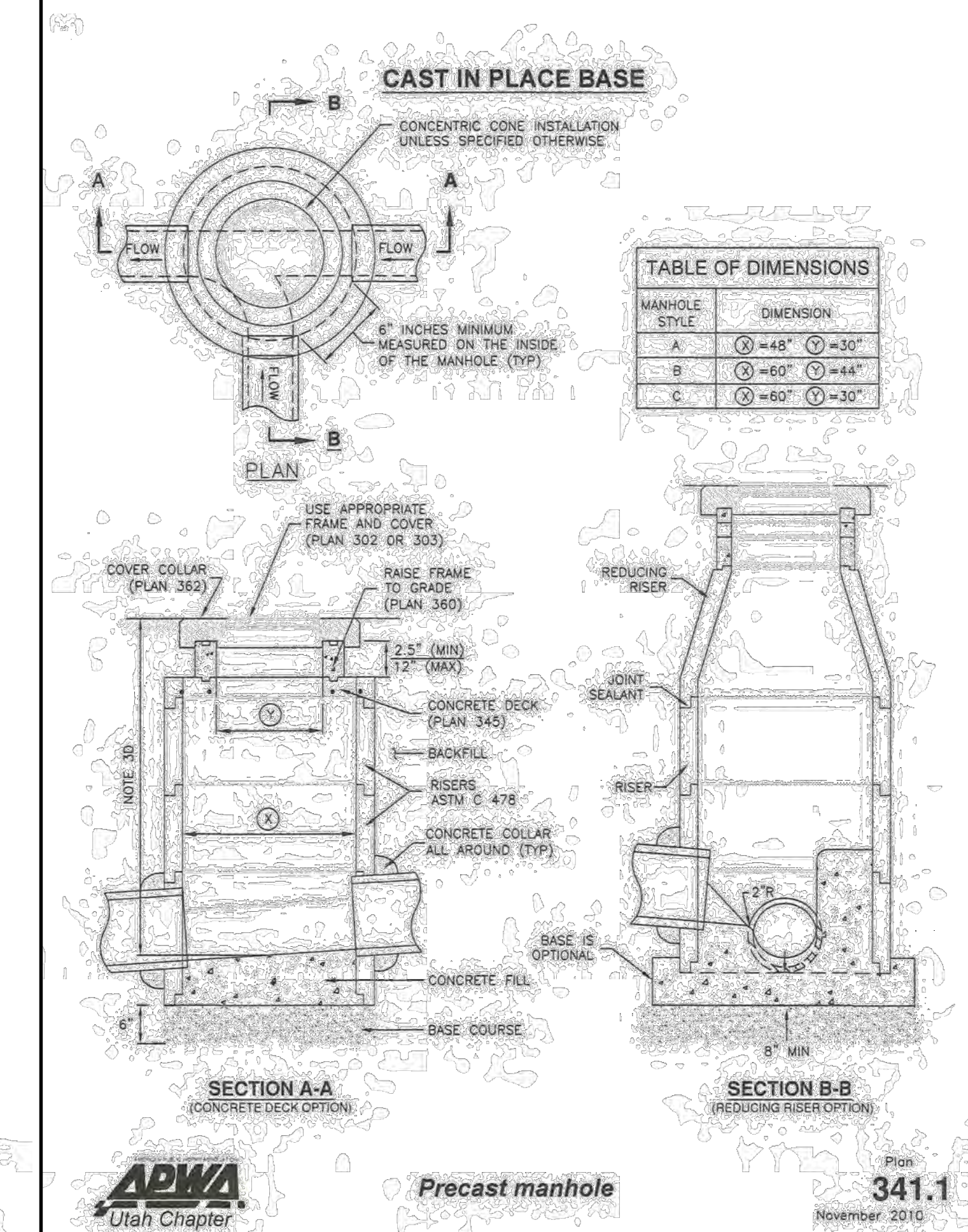
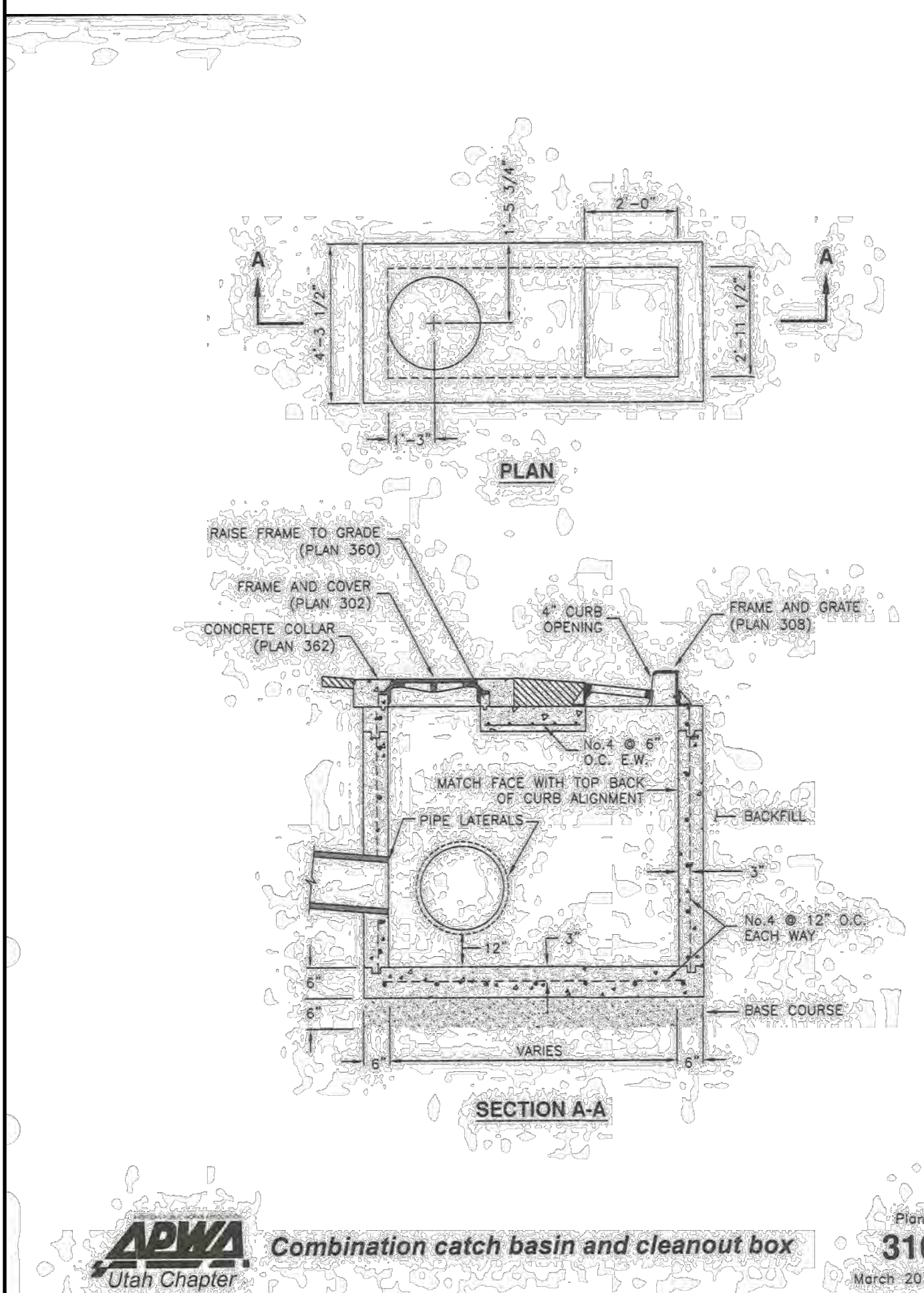
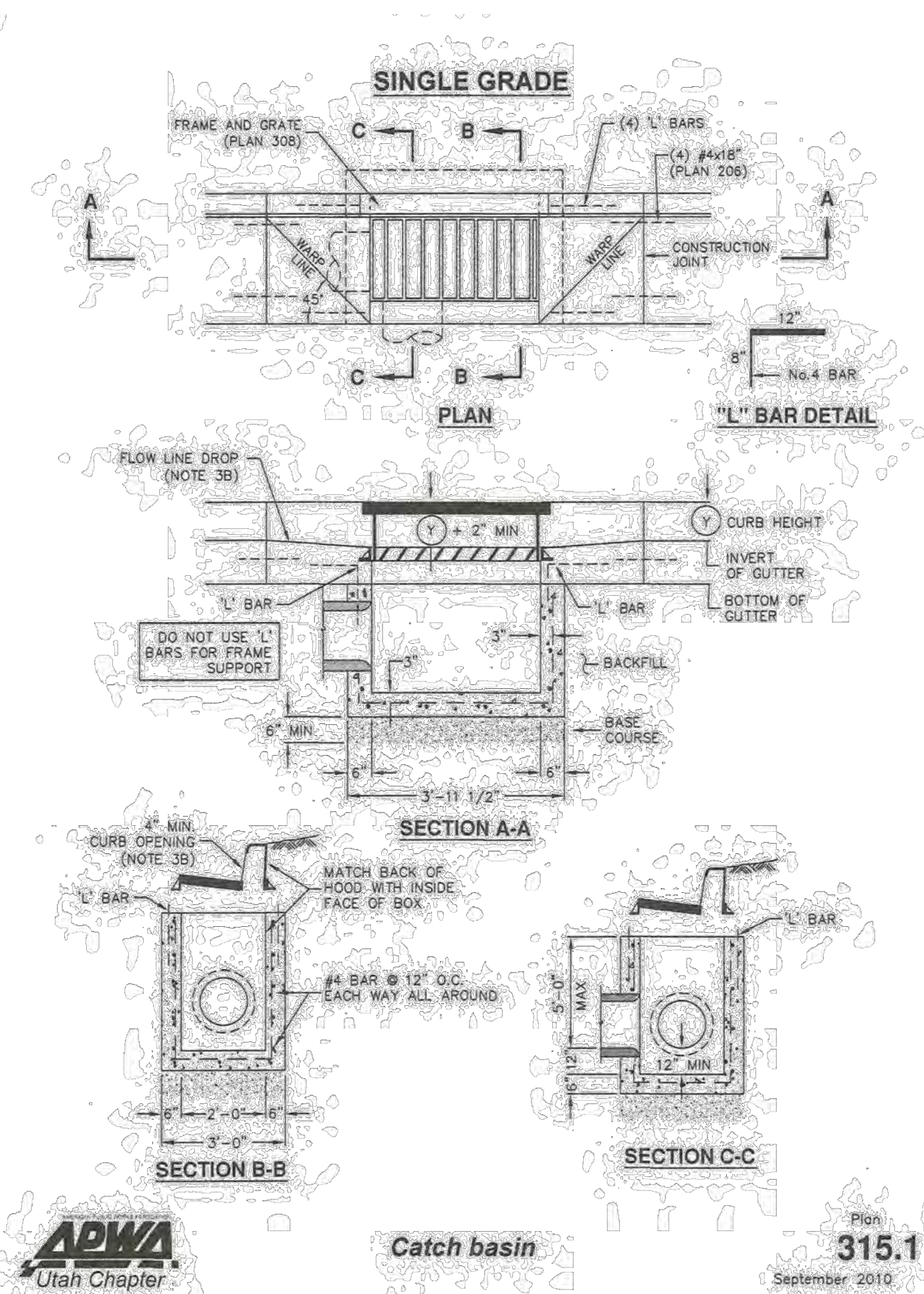
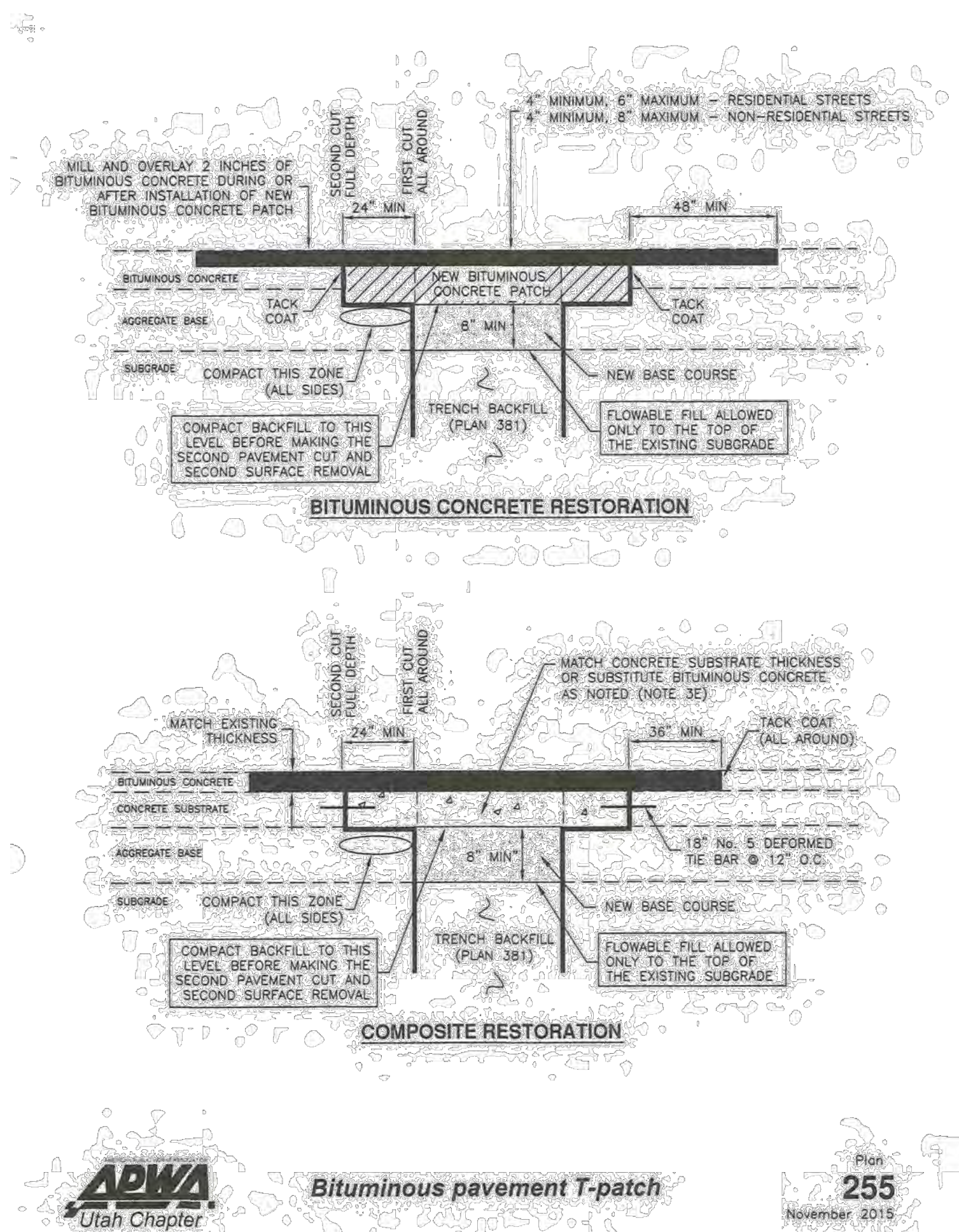


DETAILS

PROJECT NUMBER  
T1265K  
DRAWN BY  
J.CID  
PROJECT MANAGER  
J. CLEGG  
PRINT DATE  
9/20/2022  
CHECKED BY  
J. CLEGG

C-503





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JOE WHITE  
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**ALINGTON SUBDIVISION**

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**MAIN STREET**

**GRANTSVILLE, UTAH**

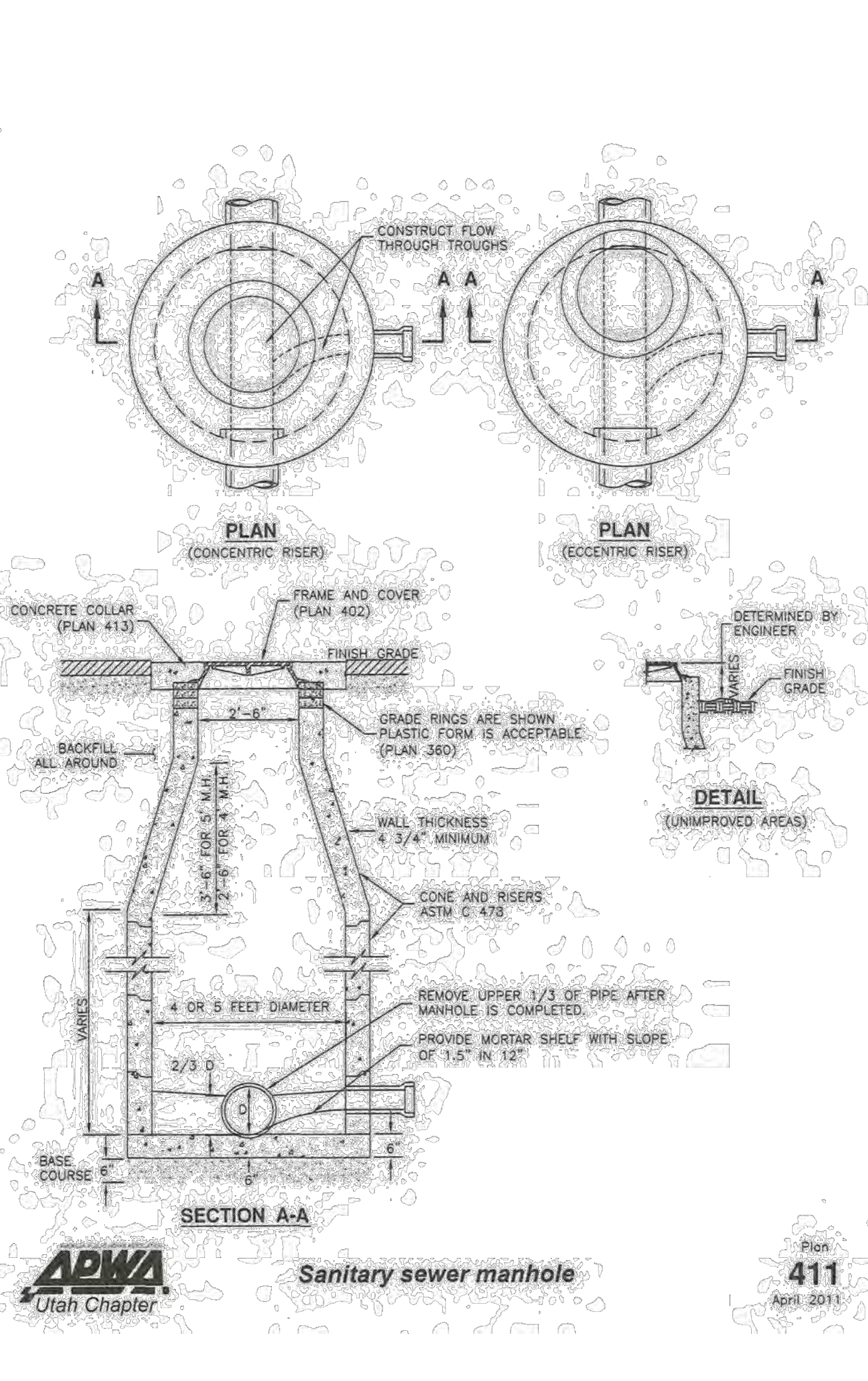
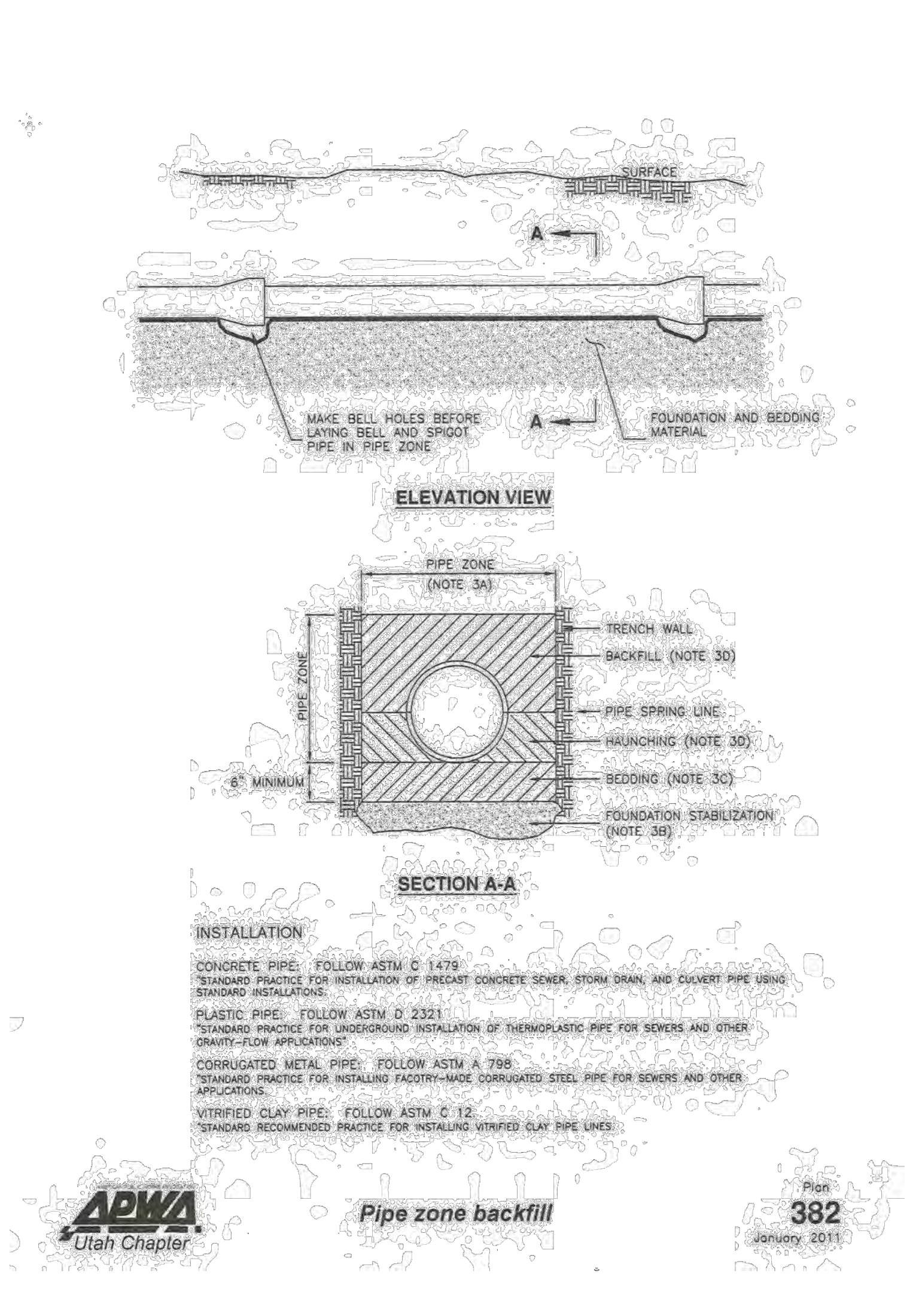
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**DETAILS**

PROJECT NUMBER: T1265K  
PRINT DATE: 9/20/2022  
DRAWN BY: J.CID  
CHECKED BY: J. CLEGG  
PROJECT MANAGER: J. CLEGG

**C-504**





#### Study Summary Statistics

No. of Lots	74
Roof SF/lot	3500
Drive SF/lot	720
Total Lots Hardscape, SF	312280
Road Length, FT	5575
Total Road Hardscape SF	250875
Total Hardscape, SF	563155
Total Area, SF	1487138
Landscaped Area, SF	923983
Weighted Average C	0.42

#### Detention Calculations (10-year storm)

Basin Tributary Area	1,487,138 SF
Runoff coefficient C:	0.415
Basin Area	30,000 SF
Allowable Discharge Rate	0.05 cfs/acre
Total Discharge	1.71 cfs

Time (min)	i (in/hr)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
5	3.16	13,529	512	13,017
10	2.40	20,576	1,024	19,552
15	1.98	25,514	1,536	23,978
30	1.33	34,310	3,073	31,238
60	0.83	42,489	6,145	36,344
120	0.46	46,913	12,290	34,623
180	0.32	49,845	18,436	31,410
360	0.19	56,642	36,871	21,770
720	0.12	70,987	73,742	(2,755)
1440	0.07	87,448	147,485	(60,037)
		Required Detention:		36,344
		Provided Detention:		39,020

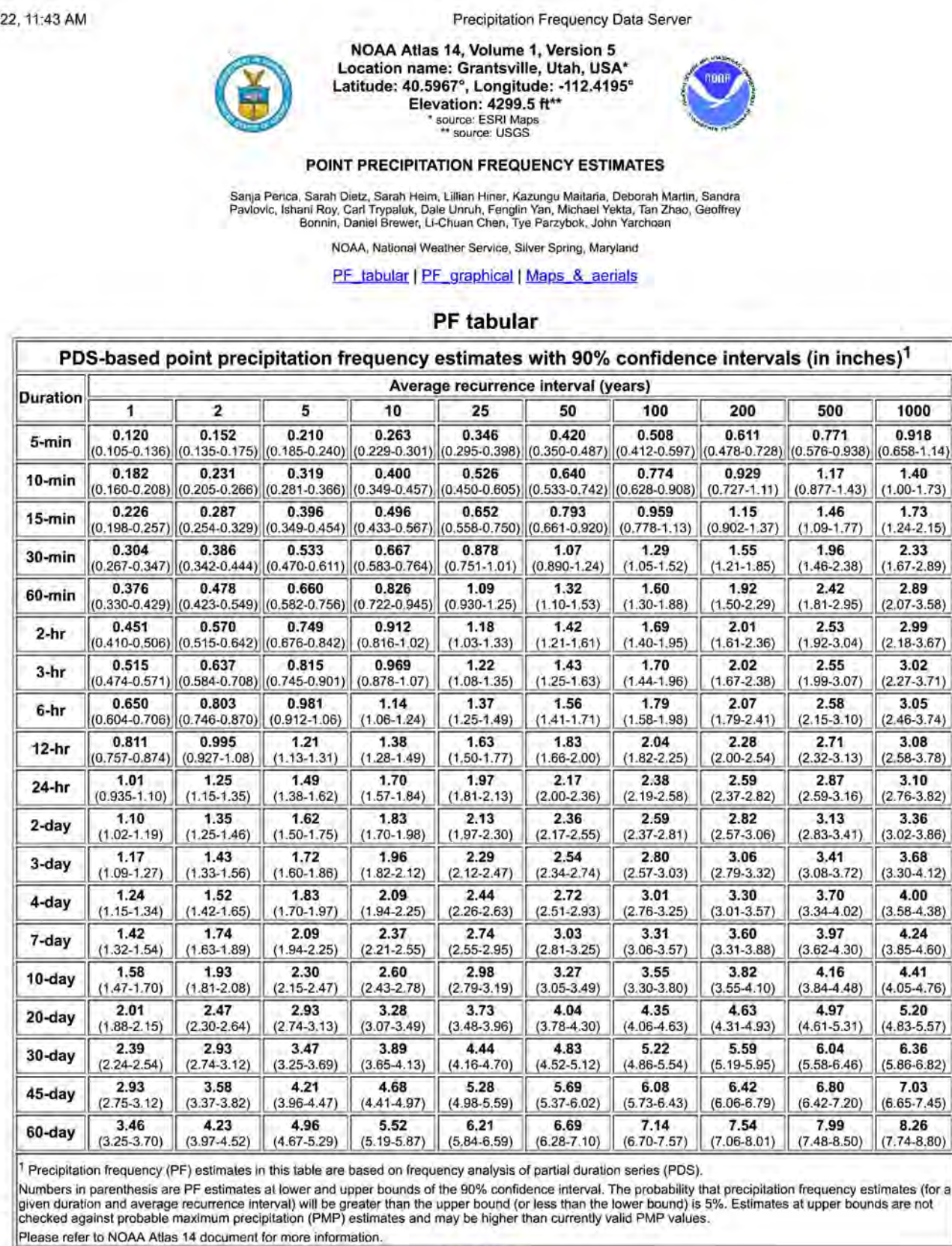
#### Catchment Calculations (10-year storm)

Time of Concentration:		30 min		
Rainfall Intensity I:		1.33 in/hr		
Manning's N		0.013		
Catchment	Area (SF)	C	Flow (CFS)	Destination
1	63,534	0.393	0.771	201
2	164,656	0.393	1.997	219
3	90,087	0.393	1.093	220
4	116,769	0.393	1.416	204
5	102,653	0.393	1.245	205
6	60,670	0.393	0.736	207
7	109,943	0.393	1.333	209
8	134,696	0.393	1.634	217
9	156,721	0.393	1.901	216
10	116,267	0.393	1.410	225
11&12	127,718	0.393	1.549	214
13	34,779	0.393	0.422	210
14	132,220	0.393	1.604	223
15	109,195	0.393	1.324	224

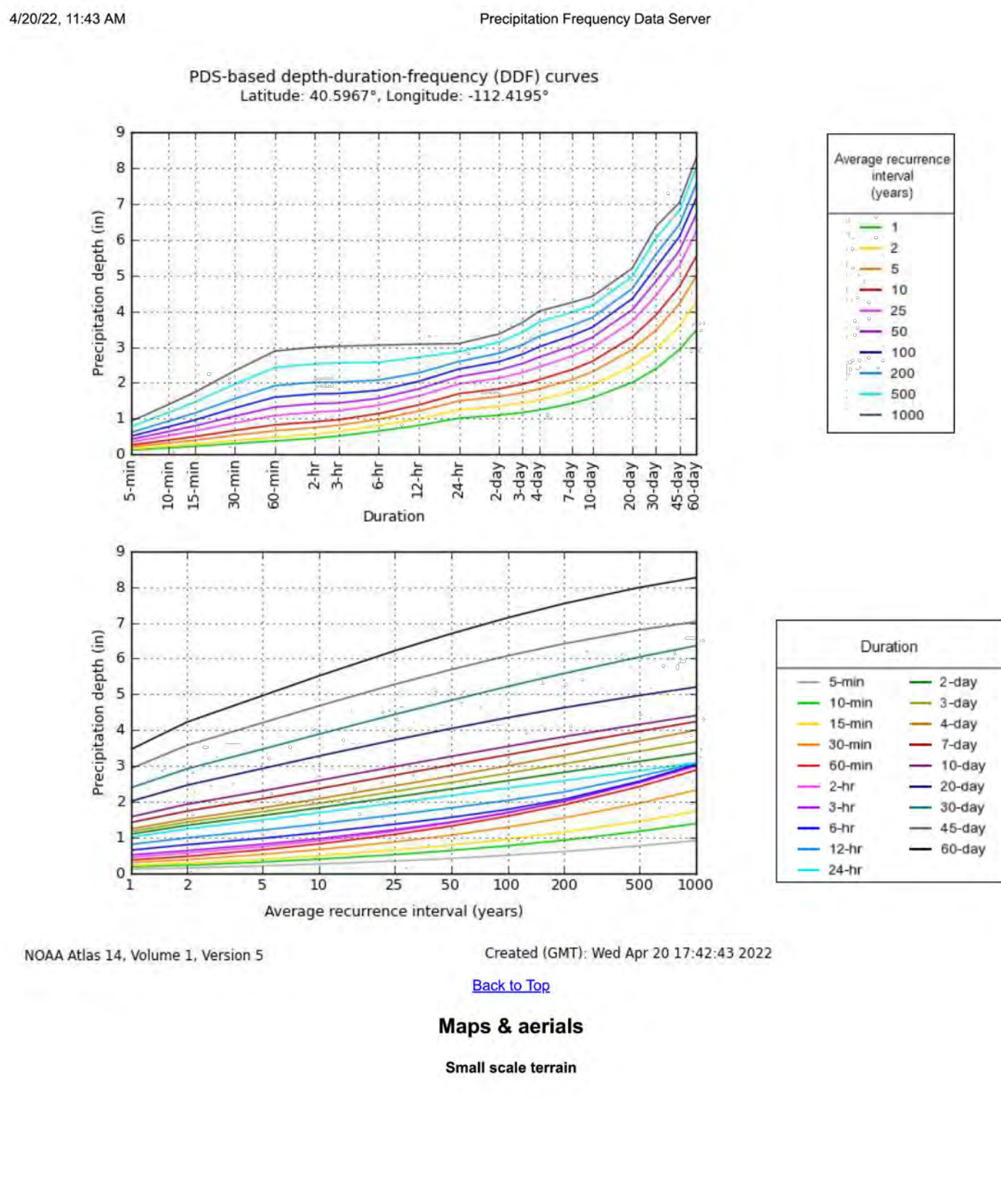
#### Pipe Design (10-year storm)

Pipe	Tributary Basins	Surface Flow (CFS)	Upstream Pipes	Pipe Flow (CFS)	Total Flow (CFS)	Pipe Slope	Diameter (IN)	Full Flow Capacity (CFS)	% of Full-Flow Capacity
201-202	1	0.771	None	0.000	0.771	0.60%	15	5.017	15.4%
204-205	5	1.245	None	0.000	1.245	1.64%	15	8.295	15.0%
204-206	4	1.416	201-205	2.016	3.432	0.71%	15	5.458	62.9%
206-207	6	0.736	None	0.000	0.736	0.60%	15	5.017	14.7%
209-210	13	0.422	None	0.000	0.422	2.72%	15	10.682	3.9%
209-211	7	1.333	201-209	4.589	5.923	0.60%	18	8.159	72.6%
222-223	14	1.604	None	0.000	1.604	0.60%	15	5.017	32.0%
224-222	15	1.324	None	0.000	1.324	0.59%	15	4.975	26.6%
212-222	None	0.000	222-224	2.928	2.928	0.60%	15	5.017	58.4%
212-213	None	0.000	201-222	8.851	8.851	0.60%	24	17.670	50.4%
213-214	11&12	1.549	None	0.000	1.549	2.00%	15	9.160	16.9%
213-225	None	0.000	201-225	10.400	10.400	0.75%	24	19.644	52.9%
219-220	3	1.093	None	0.000	1.093	0.67%	15	5.302	20.6%
218-219	2	1.997	219-220	1.093	3.090	0.60%	15	5.017	61.6%
216-217	8	1.634	None	0.000	1.634	1.13%	15	6.885	23.7%
215-216	9	1.90	216-220	4.723	6.624	0.60%	18	8.159	81.2%
221-225	10	1.410	201-225	15.123	16.533	2.50%	24	35.865	46.1%

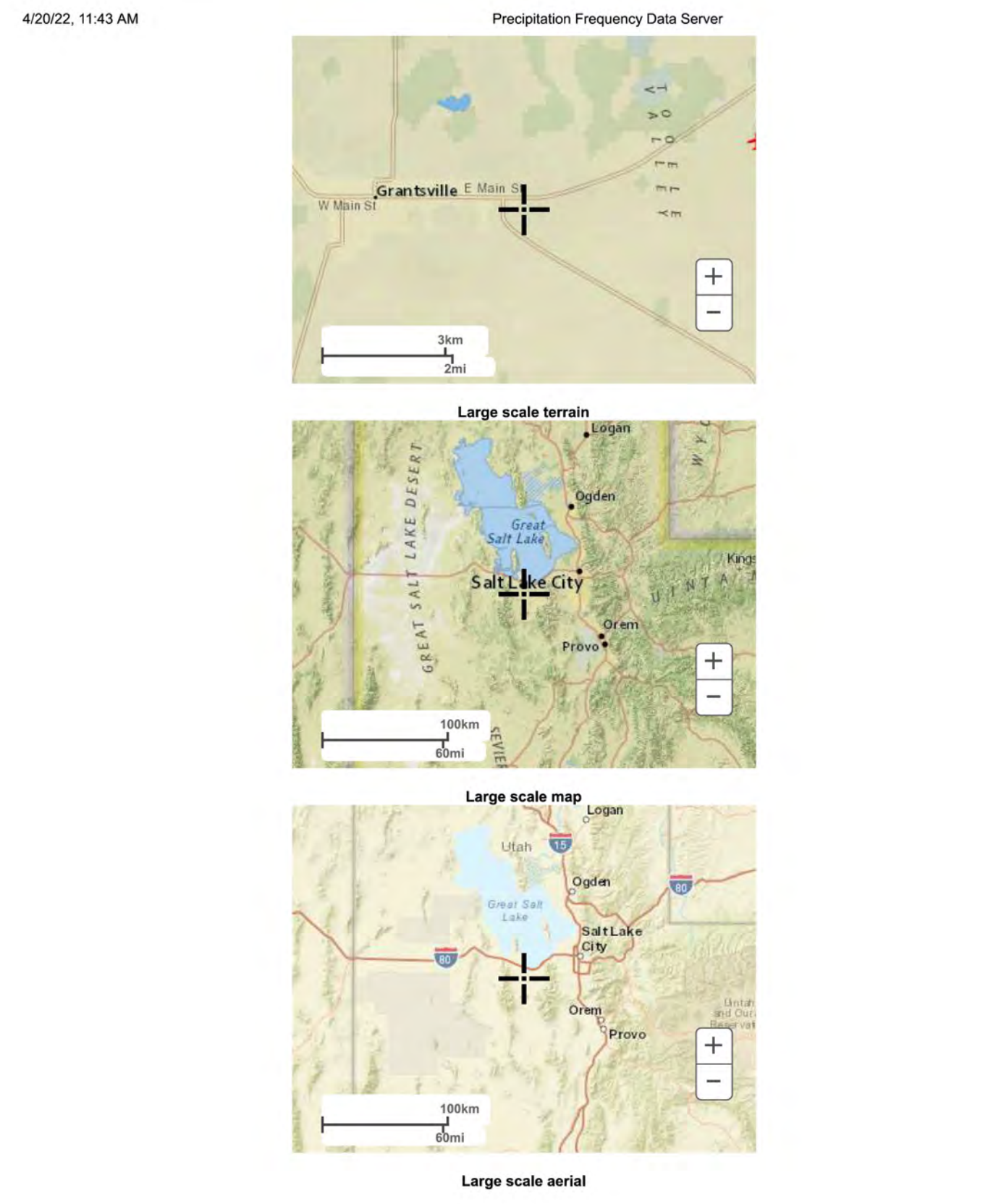
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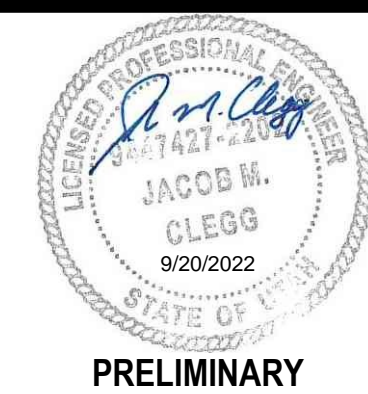
FOR:

IRONWOOD REAL ESTATE LLC  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074

CONTRACT:

JOE WHITE  
PHONE: 435-830-3642

# ALINGTON SUBDIVISION PRELIMINARY PLAT SUBMITTAL MAIN STREET GRANTSVILLE, UTAH



PRELIMINARY

#### DETAILS

PROJECT NUMBER  
T1265K  
PRINT DATE  
9/20/2022  
DRAWN BY  
J.CID  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
J. CLEGG



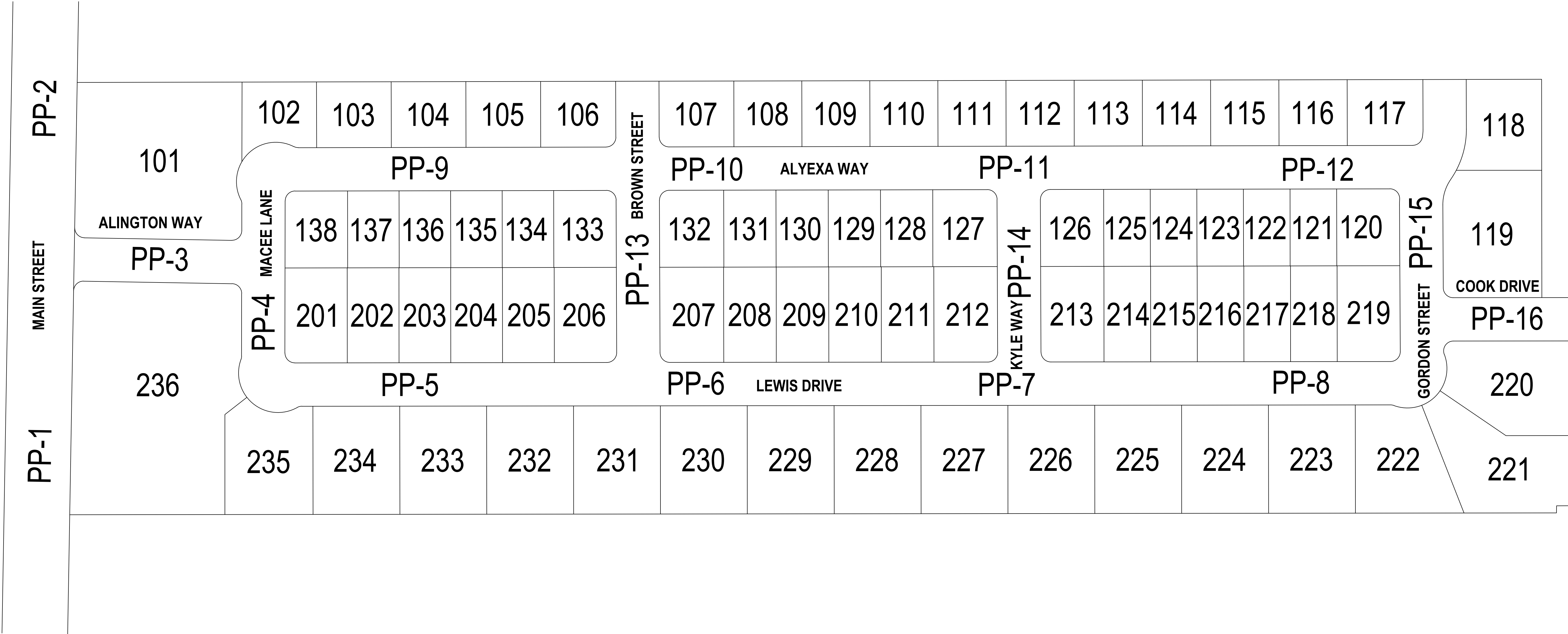
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PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.

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TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)  
  
ELEV = 4601.53





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ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL

MAIN STREET  
GRANTSVILLE, UTAH



PRELIMINARY

PLAN AND PROFILE  
KEYMAP

PROJECT NUMBER  
T1265K

PRINT DATE  
11/11/2021

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

PP-0



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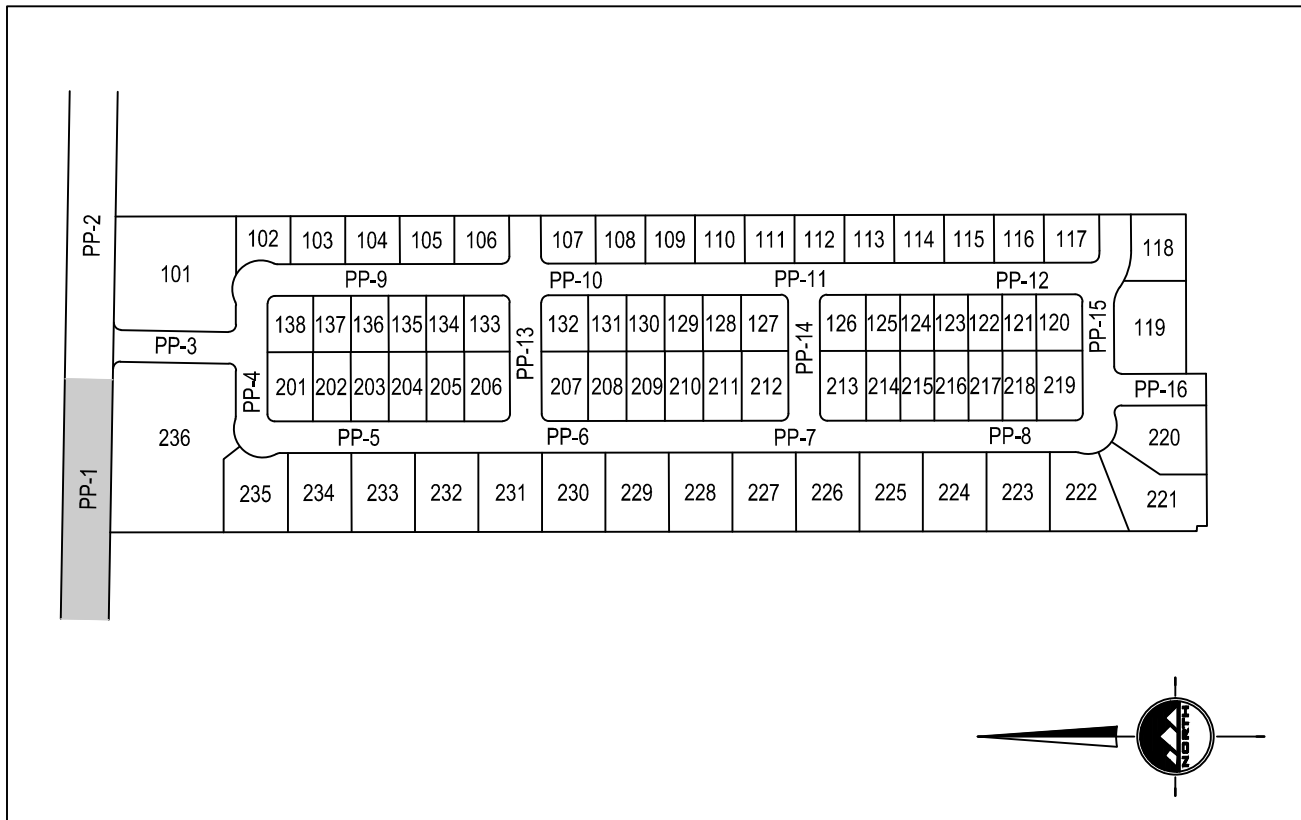
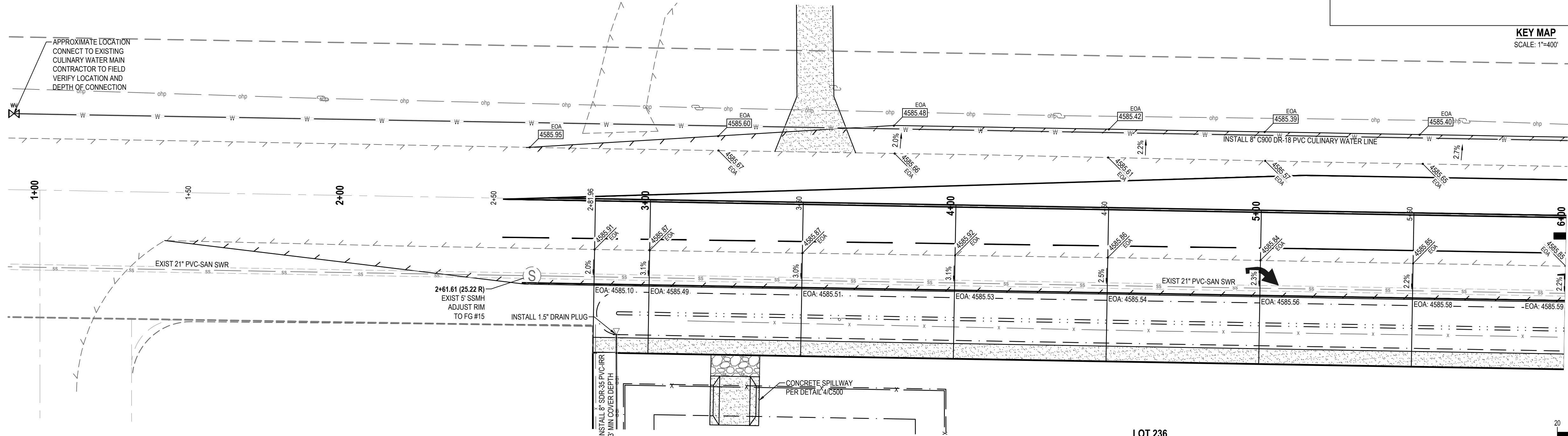
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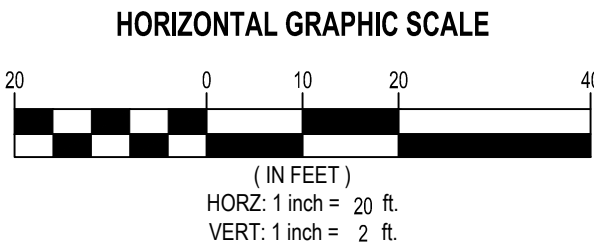
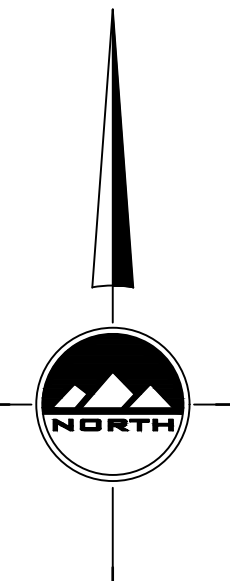
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SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)

ELEV = 4601.53



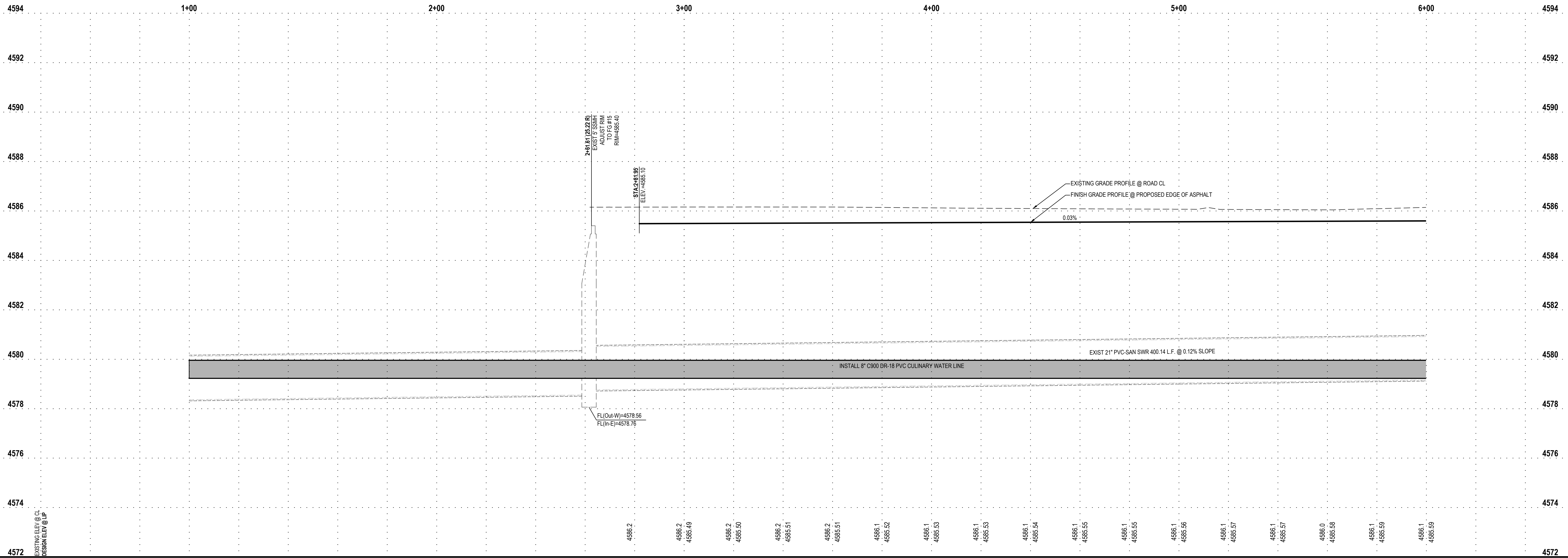
KEY MAP  
SCALE: 1"=400'



18" VERTICAL SEPARATION IS REQUIRED BETWEEN THE STORM WATER  
LINE AND CULINARY WATER LINES

MAIN STREET

LOT 236



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CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

Professional Engineer

Jacob M. Clegg

9/20/2022

STATE OF UTAH

PRELIMINARY

MAIN STREET  
PLAN AND PROFILE

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

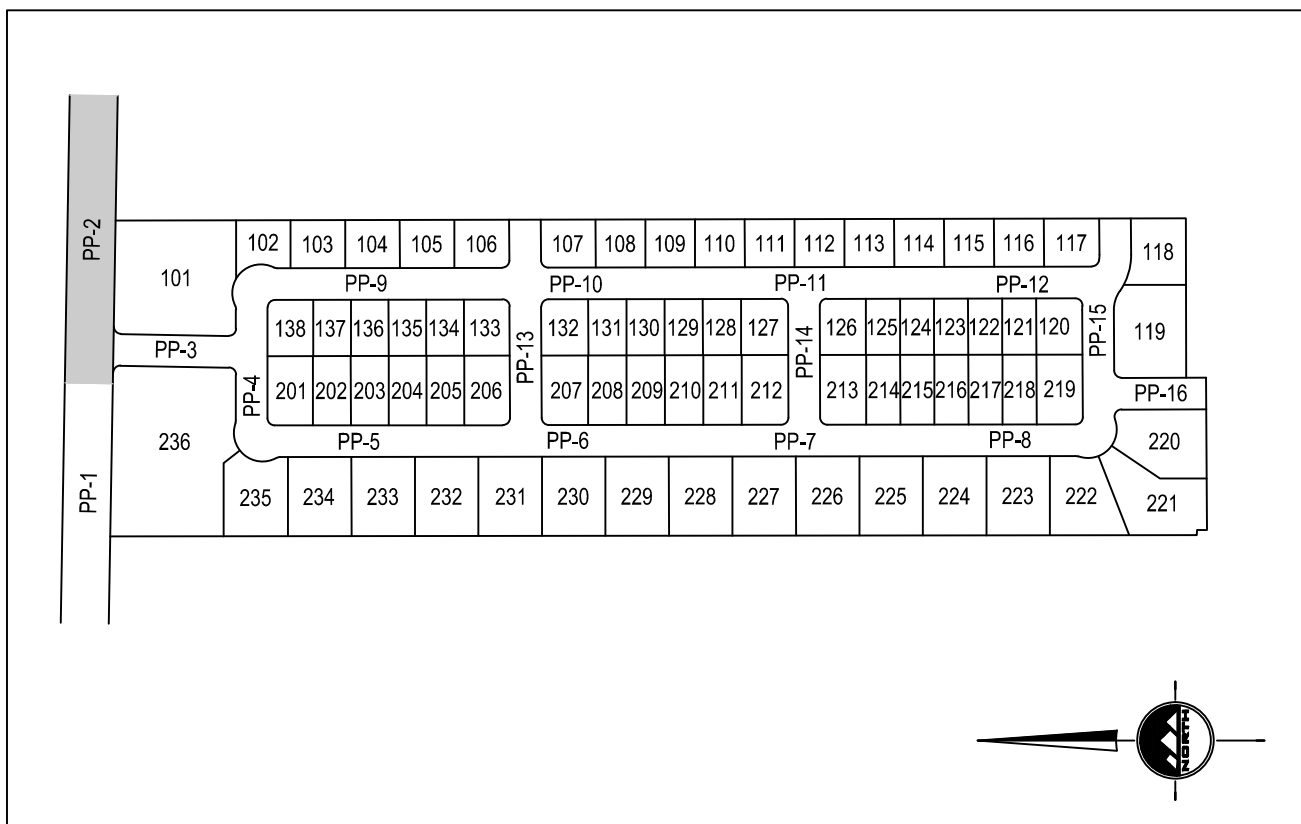
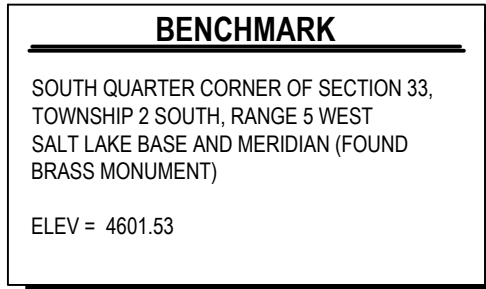
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PROJECT MANAGER  
J. CLEGG

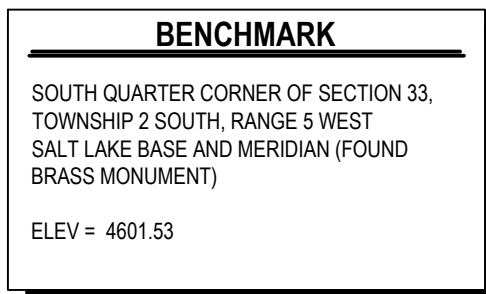
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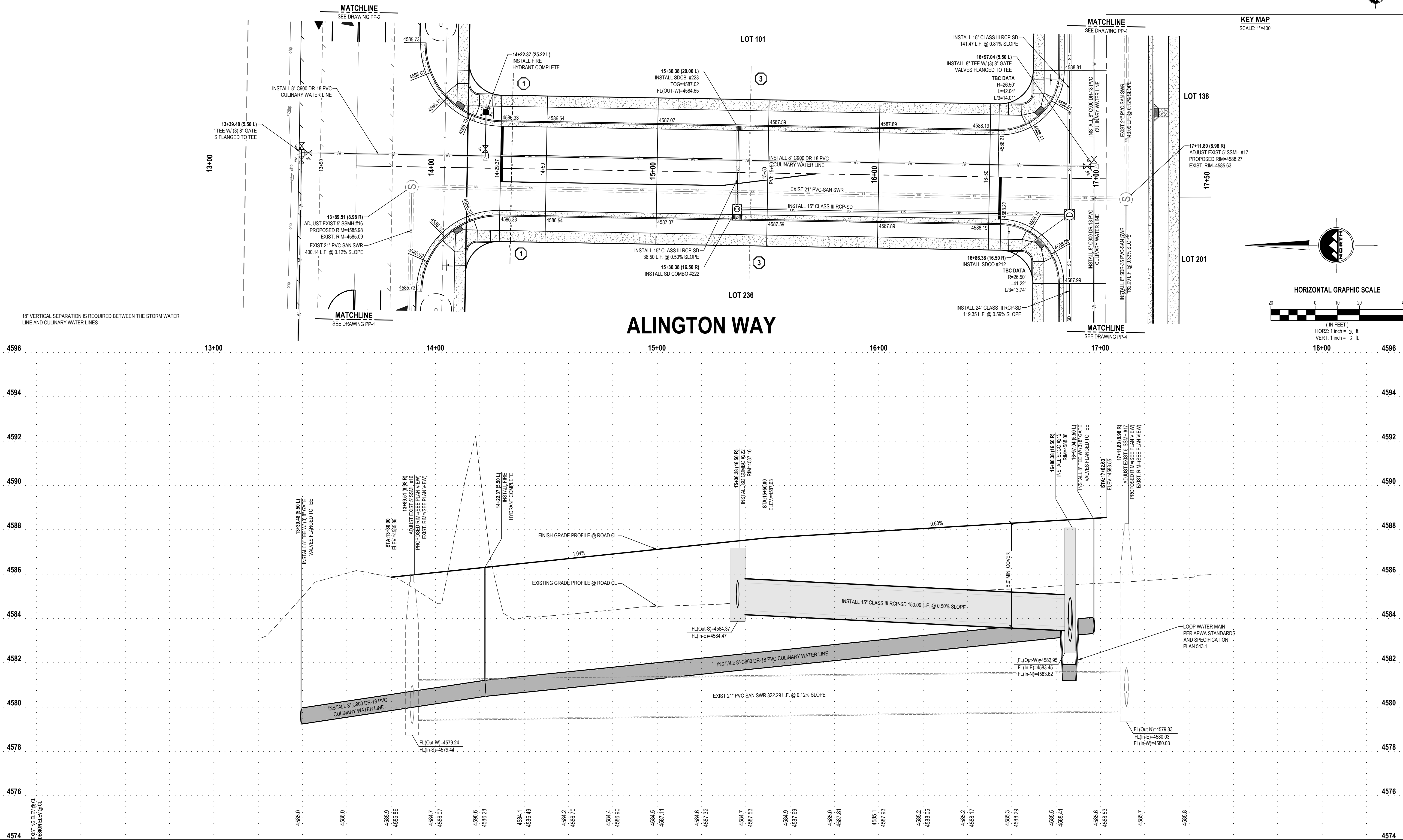
# PP-2





- ① INSTALL 3/4" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 3/4" METER SET PER APWA STANDARD PLAN NO. 521, LOCATED APPROX. 5' FROM OPPOSITE LOT CORNER OF SECONDARY WATER SERVICE LATERAL, TYPICAL.
- ② INSTALL 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN NO. 431, TYPICAL.
- ③ APPROXIMATE LOCATION OF EXISTING SANITARY SEWER SERVICE LATERAL. CONTRACTOR TO FIELD VERIFY LOCATION.
- ④ ABANDON EXISTING SANITARY SEWER SERVICE LATERAL. CONTRACTOR TO FIELD VERIFY LOCATION.

**NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.**



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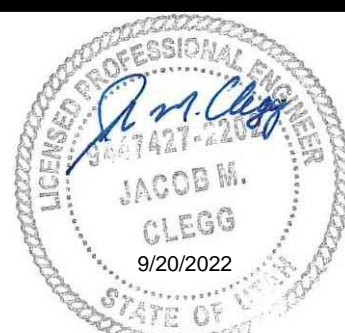
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**CONTACT:**

JOE WHITE  
PHONE: 435-830-3642

**ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL**

**MAIN STREET  
GRANTSVILLE, UTAH**



**PRELIMINARY**

**ARLINGTON WAY  
PLAN AND PROFILE**

PROJECT NUMBER	PRINT DATE
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PROJECT MANAGER	
J. CLEGG	

PP-3



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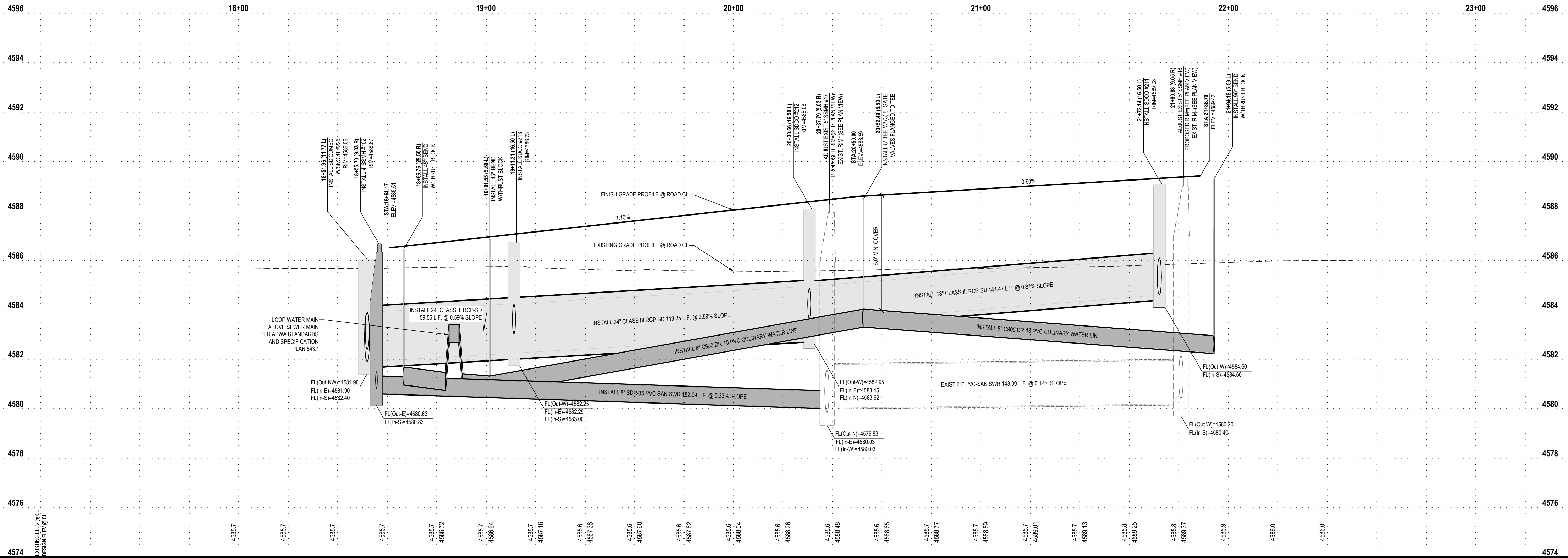
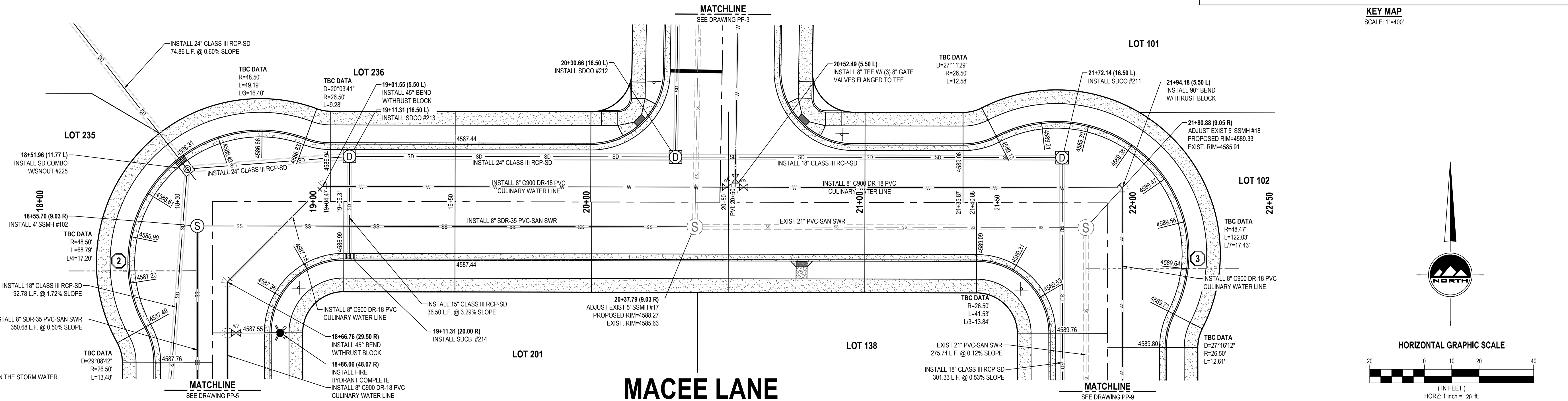
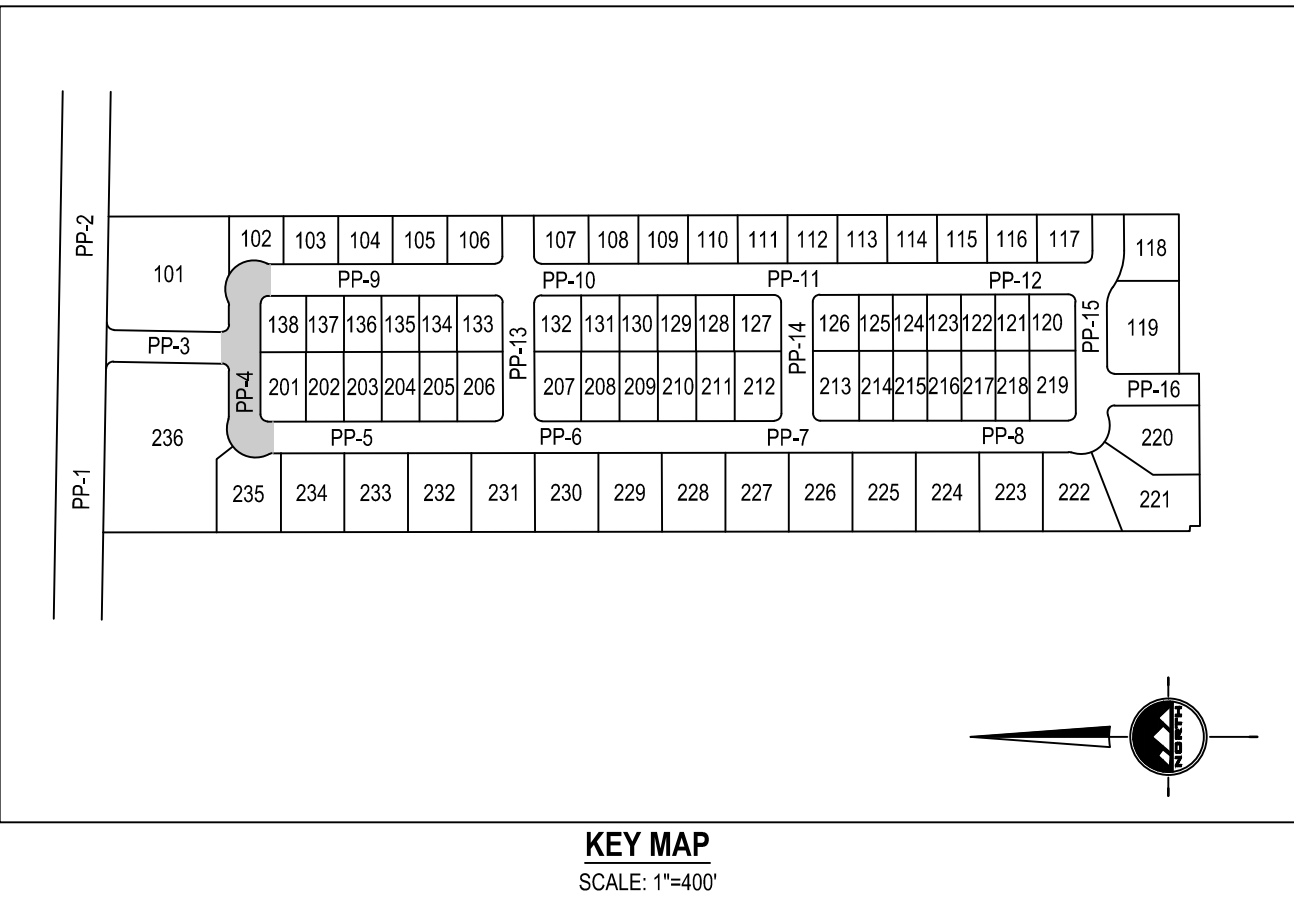
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BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
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SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)

ELEV = 4601.53

- SCOPE OF WORK:  
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE  
DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS.
1. INSTALL 3/4" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 3/4" METER SET PER APWA STANDARD  
PLAN NO. 521, LOCATED APPROX. 5' FROM OPPOSITE LOT CORNER OF SECONDARY WATER SERVICE  
LATERAL, TYPICAL.
  2. INSTALL 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN NO. 431, TYPICAL.
  3. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER SERVICE LATERAL. CONTRACTOR TO FIELD VERIFY  
LOCATION.
  4. ABANDON EXISTING SANITARY SEWER SERVICE LATERAL. CONTRACTOR TO FIELD VERIFY LOCATION.



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PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

LICENSED PROFESSIONAL ENGINEER  
JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

MACEE LANE

PLAN AND PROFILE

PROJECT NUMBER  
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PRINT DATE  
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PROJECT MANAGER  
J. CLEGG

PP-4



811

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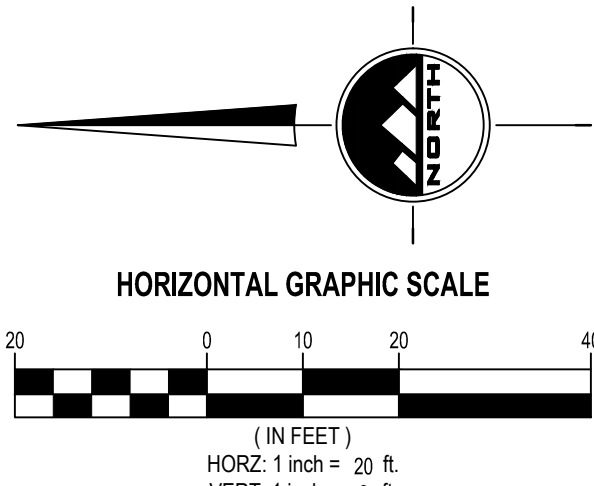
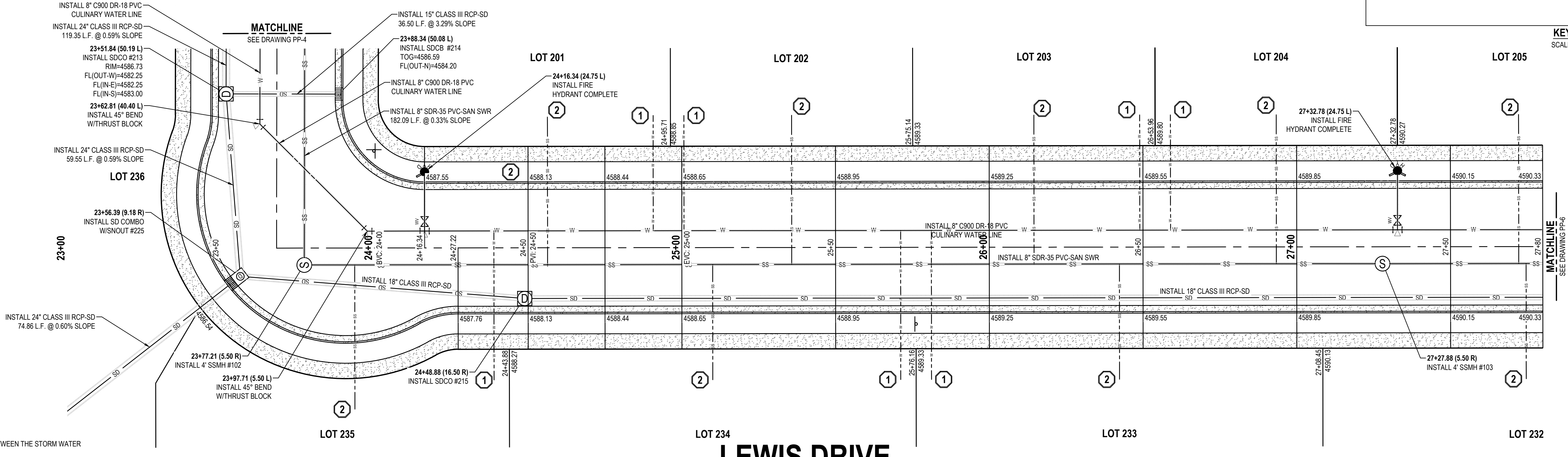
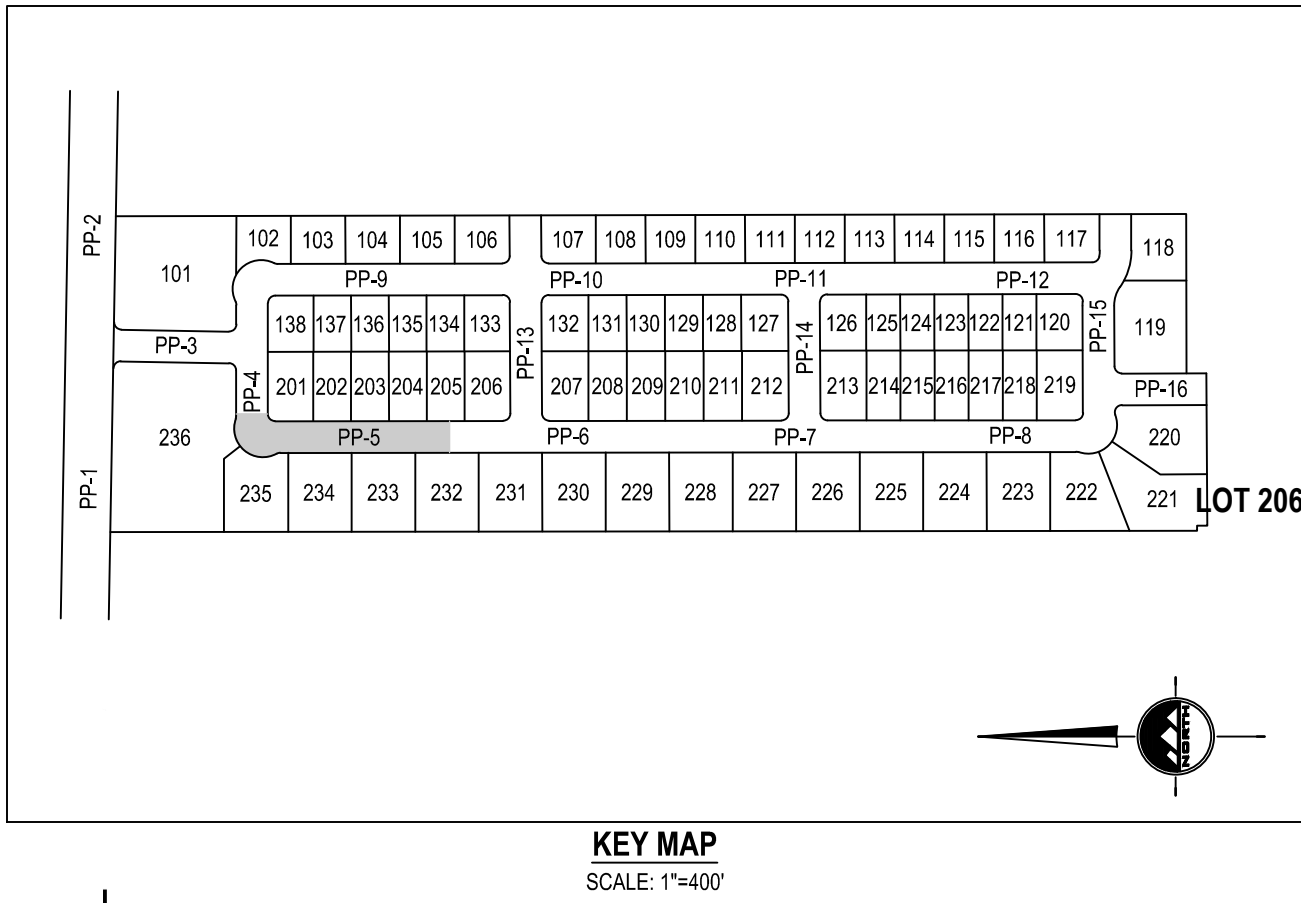
CALL BLUESTAKES  
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BENCHMARK

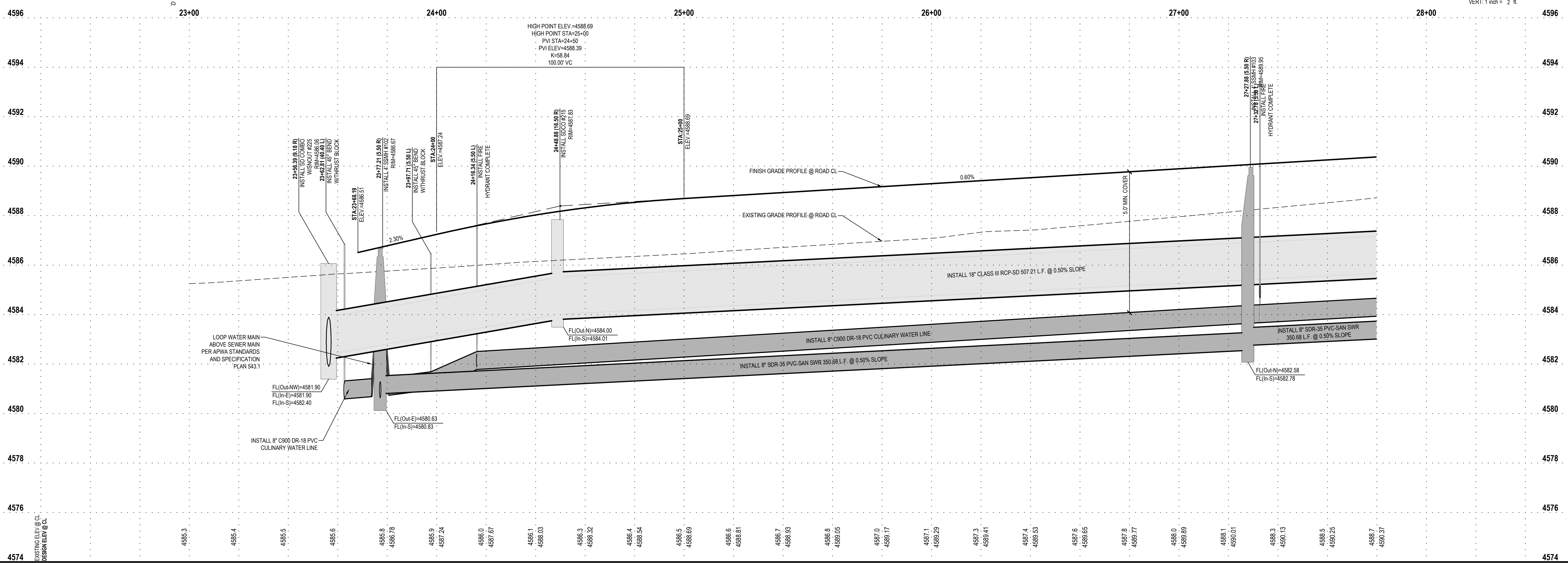
SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)

ELEV = 4601.53

- SCOPE OF WORK:**  
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## LEWIS DRIVE



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SALT LAKE CITY

Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY

Phone: 435.866.1453

RICHFIELD

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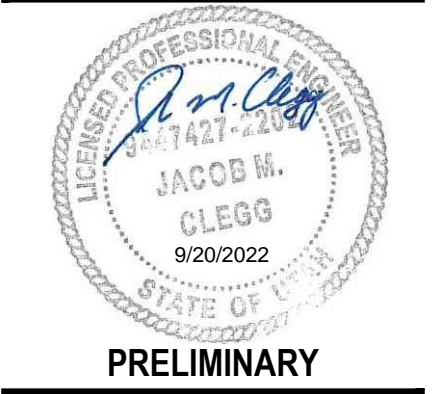
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FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074

CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

## ALINGTON SUBDIVISION PRELIMINARY PLAT SUBMITTAL

MAIN STREET  
GRANTSVILLE, UTAH



### LEWIS DRIVE PLAN AND PROFILE

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

PP-5



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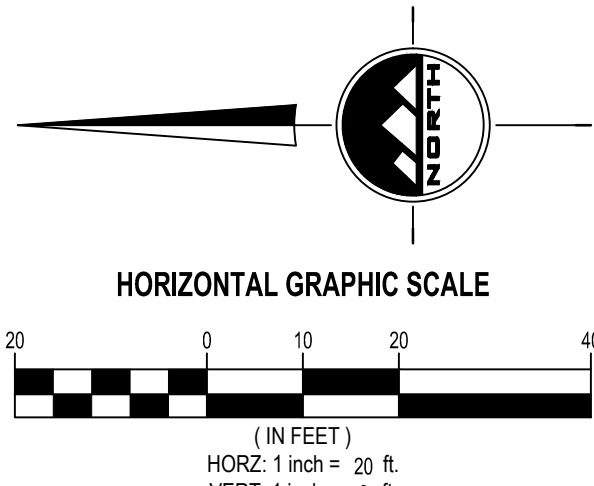
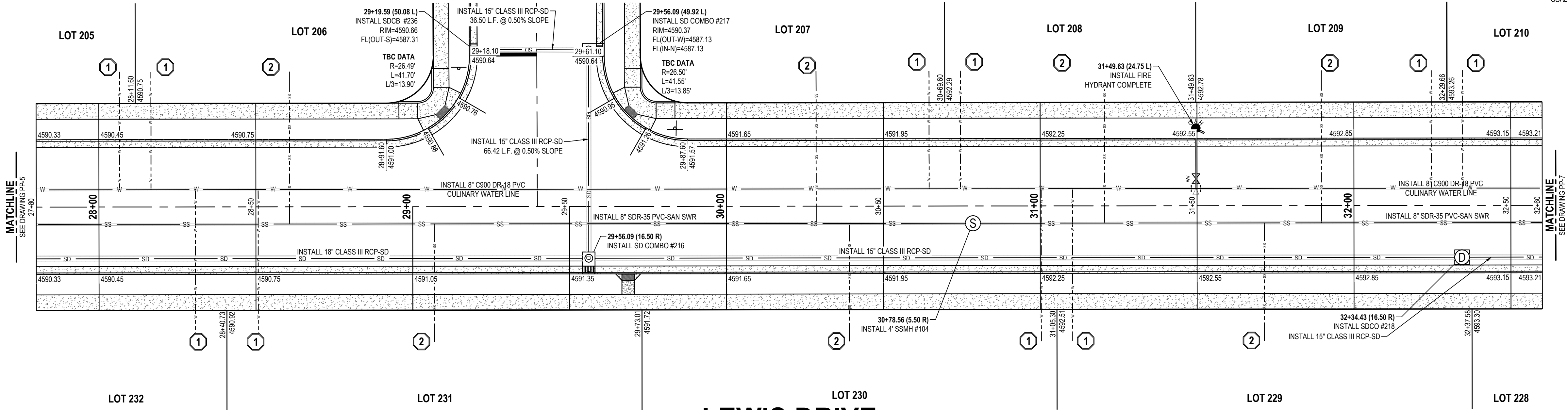
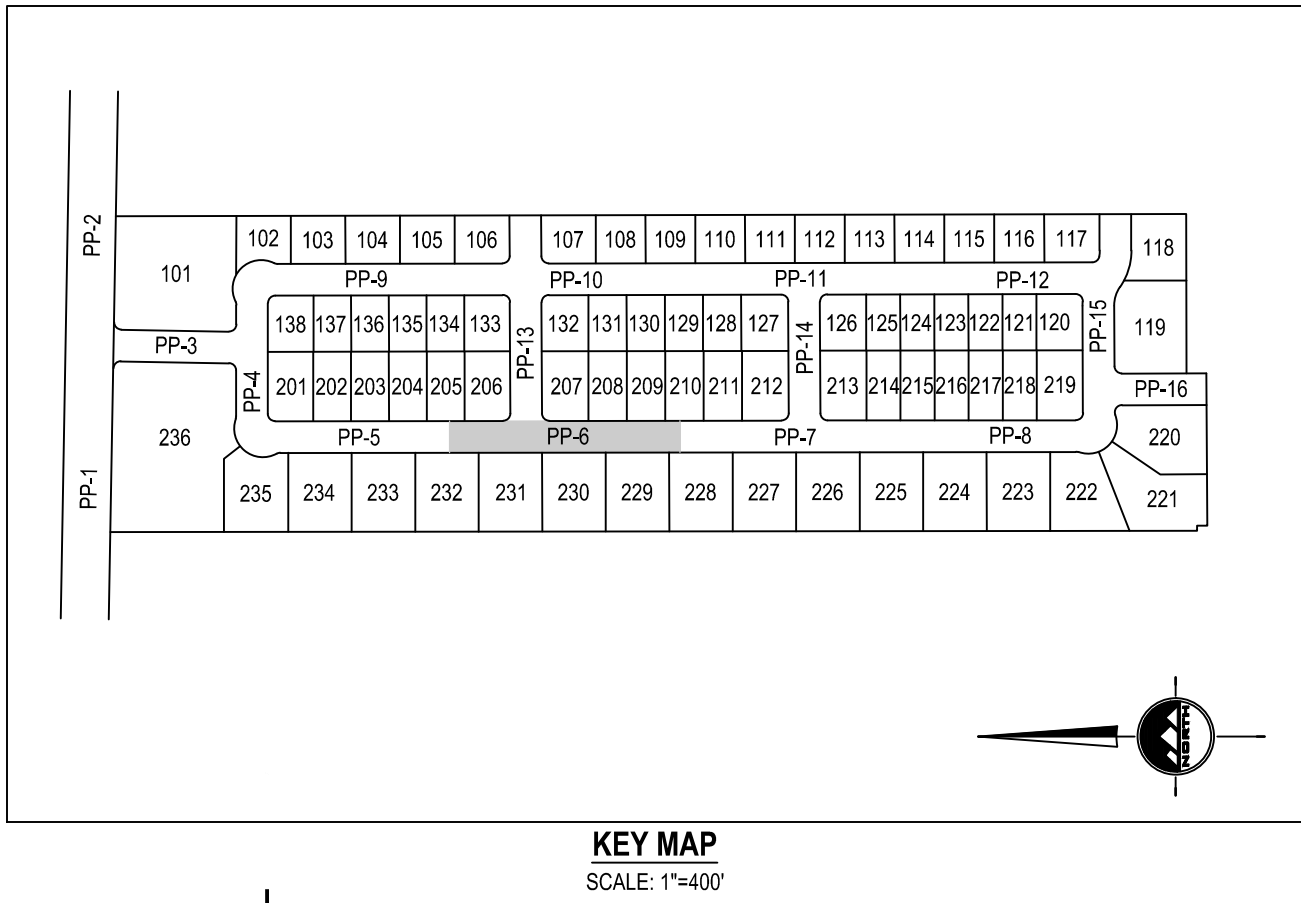
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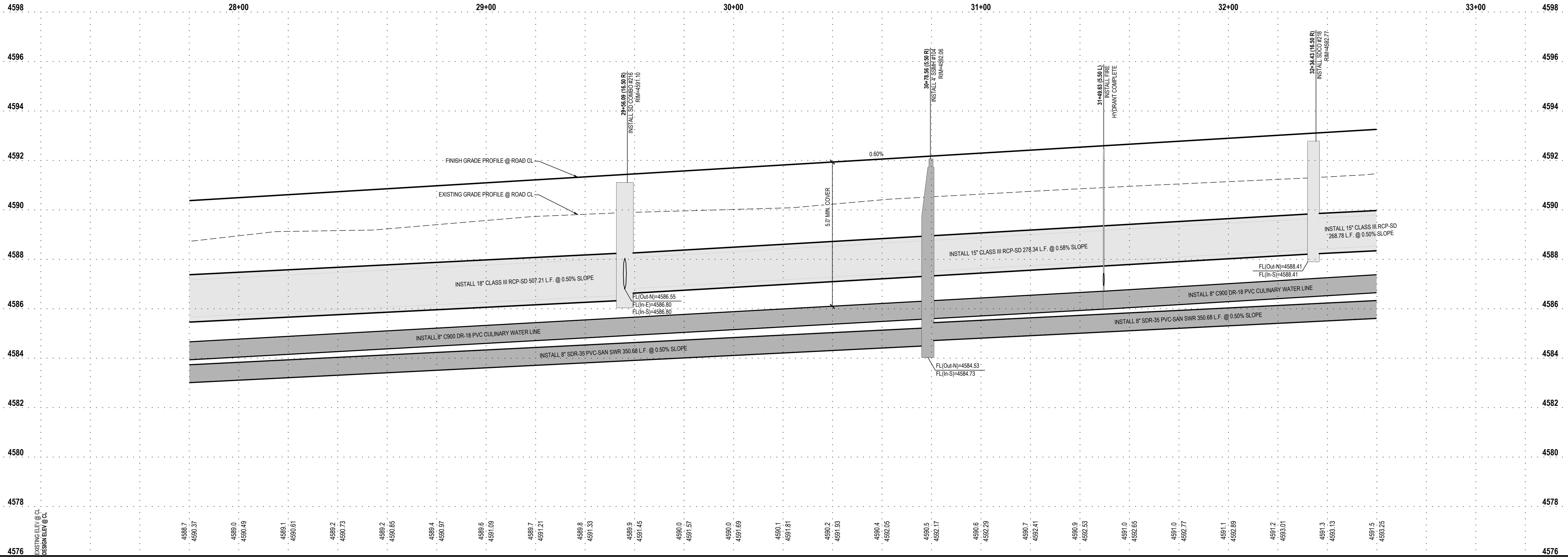
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ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL  
MAIN STREET  
GRANTSVILLE, UTAH

LICENSED PROFESSIONAL ENGINEER  
JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

LEWIS DRIVE  
PLAN AND PROFILE

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

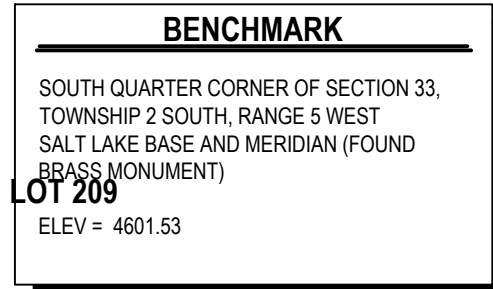
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CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG

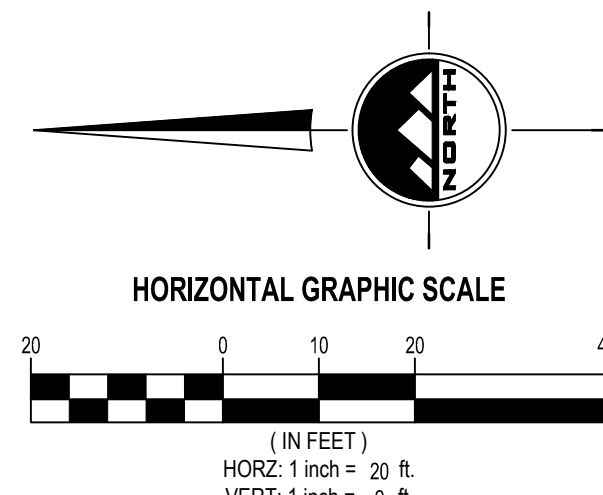
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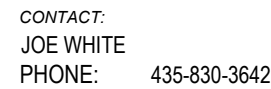
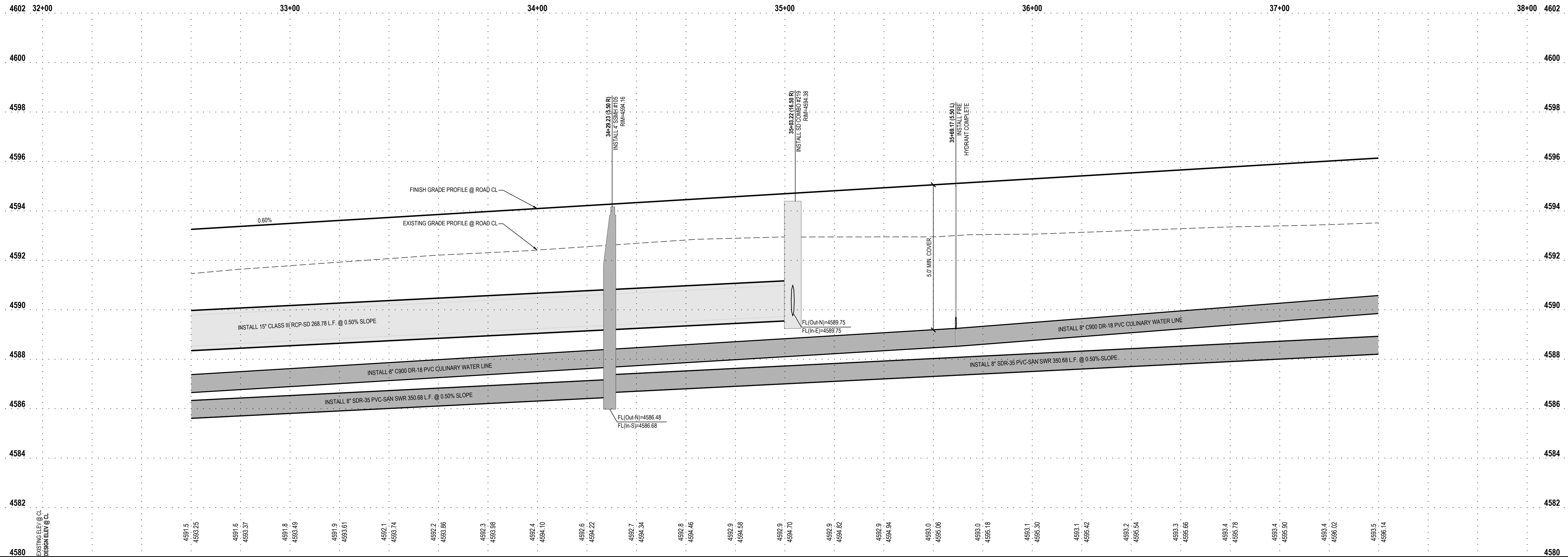


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# LEWIS DRIVE



**PRELIMINARY**

## LEWIS DRIVE PLAN AND PROFILE

PROJECT NUMBER T1265K	PRINT DATE 9/20/2022
DRAWN BY J.CID	CHECKED BY J. CLEGG
PROJECT MANAGER J. CLEGG	

**PP-7**



811

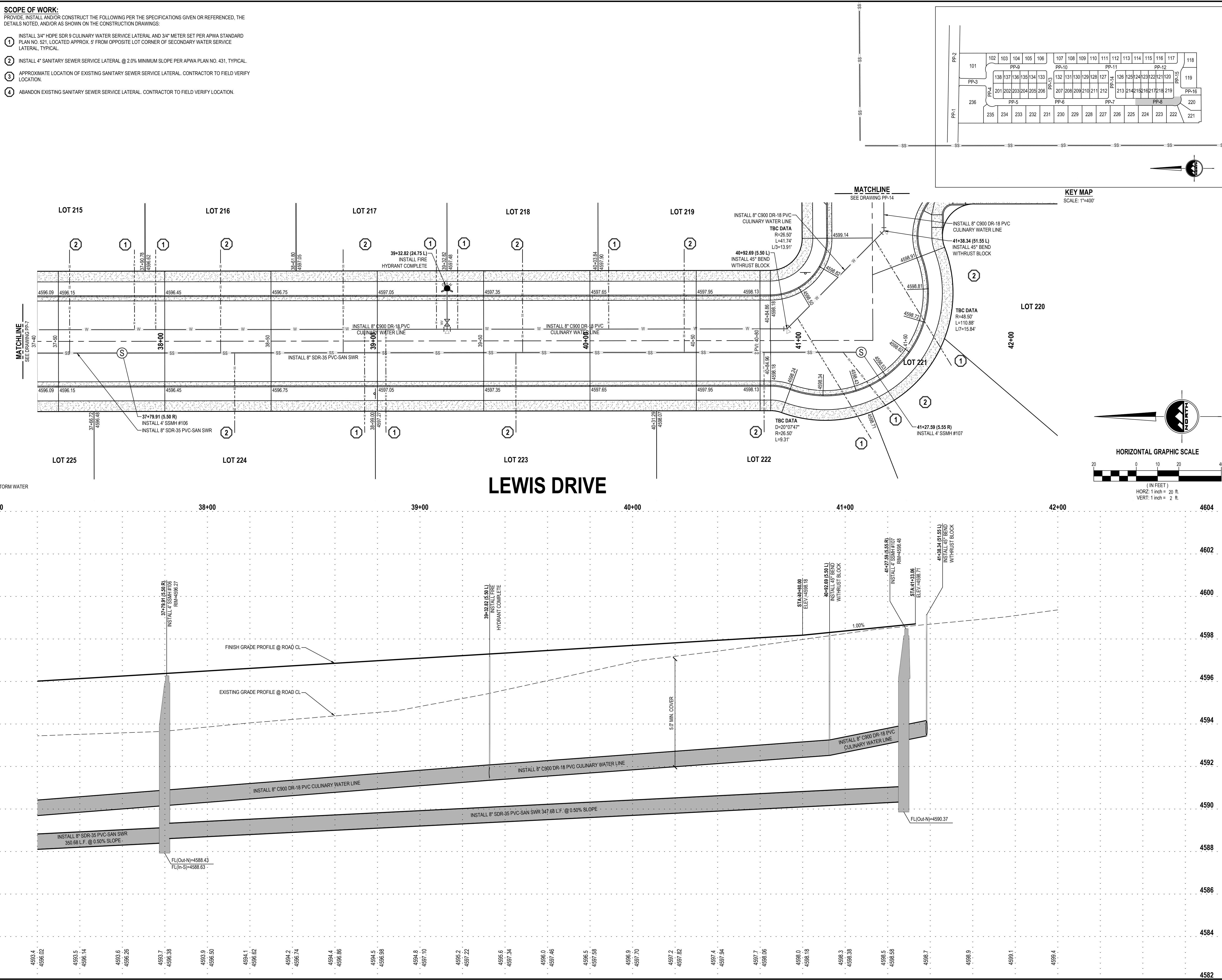
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BENCHMARK

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LOT 214  
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JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

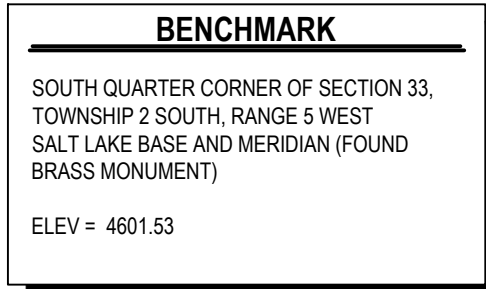
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LEWIS DRIVE  
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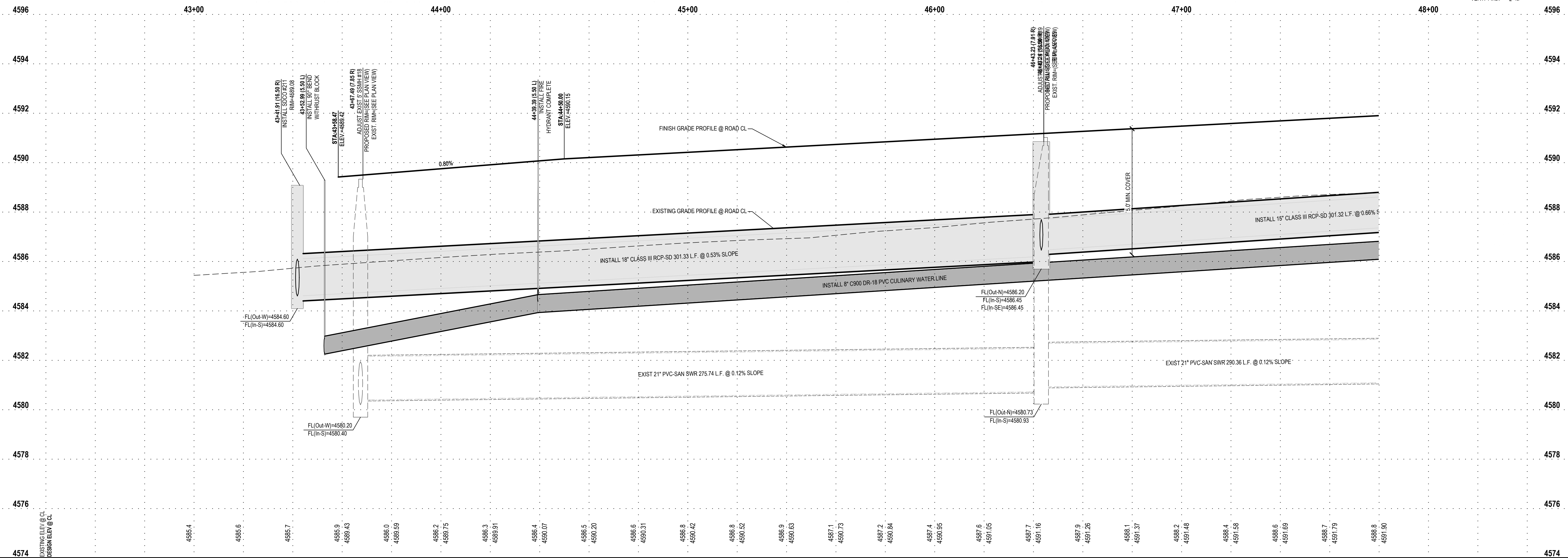
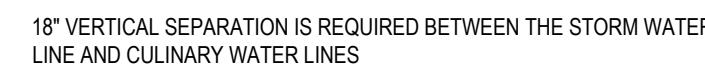
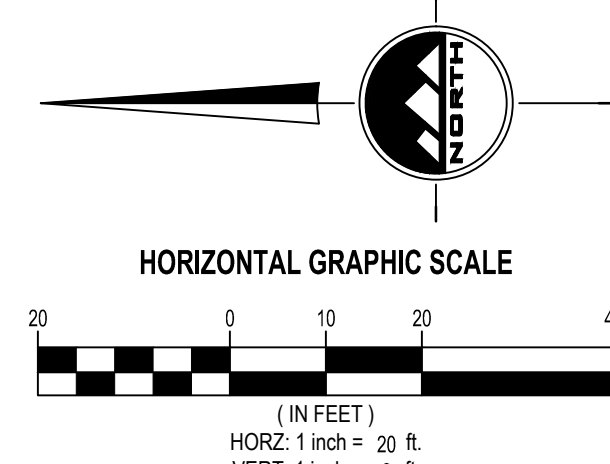
PP-8





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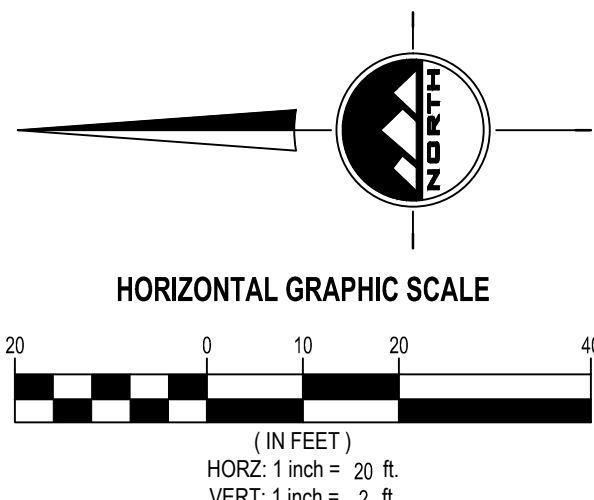
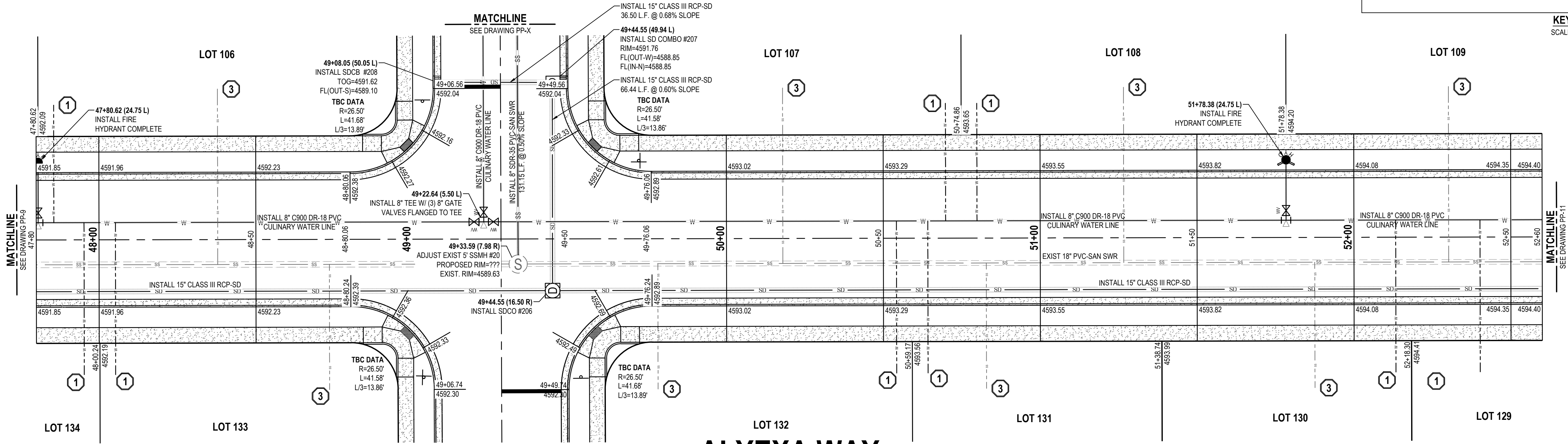
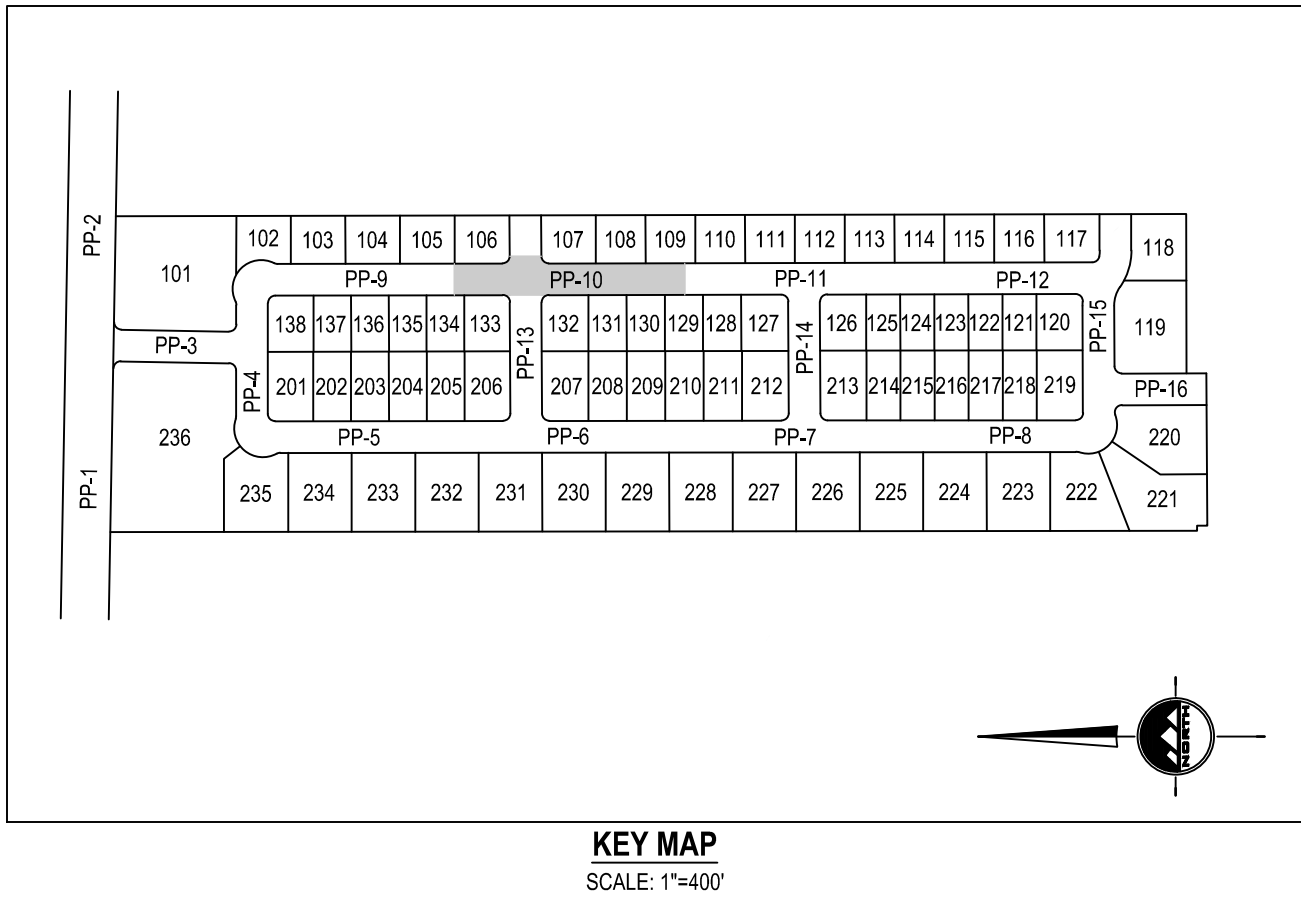
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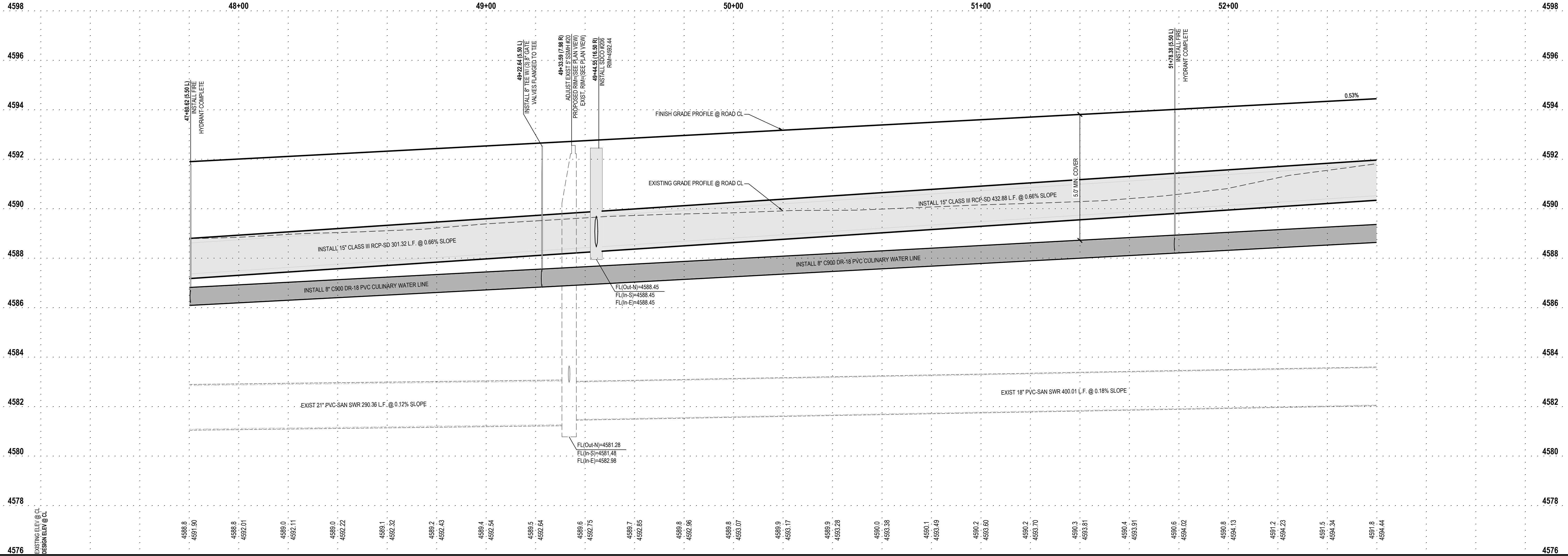
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MAIN STREET  
GRANTSVILLE, UTAH

LICENSED PROFESSIONAL ENGINEER  
JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

ALYEXA WAY  
PLAN AND PROFILE

PROJECT NUMBER  
T1265K

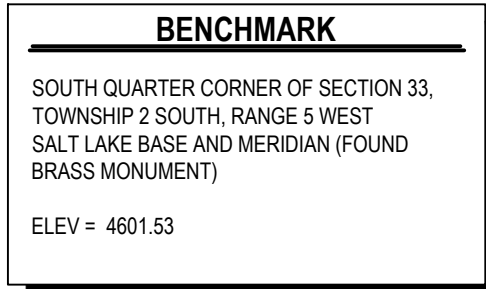
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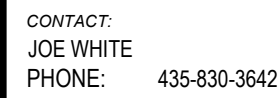
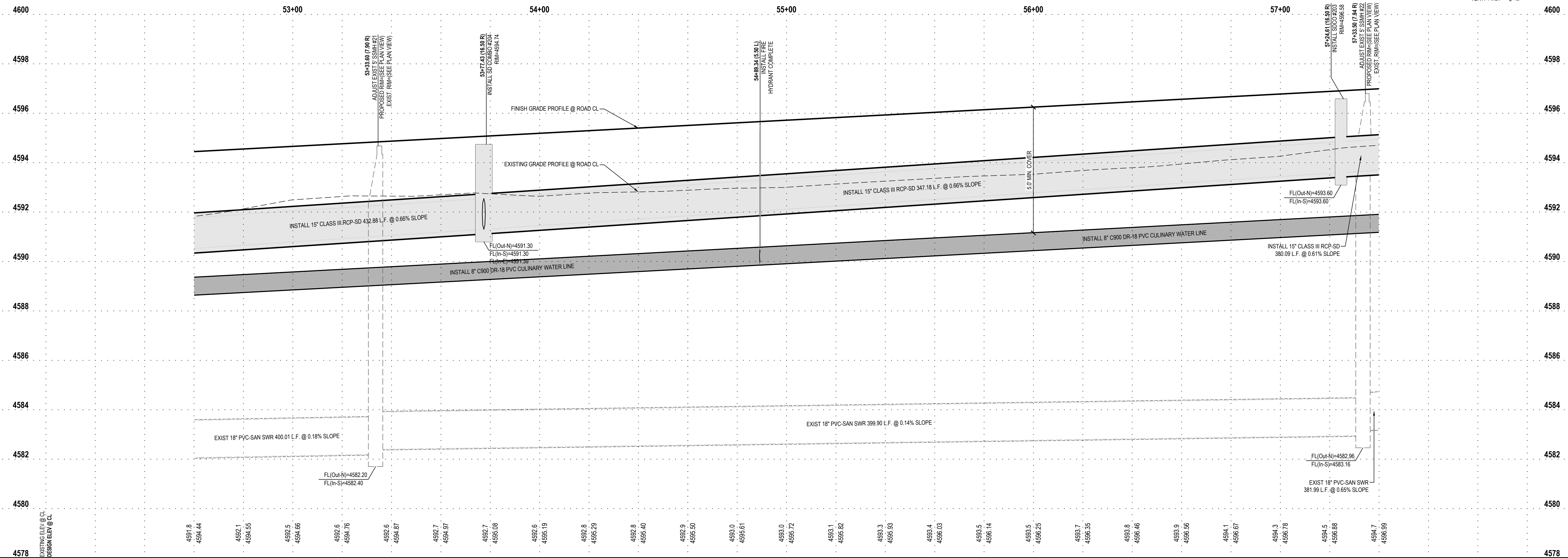
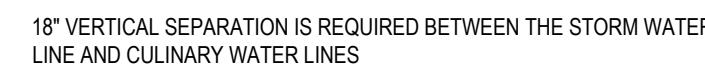
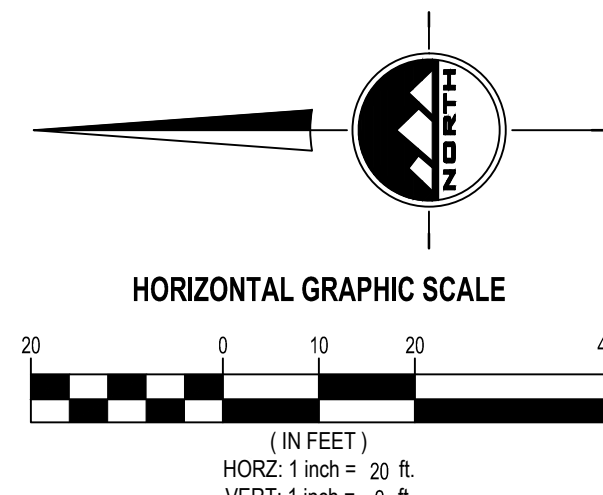
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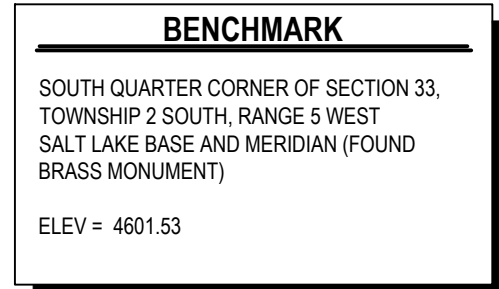


**PRELIMINARY**

PROJECT NUMBER T1265K	PRINT DATE 9/20/2022
DRAWN BY J.CID	CHECKED BY J. CLEGG
PROJECT MANAGER J. CLEGG	

**PP-11**





**HORIZONTAL GRAPHIC SCALE**

( IN FEET )

HOR: 1 inch = 20 ft.

The graphic scale shows a horizontal bar divided into alternating black and white segments. Above the bar, numerical markings are provided: 20, 0, 10, 20, and 40. The scale is used to measure distances on the map in feet.

A north arrow is located above the scale, consisting of a circle with a stylized 'N' and the word 'NORTH' written vertically inside it.

**PP-12**



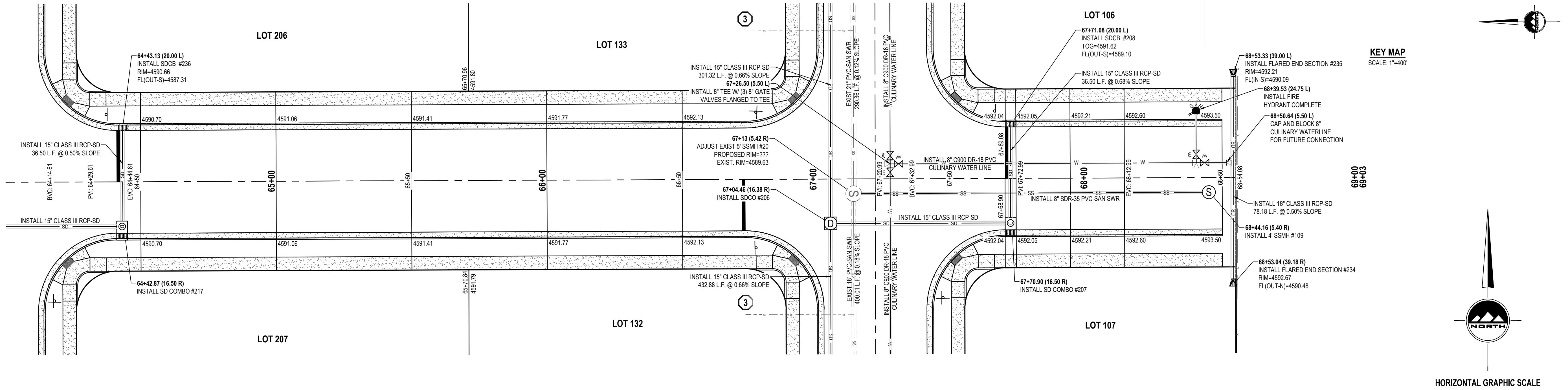
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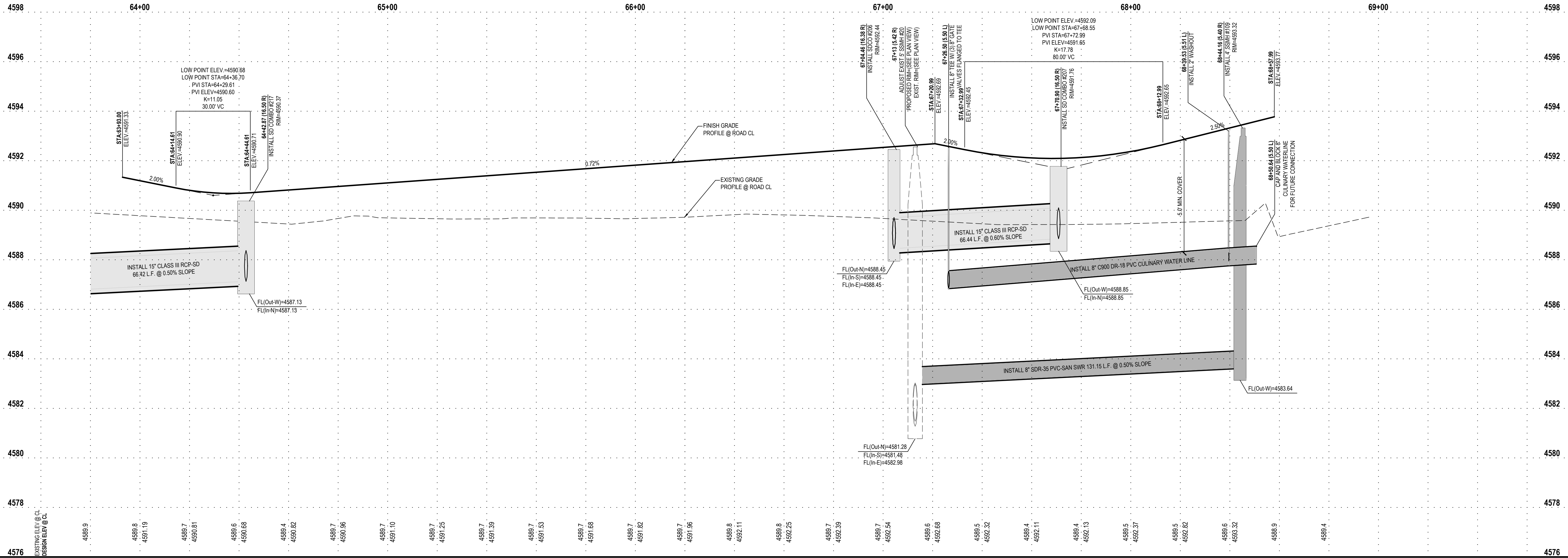
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MAIN STREET  
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER

JACOB M. CLEGG

9/20/2022

STATE OF UTAH

PRELIMINARY

BROWN STREET  
PLAN AND PROFILE

PROJECT NUMBER  
T1265K

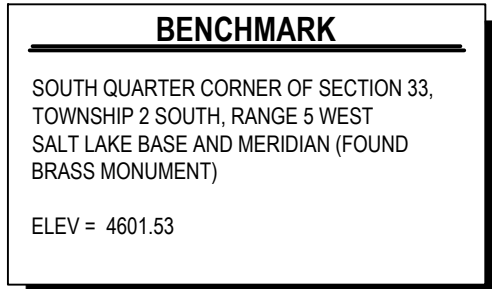
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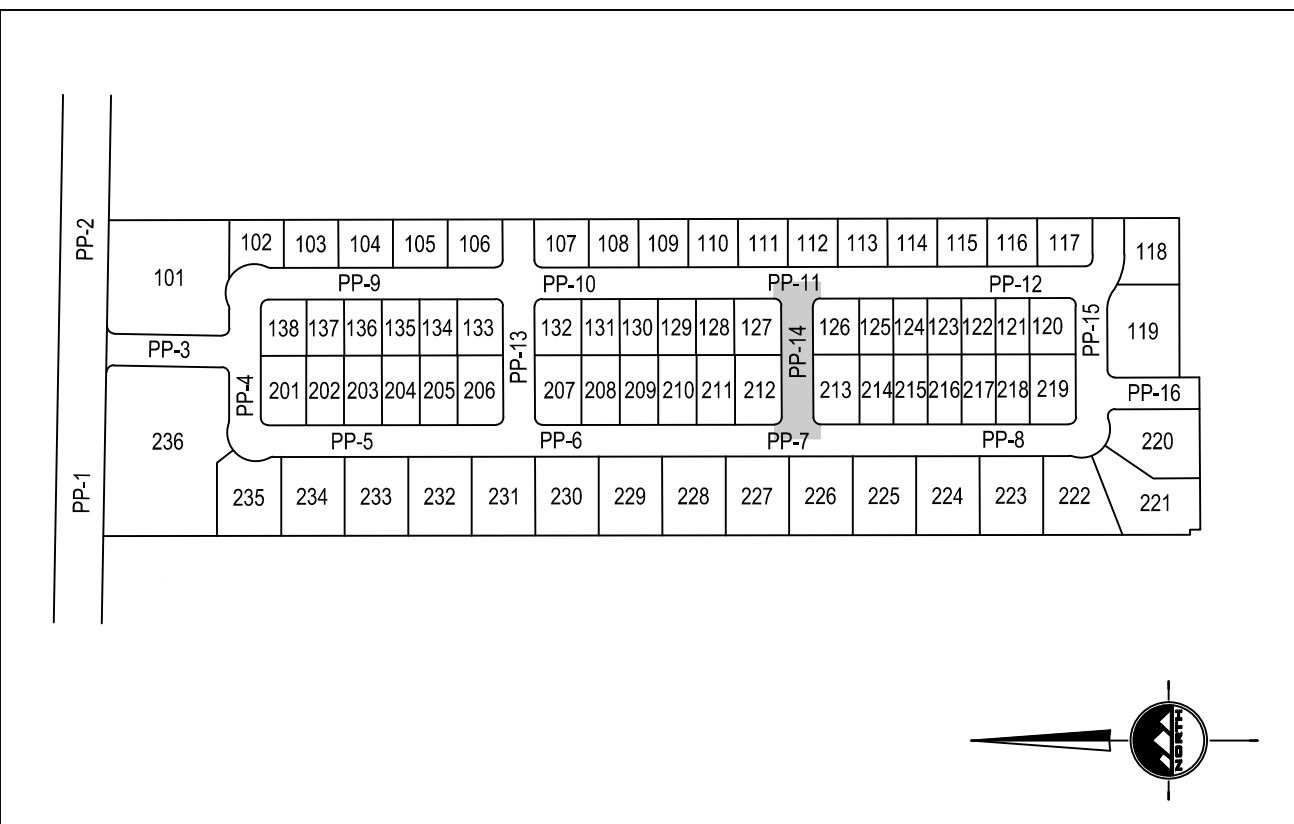
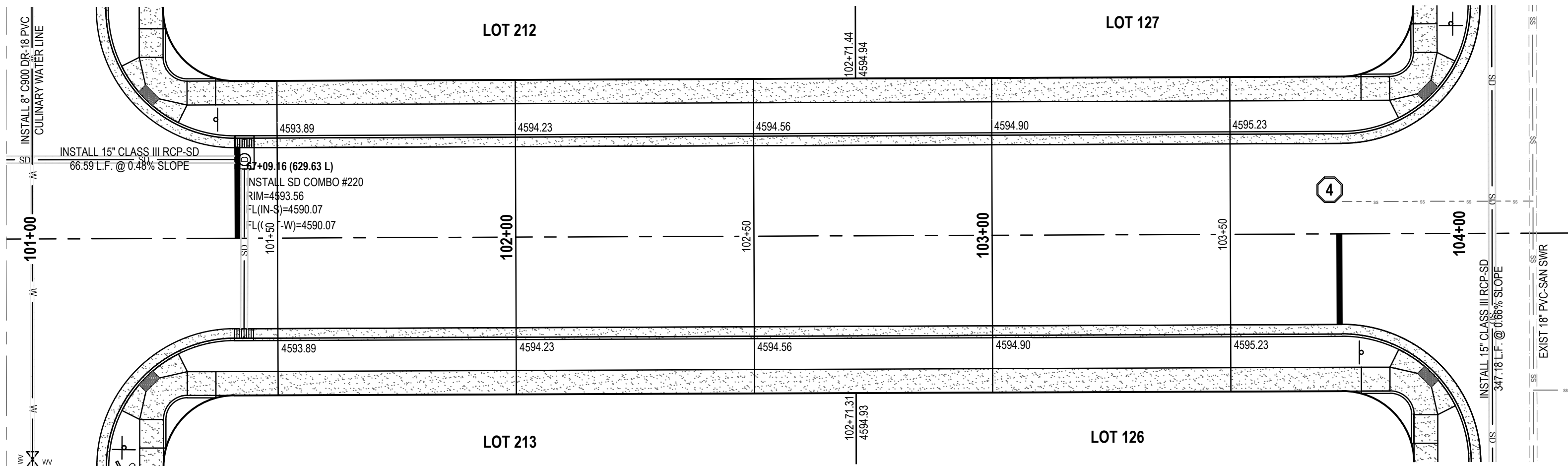




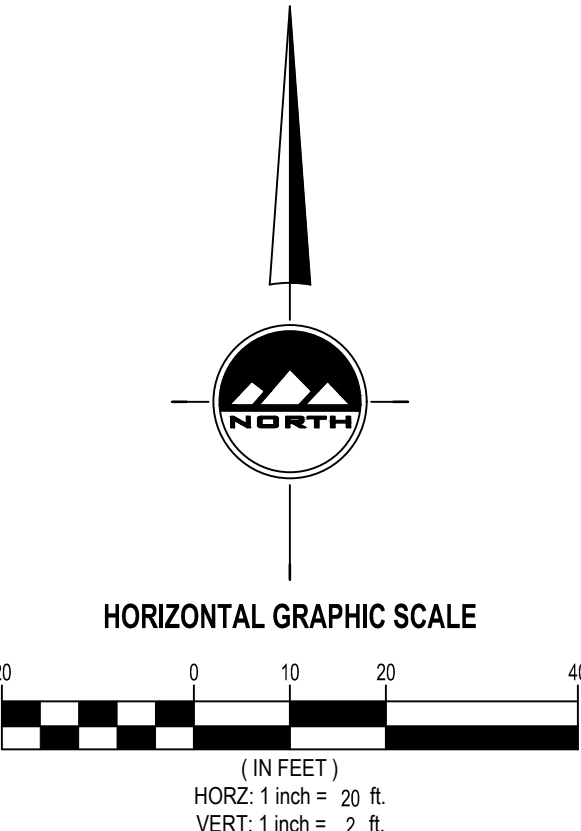
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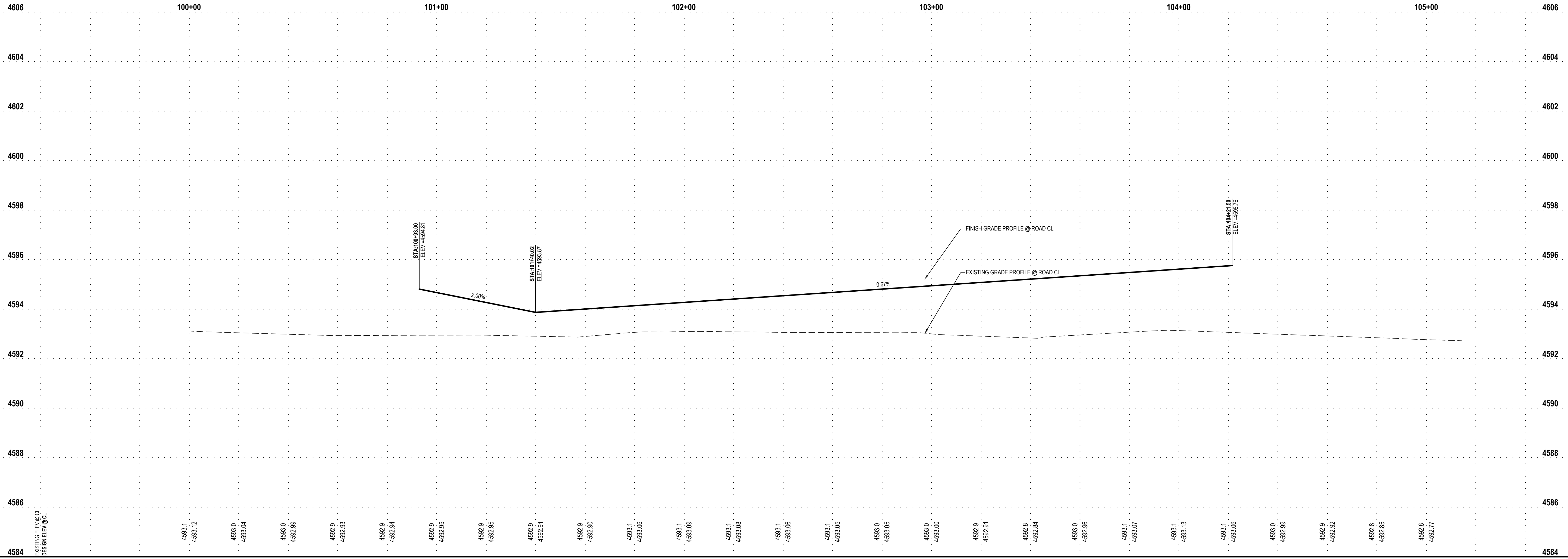
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**KEY MAP**  
SCALE: 1"=400'



# KYLE STREET



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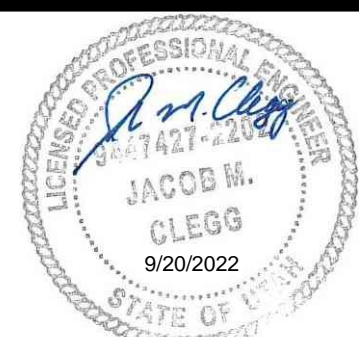
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ERDA, UTAH 84074

CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

**ALINGTON SUBDIVISION  
PRELIMINARY PLAT SUBMITTAL**

**MAIN STREET  
GRANTSVILLE, UTAH**



**PRELIMINARY**

## GORDON STREET PLAN AND PROFILE

PROJECT NUMBER	PRINT DATE
T1265K	9/20/2022
DRAWN BY	CHECKED BY
J.CID	J. CLEGG
PROJECT MANAGER	
J. CLEGG	

# PP-14



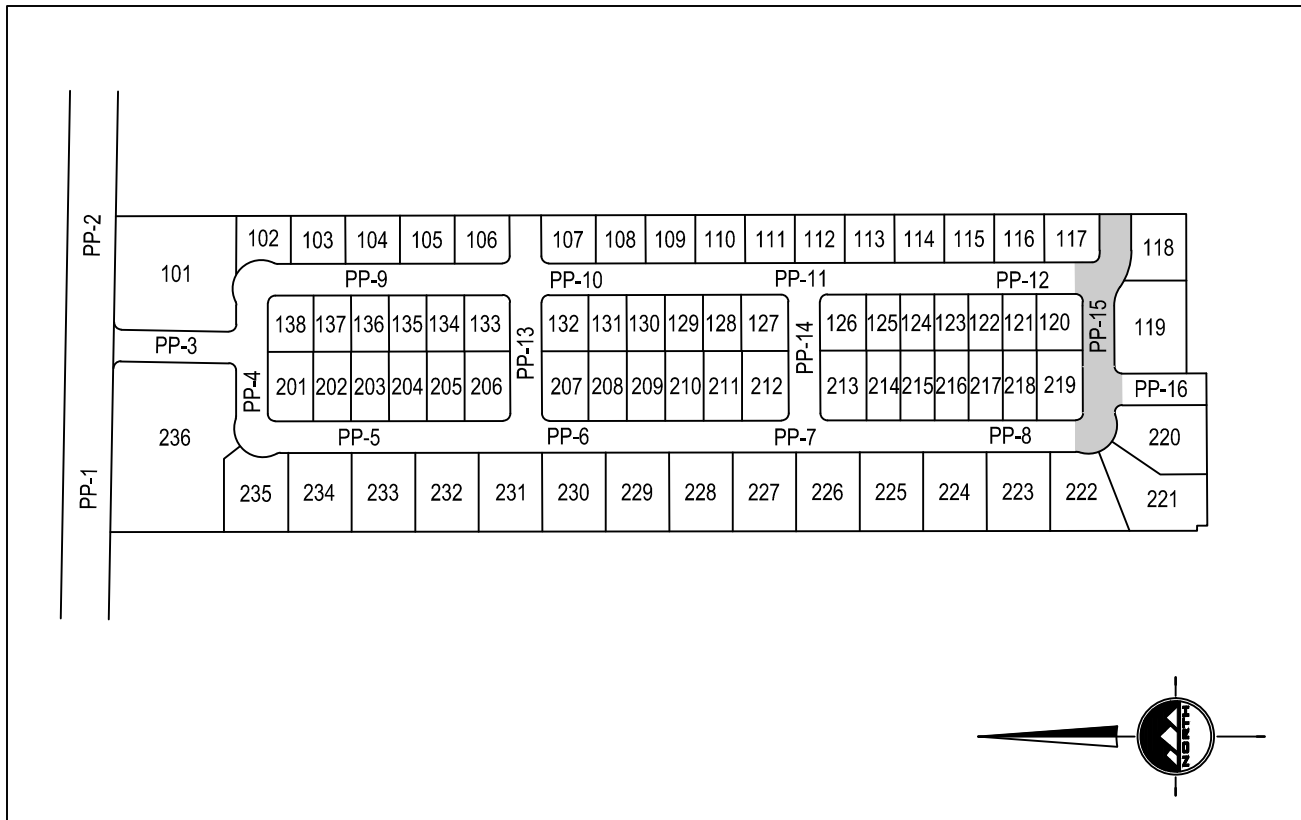
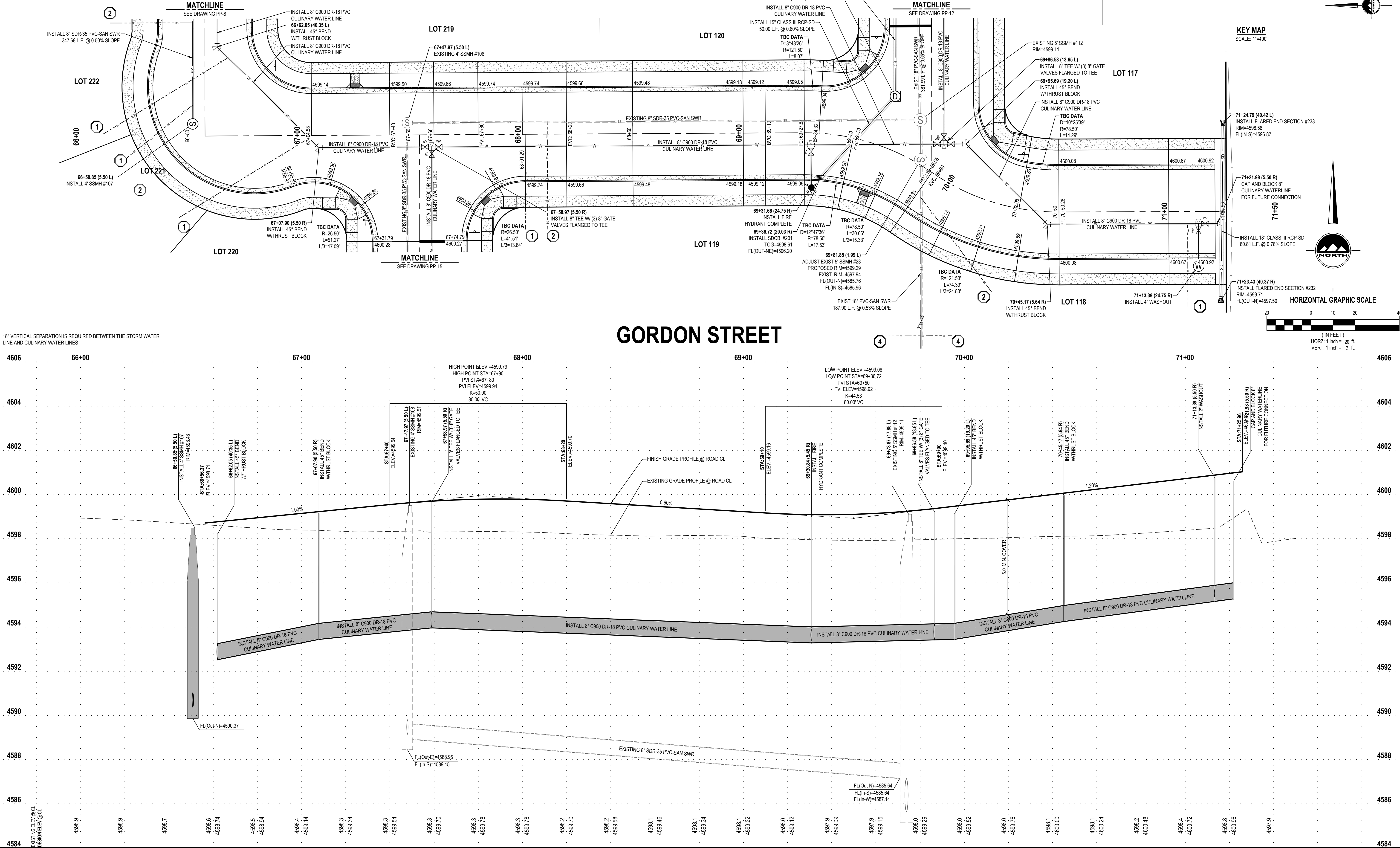
811

CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.  
Know what's below.  
Call before you dig.

BENCHMARK

SOUTH QUARTER CORNER OF SECTION 33,  
TOWNSHIP 2 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN (FOUND  
BRASS MONUMENT)  
ELEV = 4601.53

- SCOPE OF WORK:**  
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
1. INSTALL 3/4" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 3/4" METER SET PER APWA STANDARD PLAN NO. 521, LOCATED APPROX. 5' FROM OPPOSITE LOT CORNER OF SECONDARY WATER SERVICE LATERAL, TYPICAL.
  2. INSTALL 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN NO. 431, TYPICAL.
  3. APPROXIMATE LOCATION OF EXISTING SANITARY SEWER SERVICE LATERAL. CONTRACTOR TO FIELD VERIFY LOCATION.
  4. ABANDON EXISTING SANITARY SEWER SERVICE LATERAL. CONTRACTOR TO FIELD VERIFY LOCATION.
- NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.**



EN SIGN

THE STANDARD IN ENGINEERING

TOOELE

169 N. Main Street, Unit 1  
Tooele, UT. 84074  
Phone: 435.843.3590

SALT LAKE CITY

Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY

Phone: 435.866.1453

RICHFIELD

Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:  
IRONWOOD REAL ESTATE LLC,  
1392 PASSS CANYON ROAD  
ERDA, UTAH 84074  
CONTACT:  
JOE WHITE  
PHONE: 435-830-3642

ALINGTON SUBDIVISION

PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

Jacob M. Clegg

JACOB M. CLEGG

9/20/2022

STATE OF UTAH

PRELIMINARY

GORDON STREET  
PLAN AND PROFILE

PROJECT NUMBER  
T1265K  
PRINT DATE  
9/20/2022  
DRAWN BY  
J.CID  
CHECKED BY  
J. CLEGG  
PROJECT MANAGER  
J. CLEGG

PP-15



811

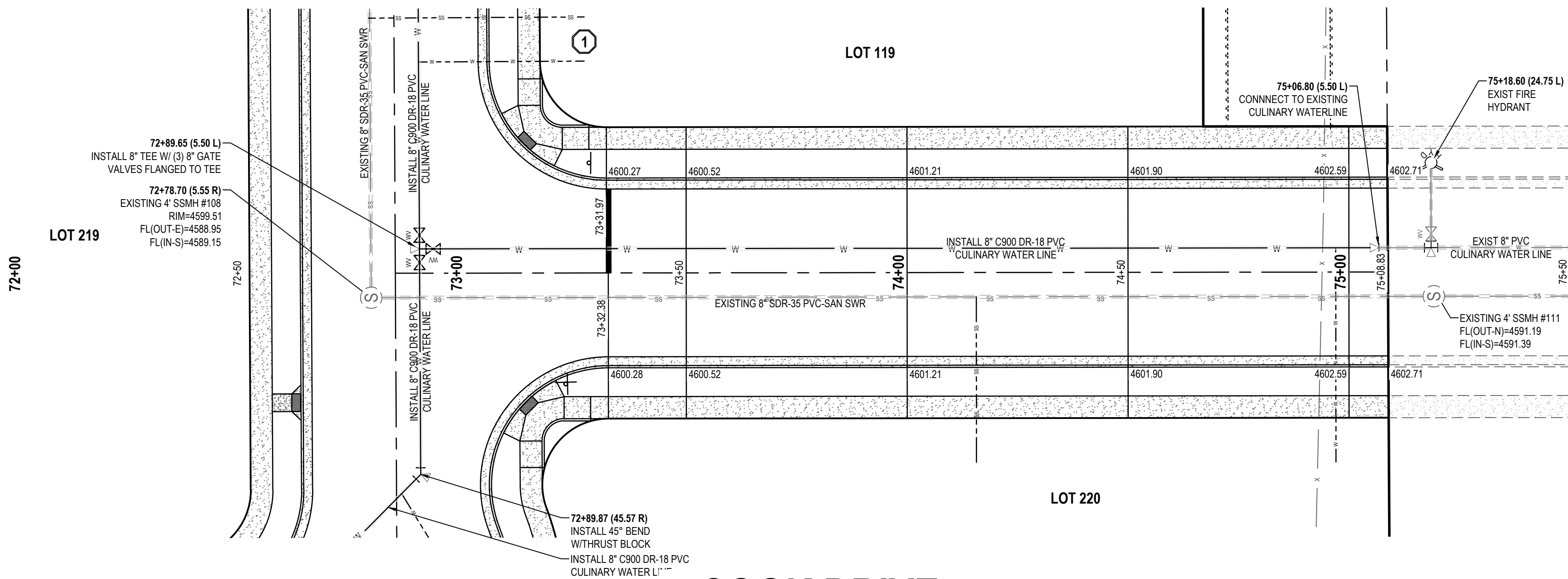
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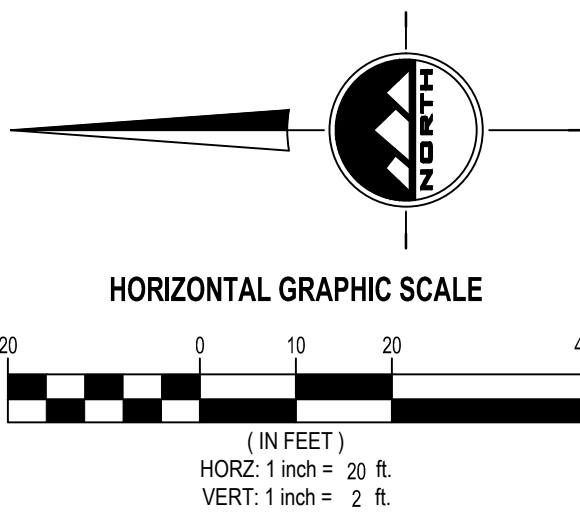
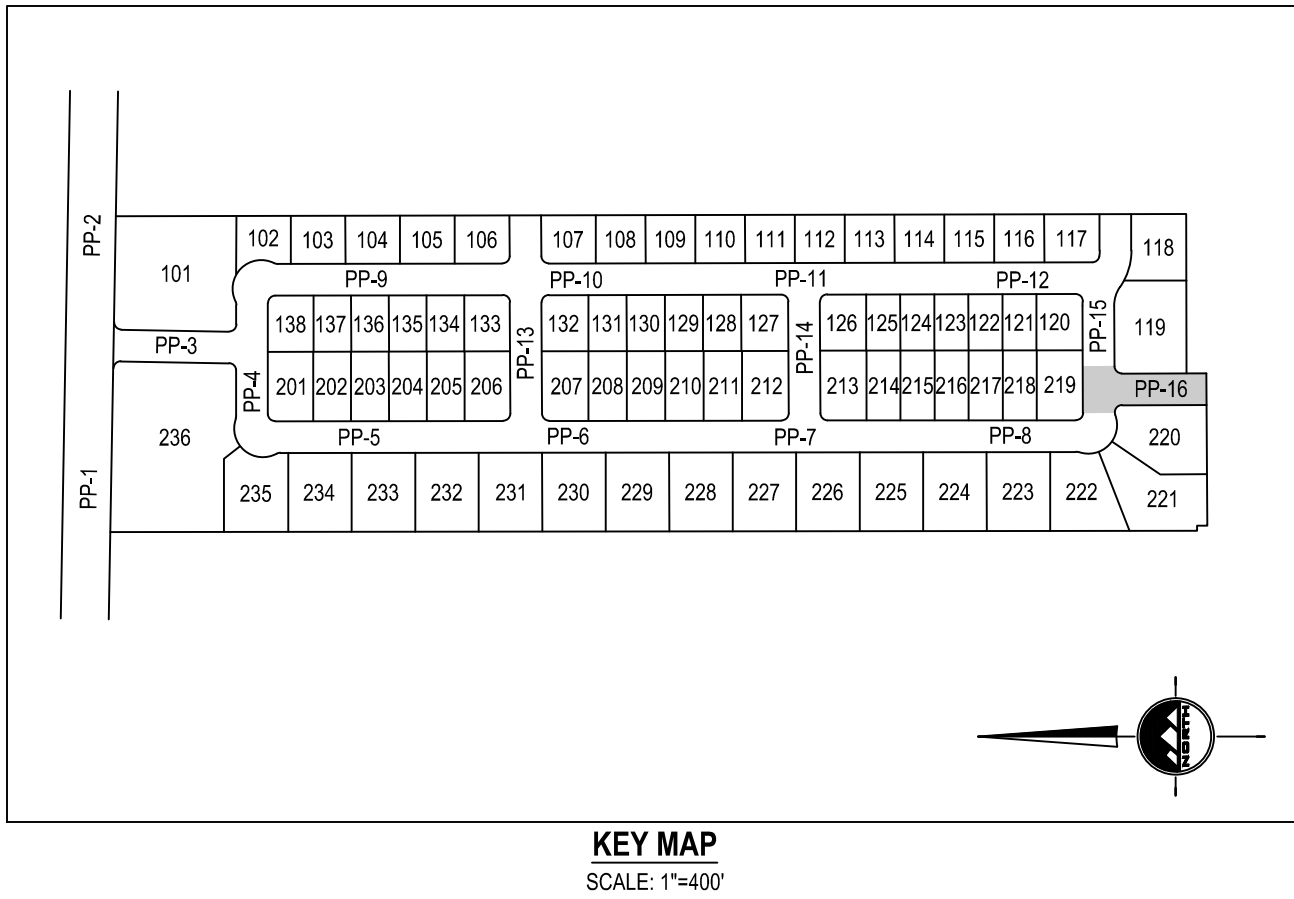
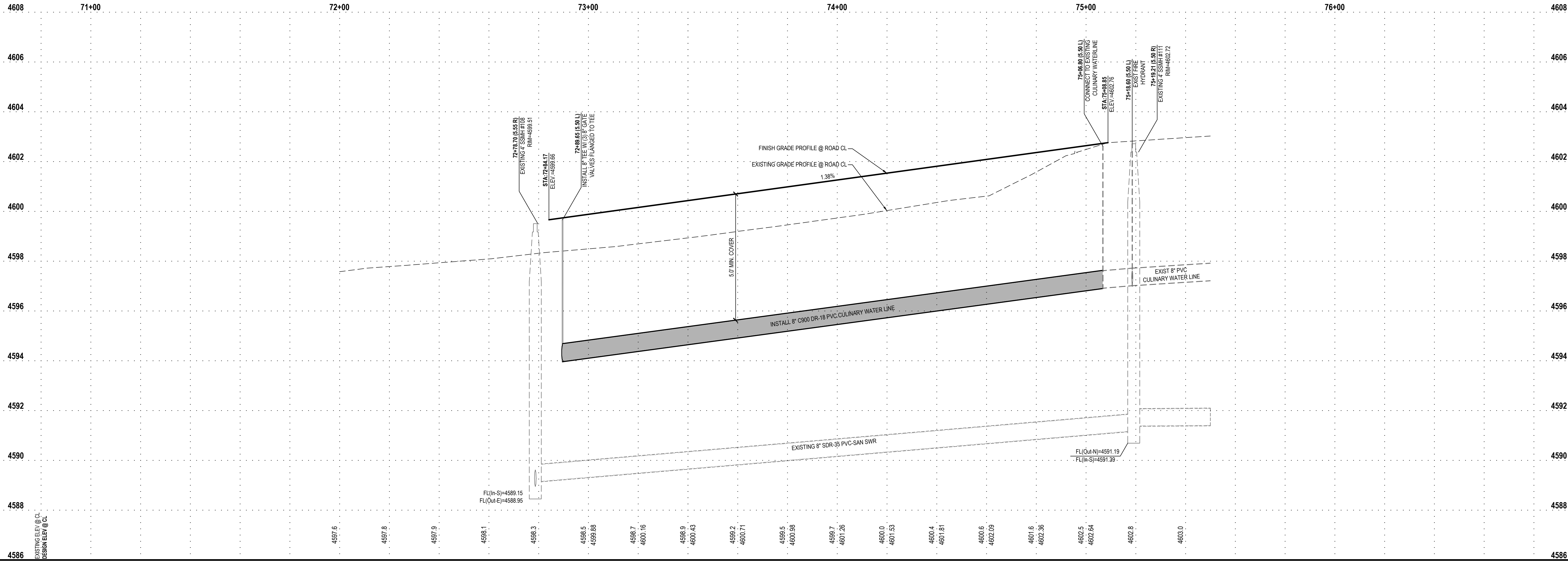
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18" VERTICAL SEPARATION IS REQUIRED BETWEEN THE STORM WATER  
LINE AND CULINARY WATER LINES



EN SIGN

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ALINGTON SUBDIVISION

PRELIMINARY PLAT SUBMITTAL

MAIN STREET

GRANTSVILLE, UTAH

LICENSED PROFESSIONAL ENGINEER  
JACOB M. CLEGG  
9/20/2022  
STATE OF UTAH

PRELIMINARY

COOK DRIVE

PLAN AND PROFILE

PROJECT NUMBER  
T1265K

PRINT DATE  
9/20/2022

DRAWN BY  
J.CID

CHECKED BY  
J. CLEGG

PROJECT MANAGER  
J. CLEGG



# **AGENDA ITEM #12**

Report from City Council Liaison

Mayor Critchlow



# AGENDA ITEM #13

Adjourn