

PROJECT WBS: BP10-R013

CONTRACT:

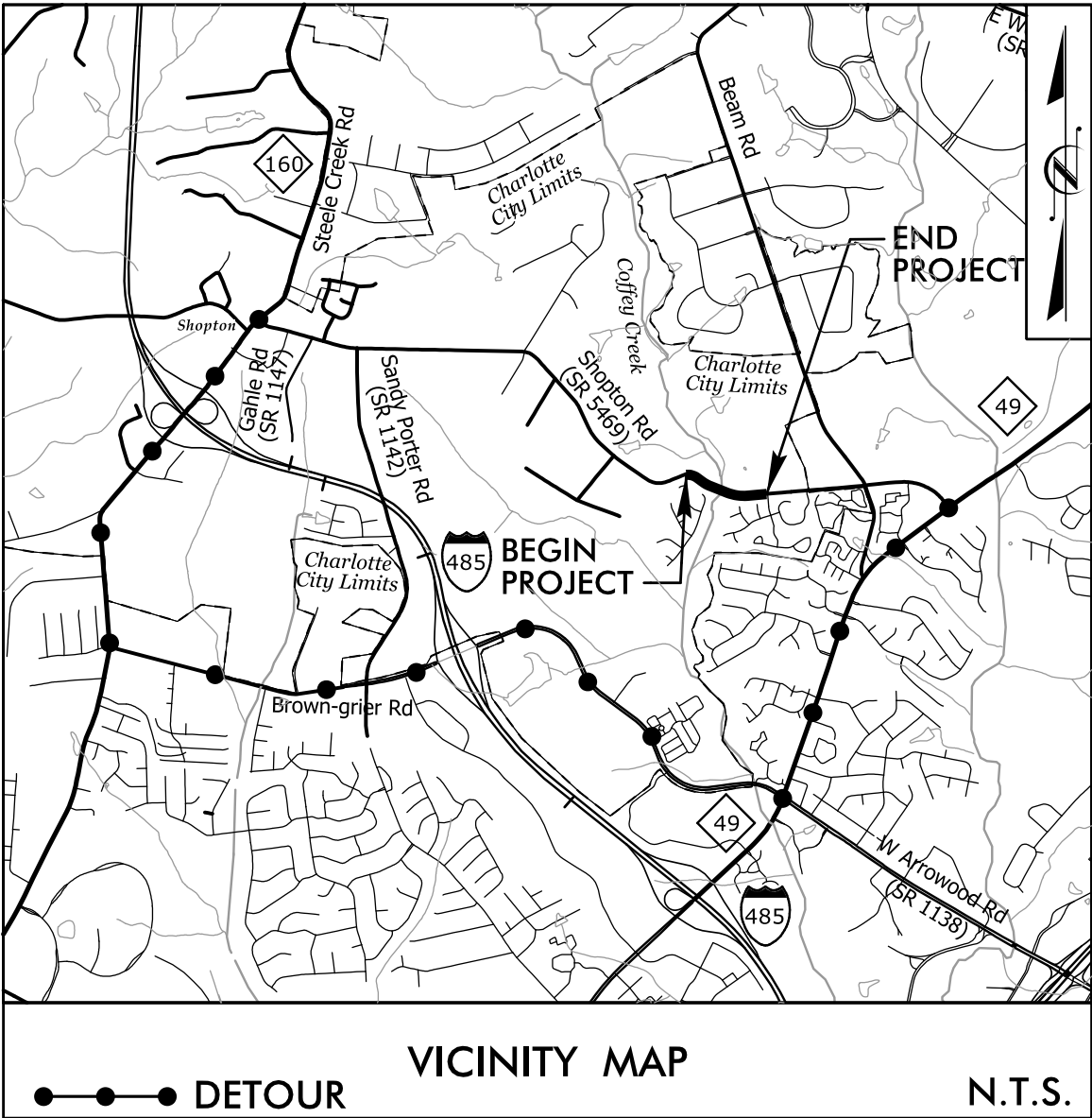
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS  
MECKLENBURG COUNTY

LOCATION: BRIDGE #590165 COFFEY CREEK ON SR 5469 (SHOPTON RD)  
TYPE OF WORK: WATER LINE RELOCATION & SANITARY SEWER RELOCATION

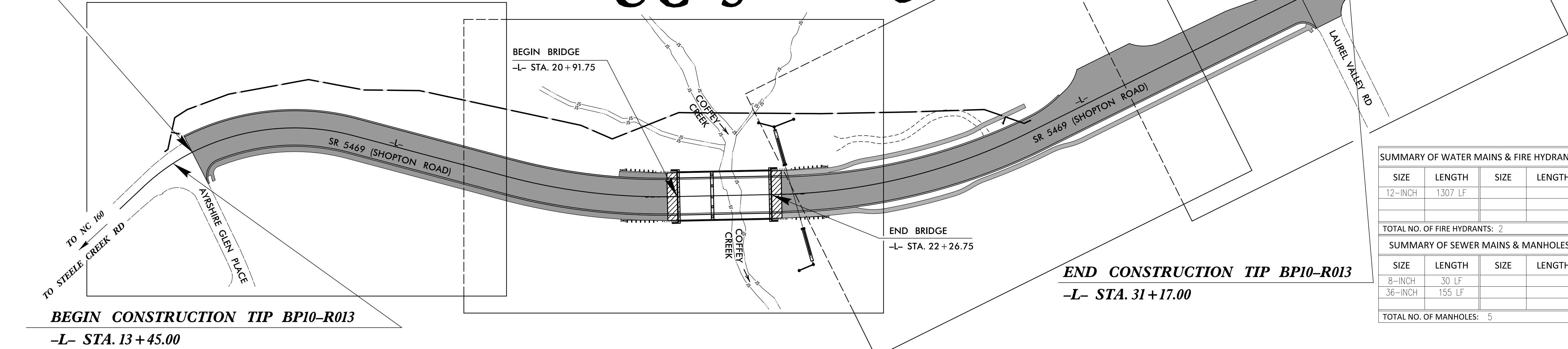
T.I.P. NO.	SHEET NO.
BP10-R013	UC-1

**stv** STV Engineers, Inc.  
800 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991



BEGIN STATE PROJECT TIP BP10-R013  
-L- STA. 13 + 81.76

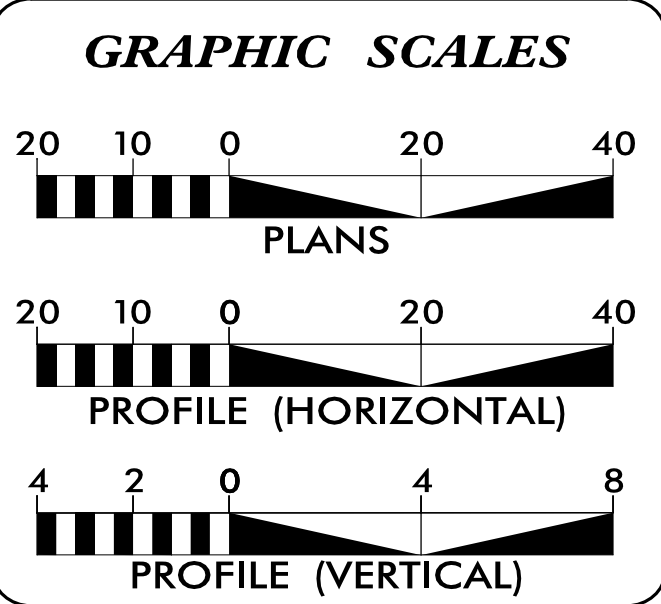
END STATE PROJECT TIP BP10-R013  
-L- STA. 30 + 43.05



SUMMARY OF WATER MAINS & FIRE HYDRANTS			
SIZE	LENGTH	SIZE	LENGTH
12-INCH	1307 LF		
TOTAL NO. OF FIRE HYDRANTS: 2			
SUMMARY OF SEWER MAINS & MANHOLES			
SIZE	LENGTH	SIZE	LENGTH
8-INCH	30 LF		
36-INCH	155 LF		
TOTAL NO. OF MANHOLES: 5			

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF CHARLOTTE.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

DOCUMENT NOT CONSIDERED FINAL  
UNTIL ALL SIGNATURES ARE COMPLETED



INDEX OF SHEETS	
SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-1A	PERMIT SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A THRU UC-3H	DETAILS
UC-4 THRU UC-7	UTILITY CONSTRUCTION SHEET
UC-8 THRU UC-10	UTILITY PROFILE SHEET

WATER AND SEWER  
OWNERS ON PROJECT

(A) WATER - CHARLOTTE WATER  
(B) SEWER - CHARLOTTE WATER

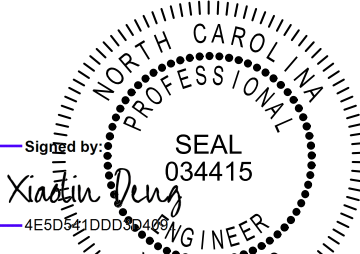
PREPARED IN THE OFFICE OF



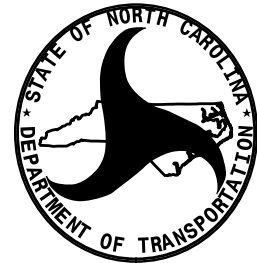
STANTEC CONSULTING  
521 E. MOREHEAD ST  
SUITE 425  
CHARLOTTE NC, 28202  
(704) 329-0900 FAX: (704) 329-0905  
License No.: F-0672

XIAOLIN DENG, PE	CONSULTANT CONTACT #1
TORIANNA KIRBY, PE	CONSULTANT CONTACT #2
	CONSULTANT CONTACT #3

SEAL



7/10/2025



DIVISION OF HIGHWAYS  
UTILITIES UNIT  
716 W MAIN ST.  
ALBEMARLE NC 28801  
PHONE (704) 983-4400  
FAX (704) 982-3146

BRETT D. CANIPE, P.E.	DIVISION ENGINEER
ERIC "NAT" HUNTER, P.E.	DIVISION CONSTRUCTION ENGR
YANWEI MA, P.E.	DIVISION BRIDGE PROGRAM MGR
LYNN BASINGER	DIVISION UTILITY ENGINEER



5/14/99

12/9/2024  
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tokr-bj



CHARLOTTE, NORTH CAROLINA

APPLICATION FOR NON-DISCHARGE PERMIT  
GRAVITY SEWER MAIN EXTENSION  
CHARLOTTE WATER

PROJECT NAME \_\_\_\_\_ BRIDGE #590165 COFFEY CREEK ON SR 5469 (SHOPTON RD) \_\_\_\_\_ CREEK BASIN \_\_\_\_\_ COFFEY \_\_\_\_\_  
\_\_\_\_\_ 30 LF OF 8-INCH SANITARY SEWER \_\_\_\_\_  
\_\_\_\_\_ 155 LF OF 36-INCH SANITARY SEWER \_\_\_\_\_

CLTWater PROJECT NO.: \_\_\_\_\_ CPM-40-25-213 \_\_\_\_\_

PROJECT TYPE: ☐ NEW CONSTRUCTION ☒ RELOCATION ☐ MODIFICATION OF PERMIT NO. \_\_\_\_\_  
OTHER \_\_\_\_\_

VOLUME OF WASTEWATER GENERATED BY THIS PROJECT: \_\_\_\_\_ \* \_\_\_\_\_ GALLONS PER DAY BASED  
ON 190 GAL/DAY/SINGLE FAMILY HOUSEHOLD X \_\_\_\_\_ \* \_\_\_\_\_ HOUSEHOLDS OR

135 GAL/DAY/MULTI-FAMILY UNIT X \_\_\_\_\_ \* \_\_\_\_\_ UNITS OR IS BASED ON :

WASTEWATER TREATMENT PLANT RECEIVING WASTEWATER:

☒ McALPINE CR. (NC0024970) ☐ IRWIN CR. (NC0024945) ☐ McDOWELL CR. (NC0036277)  
☐ SUGAR CR. (NC0024937) ☐ MALLARD CR. (NC0030210) ☐ ROCKY CR. (NC0036269)

NATURE OF WASTEWATER \_\_\_\_\_ 50 \_\_\_\_\_ % DOMESTIC \_\_\_\_\_ % INDUSTRIAL  
\_\_\_\_\_ 50 \_\_\_\_\_ % COMMERCIAL \_\_\_\_\_ % OTHER \_\_\_\_\_

ORIGIN OF WASTEWATER ☒ SUBDIVISION ☒ COMMERCIAL  
☒ SCHOOL ☐ INDUSTRIAL  
☒ APARTMENTS/CONDO'S ☐ OTHER

LIST ANY PARAMETER AND ITS CONCENTRATION THAT WILL BE GREATER THAN NORMAL DOMESTIC LEVELS:  
\_\_\_\_\_ NONE \_\_\_\_\_

IF WASTEWATER IS NON-DOMESTIC, DESCRIBE LEVEL OF PRETREATMENT:  
\_\_\_\_\_ N/A \_\_\_\_\_

IF A PRETREATMENT PERMIT IS REQUIRED, HAS ONE BEEN ISSUED? ☐ YES ☐ NO

HAS ENGINEER DETERMINED THAT DOWNSTREAM SEWERS ARE CAPABLE TO HANDLE THIS FLOW? ☒ YES ☐ NO  
PERMIT NO. FOR SEWERS IMMEDIATELY DOWNSTREAM \_\_\_\_\_ \* \_\_\_\_\_  
PIPE DIAMETER OF SEWERS IMMEDIATELY DOWNSTREAM \_\_\_\_\_ 36-INCH \_\_\_\_\_

HAS ENGINEER DETERMINED THAT NC DEM AND CLTWater MINIMUM DESIGN STANDARDS ARE MET BY THIS PROJECT? ☒ YES ☐ NO

COMPLETE NAME AND ADDRESS OF ENGINEERING DESIGN FIRM:

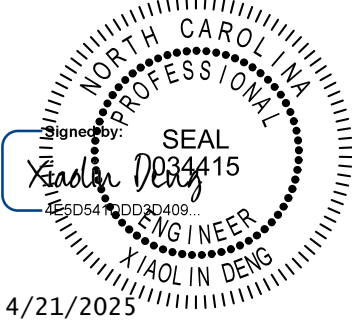
\_\_\_\_\_ STANTEC CONSULTING SERVICES, INC. \_\_\_\_\_  
\_\_\_\_\_ 521 E. MOREHEAD STREET, SUITE 425 \_\_\_\_\_  
\_\_\_\_\_ CHARLOTTE, NC 28202 \_\_\_\_\_

TELEPHONE \_\_\_\_\_ 704 \_\_\_\_\_ - \_\_\_\_\_ 329 \_\_\_\_\_ - \_\_\_\_\_ 0900 \_\_\_\_\_

PROFESSIONAL ENGINEER'S CERTIFICATION:

I, \_\_\_\_\_ XIAOLIN DENG, PE \_\_\_\_\_, ATTEST THAT THIS APPLICATION FOR \_\_\_\_\_ PROP. 8" & 36" SANITARY SEWER \_\_\_\_\_  
\_\_\_\_\_ RELOCATION \_\_\_\_\_ HAS BEEN REVIEWED BY ME AND IS ACCURATE AND COMPLETE TO THE  
BEST OF MY KNOWLEDGE. I FURTHER ATTEST THAT TO THE BEST OF MY KNOWLEDGE THE PROPOSED DESIGN HAS BEEN  
PREPARED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS. ALTHOUGH CERTAIN PORTIONS OF THIS SUBMITTAL  
PACKAGE MAY HAVE BEEN DEVELOPED BY OTHER PROFESSIONALS, INCLUSION OF THESE MATERIALS UNDER MY  
SIGNATURE AND SEAL SIGNIFIES THAT I HAVE REVIEWED THIS MATERIAL AND HAVE JUDGED IT TO BE CONSISTENT WITH  
THE PROPOSED DESIGN.

NORTH CAROLINA PROFESSIONAL ENGINEER'S SEAL, SIGNATURE, AND DATE:



CLTWater PERMIT NO. \_\_\_\_\_ ISSUED \_\_\_\_\_

PLANT FLOW ALLOCATION RECORDED BY: \_\_\_\_\_

PERMIT APPROVED BY: \_\_\_\_\_ JOSEPH C WILSON, P.E., CHIEF ENGINEER \_\_\_\_\_

APPLICATION FOR PERMIT FOR WATER MAIN EXTENSION

PROJECT NAME: \_\_\_\_\_ BRIDGE #590165 COFFEY CREEK ON SR 5469 (SHOPTON RD) \_\_\_\_\_  
\_\_\_\_\_

CLTWater PROJECT NO.: \_\_\_\_\_ CPM-20-25-212 \_\_\_\_\_

PROJECT DESCRIPTION: \_\_\_\_\_ PROPOSED 1,307 L.F. OF 12" WATER MAIN WITH ASSOCIATED FITTINGS AT COFFEY CREEK ALONG  
\_\_\_\_\_ SHOPTON ROAD IN CHARLOTTE, NC. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DESIGNED BY: FIRM: \_\_\_\_\_ STANTEC CONSULTING SERVICES, INC. \_\_\_\_\_

ENGINEER: \_\_\_\_\_ XIAOLIN DENG, PE \_\_\_\_\_

ADDRESS: \_\_\_\_\_ 521 E. MOREHEAD STREET, SUITE 425 \_\_\_\_\_  
\_\_\_\_\_ CHARLOTTE, NC 28202 \_\_\_\_\_

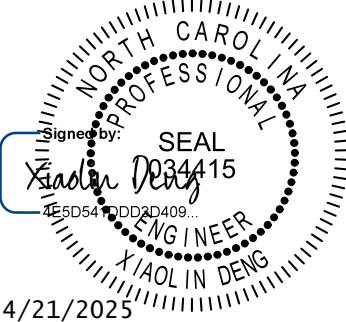
PHONE: \_\_\_\_\_ (704) 372-1885 \_\_\_\_\_

THIS APPLICATION IS MADE UNDER AND IN FULL ACCORD WITH THE PROVISIONS OF CHAPTER 130A-317 OF THE  
NORTH CAROLINA GENERAL STATUTES, AND SUCH OTHER STATUTES AS RELATED TO PUBLIC WATER SYSTEMS.  
CLTWater HAS BEEN GRANTED AUTHORITY TO ISSUE PERMITS FOR EXTENSION OF WATER MAINS PURSUANT TO  
15A NCAC 18C.1801. THE APPLICANT AGREES THAT NO SIGNIFICANT CHANGE OR DEVIATION FROM THE PLANS  
AND SPECIFICATIONS APPROVED BY CLTWater WILL BE MADE WITHOUT THE WRITTEN CONSENT AND APPROVAL  
OF CLTWater OR ITS AUTHORIZED REPRESENTATIVE. A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE  
STATE OF NORTH CAROLINA SHALL SUBMIT A STATEMENT REFLECTING THAT ADEQUATE OBSERVATIONS DURING  
AND UPON COMPLETION OF CONSTRUCTION INDICATES THAT CONSTRUCTION WAS COMPLETED IN ACCORDANCE  
WITH APPROVED PLANS AND SPECIFICATIONS.

PERMIT NO. \_\_\_\_\_

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

JOSEPH C.WILSON, PE, CHIEF ENGINEER  
CHARLOTTE WATER  
5100 BROOKSHIRE BLVD.  
CHARLOTTE, NORTH CAROLINA 28216



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License No. F-0672

PROJECT REFERENCE NO.	SHEET NO.
BP10-R013	UC-1A
DESIGNED BY: XMD	
DRAWN BY: TK	
CHECKED BY: XMD	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	4/21/2025
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION



STV Engineers, Inc.  
900 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991

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12/18/2024  
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tokirby


REV: 2/1/2012

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

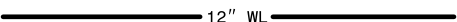























UTILITIES PLAN SHEET SYMBOLS

**Stantec**

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PROJECT REFERENCE NO.	SHEET NO.
BP10-R013	UC-2
<div><div></div><div>STV Engineers, Inc. 900 West Trade St., Suite 715 Charlotte, NC 28202 NC License Number F-0991</div></div>	









PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS


Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Force Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

\*For Existing Utilities

Utility Line Drawn from Record (Type as Shown)

Designated Utility Line (Type as Shown)



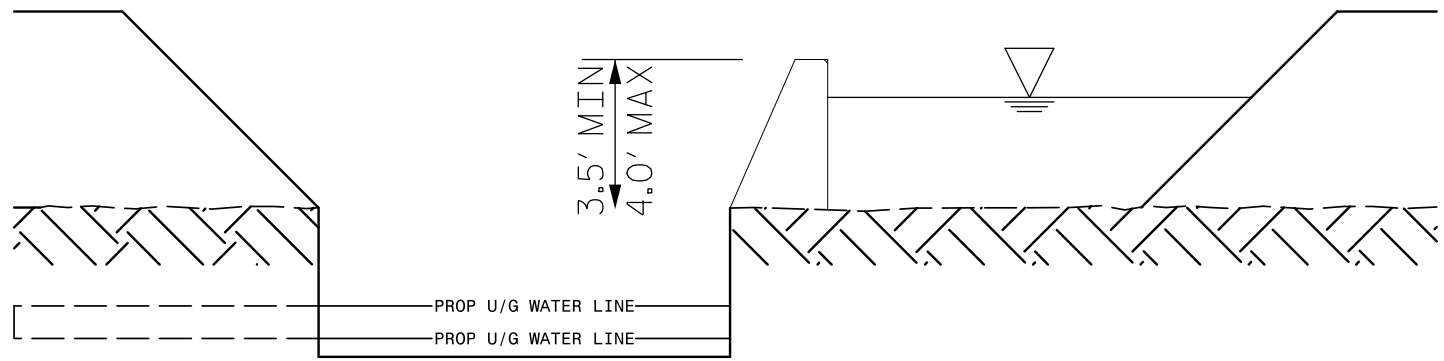
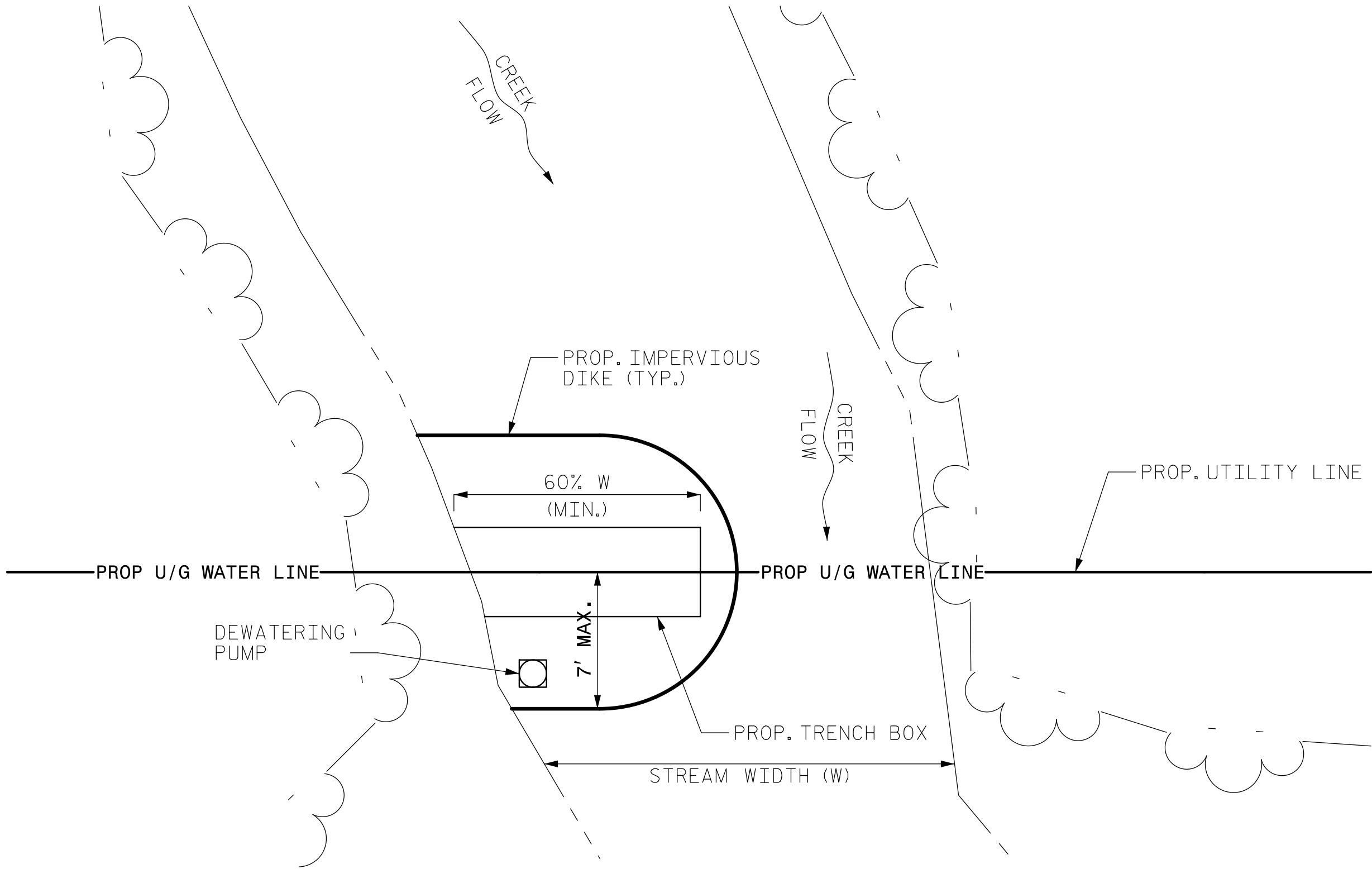




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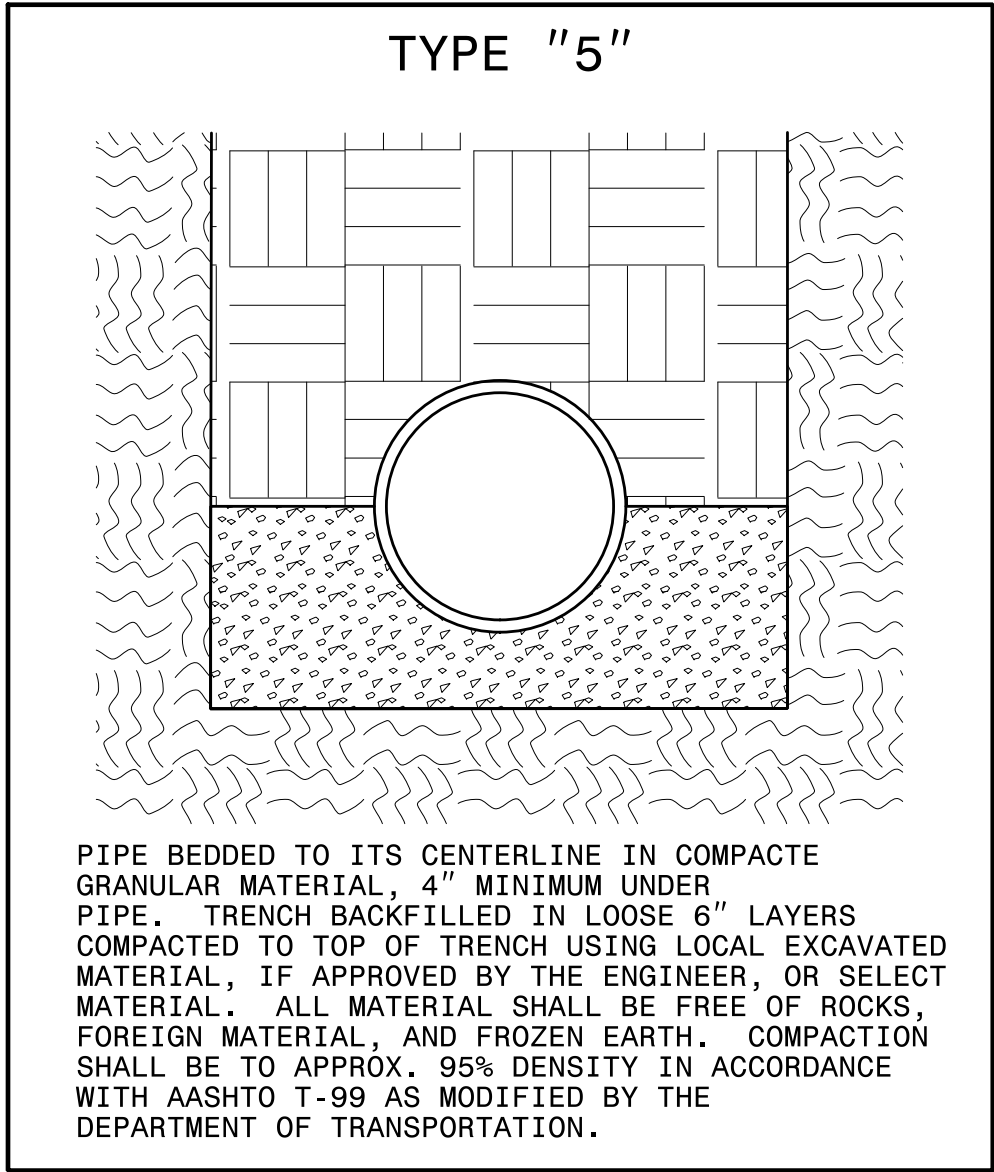
PROJECT TYPICAL DETAILS



IMPERVIOUS DIKE SECTION

OPEN CUT CONSTRUCTION

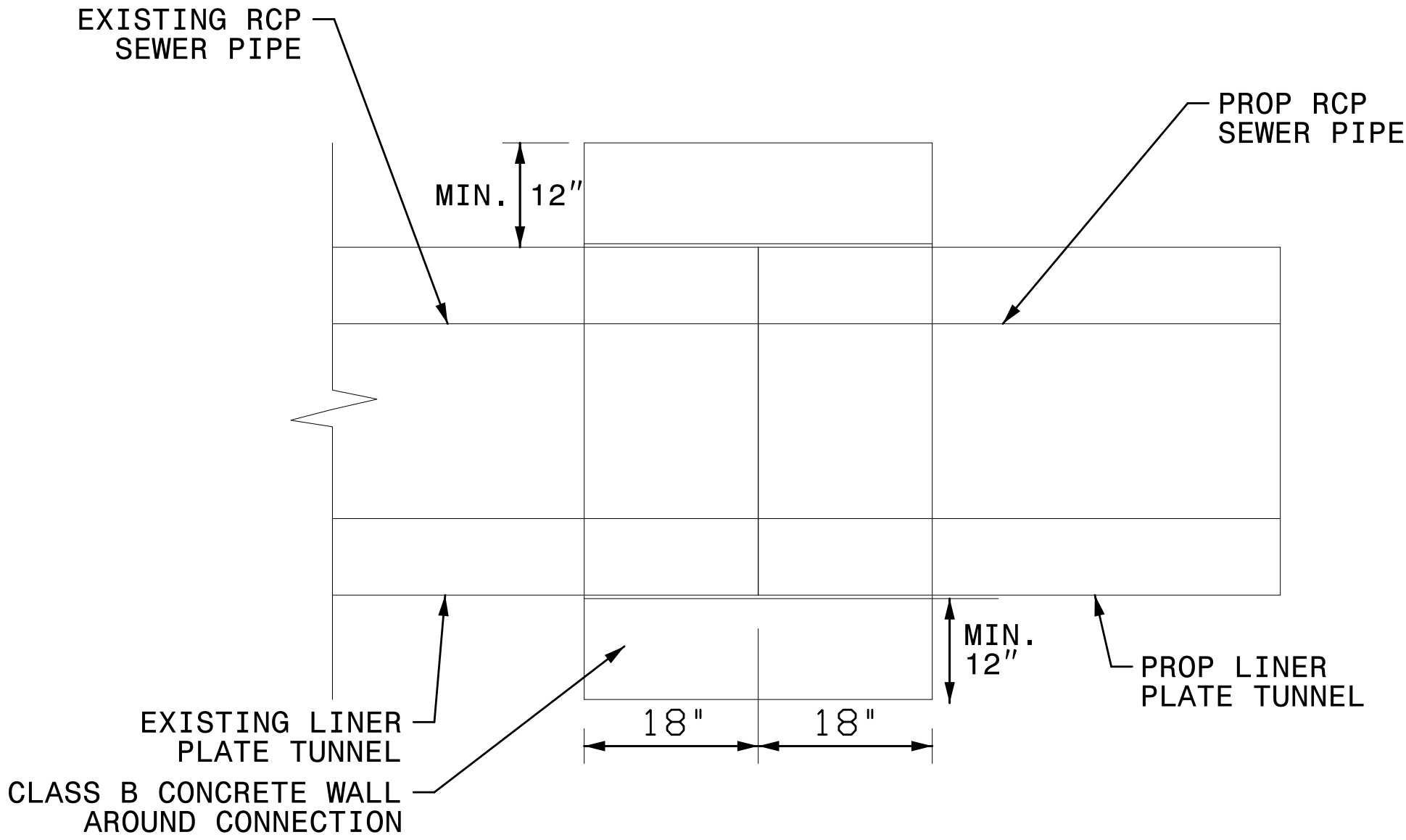
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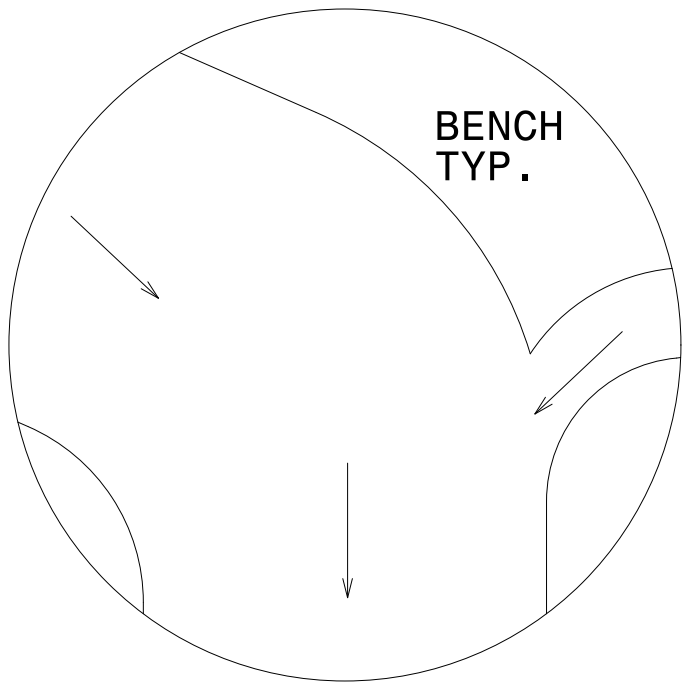
MAXIMUM TRENCH WIDTH AT TOP OF PIPE			
NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		

NOTES:

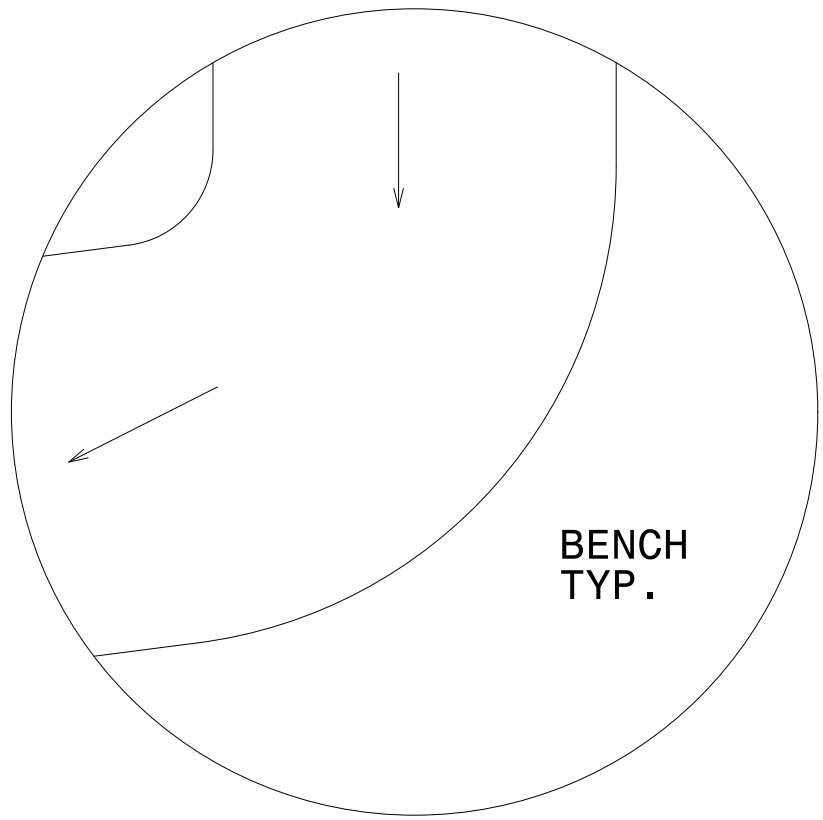
1. BASE FLOW OF STREAM WILL BE DIVERTED AROUND WORK AREA AND RELEASED BACK INTO EXISTING STREAM BELOW THE WORK AREA.
2. SANDBAG MATERIAL:  
SANDBAG SHALL BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC, MINIMUM UNIT WEIGHT FOUR OUNCES PER SQUARE YARD, MULLEN BURST STRENGTH EXCEEDING 300 PSI IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355. USE OF BURLAP IS NOT ACCEPTABLE.
3. SAND FOR SANDBAGS SHALL BE A MINIMUM 110LB/CU. FT MATERIAL.
4. THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS NECESSARY TO PROTECT THE EXISTING WATERLINE FROM LEAKS OR DAMAGE DURING THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED WATERLINE.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FOLLOW ALL OSHA AND STATE SAFETY REQUIREMENTS PERTAINING TO THIS EXCAVATION.
6. ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.
7. PERFORM CROSSING DURING ANTICIPATED DRY WEATHER ONLY. INSTALL PROPOSED UTILITY IN A DRY TRENCH.
8. IMPERVIOUS DIKE TO BE APPROX 60% OF STREAM WIDTH.
9. ONCE PIPE IS INSTALLED, INSTALL IMPERVIOUS DIKE ON OPPOSITE SIDE OF CREEK AND INSTALL REMAINDER OF PIPE CROSSING.



CONCRETE COLLAR FOR PROPOSED SEWER & TUNNEL CONNECTIONS



SSMH3 INVERT DETAIL



SSMH2 INVERT DETAIL

NOTE: FORM BENCH AND INVERTS TO CREATE SMOOTH TRANSITIONS



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PROJECT REFERENCE NO.		SHEET NO.	
BP10-R013		UC-3A	
DESIGNED BY: XMD		UTILITY CONSTRUCTION PLANS ONLY	
DRAWN BY: TK			
CHECKED BY: XMD			
APPROVED BY:			
REVISD:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		7/10/2025	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION



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# PROJECT TYPICAL DETAILS



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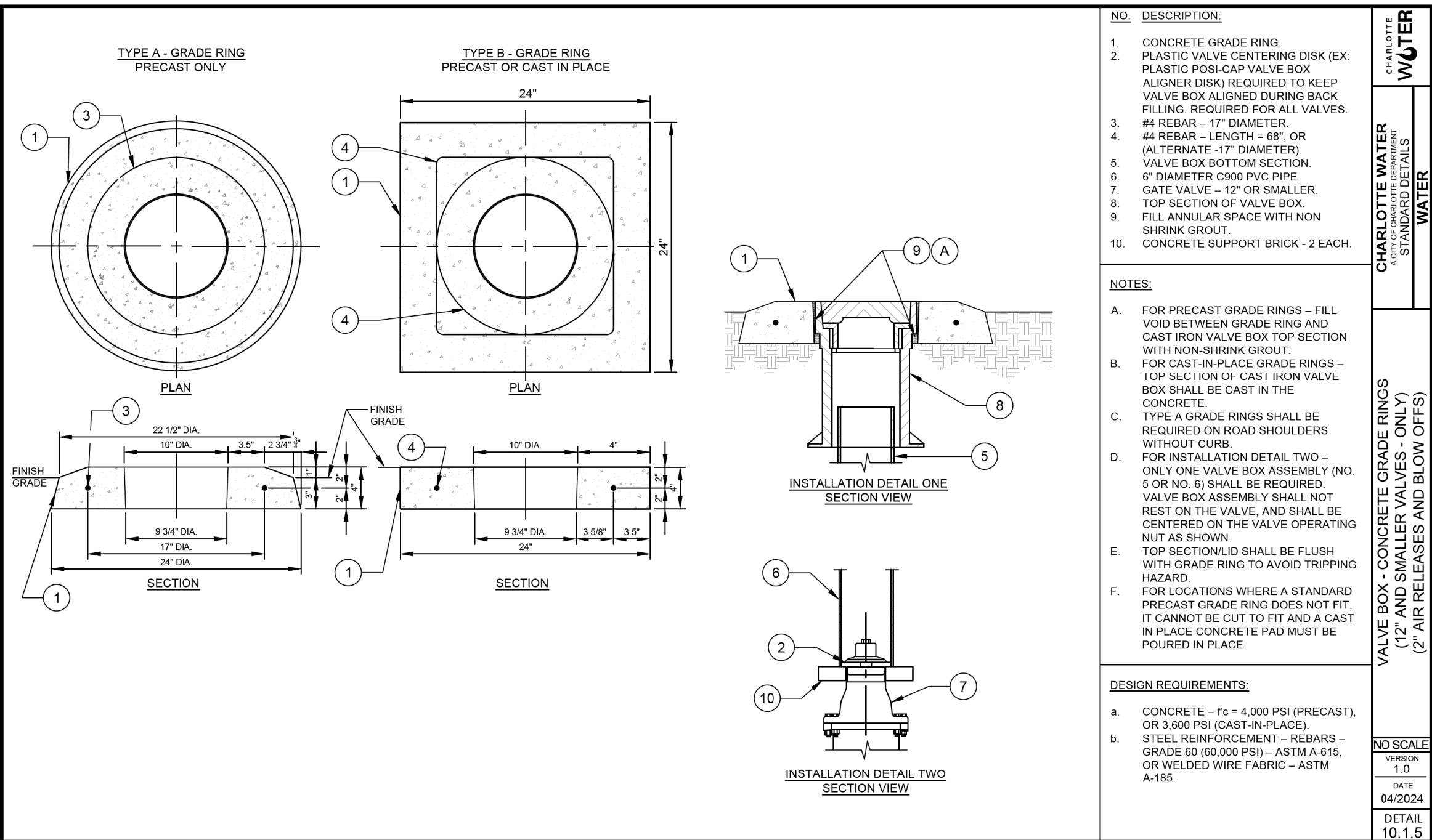
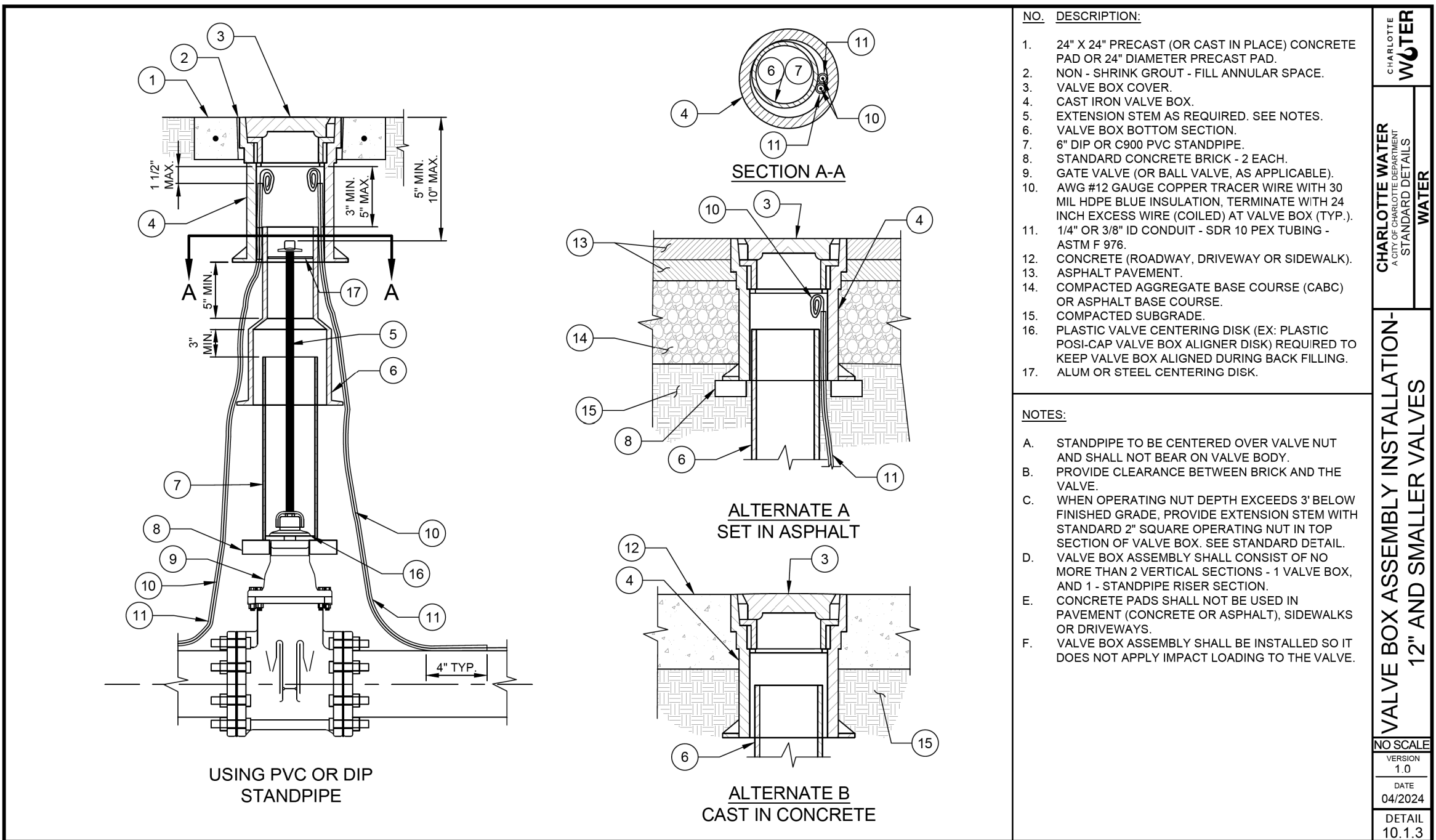
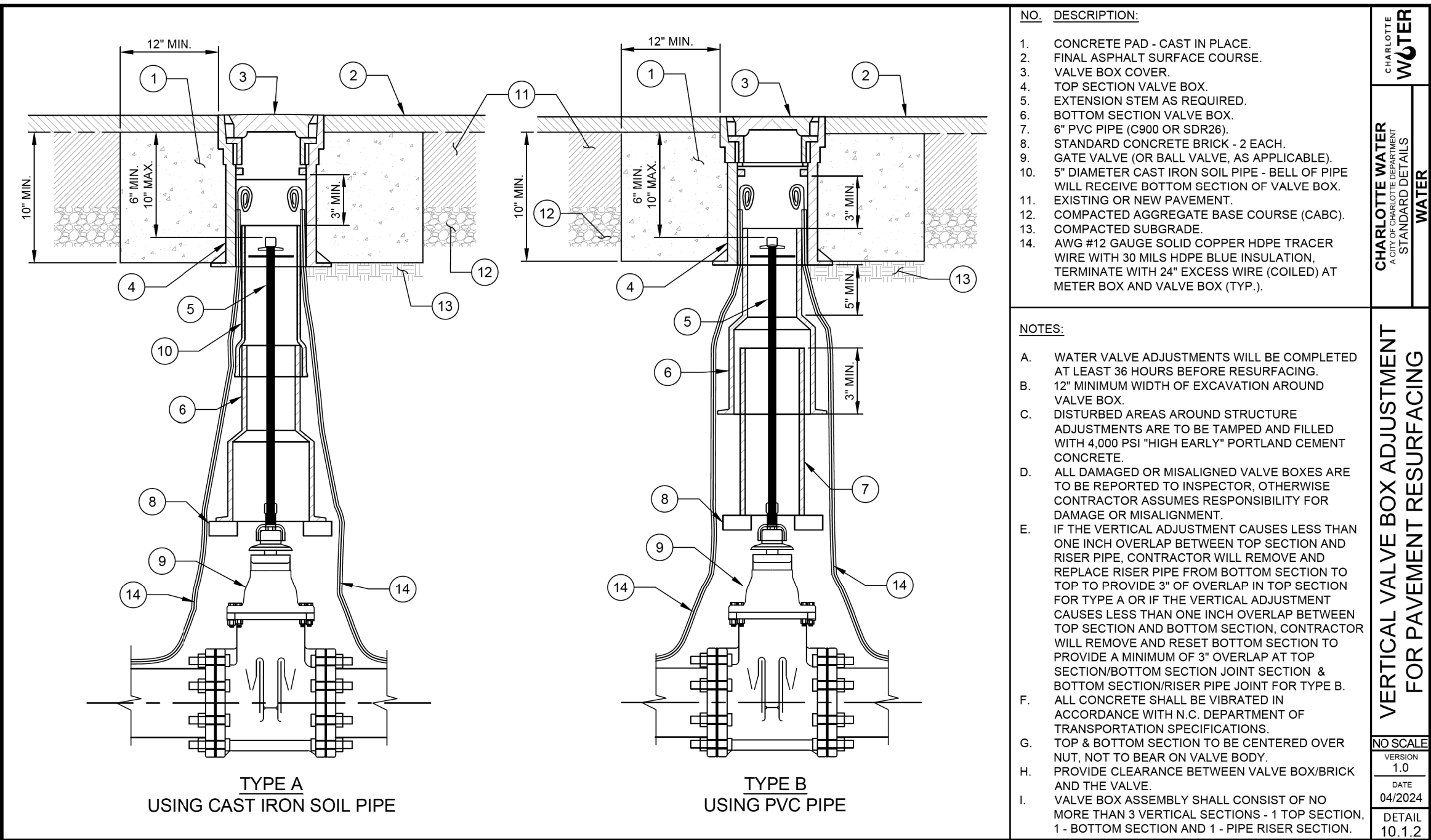
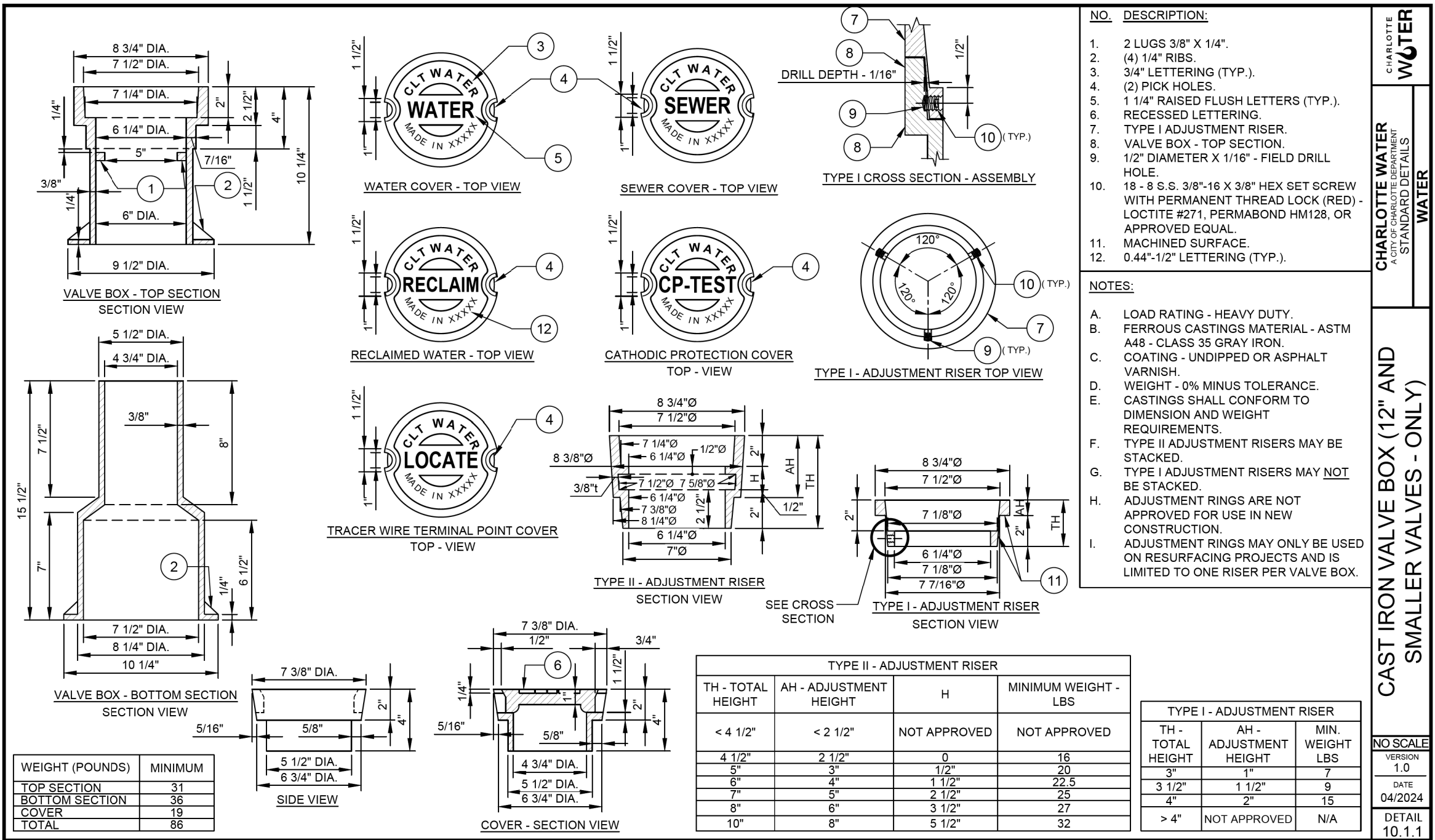
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APPROVED BY:		
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		7/30/2025
		UTILITY CONSTRUCTION PLANS ONLY

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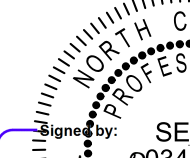




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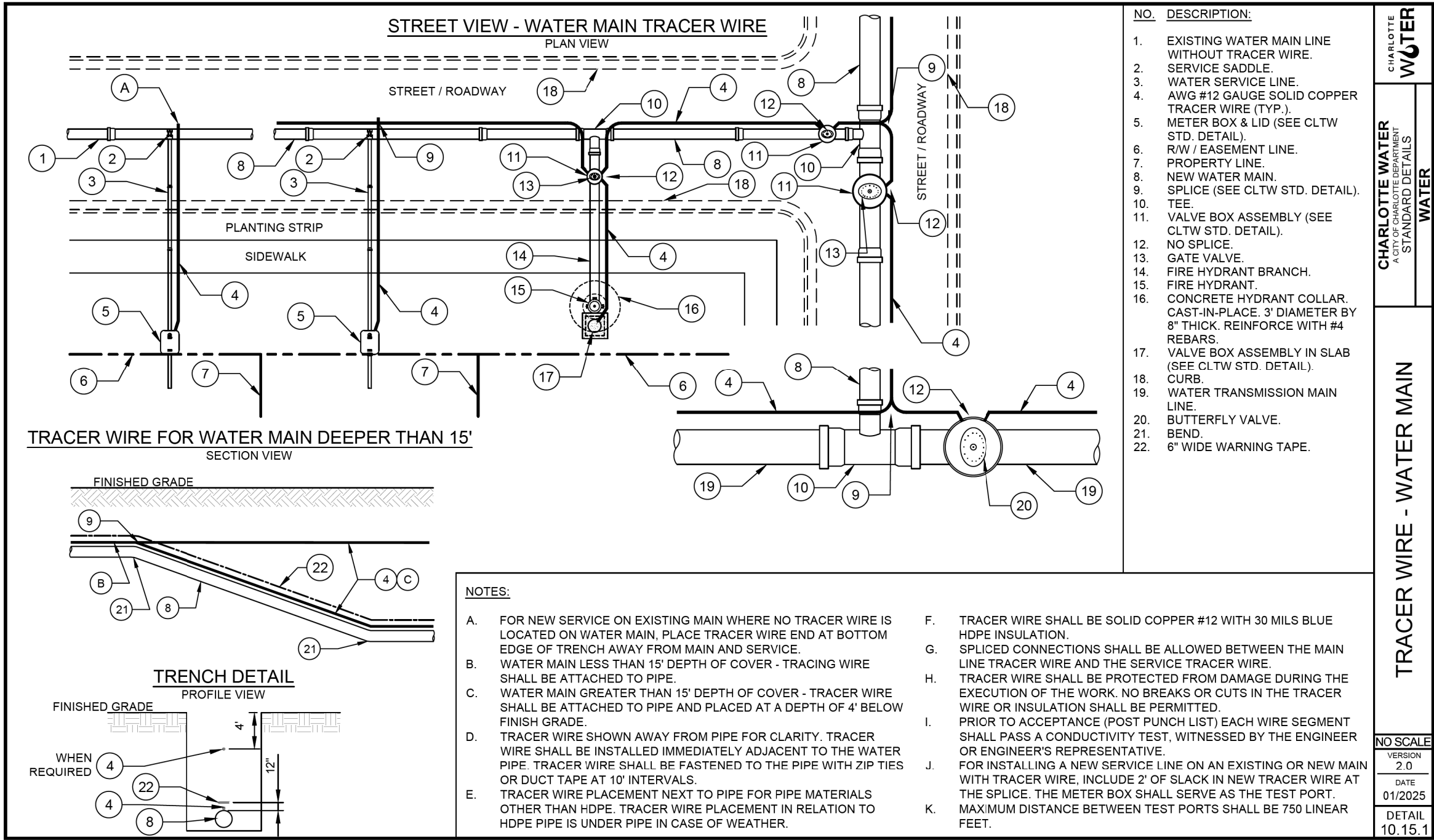
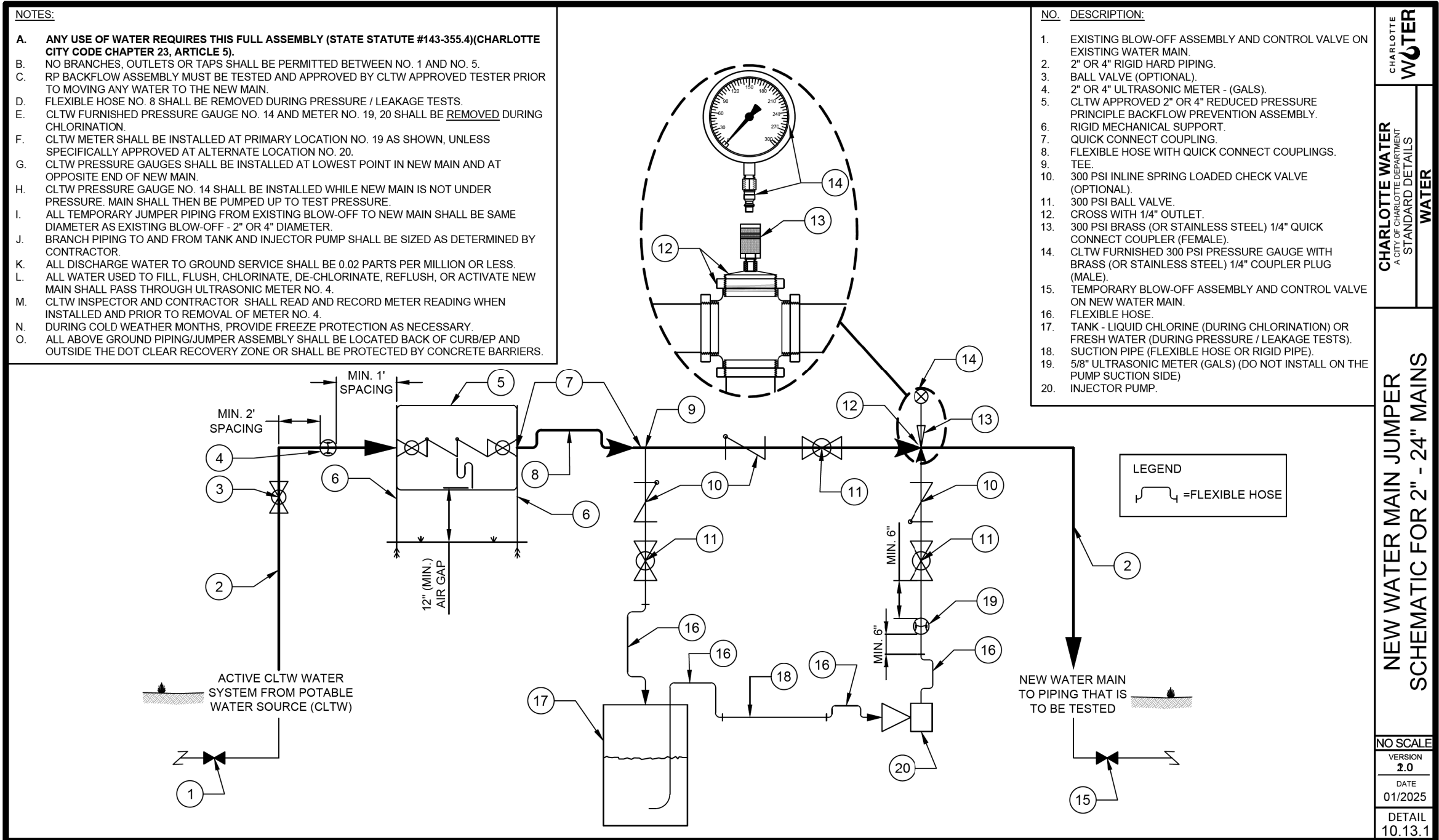
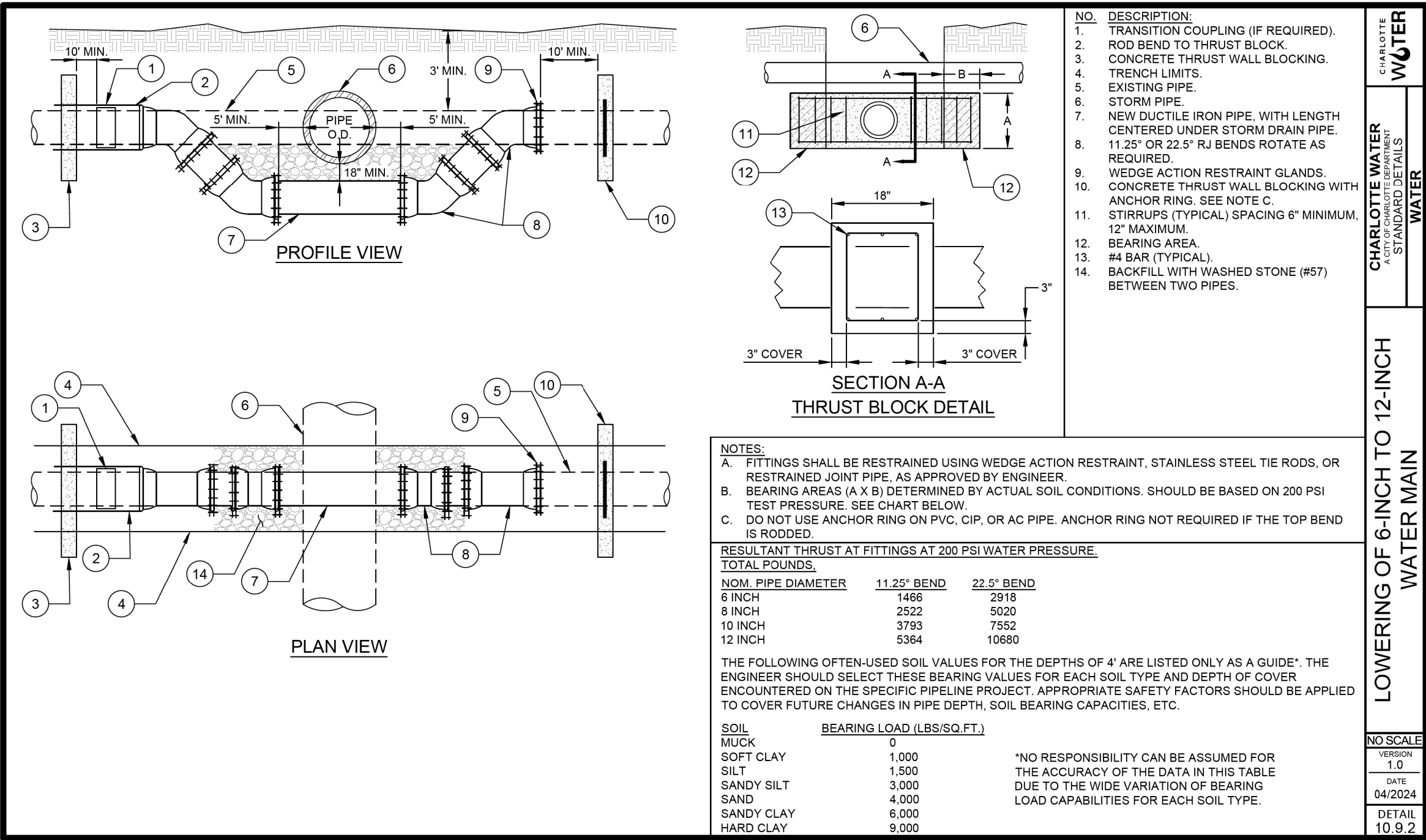
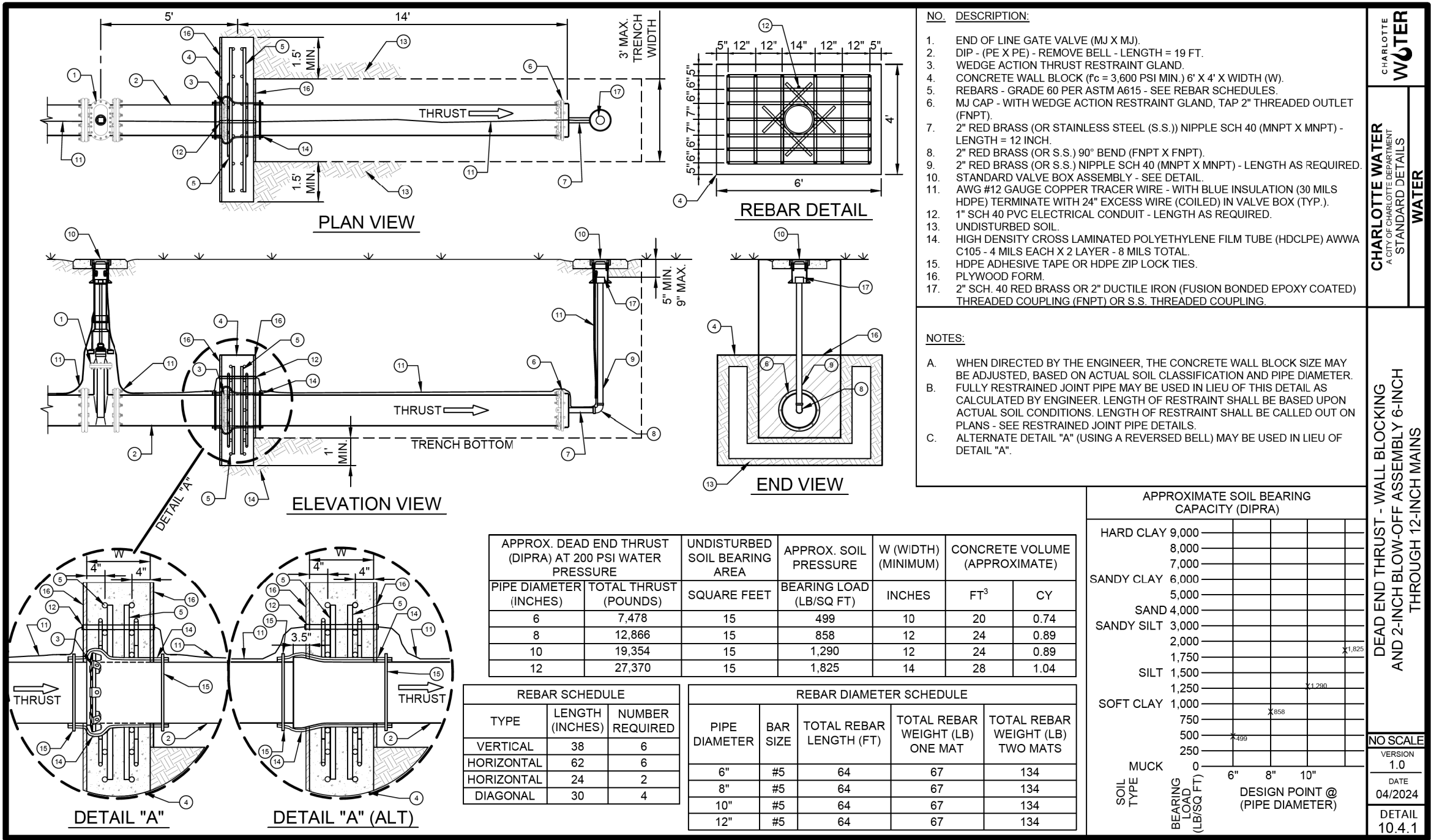
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REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		7/10/2025
		UTILITY CONSTRUCTION PLANS ONLY

## UTILITY CONSTRUCTION



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## PROJECT TYPICAL DETAILS



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Fax. (704) 329-0905  
[www.stantec.com](http://www.stantec.com)  
License No. F-0672

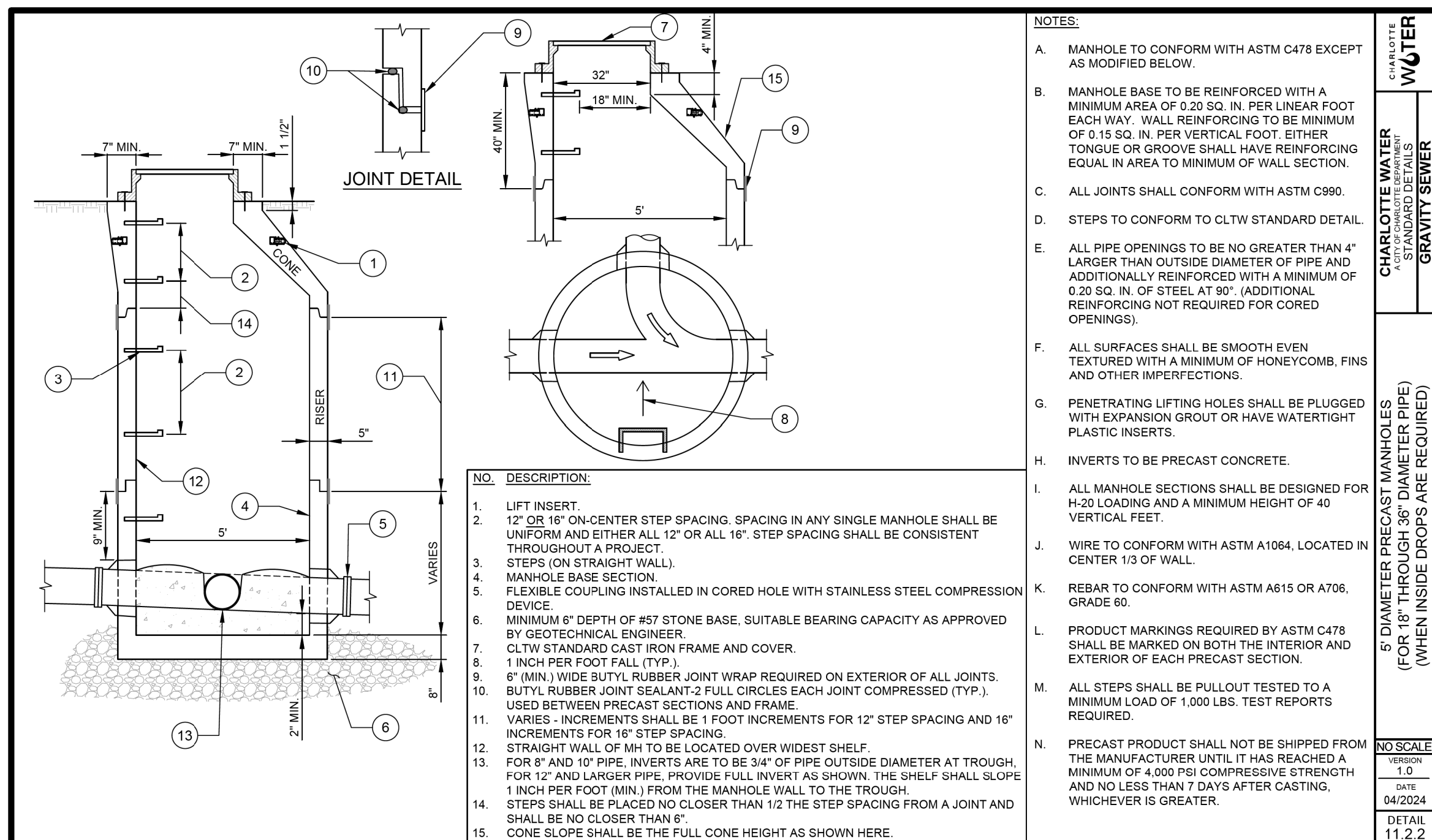
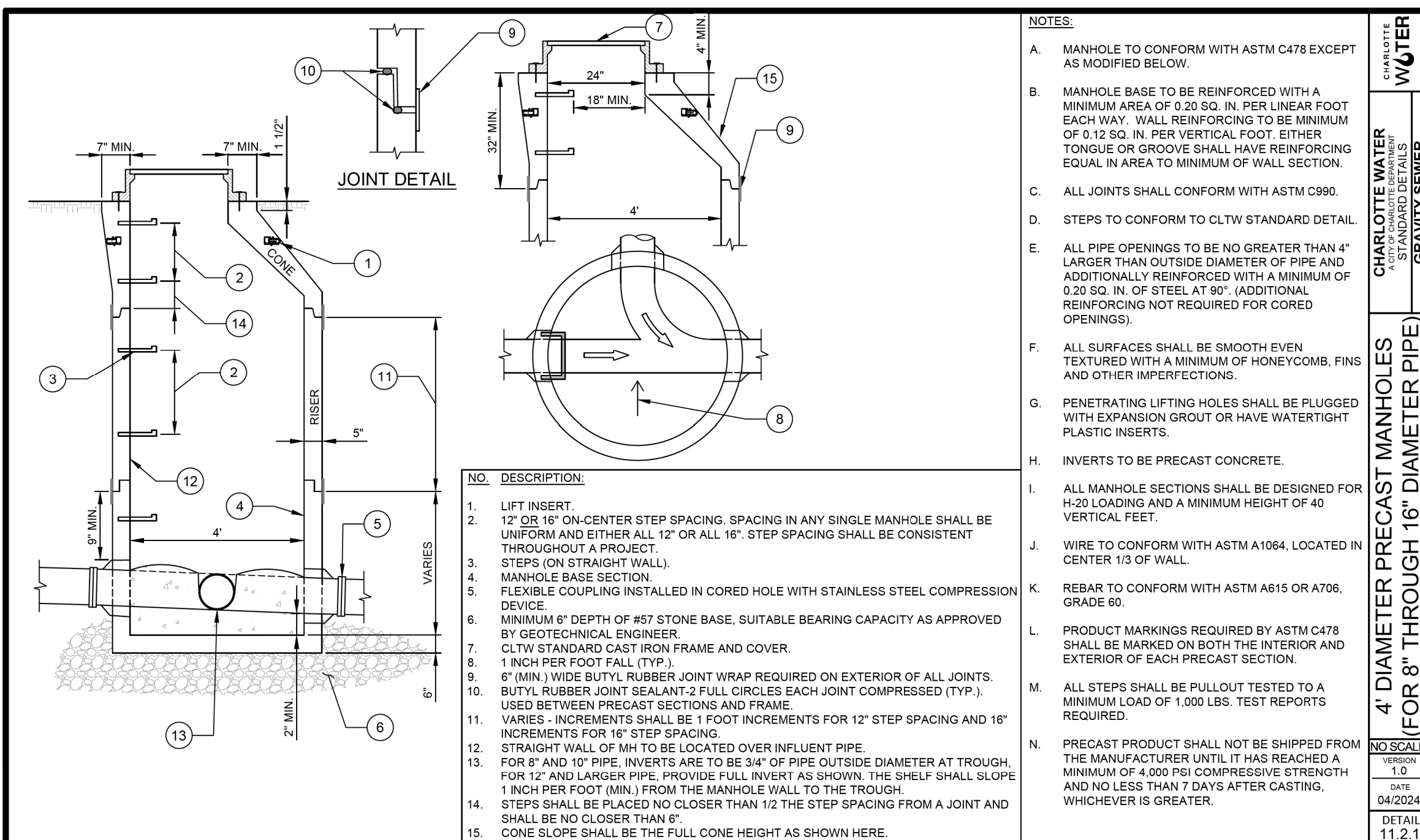
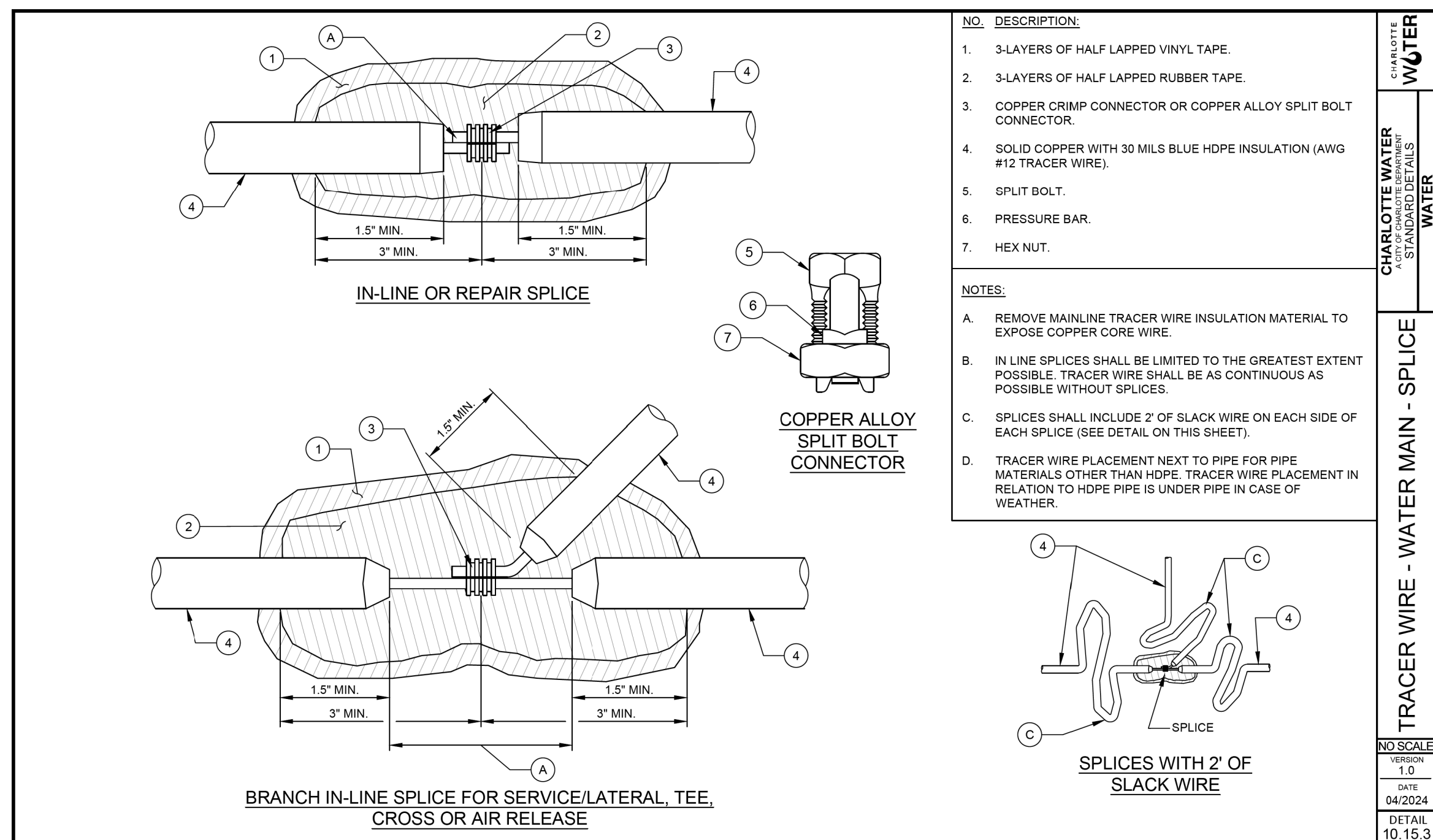
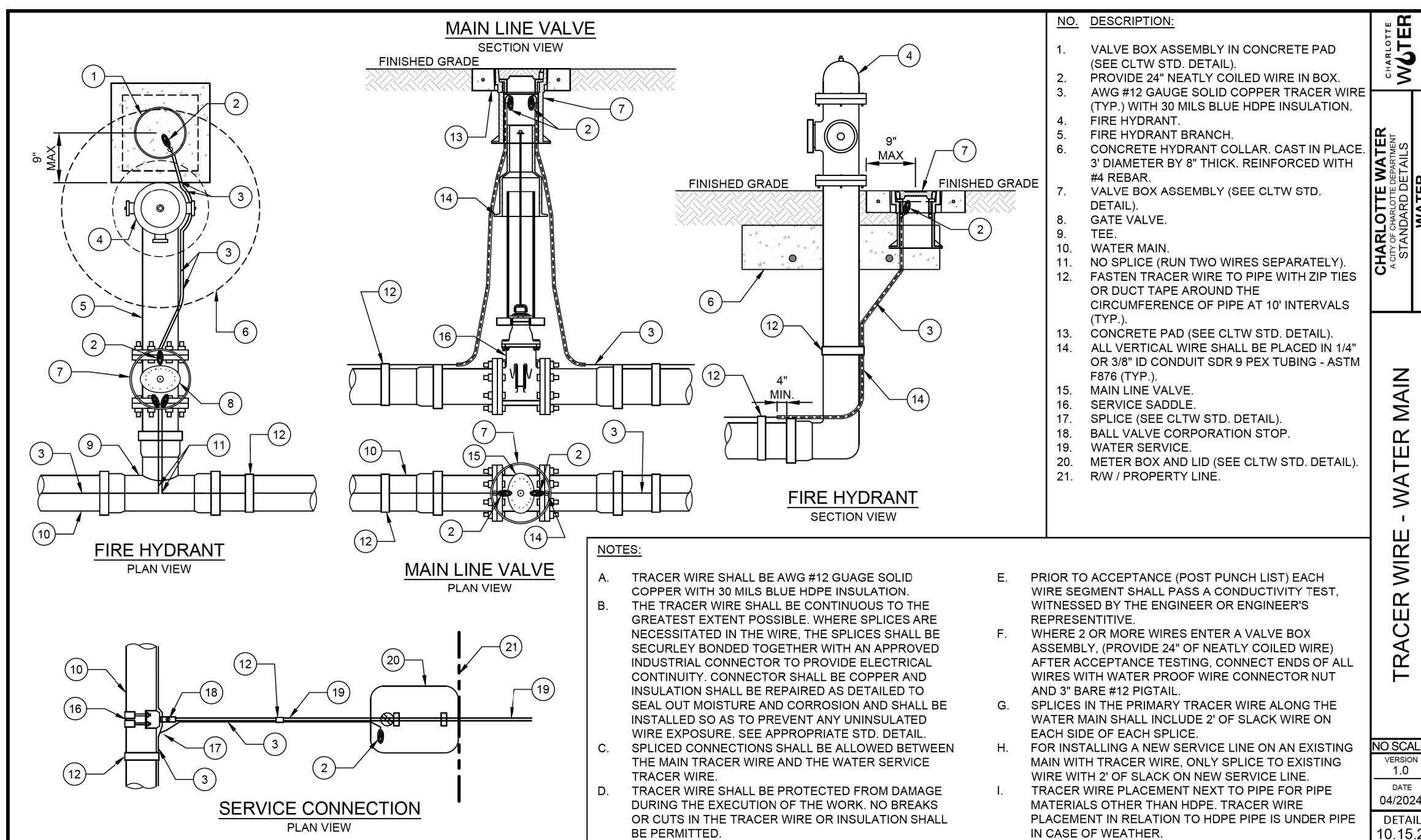
PROJECT REFERENCE NO.		SHEET NO.	
BPI0-R013		UC-3E	
DESIGNED BY: XMD			
DRAWN BY: TK			
CHECKED BY: XMD			
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		7/10/2025 UTILITY CONSTRUCTION PLANS ONLY	

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**STV Engineers, Inc.**  
900 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991

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PROJECT REFERENCE NO.  
BP10-R013

SHEET NO.  
UC-3F

DESIGNED BY: XMD  
DRAWN BY: TK  
CHECKED BY: XMD  
APPROVED BY:  
REVISED:



NORTH CAROLINA  
DEPARTMENT OF  
TRANSPORTATION

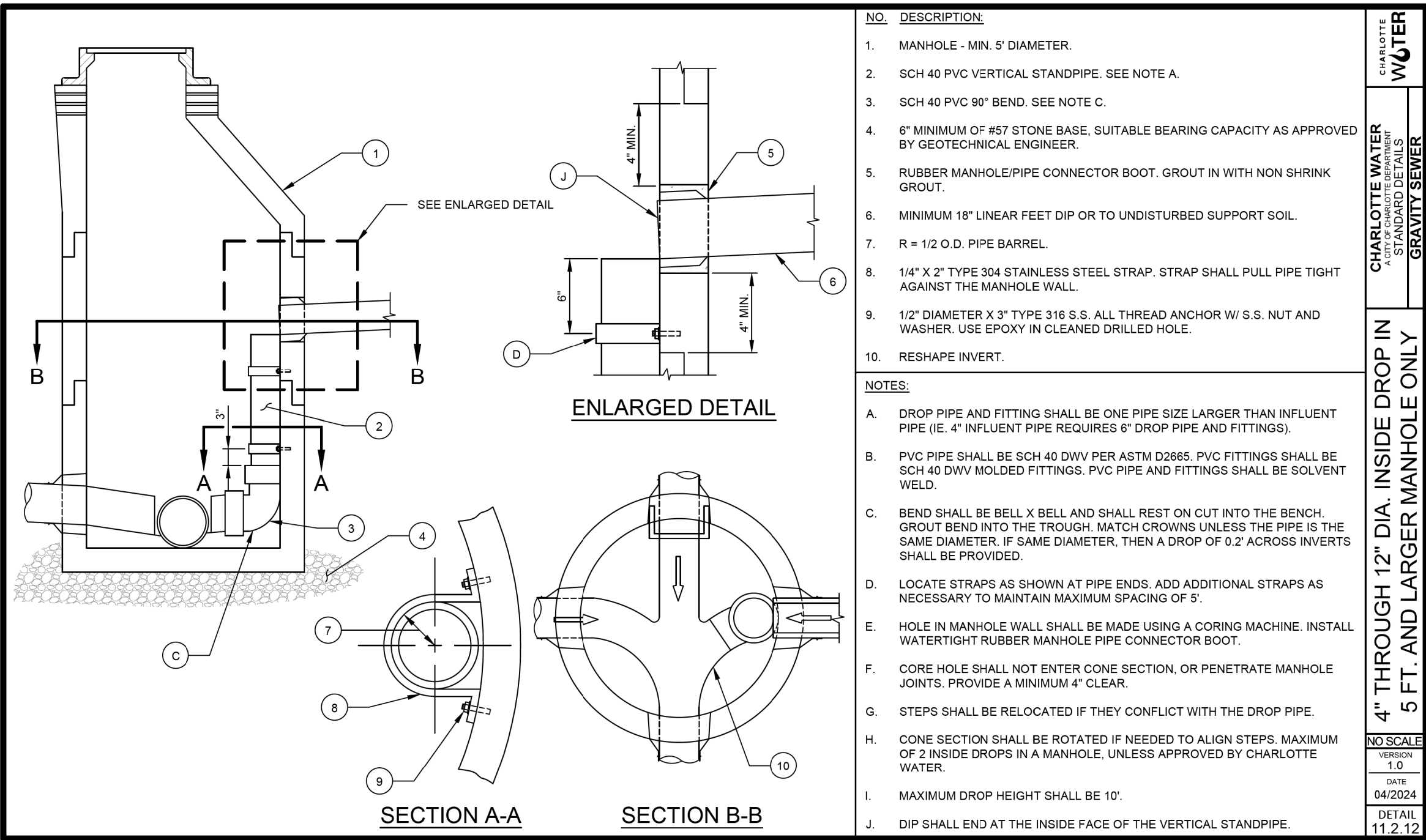
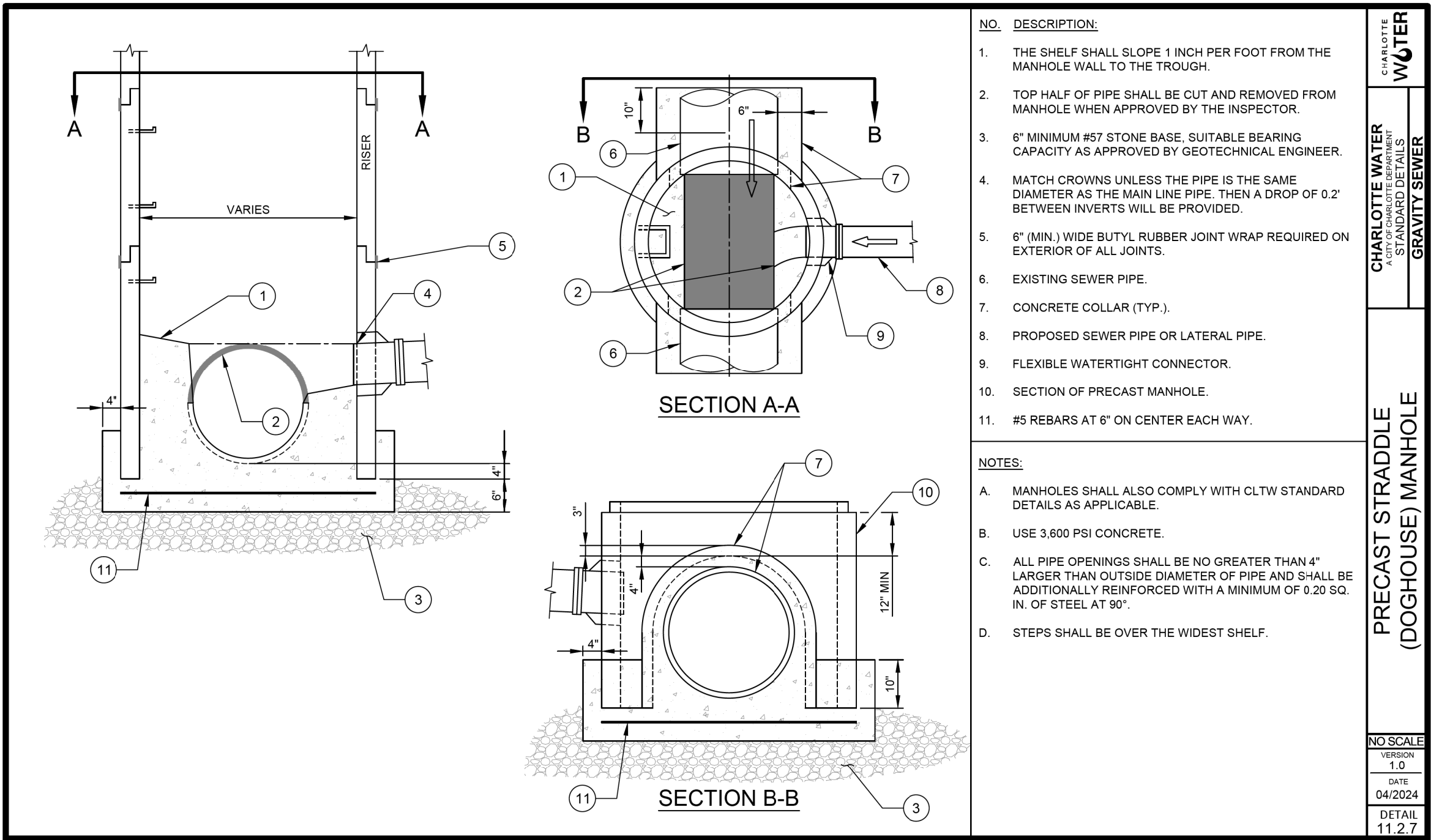
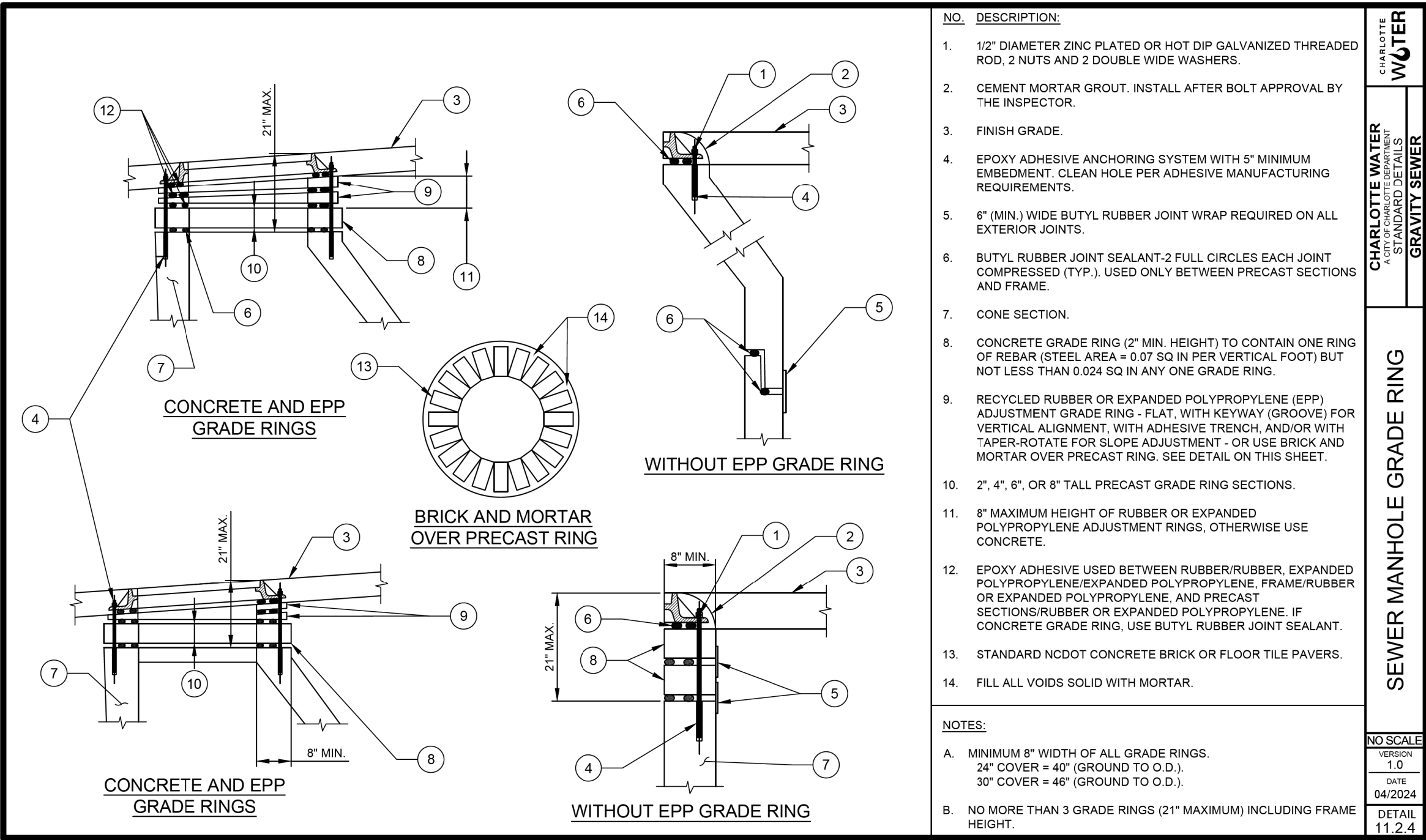
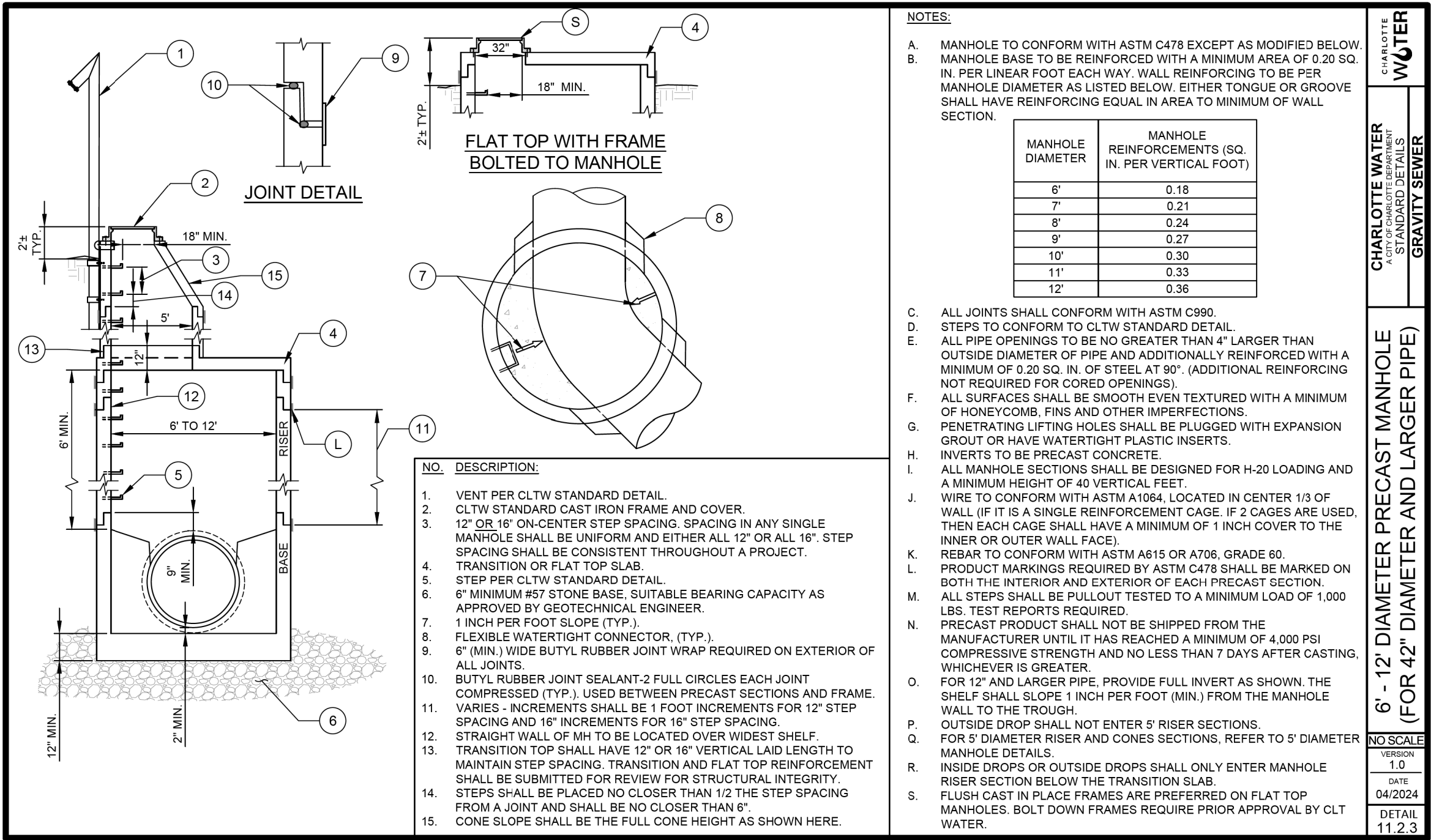
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### U.S. FOUNDRY & MFG. CORP.

U.S. FOUNDRY & MFG. CORP.  
CHARLOTTE WATER  
WARNING DO NOT ENTER  
SANITARY SEWER  
MADE IN U.S.A.

CAM ASSEMBLY DETAIL

USF NL  
DATE  
CLASS 35

PICK HOLE DETAIL

WEIGHT - 150 LB. MIN., 0% MINUS TOLERANCE

### EJ (EJ GROUP, INC.)

CHARLOTTE WATER  
SANITARY SEWER  
WARNING DO NOT ENTER  
GRADE 1.5\"

CAM ASSEMBLY DETAIL

MADE IN USA  
1040AGS

PICK HOLE DETAIL

WEIGHT - 145 LB. MIN., 0% MINUS TOLERANCE

#### NO. DESCRIPTION

1. 1 INCH ARIAL TEXT.
- 5/8" ARIAL STYLE TEXT.
- (2) - LIFTING BARS.
- (2) - NON PENETRATING PICK HOLES.
- CAM LOCK SEE ASSEMBLY DETAIL.
- USF WEDGE LOC 5/8" HEX HEAD BOLT ALL GRADE S.S. TYPE 304.
- 5/8" TYPE 304 S.S. ROD.
- MACHINED SURFACE.
- 7/8" DIA. CAM LOCK HOLE @ 22" DIA.
- 1 1/4" SHARP FACE GOTHIC TEXT.
- 1 INCH SHARP FACE GOTHIC TEXT.
- 1 1/8" BOSS.
- BOLT HEX 5/8"-11 X 4" TYPE 304 S.S.
- WASHER 1/16" X 5/8" X 1 1/2" RUBBER.
- LOCK LUG.
- NUT HEX JAM 5/8"-11 TYPE 304 S.S.
- NUT HEX 5/8"-11 TYPE 304 S.S. NYLK.
- WASHER 5/8" ID 1.50 OD TYPE 304 S.S.
- 1/4" NEOPRENE GASKET.
- 20/3/16" DOVETAIL GROOVE.
- 25" DIAMETER (O.D. OF GKT GROOVE).
- 2/4" SHARP FACE GOTHIC TEXT.

#### NOTES:

- LOAD RATING - HEAVY DUTY.
- MATERIAL - ASTM A48 - CLASS 35 GRAY IRON.
- COATING - UNDIPPED.
- COVER SHALL CONFORM TO DIMENSION AND WEIGHT REQUIREMENTS.
- COVER SHALL NOT BE OUT OF ROUND.

U.S. FOUNDRY & MFG. CORP.

CHARLOTTE WATER

STANDARD DETAILS

GRAVITY SEWER

EJ (EJ GROUP, INC.)

CHARLOTTE WATER

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GRAVITY SEWER

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# PROJECT TYPICAL DETAILS



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PROJECT REFERENCE NO.

BP10-R013

SHEET NO.

UC-3H

DESIGNED BY: XMD

DRAWN BY: TK

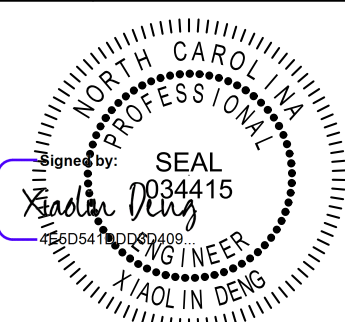
CHECKED BY: XMD

APPROVED BY:

REVISED:

NORTH CAROLINA  
DEPARTMENT OF  
TRANSPORTATION

UTILITIES ENGINEERING SEC.  
PHONE: (919) 707-6690  
FAX: (919) 250-4151



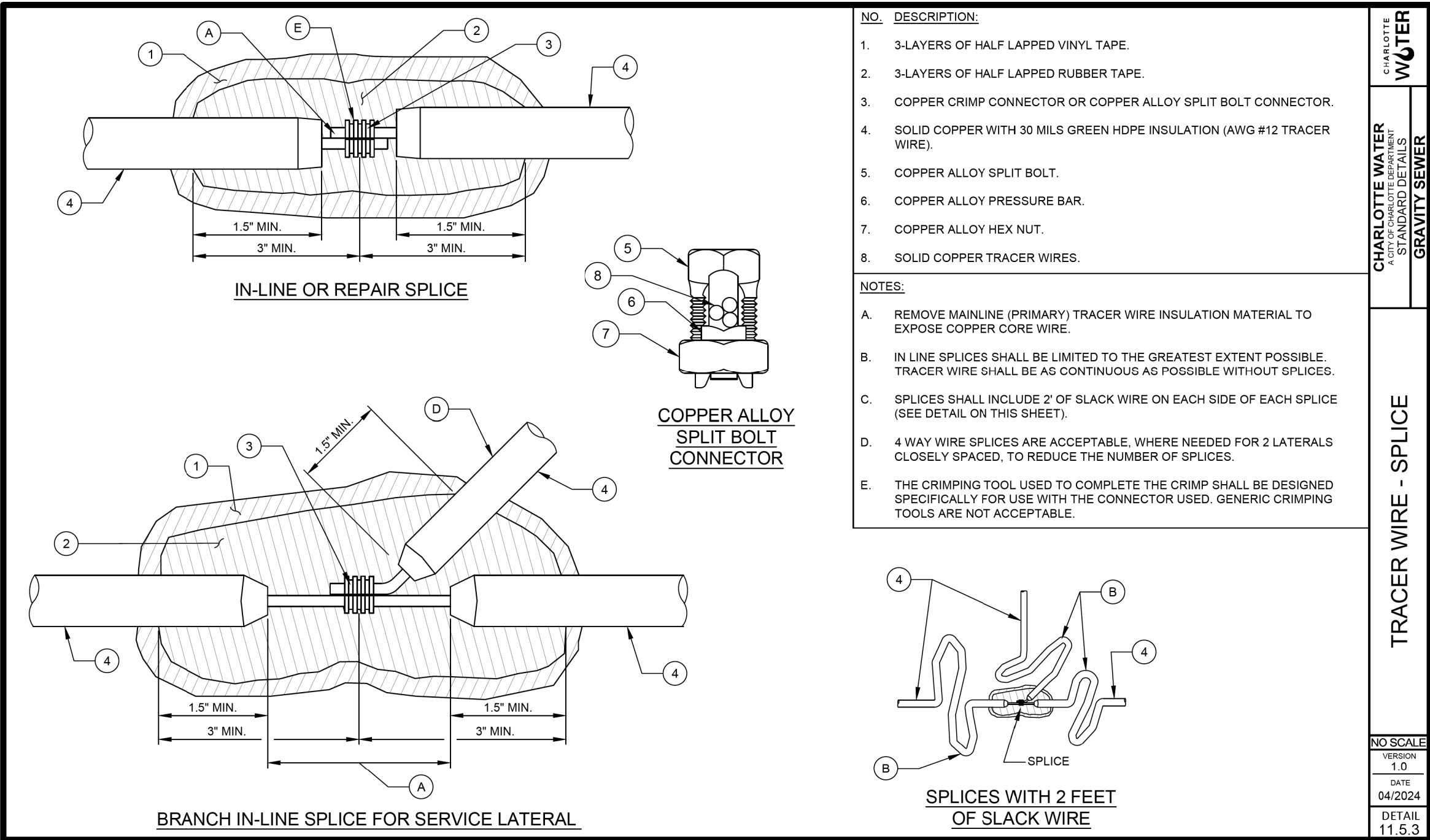
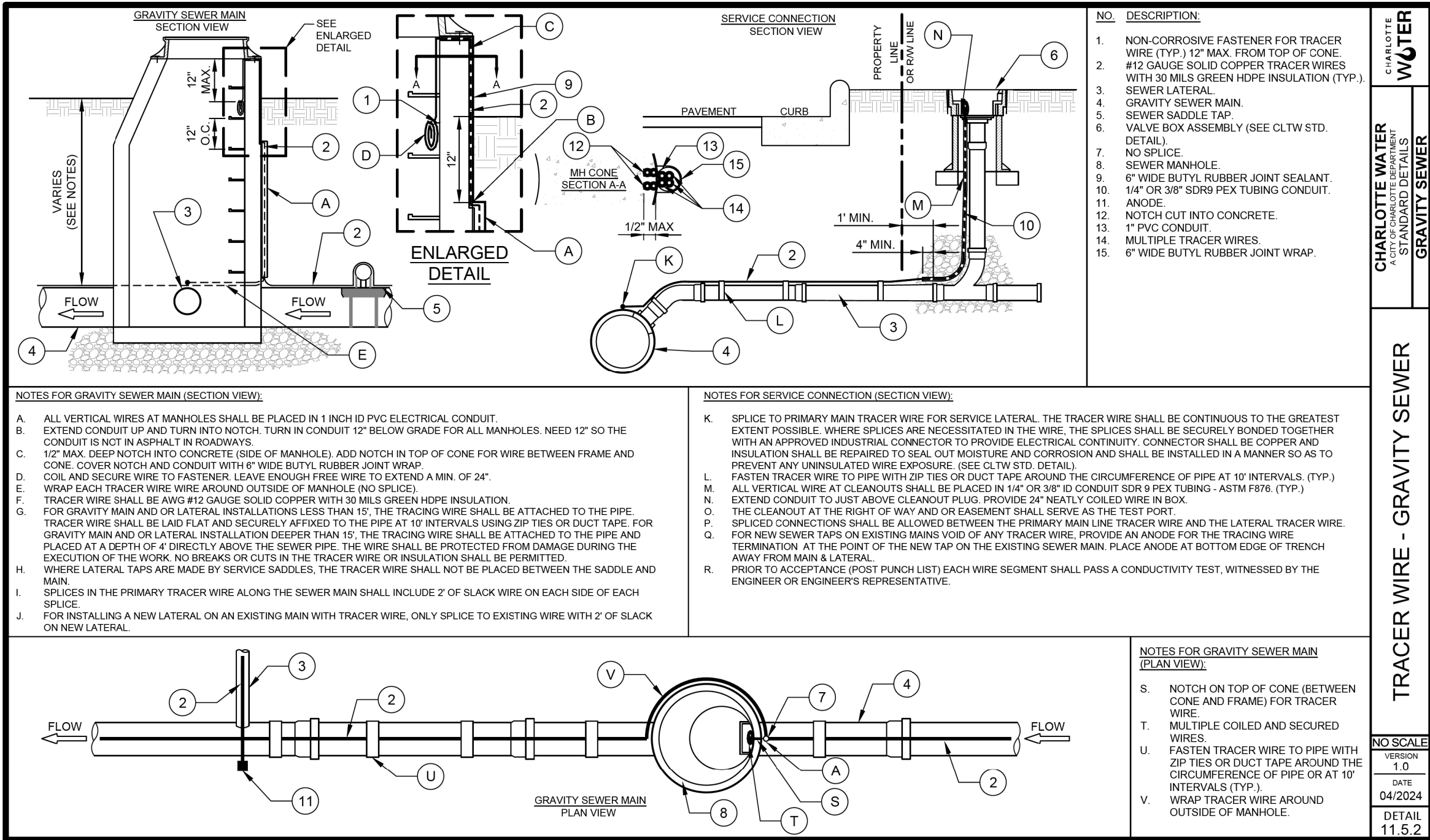
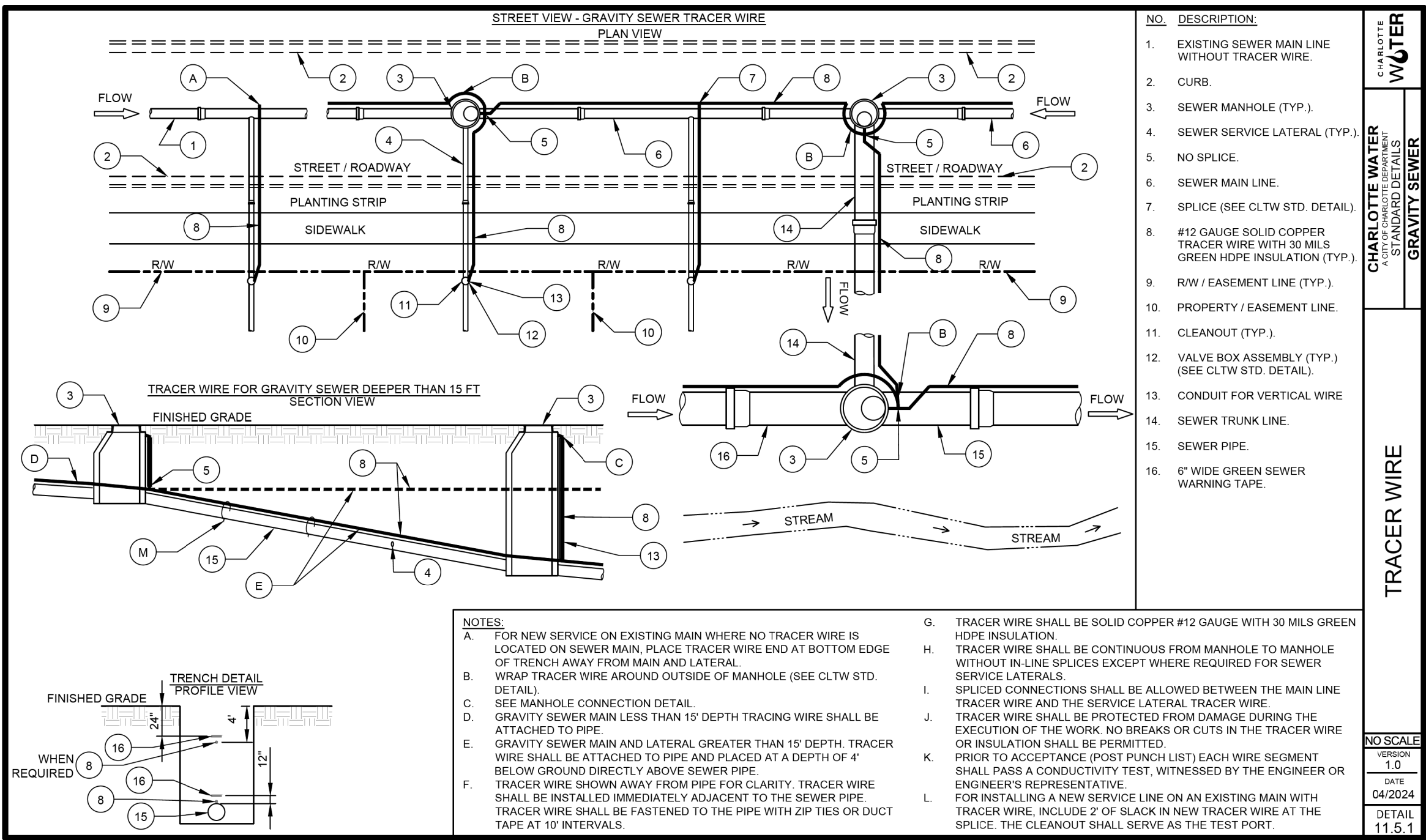
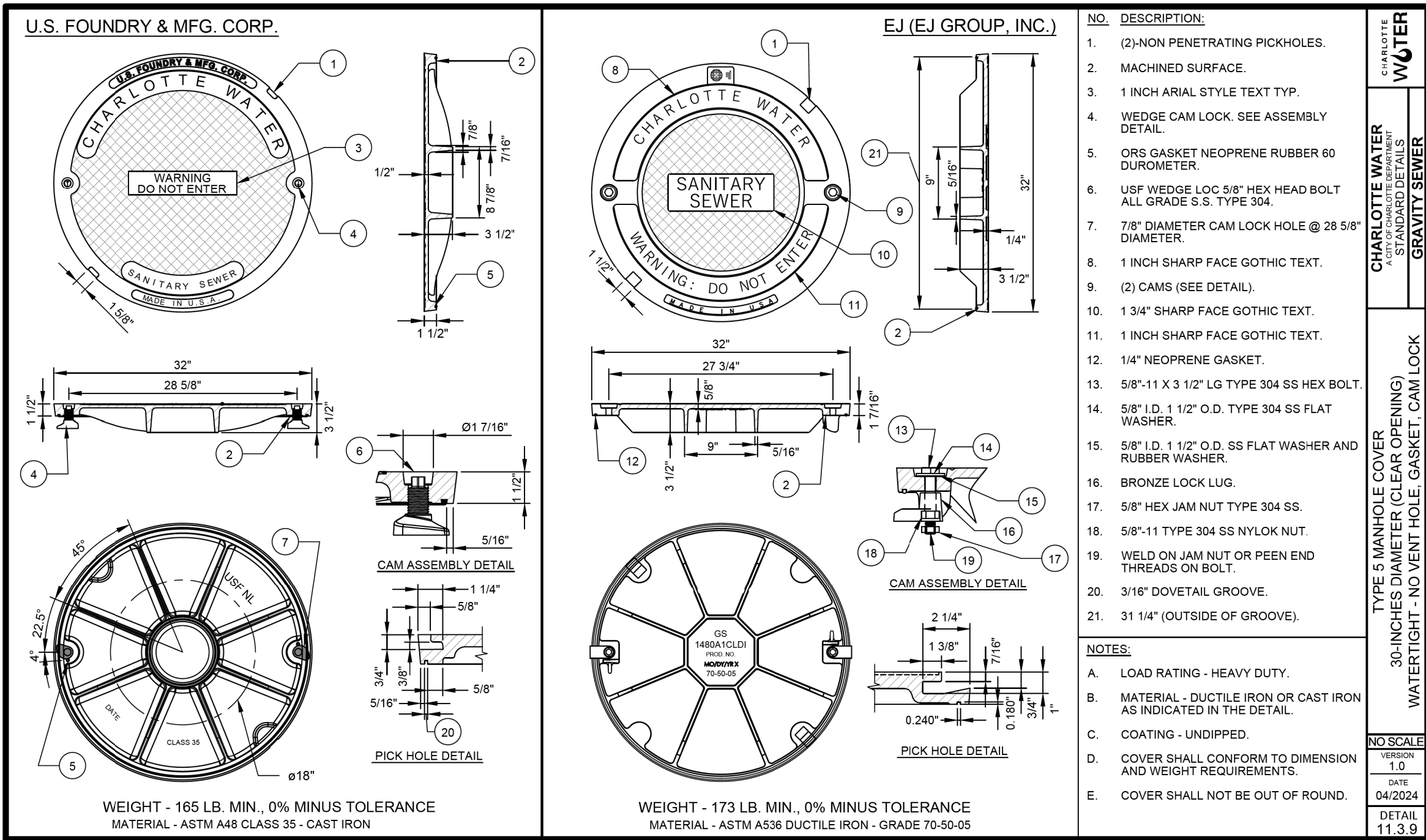
7/10/2025  
UTILITY CONSTRUCTION  
PLANS ONLY

## UTILITY CONSTRUCTION



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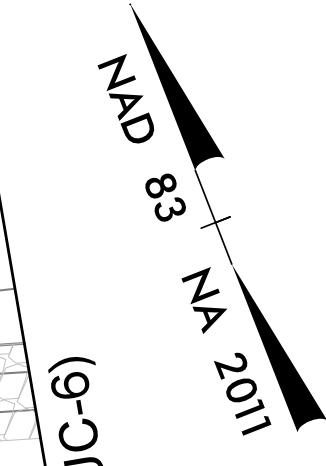
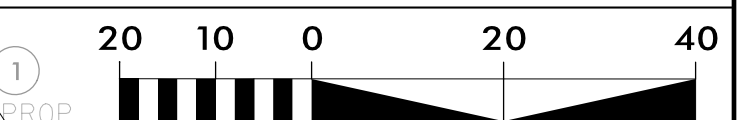




ALL WATER LINE PIPE AND FITTINGS TO BE RESTRAINED JOINT.



1. CONTRACTOR TO CUT AND REMOVE 40 LF OF EXISTING WATER LINE WHERE INDICATED ON THE PLANS AND TURN OVER UNDAMAGED TO CLTWATER REHABILITATION DIVISION FOR INSPECTION.







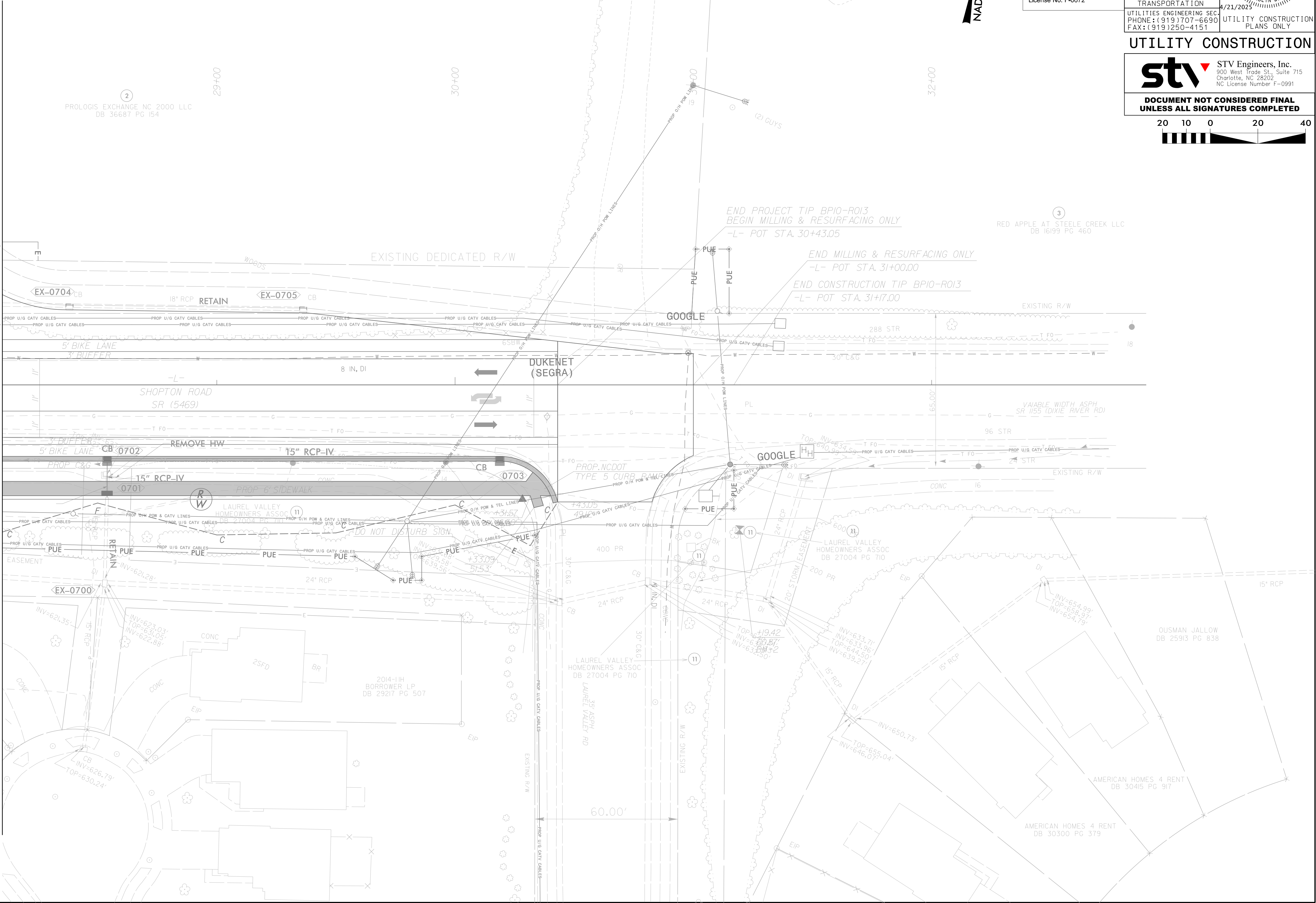


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12/8/2024  
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tokr:bj

NOTE:  
1. NO WATER MAIN OR SANITARY SEWER  
UTILITY RELOCATIONS ON THIS SHEET.

MATCHLINE -L- STA 28+10 (SHEET UC-6)



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PROJECT REFERENCE NO.		SHEET NO.	
BP10-R013		UC-7	
DESIGNED BY:	XMD	<div>SEAL 4/21/2025 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 4/21/2025</div>	
DRAWN BY:	TK		
CHECKED BY:	XMD		
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION

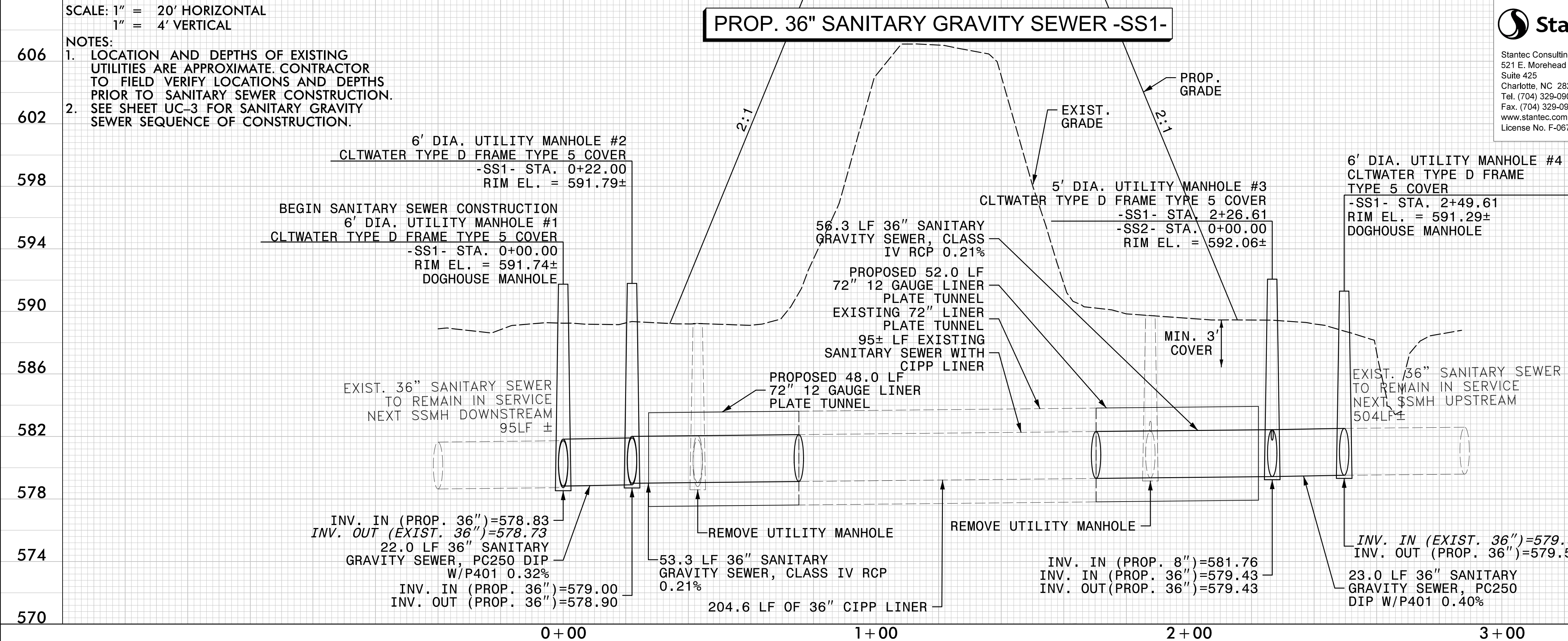
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5/28/99



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PROJECT REFERENCE NO.		SHEET NO.
BP10-R013		UC-8
DESIGNED BY: XMD		UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY: TK		
CHECKED BY: XMD		
APPROVED BY:		
REVISED:		
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UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

UTILITY CONSTRUCTION

**st** **STV Engineers, Inc.**  
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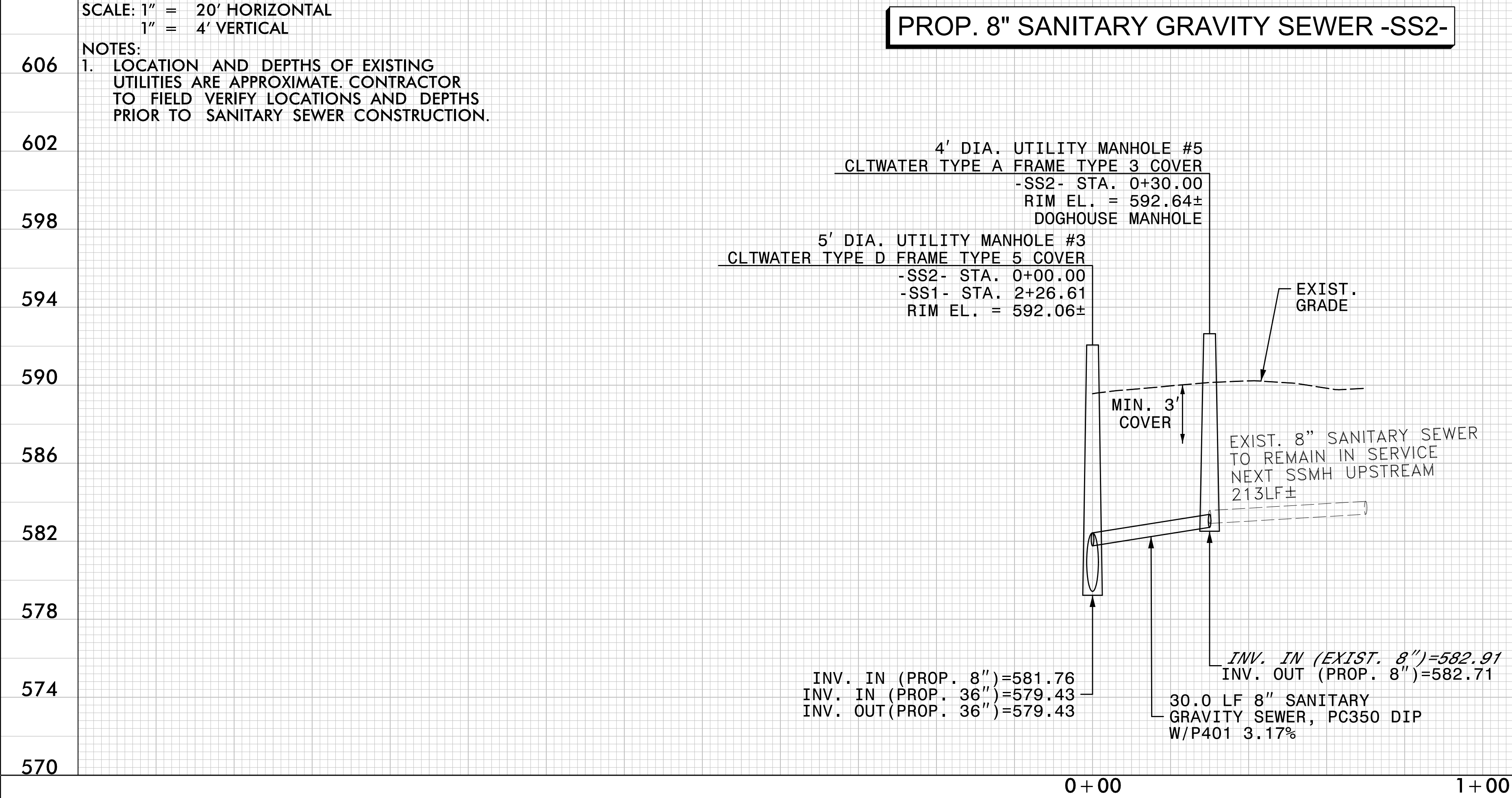
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SEE SHEET UC-5 FOR -SS1- PLAN

570



SEE SHEET UC-5 FOR -SS2- PLAN

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12/19/2024  
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tokrby







