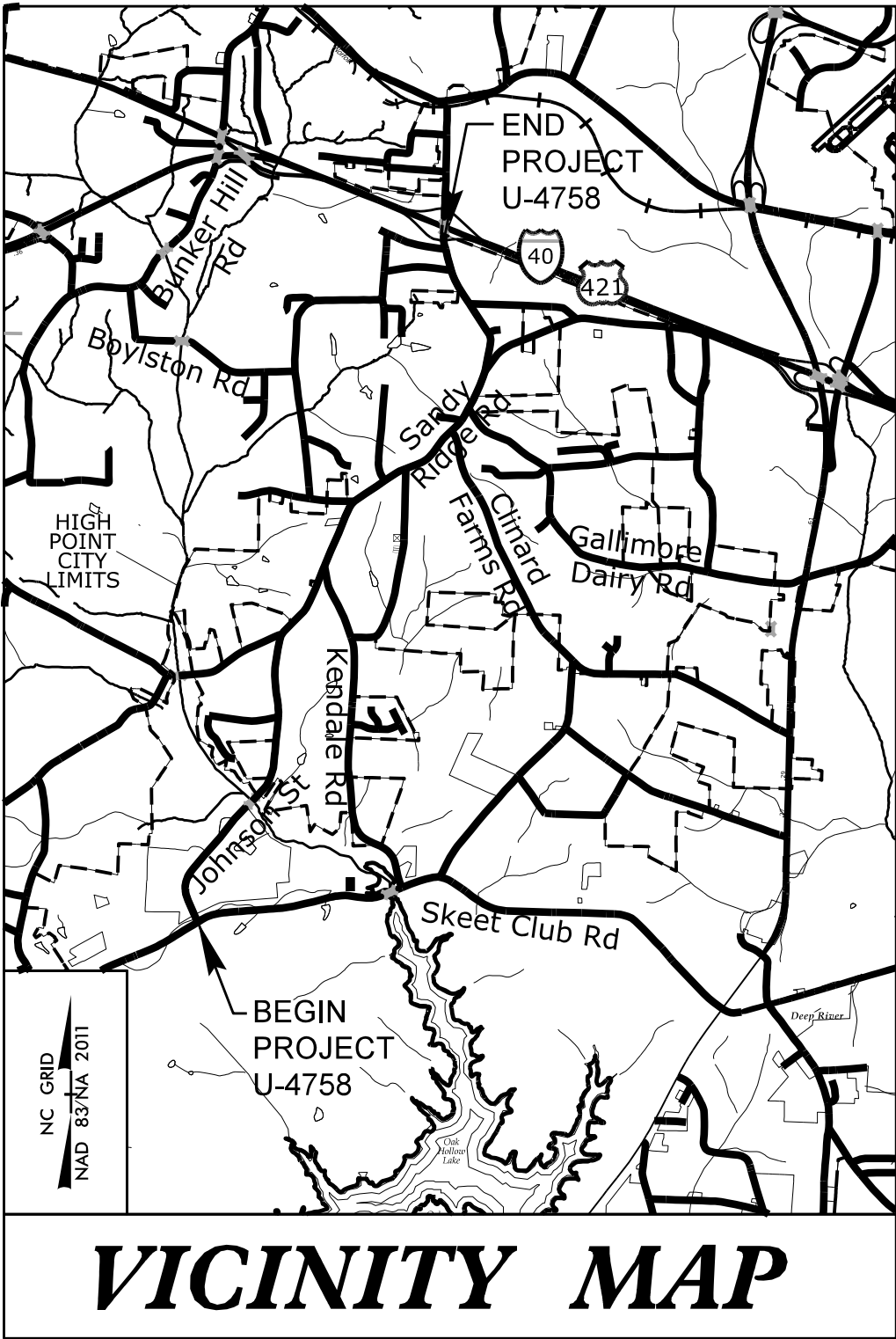




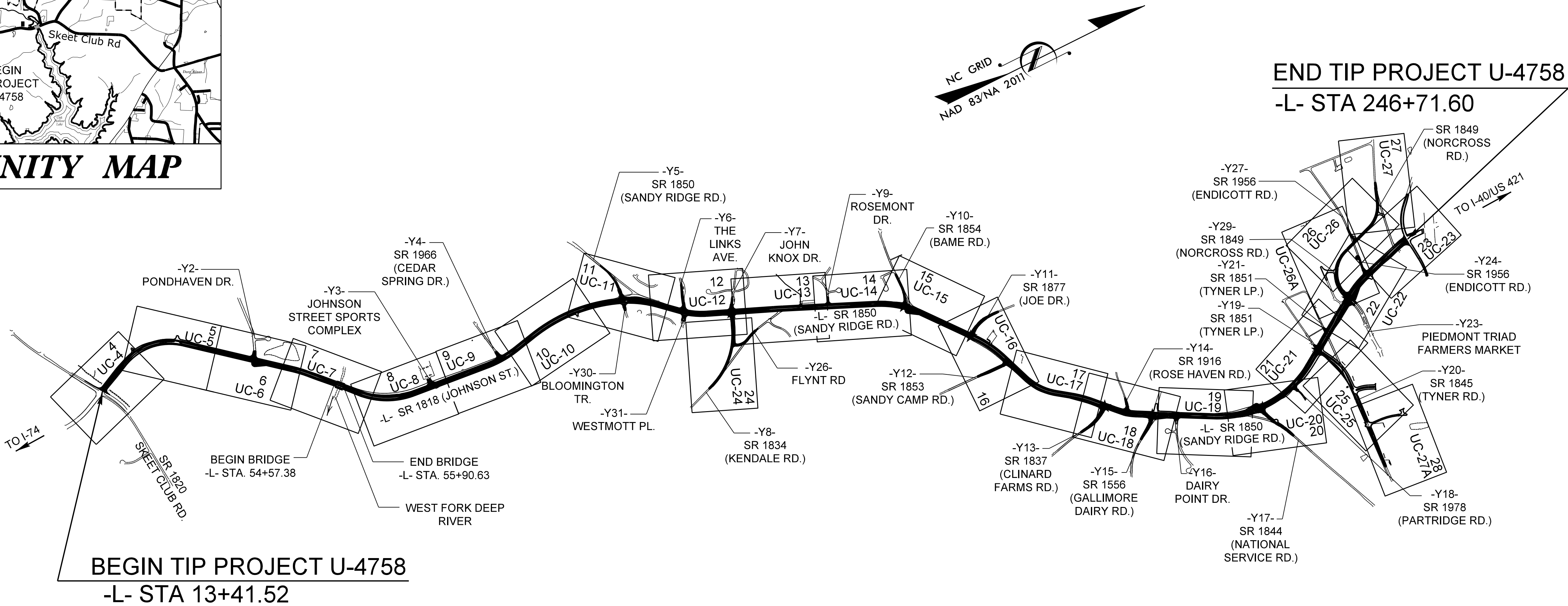
VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS
GUILFORD COUNTY

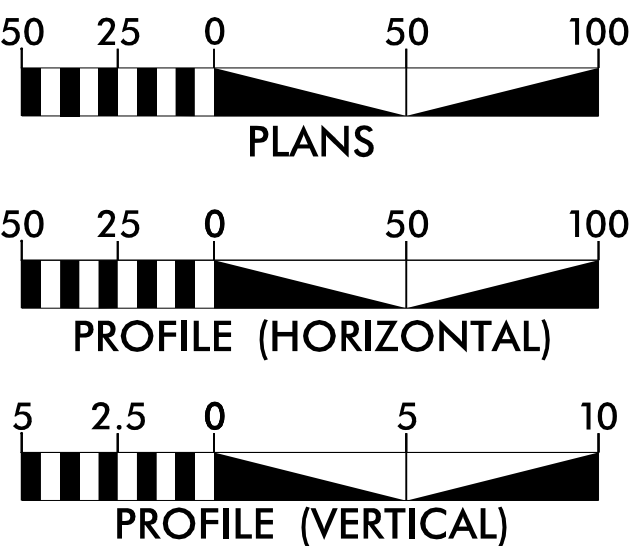
LOCATION: SR 1818 (JOHNSON STREET) /SR 1850 (SANDY RIDGE ROAD) FROM
SR 1820 (SKEET CLUB ROAD) TO SOUTH OF I-40 IN HIGH POINT

TYPE OF WORK: UTILITY CONSTRUCTION



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	CONSTRUCTION SEQUENCE
UC-3B THRU UC-3F	DETAILS
UC-4 THRU UC-27A	UTILITY CONSTRUCTION SHEETS
UC-28 THRU UC-33	PROFILE SHEETS

WATER AND SEWER
OWNERS ON PROJECT

- A) WATER - CITY OF HIGH POINT
B) SEWER - CITY OF HIGH POINT
C) SEWER - NC DEPARTMENT OF
ADULT CORRECTION

PREPARED IN THE OFFICE OF:

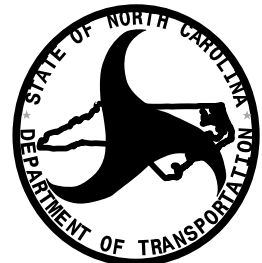
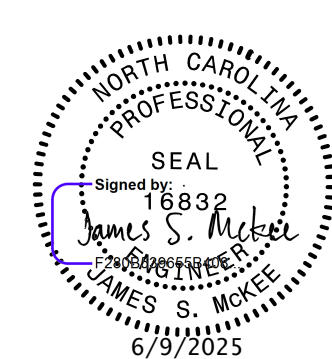
DAVIS • MARTIN • POWELL
ENGINEERS & SURVEYORS

6415 OLD PLANK RD., HIGH POINT, NC 27265
PHONE: (336)886-4821 FAX: (336)886-4458
WWW.DMP-INC.COM LICENSE: F-0245



Steve McKee, P.E.	CONSULTANT CONTACT #1
Randy McNeill, P.E.	CONSULTANT CONTACT #2
Kyle Stalls	CONSULTANT CONTACT #3

SEAL



DIVISION OF HIGHWAYS
UTILITIES UNIT

1555 MAIL SERVICE CENTER
RALEIGH, NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

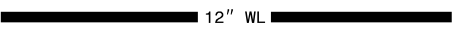
Amy York	CENTRAL UTILITIES MANAGER
Ali Kouchehi, P.E.	REGIONAL UTILITIES ENGINEER
Douglas Joyner	SENIOR UTILITIES ENGINEER
Dayton Martin	REGIONAL UTILITY COORDINATOR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

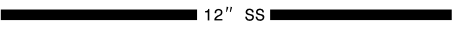
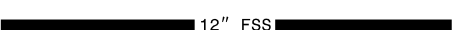
UTILITIES PLAN SHEET SYMBOLS

PROJECT REFERENCE NO.	SHEET NO.
U-4758	UC-2

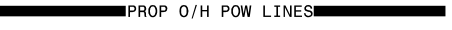
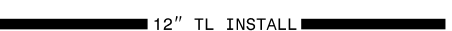
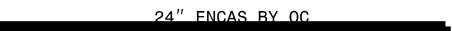
PROPOSED WATER SYMBOLS

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	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
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	

NOTE

PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Utility Pole	
Utility Pole with Base	
H-Frame Pole	
Power Transmission Line Tower	
Water Manhole	
Power Manhole	
Telephone Manhole	
Sanitary Sewer Manhole	
Hand Hole for Cable	
Power Transformer	
Telephone Pedestal	
CATV Pedestal	
Gas Valve	
Gas Meter	
Located Miscellaneous Utility Object	
Abandoned According to Utility Records	
End of Information	

*Underground Power Line	
*Underground Telephone Cable	
*Underground Telephone Conduit	
*Underground Fiber Optics Telephone Cable	
*Underground TV Cable	
*Underground Fiber Optics TV Cable	
*Underground Gas Pipeline	
Aboveground Gas Pipeline	
*Underground Water Line	
Aboveground Water Line	
*Underground Gravity Sanitary Sewer Line	
Aboveground Gravity Sanitary Sewer Line	
*Underground SS Forced Main Line	
Underground Unknown Utility Line	
SUE Test Hole	
Water Meter	
Water Valve	
Fire Hydrant	
Sanitary Sewer Cleanout	

*For Existing Utilities

Utility Line Drawn from Record (Type as Shown)	
Designated Utility Line (Type as Shown)	

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.

2. THE EXISTING WATER AND SEWER UTILITIES BELONG TO THE CITY OF HIGH POINT AND THE NC DEPARTMENT OF ADULT CORRECTION.

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES AND SEWER PUMP STATIONS TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNERS OWN THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT AND ACCEPTANCE BY EACH UTILITY OWNER. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNERS ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNERS AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNERS' REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNERS TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY. LINE STOPS AND INSERT VALVES WILL BE REQUIRED WHERE INDICATED ON THE PLANS, WHERE THE UTILITY OWNER CANNOT ISOLATE THE EXISTING LINES WITHOUT MAJOR DISRUPTION OF SERVICE TO MANY USERS. USE FIRE HYDRANTS TO DRAIN 16" WATER LINE, AND USE A DECHLORINATION DEVICE.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

UTILITY CONSTRUCTION

PROJECT SPECIFIC NOTES:

1. UNLESS OTHERWISE NOTED, PIPE FOR PROPOSED WATER MAINS IN NOMINAL DIAMETERS 4" THROUGH 12" SHALL BE DUCTILE IRON, PC 350. PIPES FOR PROPOSED WATER MAINS IN NOMINAL DIAMETERS 16" AND LARGER SHALL BE DUCTILE IRON, PC 250. PROVIDE RESTRAINED JOINT PIPE WHERE INDICATED ON PROFILES.

2. UNLESS OTHERWISE NOTED, PIPE FOR PROPOSED WATER LINES IN NOMINAL DIAMETERS 2" AND SMALLER SHALL BE TYPE K COPPER.

3. WATER LINE VALVES SHALL BE RESILIENT-SEAT GATE VALVES CONFORMING TO ANSI/AWWA C509 OR ANSI/AWWA C515, AND SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI.

4. FOR PROPOSED WATER VALVES, OR EXISTING WATER VALVES THAT WILL REMAIN IN SERVICE: IF THE TOP OF THE VALVE NUT WILL BE MORE THAN 5 FEET DEEP FROM FINISHED GRADE, THE CONTRACTOR SHALL INSTALL A VALVE STEM EXTENSION WITH A 2" SQUARE OPERATING NUT SO THE TOP OF THE VALVE STEM EXTENSION WILL BE BETWEEN 3 FEET AND 5 FEET DEEP FROM FINISHED GRADE, PER CITY OF HIGH POINT STANDARD DRAWING 237.00. THE COST TO FURNISH AND INSTALL ANY VALVE STEM EXTENSIONS SHALL BE INCIDENTAL TO THE CONTRACT.

5. UNLESS OTHERWISE NOTED, PIPE FOR PROPOSED GRAVITY SEWER LINES IN NOMINAL DIAMETERS 8" AND LARGER SHALL BE DUCTILE IRON, CLASS 51. PIPE FOR PROPOSED FORCE MAINS SHALL BE EITHER PVC C900 OR DR 18 OR DUCTILE IRON, PC 350. PROVIDE RESTRAINED JOINT PIPE WHERE INDICATED ON PROFILES. THE INTERIOR OF THE DUCTILE IRON PIPE SHALL BE COATED TO A MINIMUM DRY THICKNESS OF 24 MILS WITH AN APPROVED COAL-TAR EPOXY HAVING AN EPOXY RESIN CONTENT OF 35% BY WEIGHT IN THE DRY FILM AND A MINIMUM SOLIDS CONTENT OF 74% BY VOLUME.

6. TEMPORARY BYPASS PUMPING OF FLOW IN SOME EXISTING SEWER LINES WILL BE REQUIRED WHEN INSTALLING NEW SEWER LINES IN THE SAME HORIZONTAL ALIGNMENT AS THE EXISTING SEWER LINES, AND WHEN TYING PROPOSED MH'S INTO EXISTING SEWER LINES. SEE DIVISION 15, SECTION 1520-3-A-1 OF THE NCDOT STANDARD SPECIFICATIONS. COSTS FOR TEMPORARY BYPASS PUMPING SHALL BE INCIDENTAL TO THE CONTRACT.

7. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER CONCERNING THE TIMING AND SCHEDULE OF REQUIRED SHUT-DOWNS OF ANY EXISTING WATER OR SEWER MAINS.

8. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE TO CUSTOMERS WHEN EXISTING WATER MAINS HAVE TO BE SHUT DOWN FOR MORE THAN 8 HOURS, OR AS DIRECTED BY THE ENGINEER.

9. FOR EXISTING WATER SERVICES TO BE ABANDONED, AND ARE CONNECTED TO EXISTING WATER MAINS THAT WILL REMAIN IN SERVICE, THE CONTRACTOR SHALL EXCAVATE THE CORPORATION STOP AT THE WATER MAIN, CLOSE THE CORPORATION STOP, AND DISCONNECT THE WATER SERVICE LINE FROM THE CORPORATION STOP. THE COST FOR THIS WORK SHALL BE INCIDENTAL TO THE COST FOR THE "REMOVE WATER METER" PAY ITEM.

10. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SEWER LATERALS AND/OR CLEANOUTS AS DIRECTED BY THE ENGINEER. THE NECESSARY QUANTITIES HAVE BEEN ADDED TO THE CONTRACT TO FACILITATE THIS PROCEDURE.

11. HYDRANT METER SHOWN ON SHEET UC-12 SHALL BE INCIDENTAL TO FIRE HYDRANT PAY ITEM.

12. THE CITY OF HIGH POINT WILL PROVIDE NEW HYDRANTS TO REPLACE EXISTING ONES THAT ARE DAMAGED.

PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-3
DESIGNED BY: DMP	NORTH CAROLINA PROFESSIONAL SEAL signed by 18832 James S. McCall 3/21/2025 UTILITY CONSTRUCTION PLANS ONLY	
DRAWN BY: DMP		
CHECKED BY: DMP		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

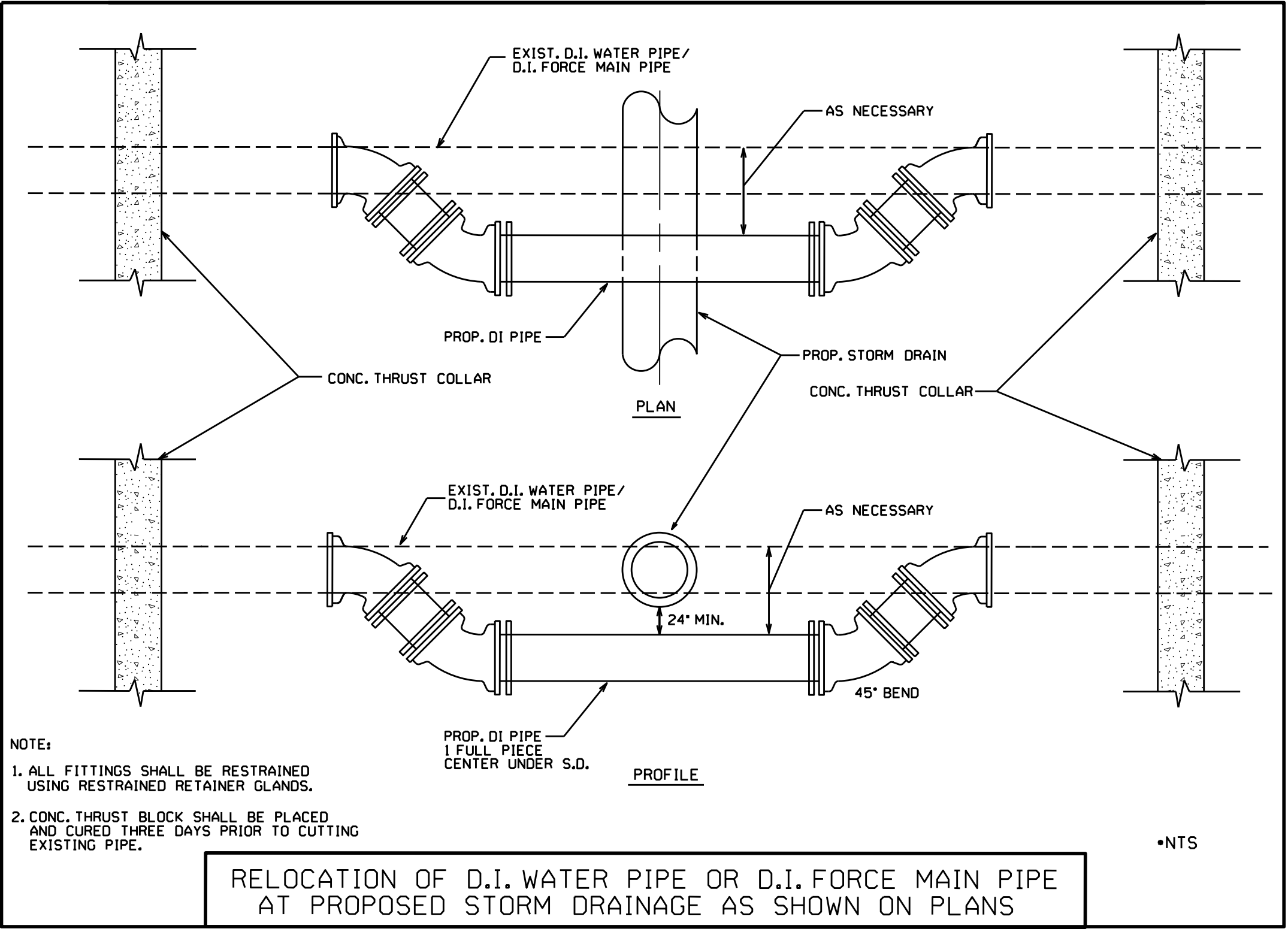
UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

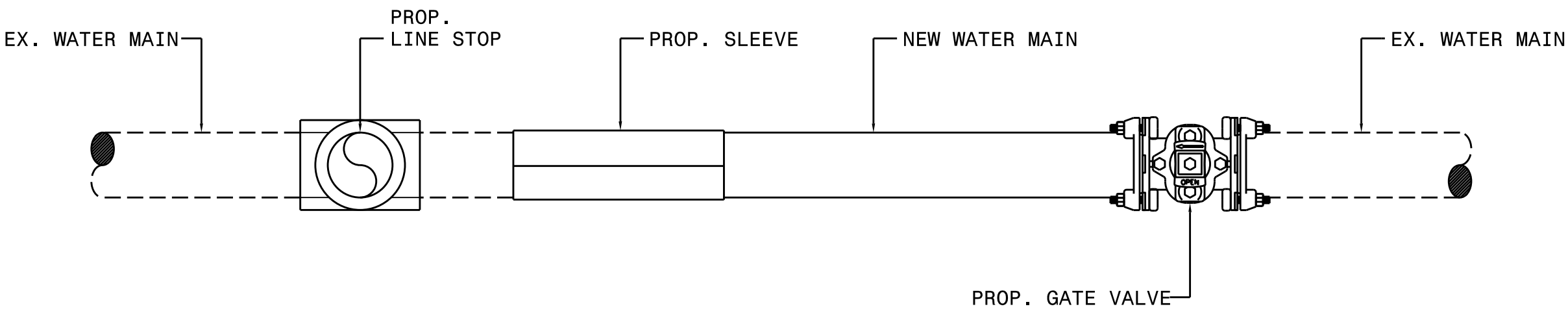
5/14/99

REVISIONS

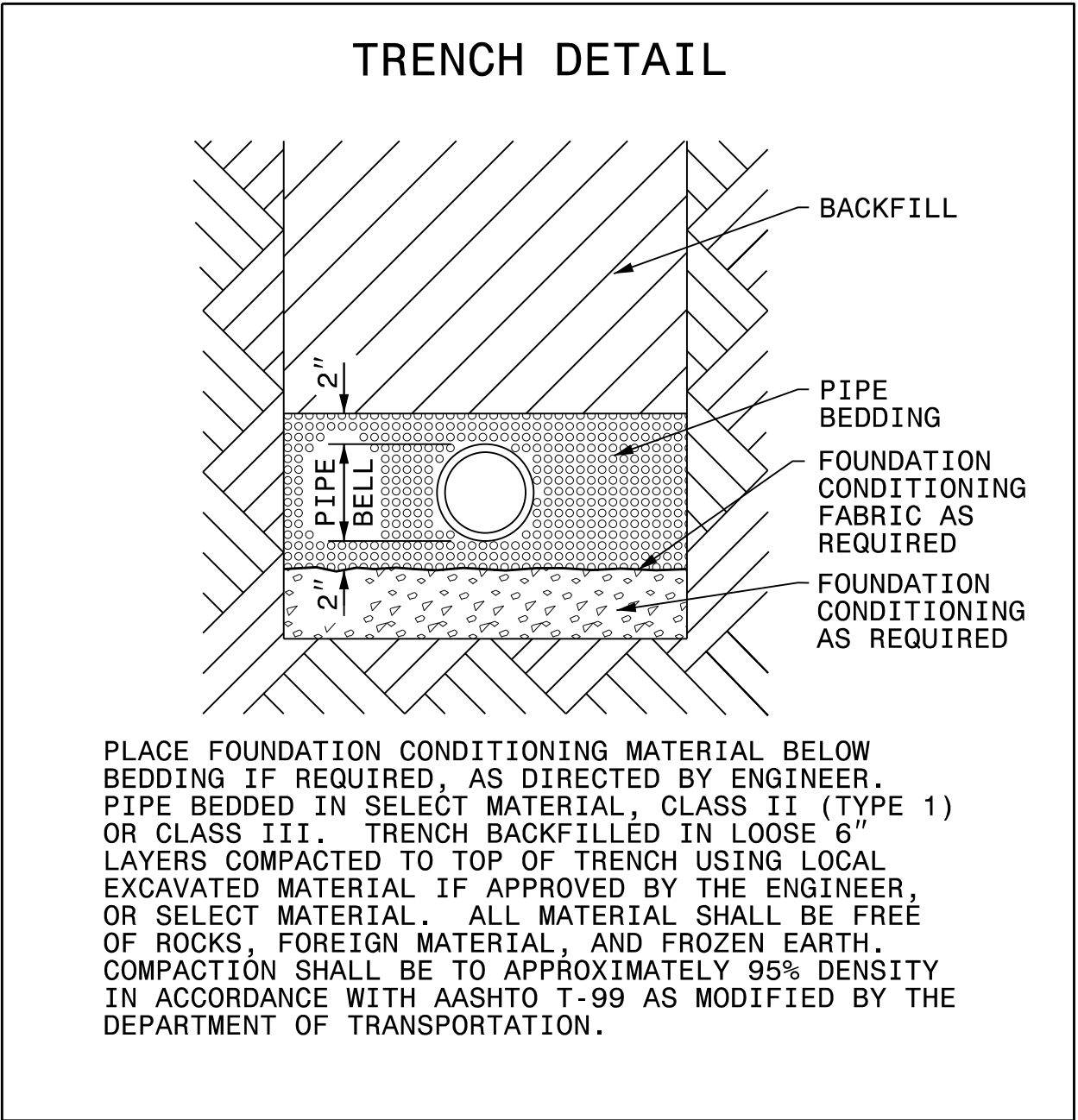
PROJECT TYPICAL DETAILS



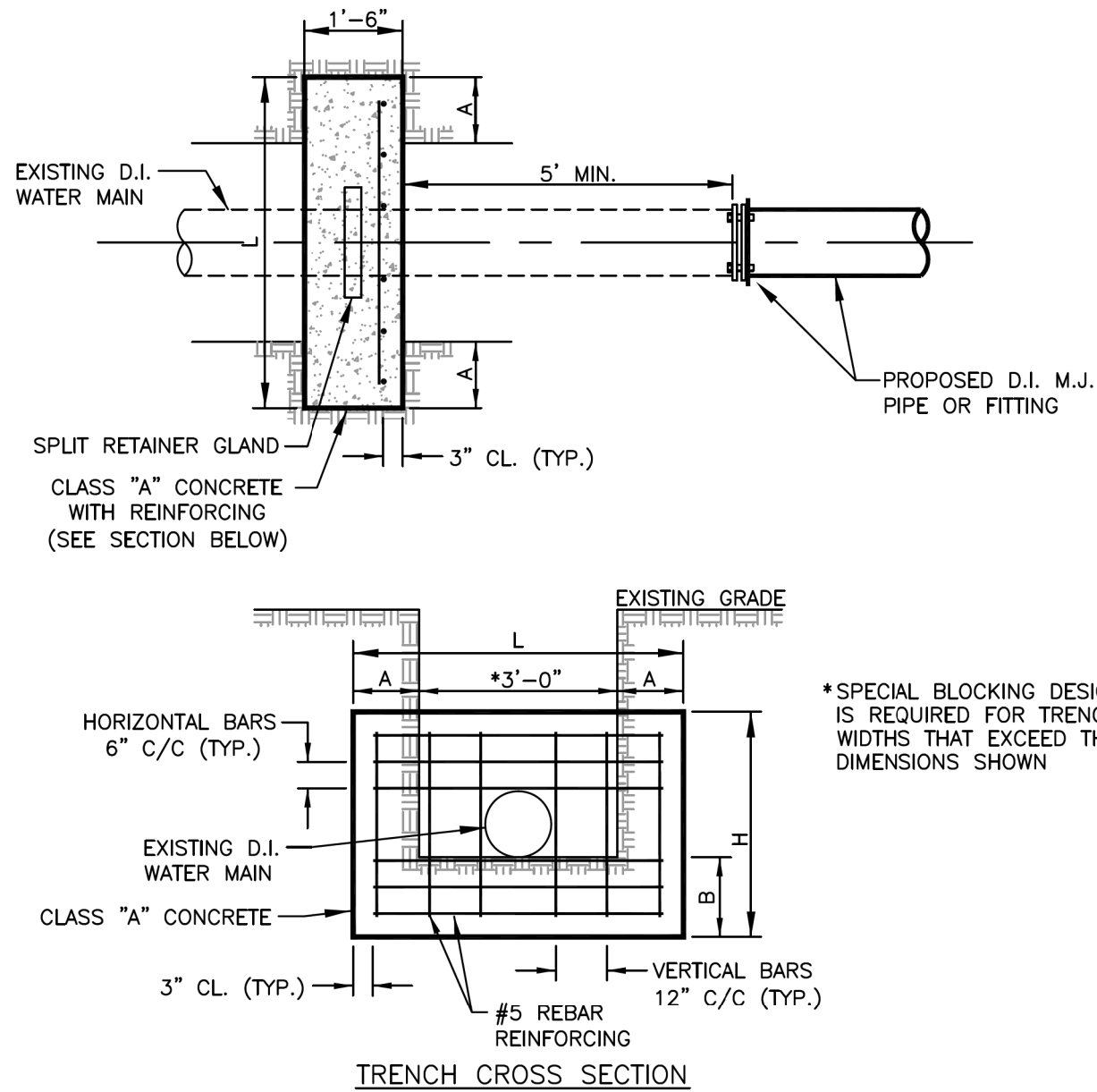
- NOTE:
1. ALL FITTINGS SHALL BE RESTRAINED USING RESTRAINED RETAINER GLANDS.
 2. CONC. THRUST BLOCK SHALL BE PLACED AND CURED THREE DAYS PRIOR TO CUTTING EXISTING PIPE.



TYPICAL NO SHUT DOWN TIE-IN DETAIL
NOT TO SCALE



THRUST COLLAR FOR EXISTING PIPE

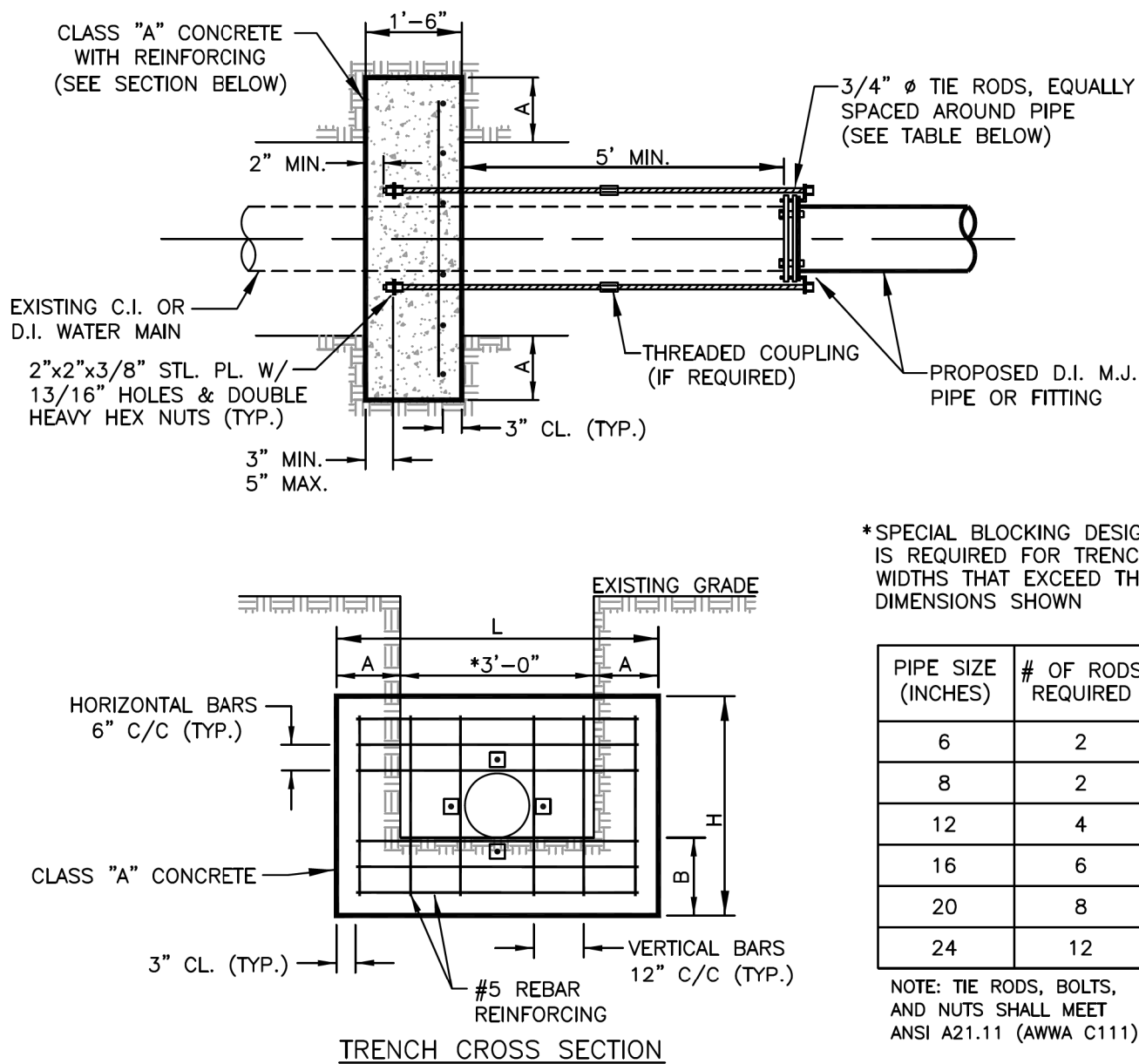


- NOTES:
1. CONCRETE SHALL BE PLACED AND CURED THREE DAYS PRIOR TO REMOVING EXISTING PIPE OR FITTINGS.
 2. INSTALL POLYETHYLENE WRAP AROUND EXISTING PIPE PRIOR TO POURING CONCRETE.
 3. MAINTAIN 2" CLEAR BETWEEN ALL REBARS AND PIPE.
 4. CONCRETE TO BE KEYED IN TO UNDISTURBED SOIL ADJACENT TO TRENCH WALL AND BOTTOM.
 5. DESIGN BASED ON MIN. SOIL BEARING OF 2000 PSF. SOFT SOIL CONDITIONS MAY REQUIRE SPECIAL DESIGN.

PIPE SIZE (INCHES)	CONCRETE DIMENSIONS (FT)			
	H	L	A	B
6	2.5	5	1	1
8	2.5	5	1	1
12	4	6	1.5	1
16	4	9	3	1
20	5	10	3.5	1
24	5.5	12	4.5	1

ACKNOWLEDGMENT: DETAIL IS FROM CITY OF WINSTON-SALEM ENGINEERING DEPT.

THRUST HARNESS FOR EXISTING PIPE



- NOTES:
1. CONCRETE SHALL BE PLACED AND CURED THREE DAYS PRIOR TO REMOVING EXISTING PIPE OR FITTINGS.
 2. INSTALL POLYETHYLENE WRAP AROUND EXISTING PIPE PRIOR TO POURING CONCRETE.
 3. MAINTAIN 2" CLEAR BETWEEN ALL REBARS AND PIPE.
 4. CONCRETE TO BE KEYED IN TO UNDISTURBED SOIL ADJACENT TO TRENCH WALL AND BOTTOM.
 5. DESIGN BASED ON MIN. SOIL BEARING OF 2000 PSF. SOFT SOIL CONDITIONS MAY REQUIRE SPECIAL DESIGN.

PIPE SIZE (INCHES)	CONCRETE DIMENSIONS (FT)			
	H	L	A	B
6	2.5	5	1	1
8	2.5	5	1	1
12	4	6	1.5	1
16	4	9	3	1
20	5	10	3.5	1
24	5.5	12	4.5	1

ACKNOWLEDGMENT: DETAIL IS FROM CITY OF WINSTON-SALEM ENGINEERING DEPT.

PROJECT REFERENCE NO.
U-4758

SHEET NO.
UC-3B

DESIGNED BY: DMP

DRAWN BY: DMP

CHECKED BY: DMP

APPROVED BY:

REVISED:

NORTH CAROLINA PROFESSIONAL SEAL
Signed 76832
James S. Miller
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
3/21/2025

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

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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	60	84

REVISIONS

PROJECT TYPICAL DETAILS

CARSON-11182520 HEAVYWALL BOX W/ TRICAST-MS-CP1118 LID

STANDARD DRAWING FOR
3/4" WATER METER BOX
FOR USE WITH 3/4" WATER SERVICES

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: JUNE 1, 2023
DIRECTOR

ISSUED: 03-01-07
REVISIONS

202.00
SHEET 1 OF 2

CARSON-11182520 HEAVYWALL BOX W/ TRICAST-MS-CP1118 LID

STANDARD DRAWING FOR
3/4" WATER METER BOX
FOR USE WITH 3/4" WATER SERVICES

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: JUNE 1, 2023
DIRECTOR

ISSUED: 03-01-07
REVISIONS

202.00
SHEET 2 OF 2

5/8" x 3/4" WATER METER SETTER FOR 3/4" WATER SERVICE

STANDARD DRAWING FOR
5/8" x 3/4" WATER METER SETTER
FOR 3/4" WATER SERVICE

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

206.00
SHEET 1 OF 1

1" WATER METER BOX FOR USE WITH 1" WATER SERVICES

STANDARD DRAWING FOR
1" WATER METER BOX
FOR USE WITH 1" WATER SERVICES

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

203.00
SHEET 1 OF 1

1" WATER METER SETTER FOR 1" WATER SERVICE

STANDARD DRAWING FOR
1" WATER METER SETTER
FOR 1" WATER SERVICE

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

207.00
SHEET 1 OF 1

3/4" AND 1" SERVICE LINE INSTALLATION (REHAB.) FOR REHABILITATION OF 3/4" AND 1" WATER SERVICES

STANDARD DRAWING FOR
3/4" AND 1" SERVICE LINE INSTALLATION (REHAB.)
FOR REHABILITATION OF 3/4" AND 1" WATER SERVICES

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

210.00
SHEET 1 OF 1

1 1/2" AND 2" WATER METER BOX FOR USE WITH 1 1/2" AND 2" WATER SERVICES

STANDARD DRAWING FOR
1 1/2" AND 2" WATER METER BOX
FOR USE WITH 1 1/2" AND 2" WATER SERVICES

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

205.00
SHEET 1 OF 1

1 1/2" WATER METER SETTER FOR 1 1/2" WATER SERVICE

STANDARD DRAWING FOR
1 1/2" WATER METER SETTER
FOR 1 1/2" WATER SERVICE

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

208.01
SHEET 1 OF 1

1 1/2" AND 2" SERVICE LINE INSTALLATION (REHAB.) FOR REHABILITATION OF 1 1/2" AND 2" WATER SERVICES

STANDARD DRAWING FOR
1 1/2" AND 2" SERVICE LINE INSTALLATION (REHAB.)
FOR REHABILITATION OF 1 1/2" AND 2" WATER SERVICES

CITY OF HIGH POINT
NORTH CAROLINA
ENGINEERING SERVICES DEPARTMENT
APPROVED: FEBRUARY 1, 2022
DIRECTOR

ISSUED: 03-01-07
REVISIONS

211.00
SHEET 1 OF 1

PROJECT REFERENCE NO. U-4758 SHEET NO. UC-3C

DESIGNED BY: DMP
DRAWN BY: DMP
CHECKED BY: DMP
APPROVED BY:
REVISED:

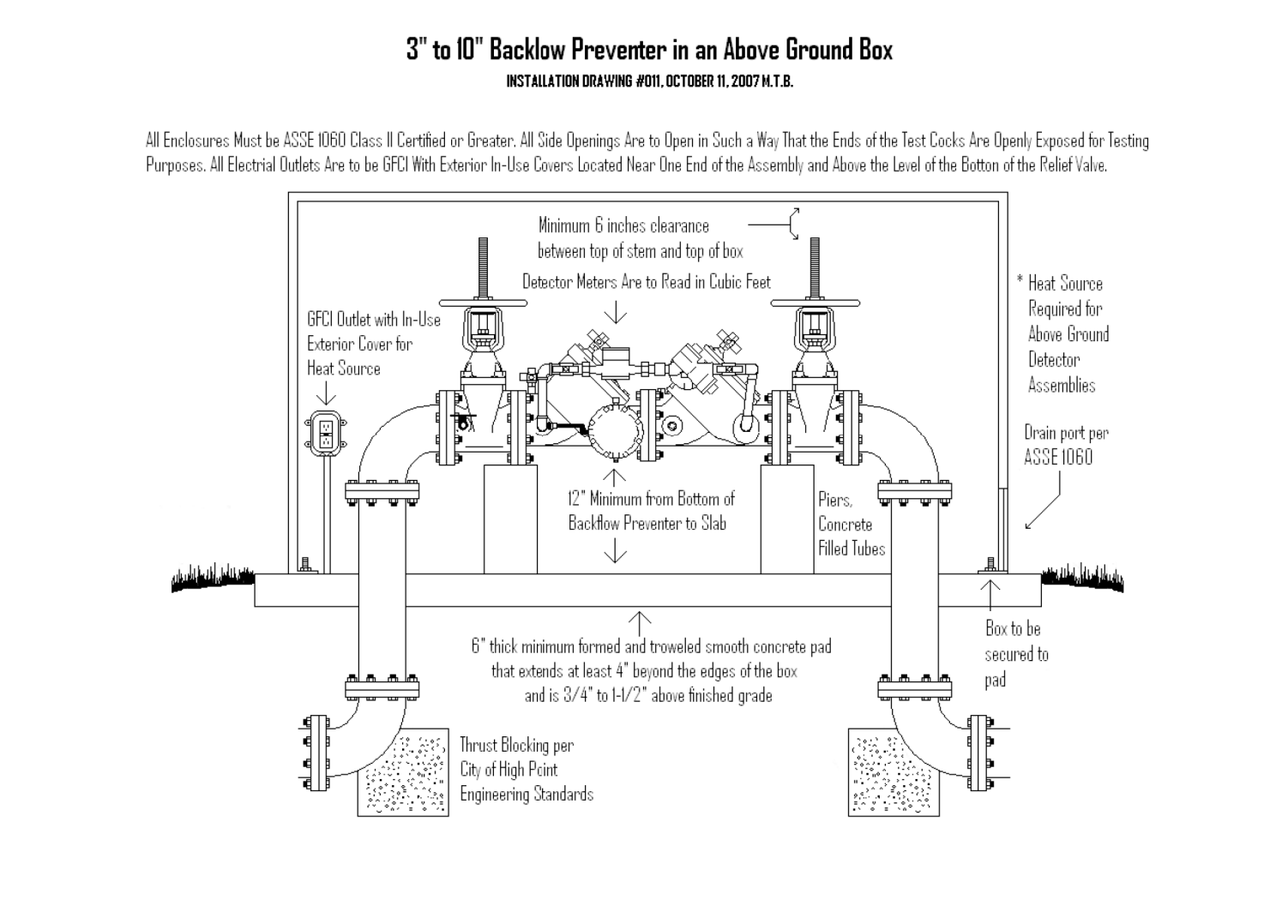
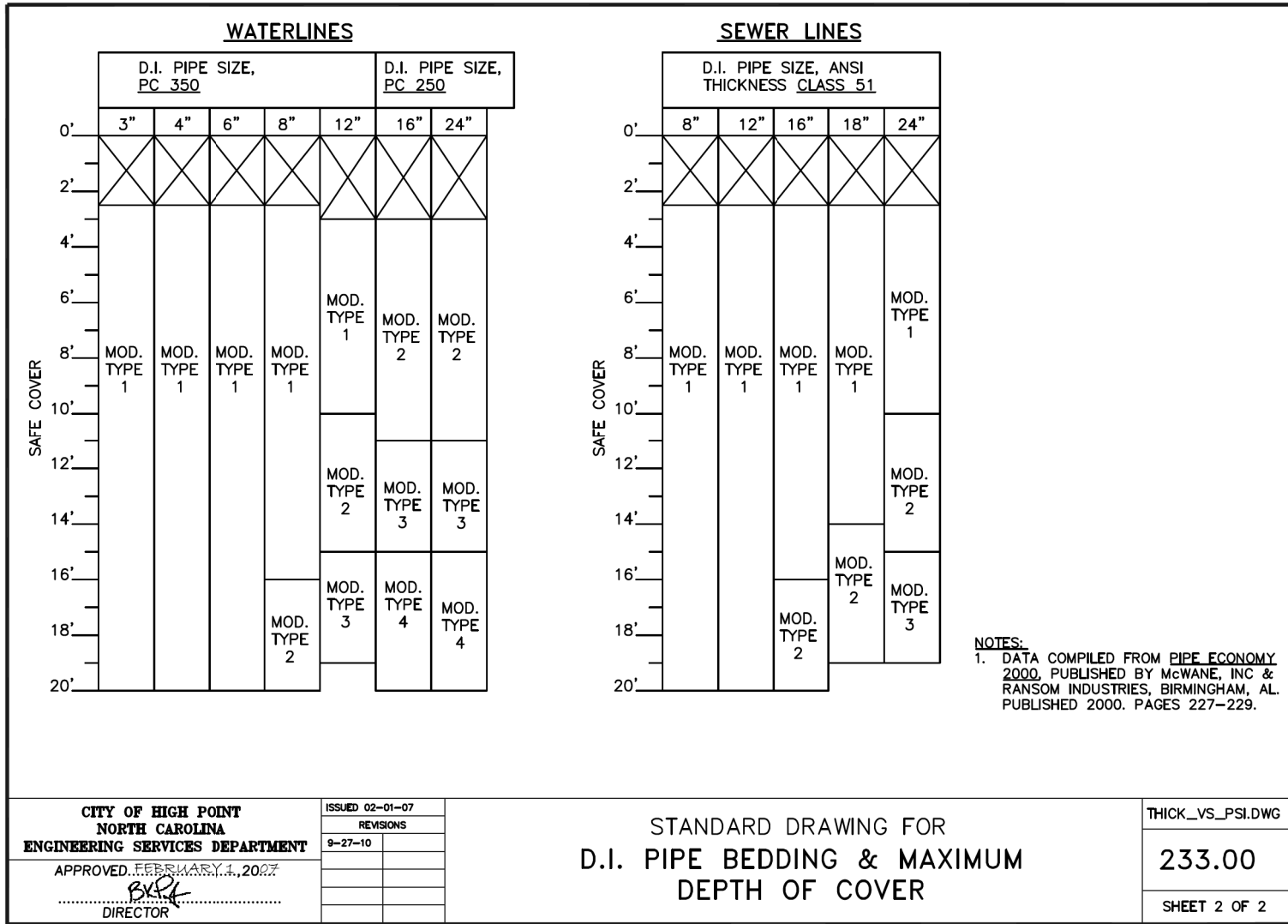
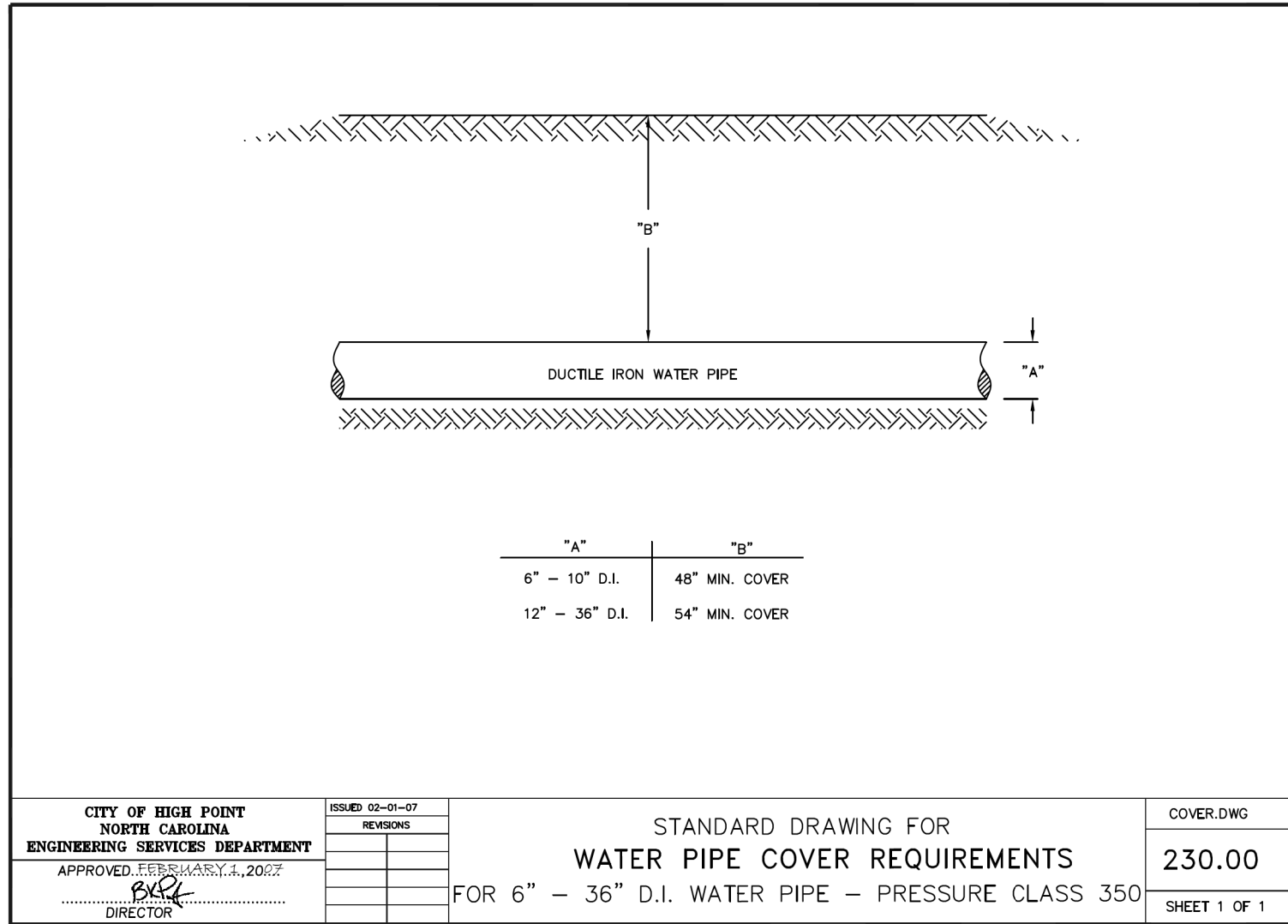
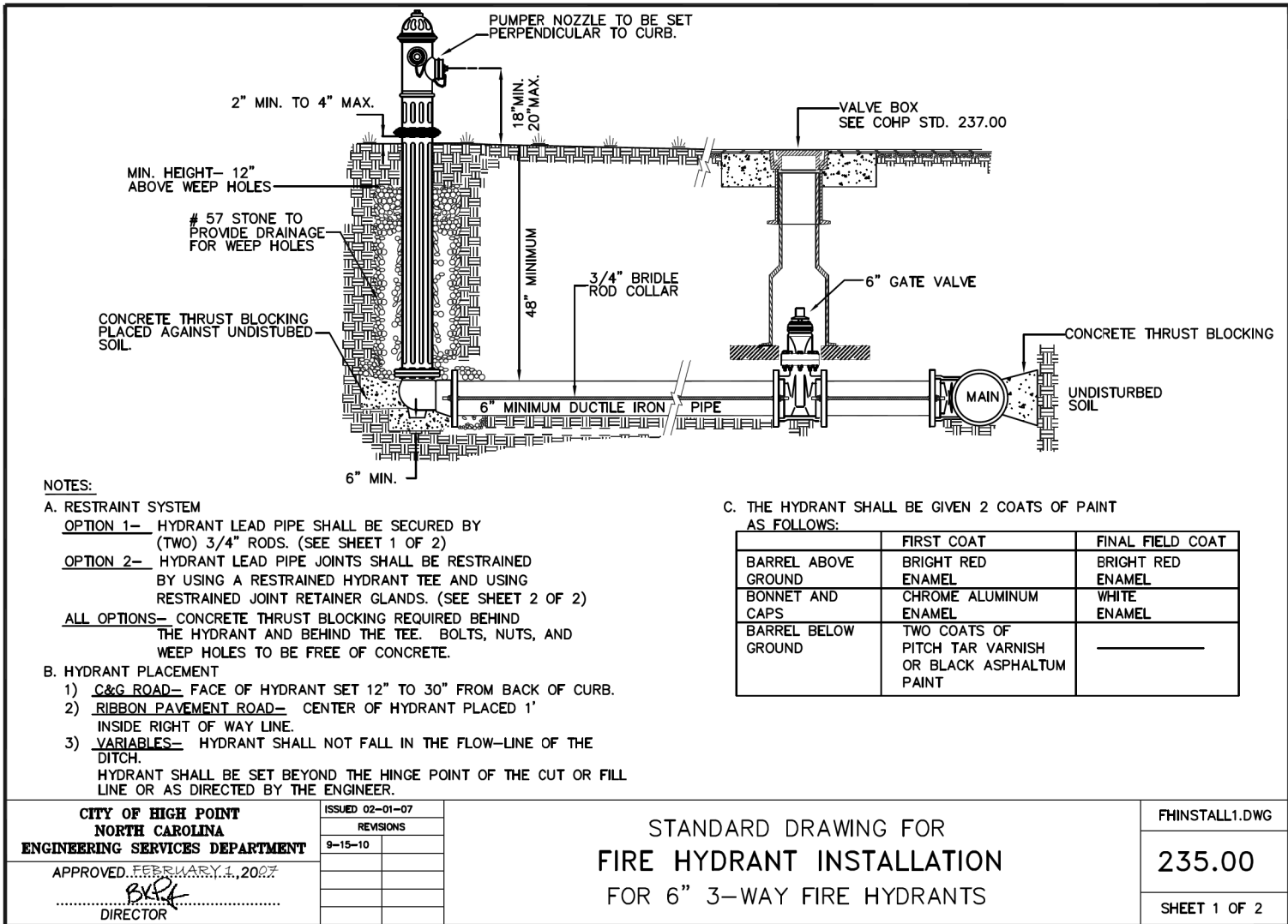
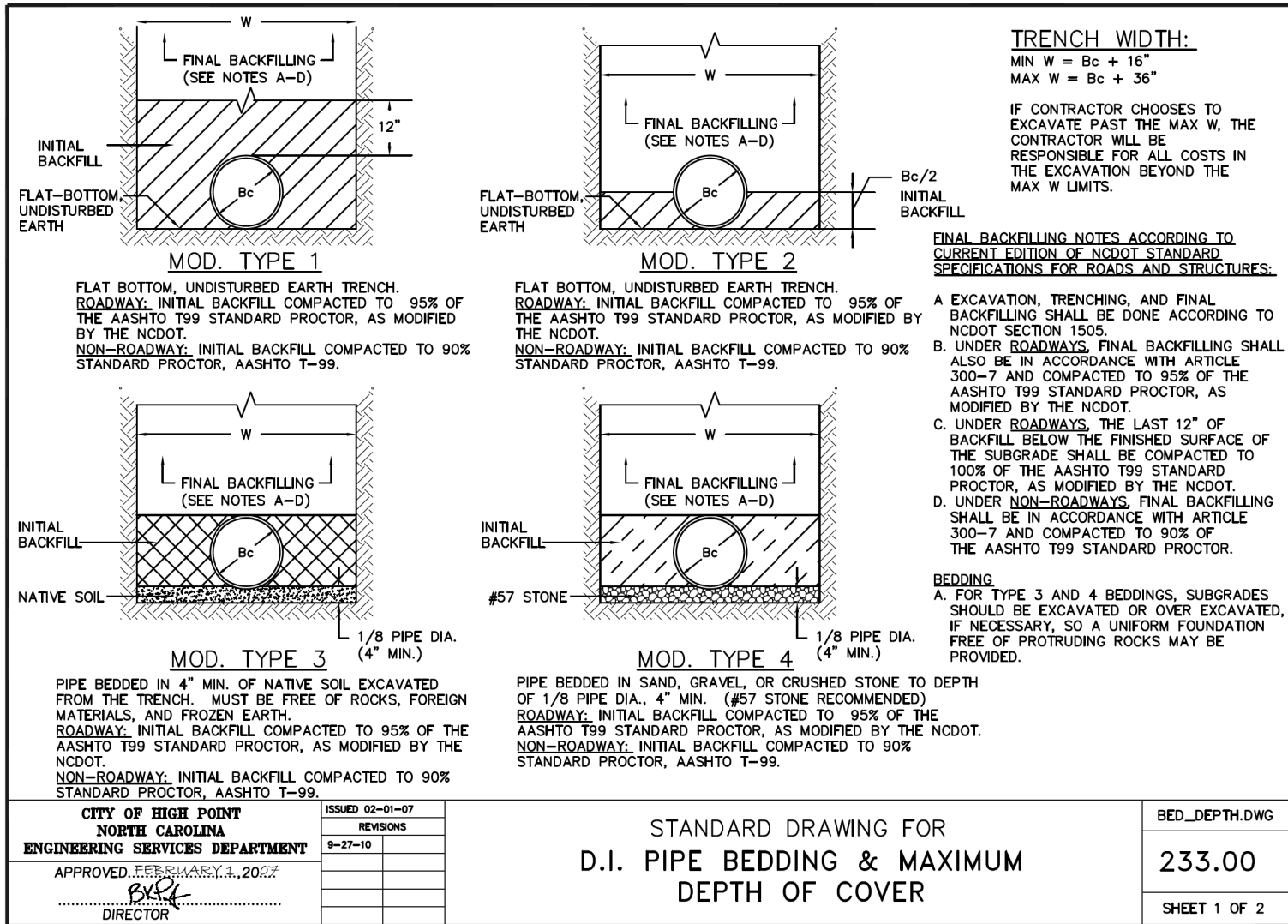
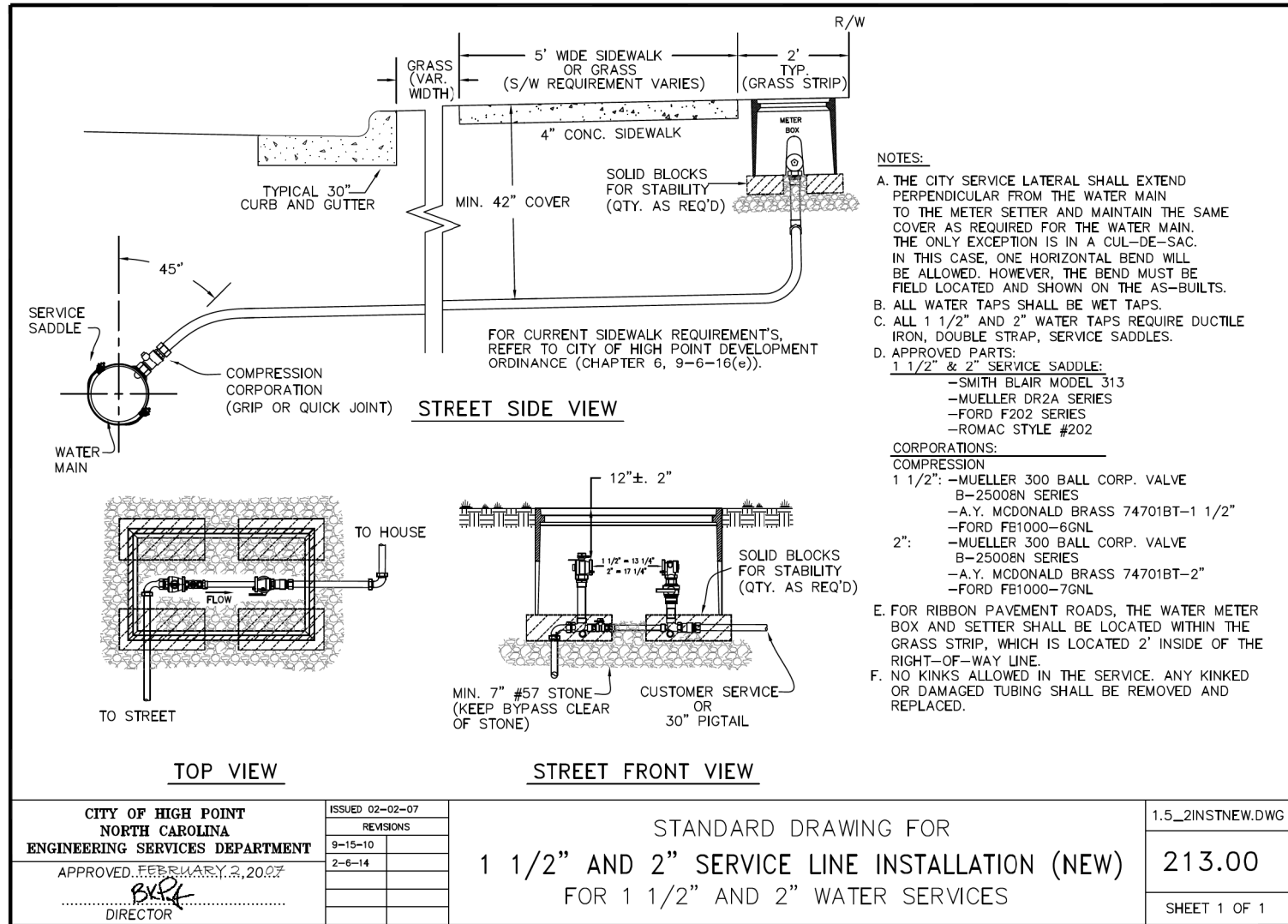
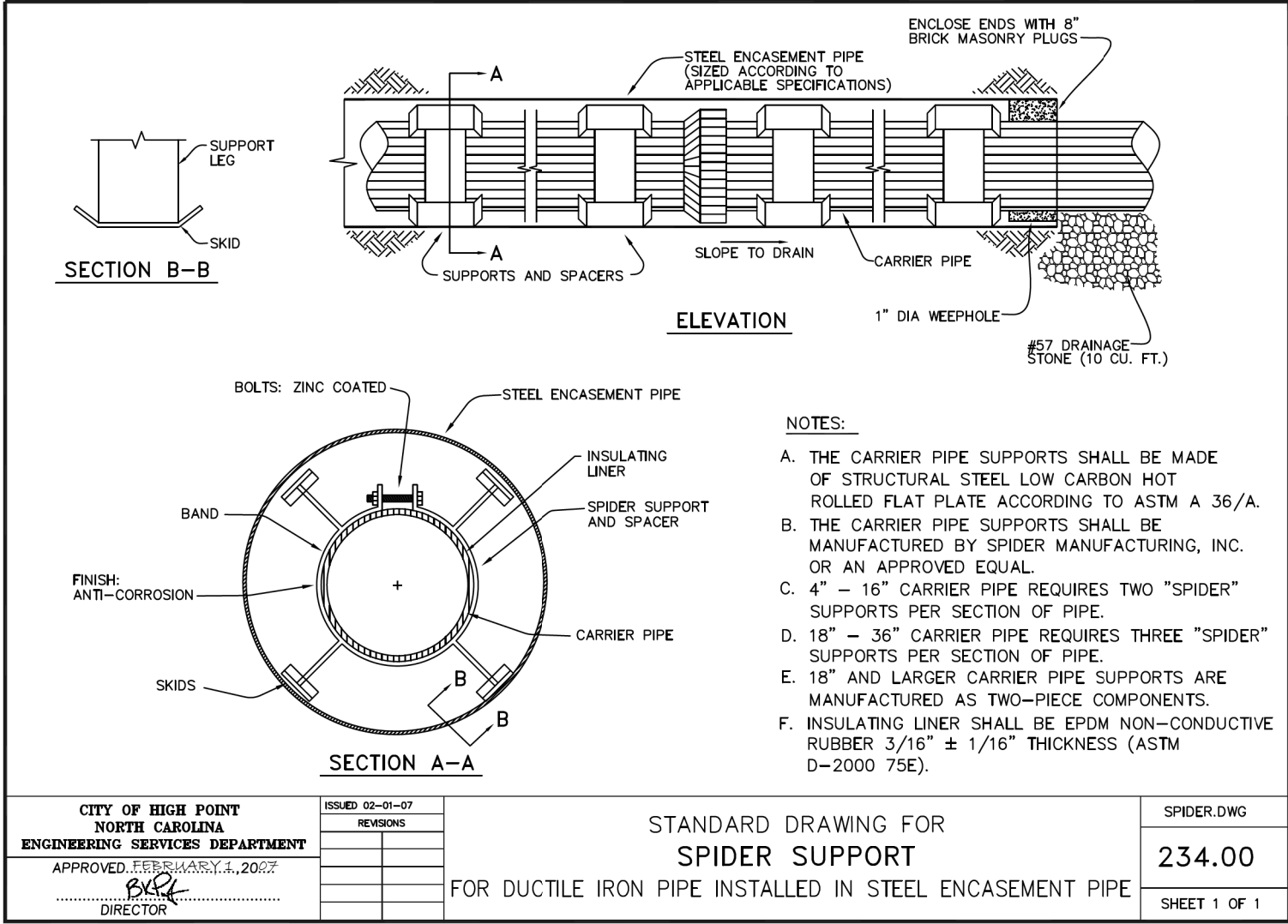
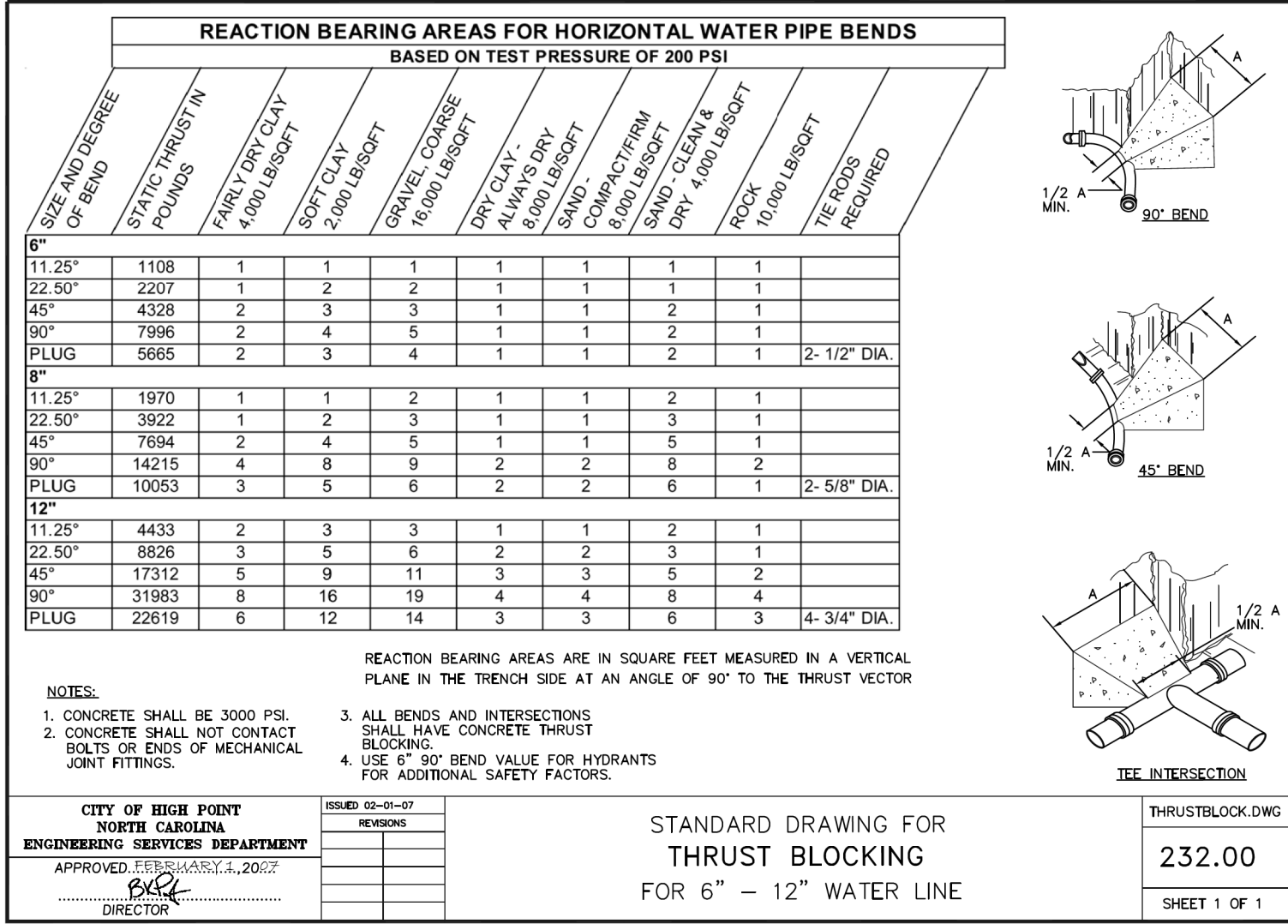
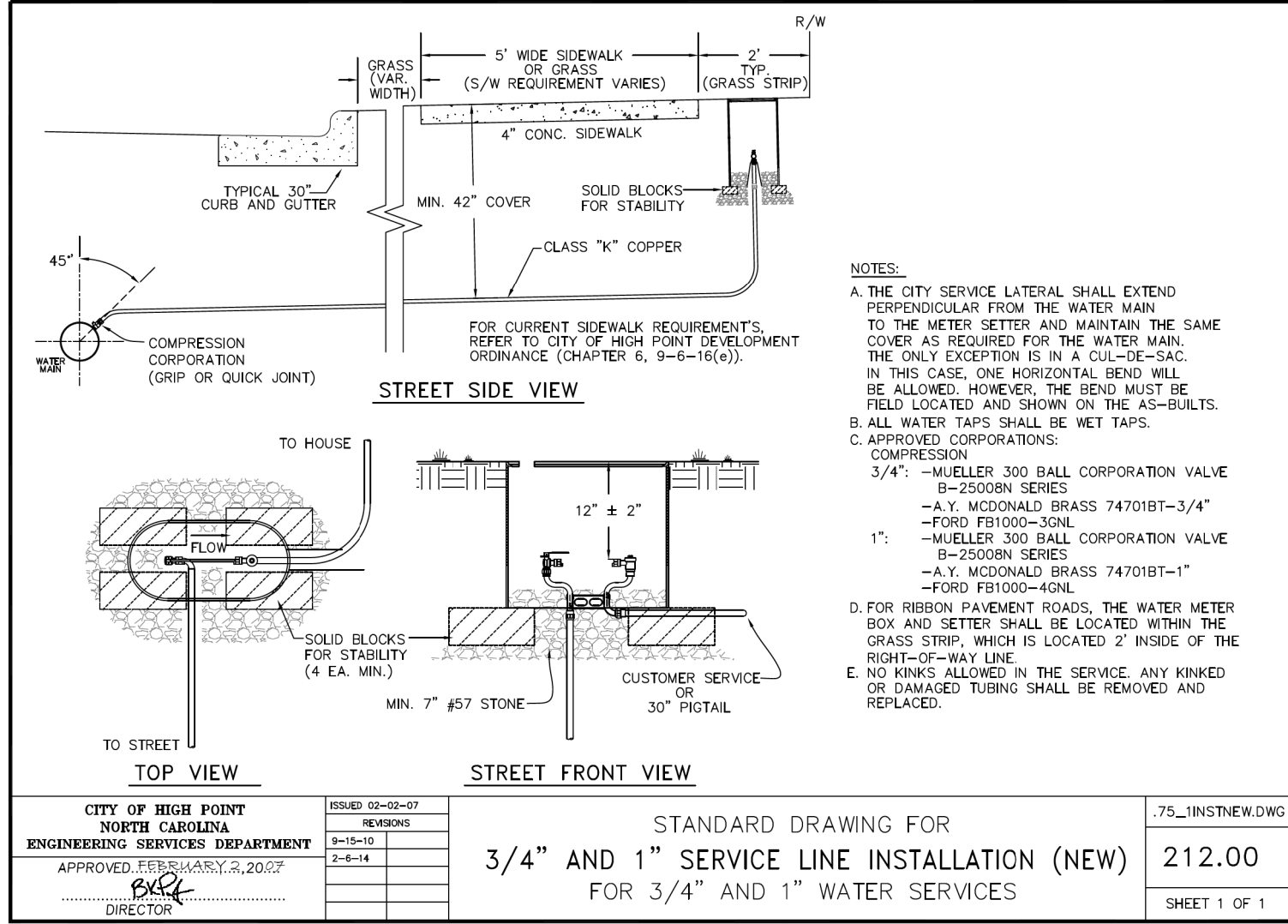
NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION
PLANS ONLY

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

5/14/2025

REVISIONS



PROJECT REFERENCE NO. U-4758 SHEET NO. UC-3D

DESIGNED BY: DMP

DRAWN BY: DMP

CHECKED BY: DMP

APPROVED BY: DMP

REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

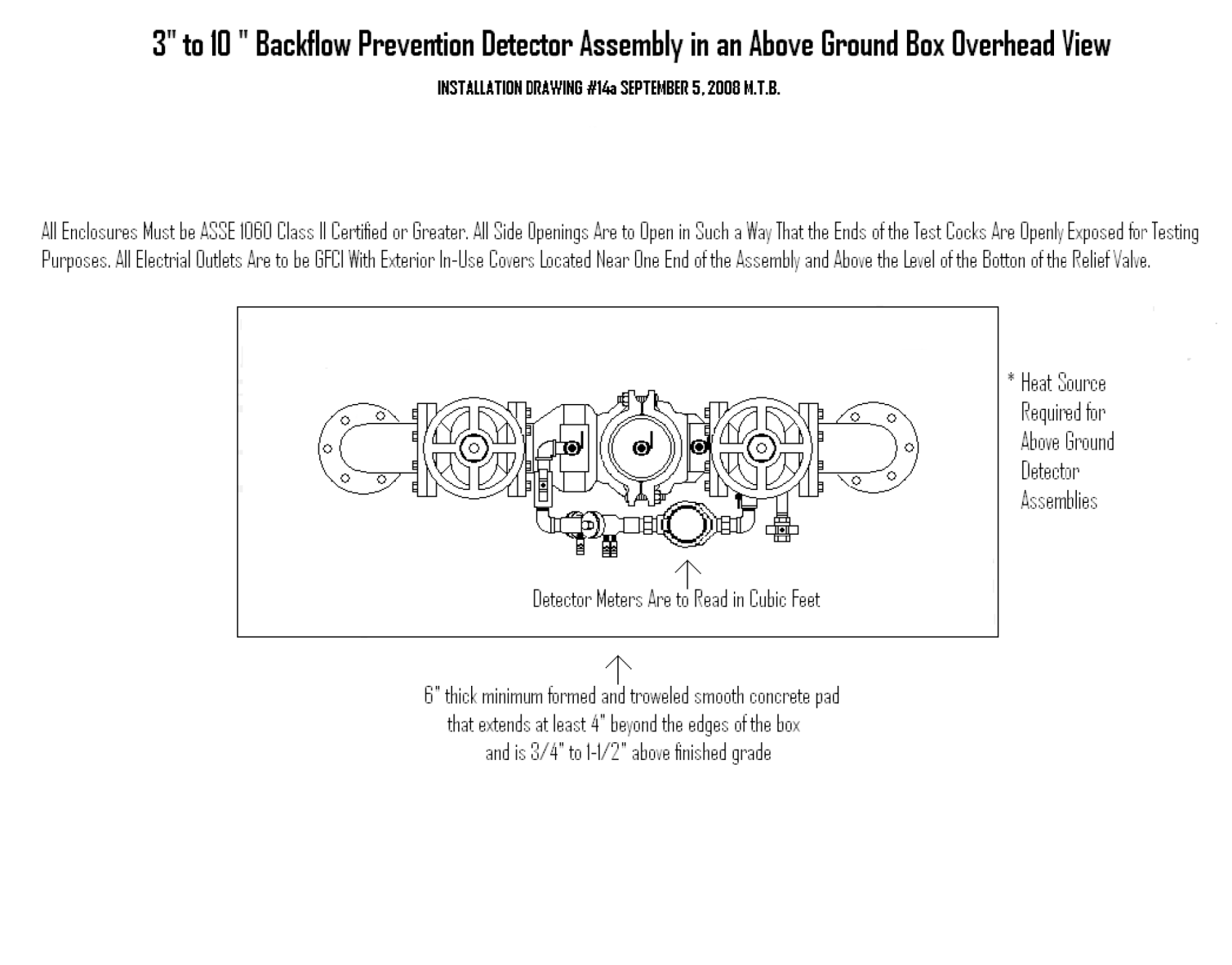
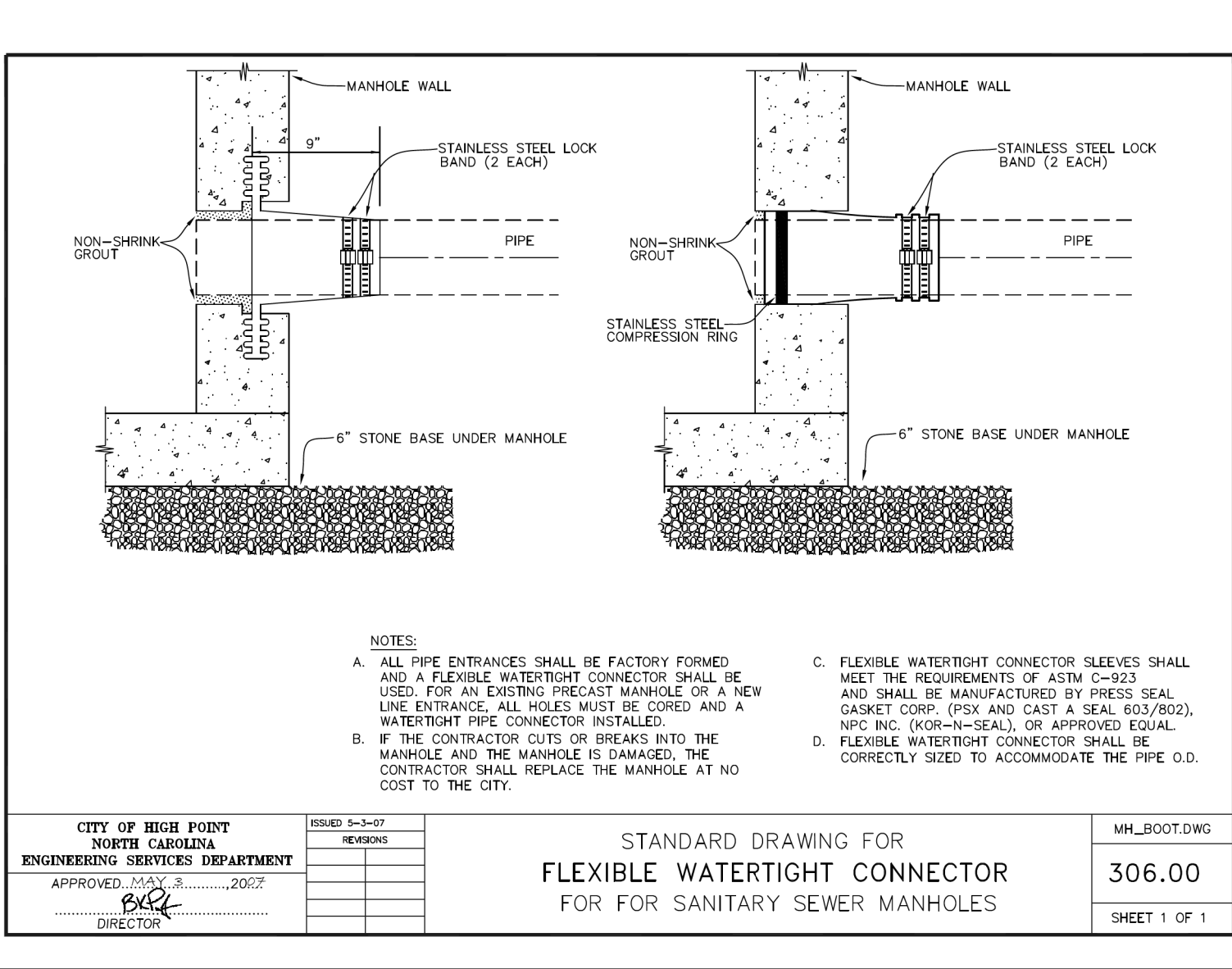
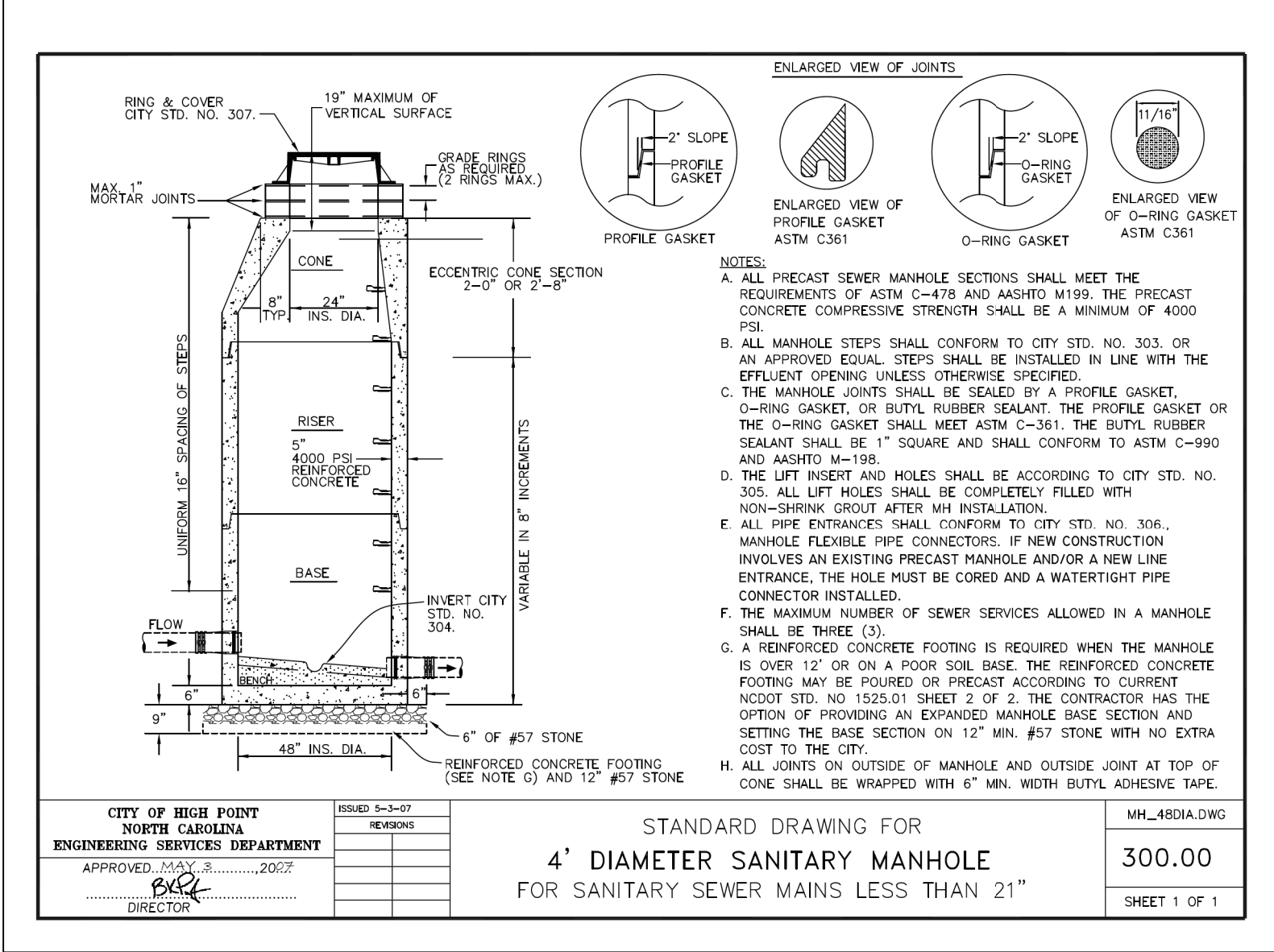
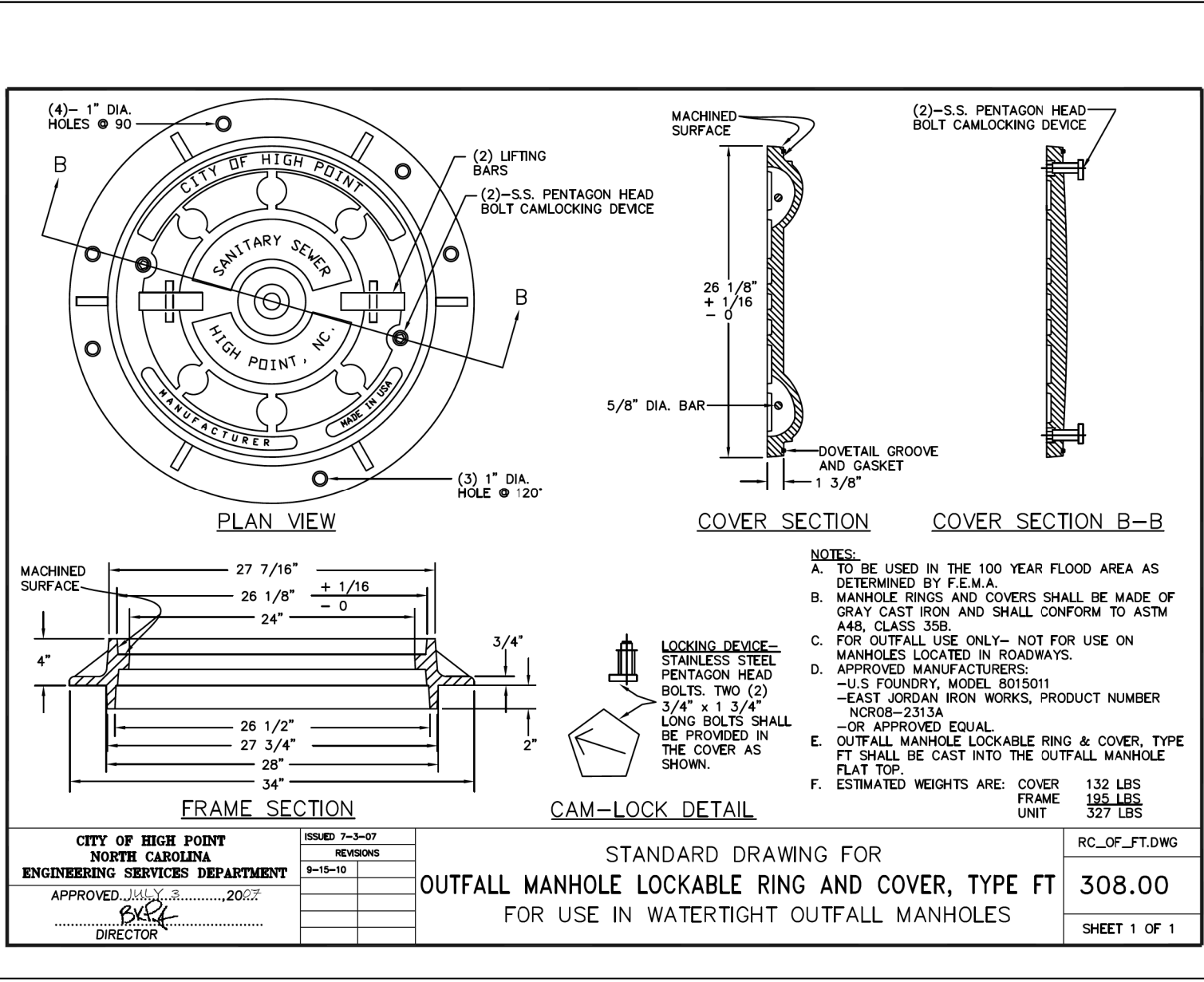
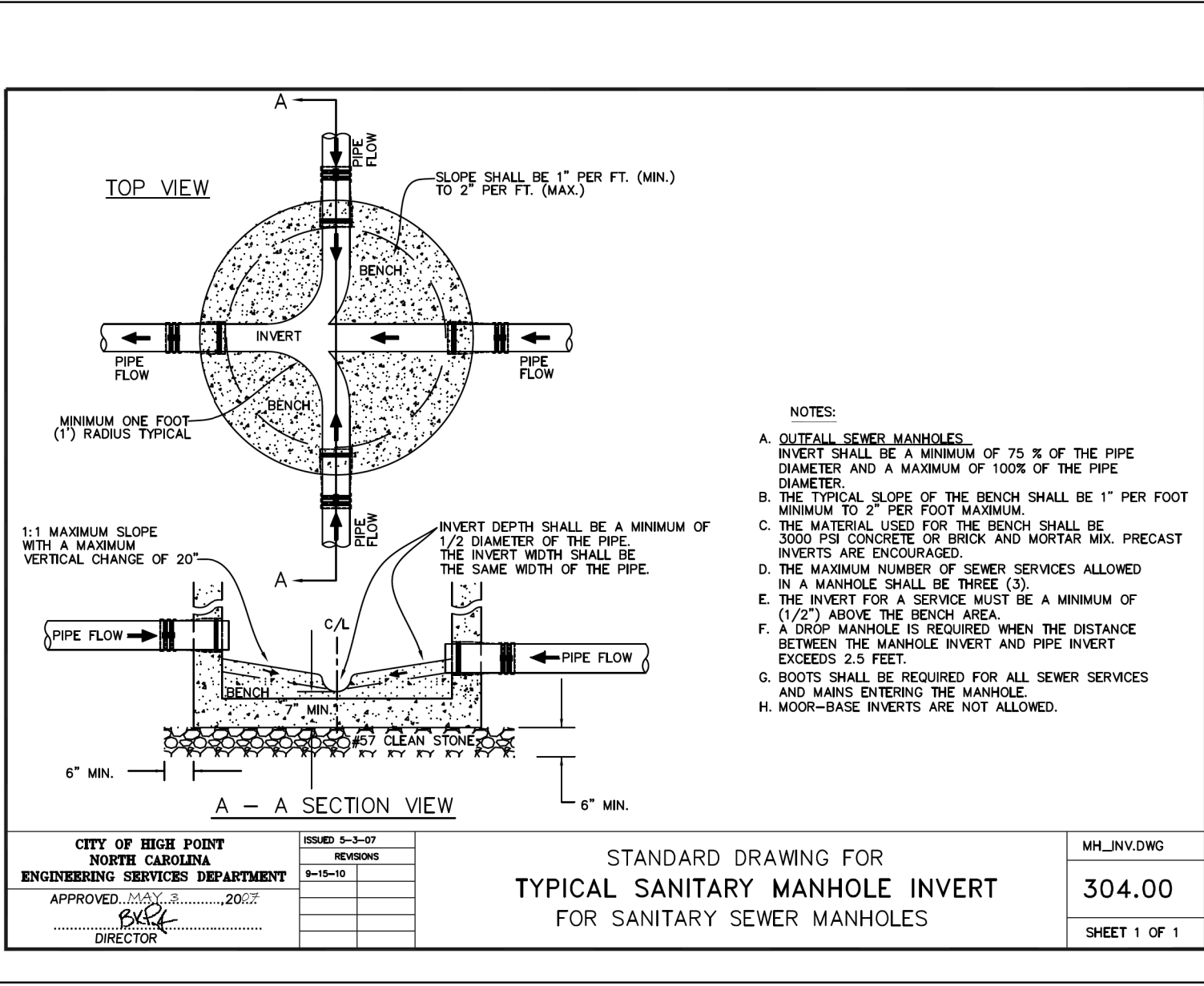
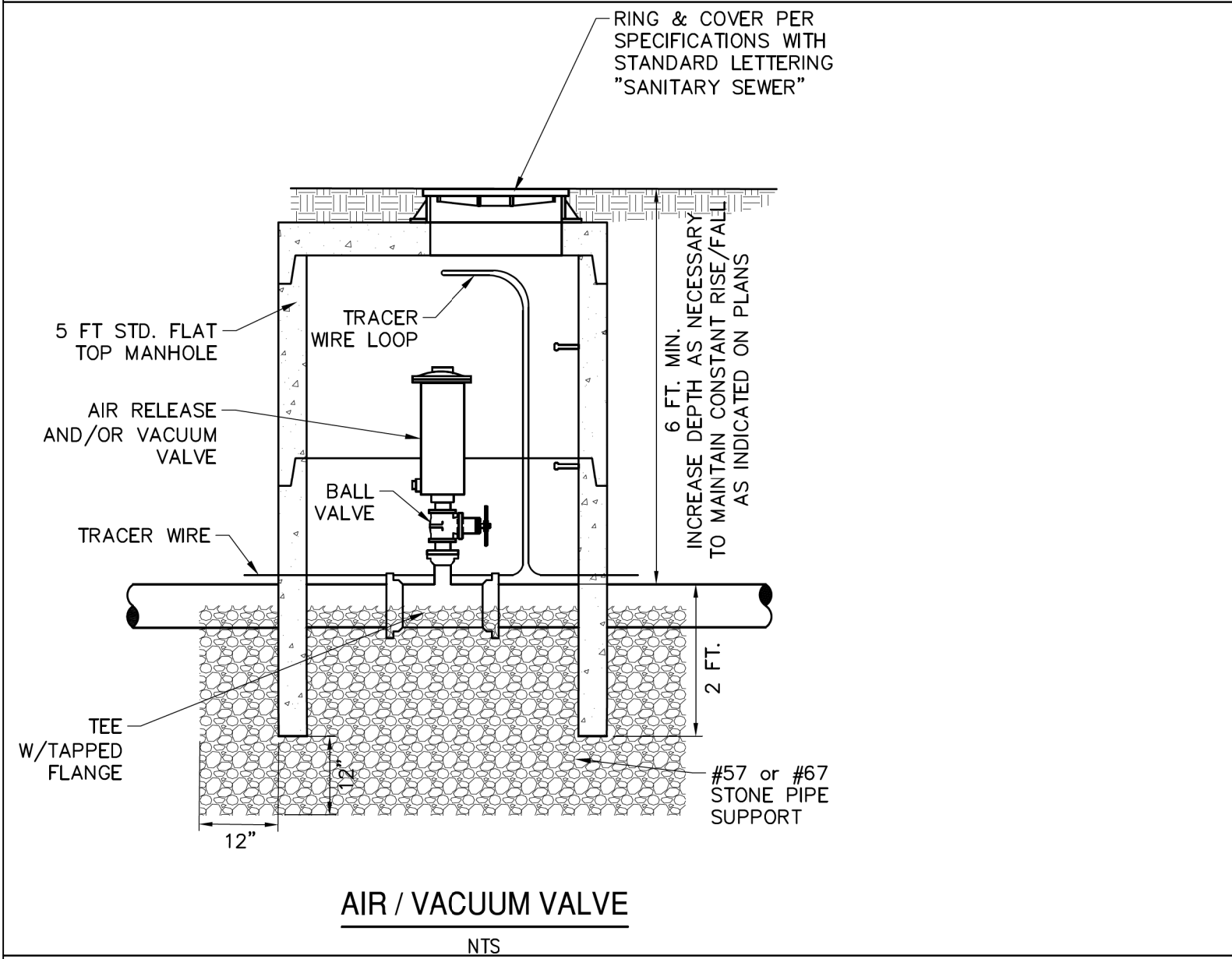
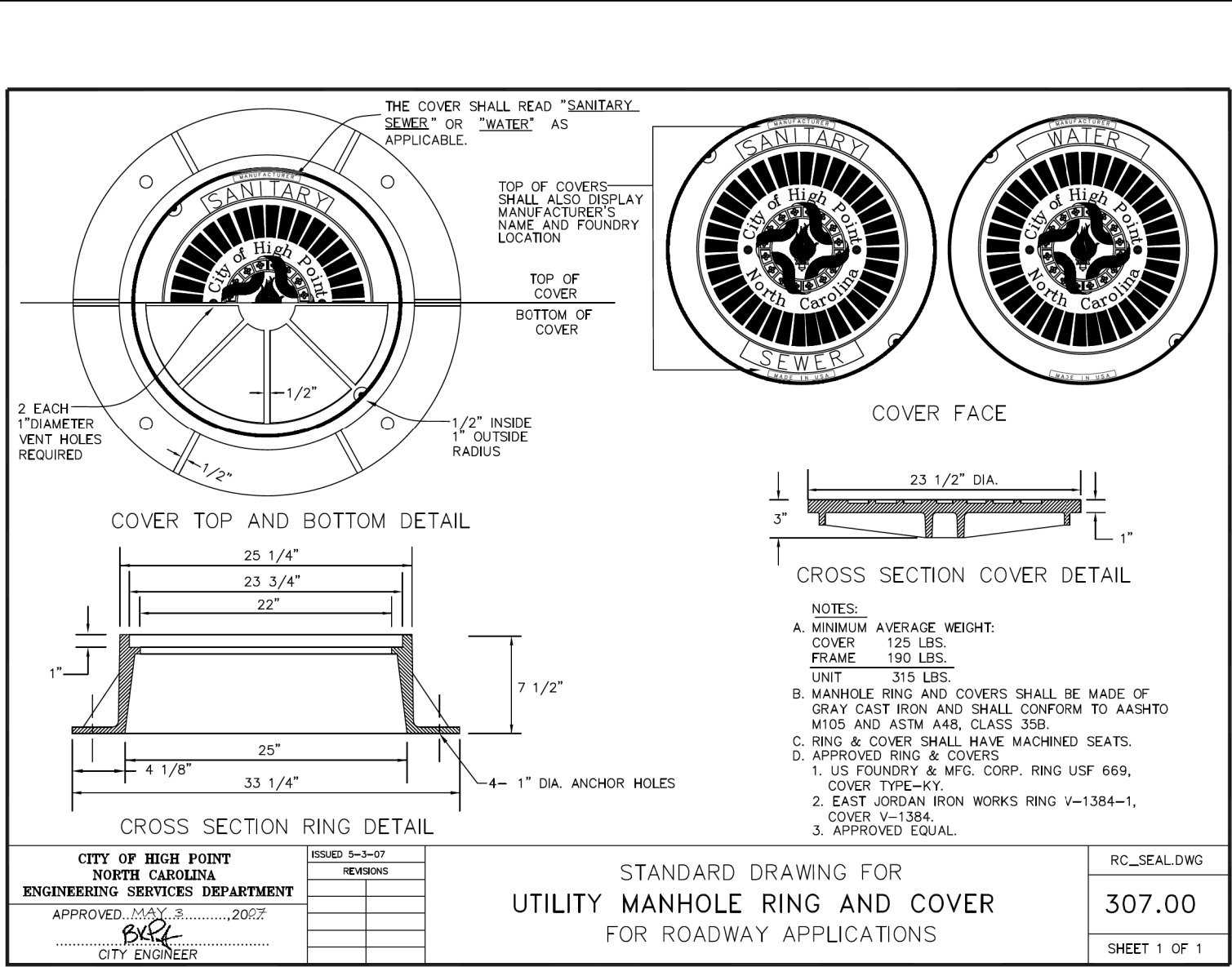
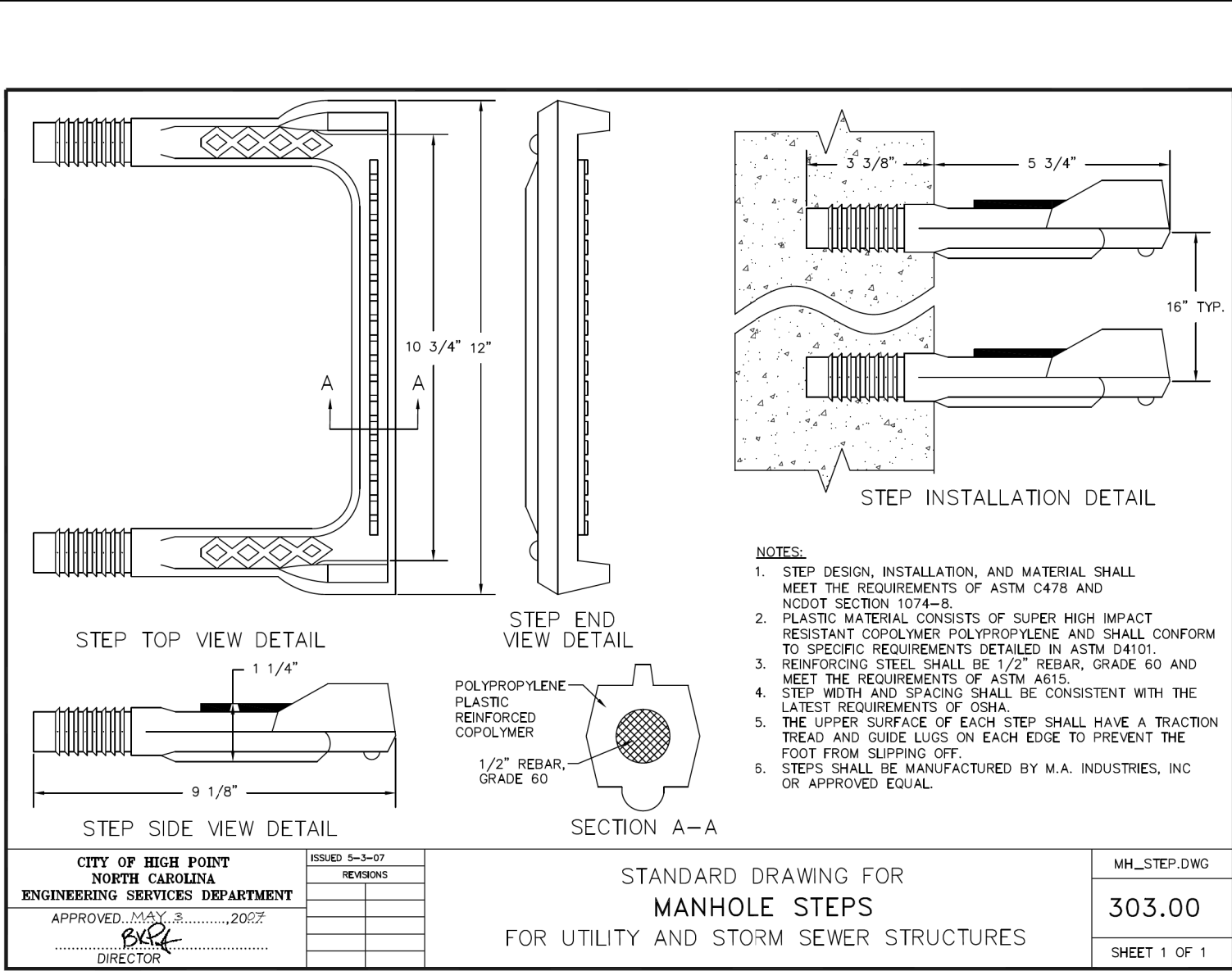
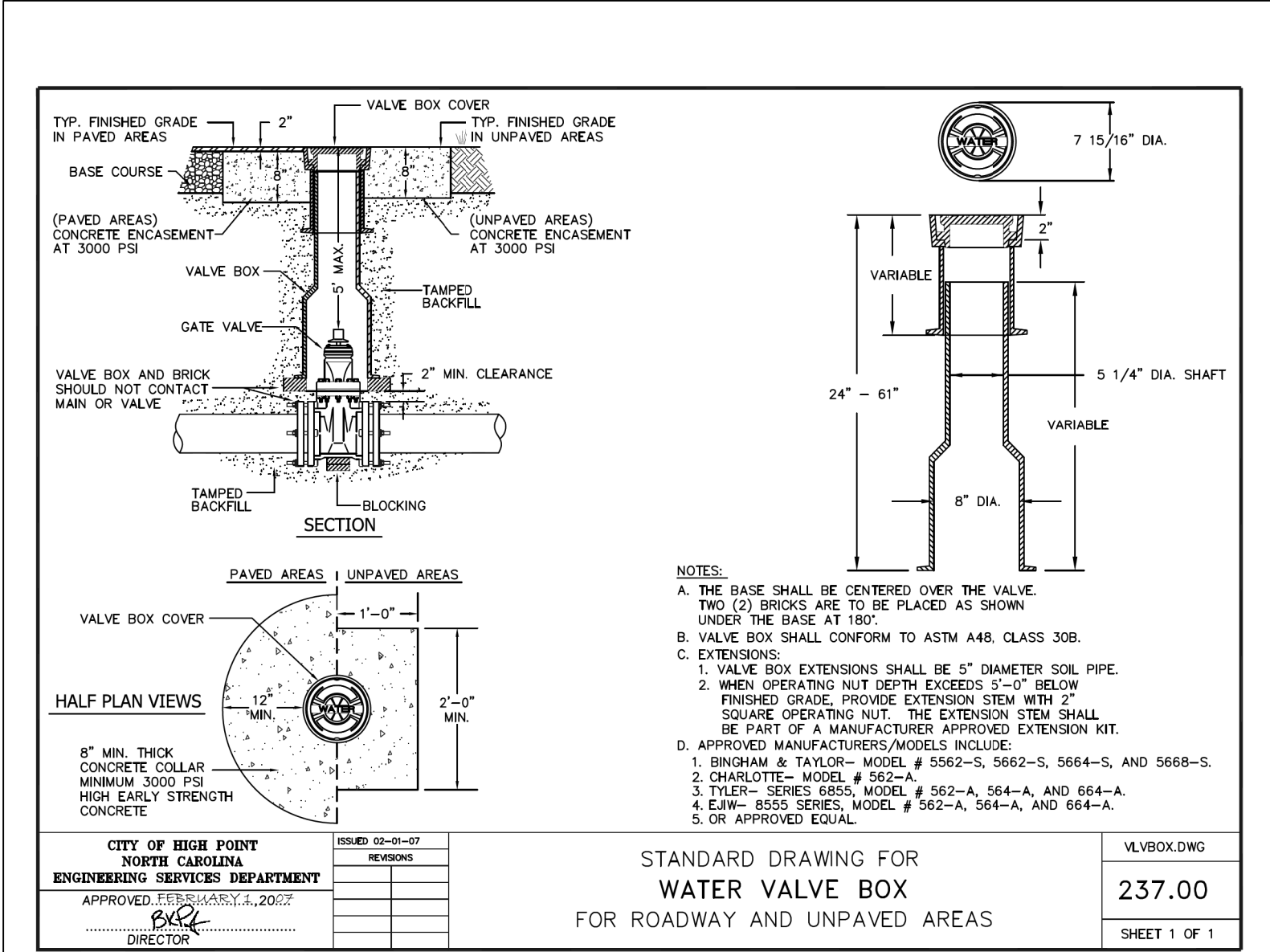
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT TYPICAL DETAILS



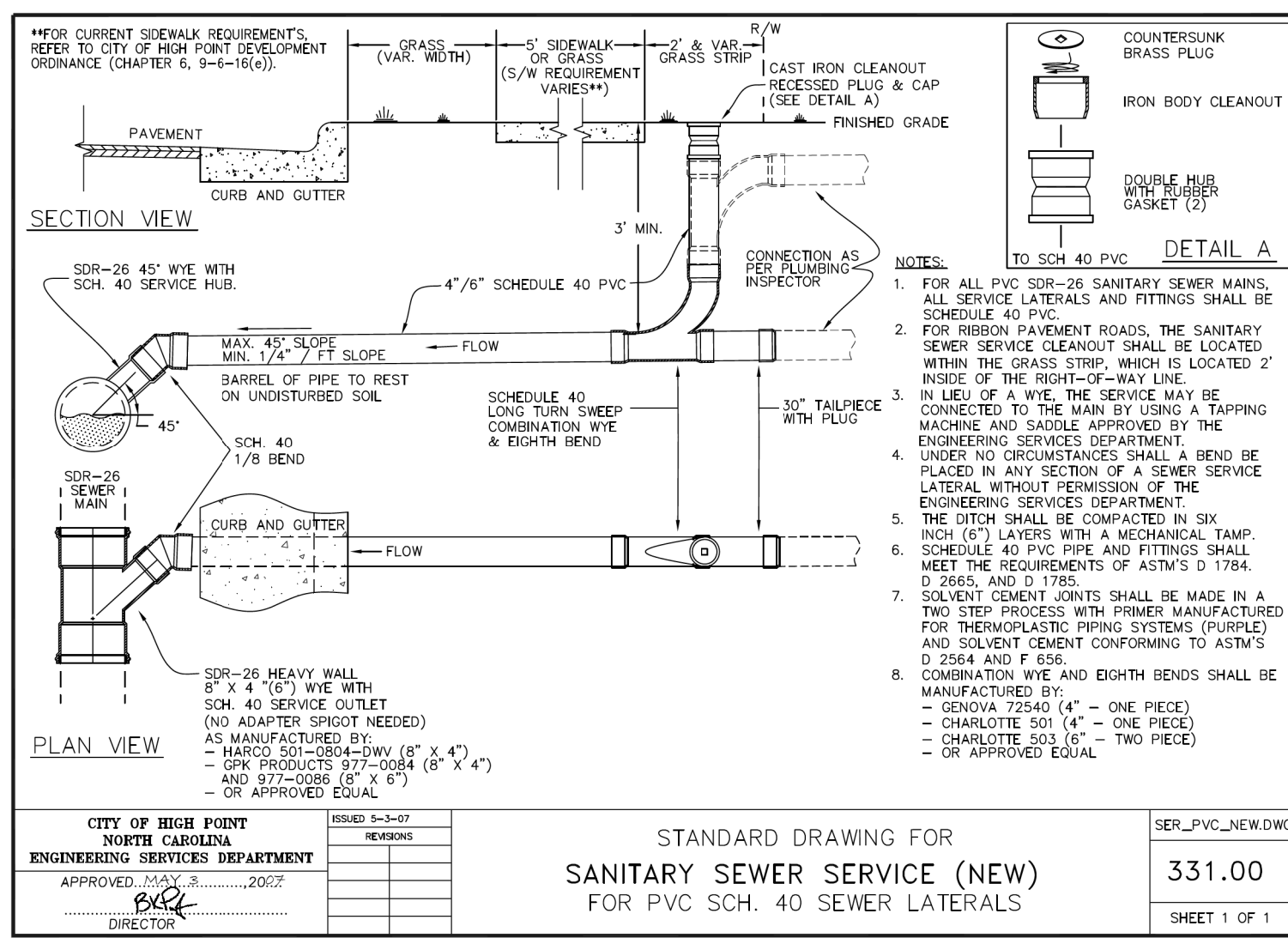
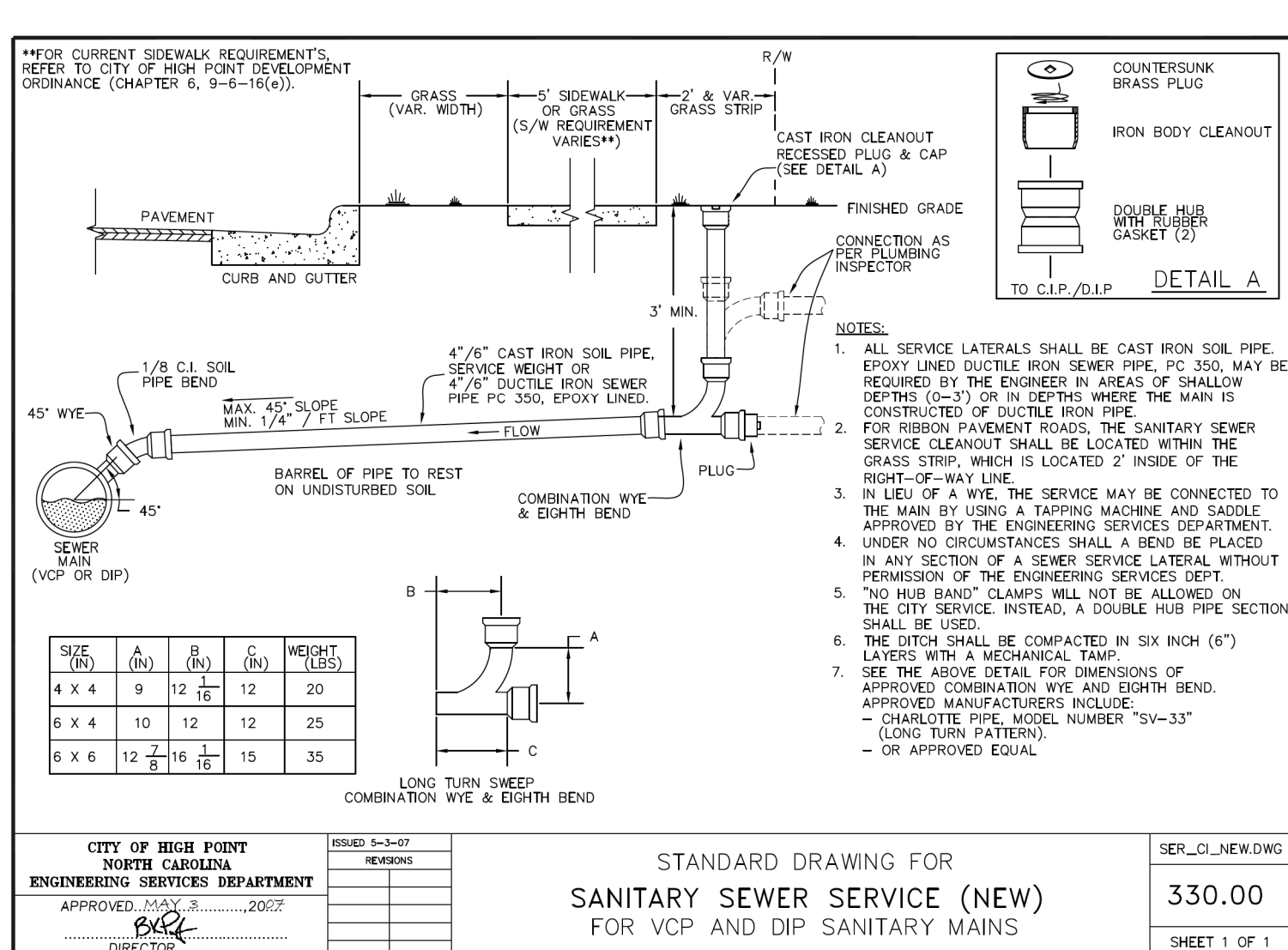
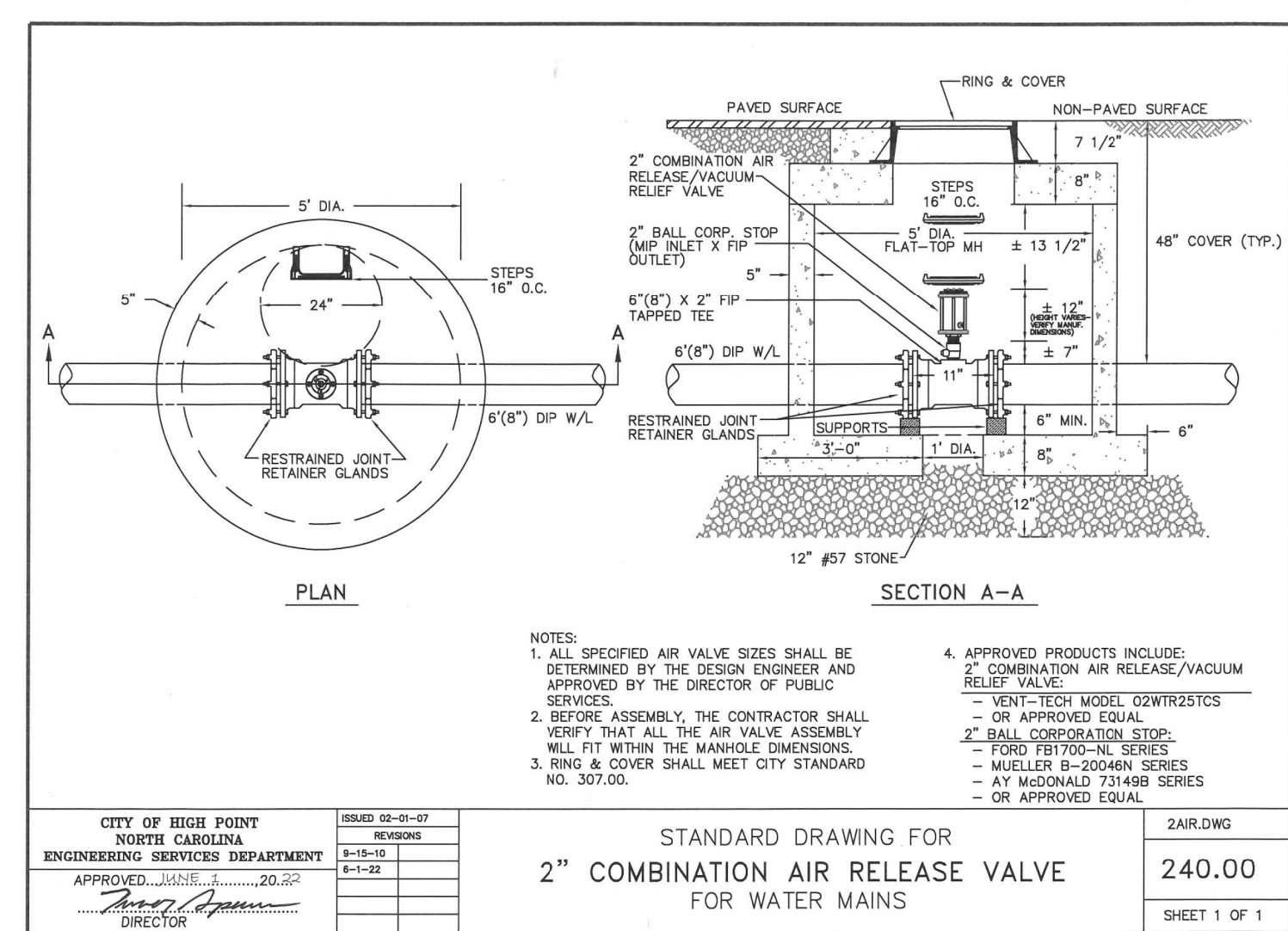
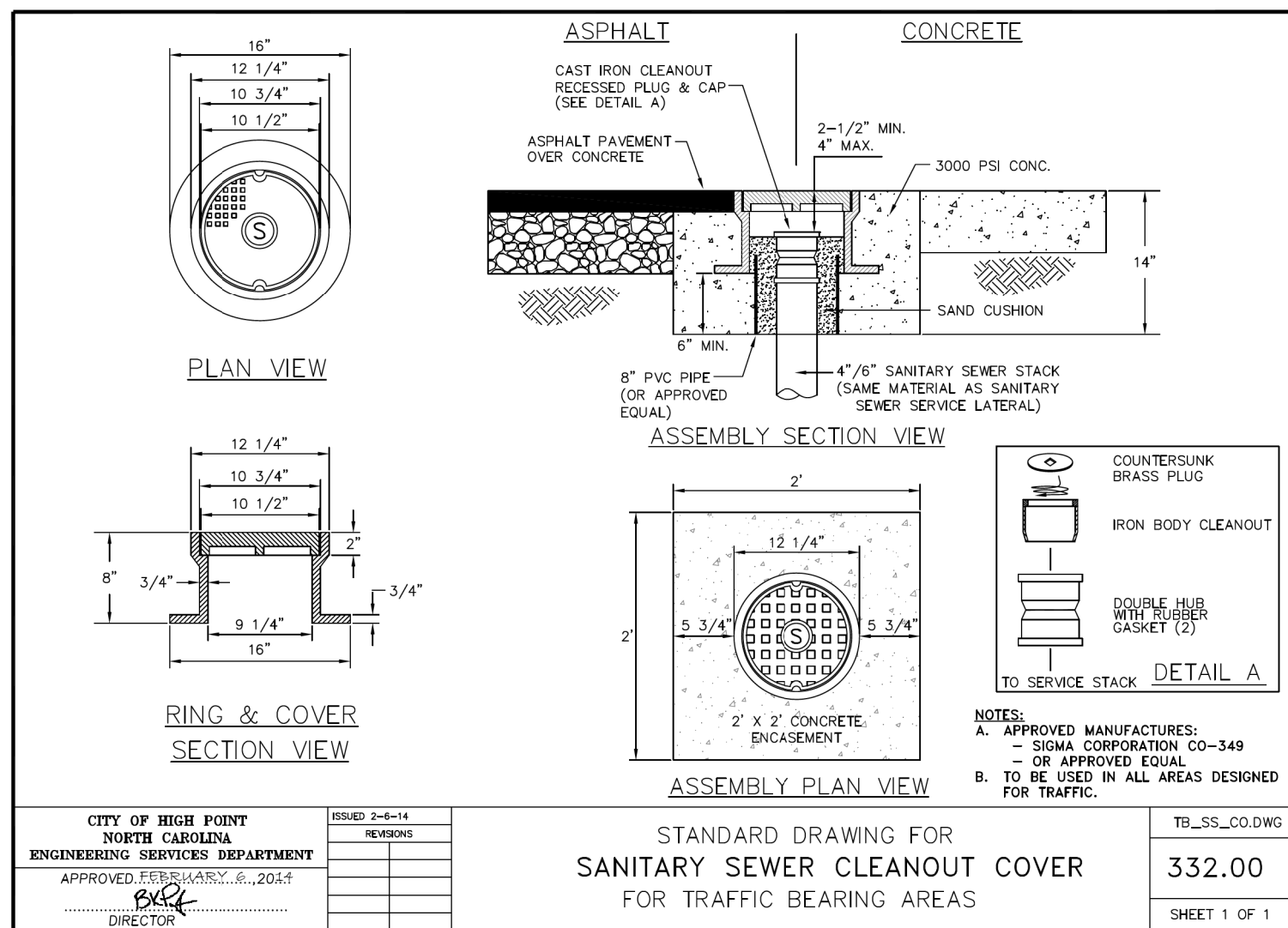
PROJECT REFERENCE NO.		SHEET NO.
U-5896		UC-3E
DESIGNED BY: DMP		
DRAWN BY: DMP		
CHECKED BY: DMP		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		
UTILITY CONSTRUCTION PLANS ONLY		

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.		SHEET NO.	
U-4758		UC-3F	
DESIGNED BY: DMP			
DRAWN BY: DMP			
CHECKED BY: DMP			
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		3/21/2025	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 7250-4151		UTILITY CONSTRUCTION PLANS ONLY	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



UTILITY CONSTRUCTION PLANS PREPARED BY:

DAVIS • MARTIN • POWELL
ENGINEERS & SURVEYORS

6415 OLD PLANK RD., HIGH POINT, NC 27285
PHONE: (336)886-4821 FAX: (336)886-4458
WWW.DMP-INC.COM LICENSE: F-0245

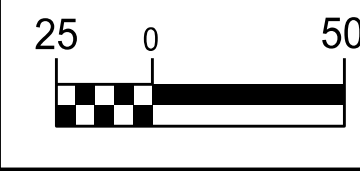
dmp

5/14/2025

-Y33-
PI Sta 10+85.22
 $\Delta = 9' 44" 29.7" (RT)$
 $D = 5' 43" 46.5"$
 $L = 170.02'$
 $T = 85.22'$
 $R = 1,000.00'$
 $SE = NC$
 $LR = N/A$

-Y34-
PI Sta 12+15.97
 $\Delta = 4' 19" 52.3" (LT)$
 $D = 7' 09" 43.1"$
 $L = 60.48'$
 $T = 30.25'$
 $R = 800.00'$
 $SE = NC$
 $LR = N/A$

-L-
PI Sta 24+77.08
 $\Delta = 64' 54" 30.9" (RT)$
 $D = 6' 09" 39.0"$
 $L = 1053.57'$
 $T = 591.43'$
 $R = 930.00'$
 $SE = 0.04$
 $LR = 192'$



PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-5
DESIGNED BY: DMP		
DRAWN BY: DMP		
CHECKED BY: DMP		
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

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

MATCHLINE SEE SHEET UC-6
-L- STA 35+00

PROP. -
1 - RELOCATE
FIRE HYDRANT,
1 - 6" VALVE,
12 L.F. FIRE
HYDRANT LEG
(EX. HYDRANT
LOCATED LEFT
OF STA 22+25
-L-)

PROP. - 379 L.F.
16" WATER LINE
(PW100 - SEE
UC-28 FOR
PROFILE)

ABANDON 365 L.F. OF
16" UTILITY PIPE

PROP. - 424 L.F.
16" WATER LINE
(PW200 - SEE UC-28
FOR PROFILE)

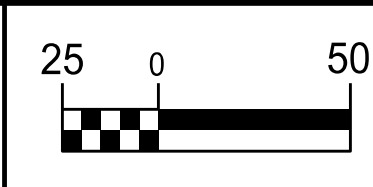
ABANDON 409 L.F. OF
16" UTILITY PIPE

MATCHLINE SEE SHEET UC-4
-L- STA 21+00

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON
THIS PLAN SHEET IS 5,375 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

5/14/2019

REVISIONS



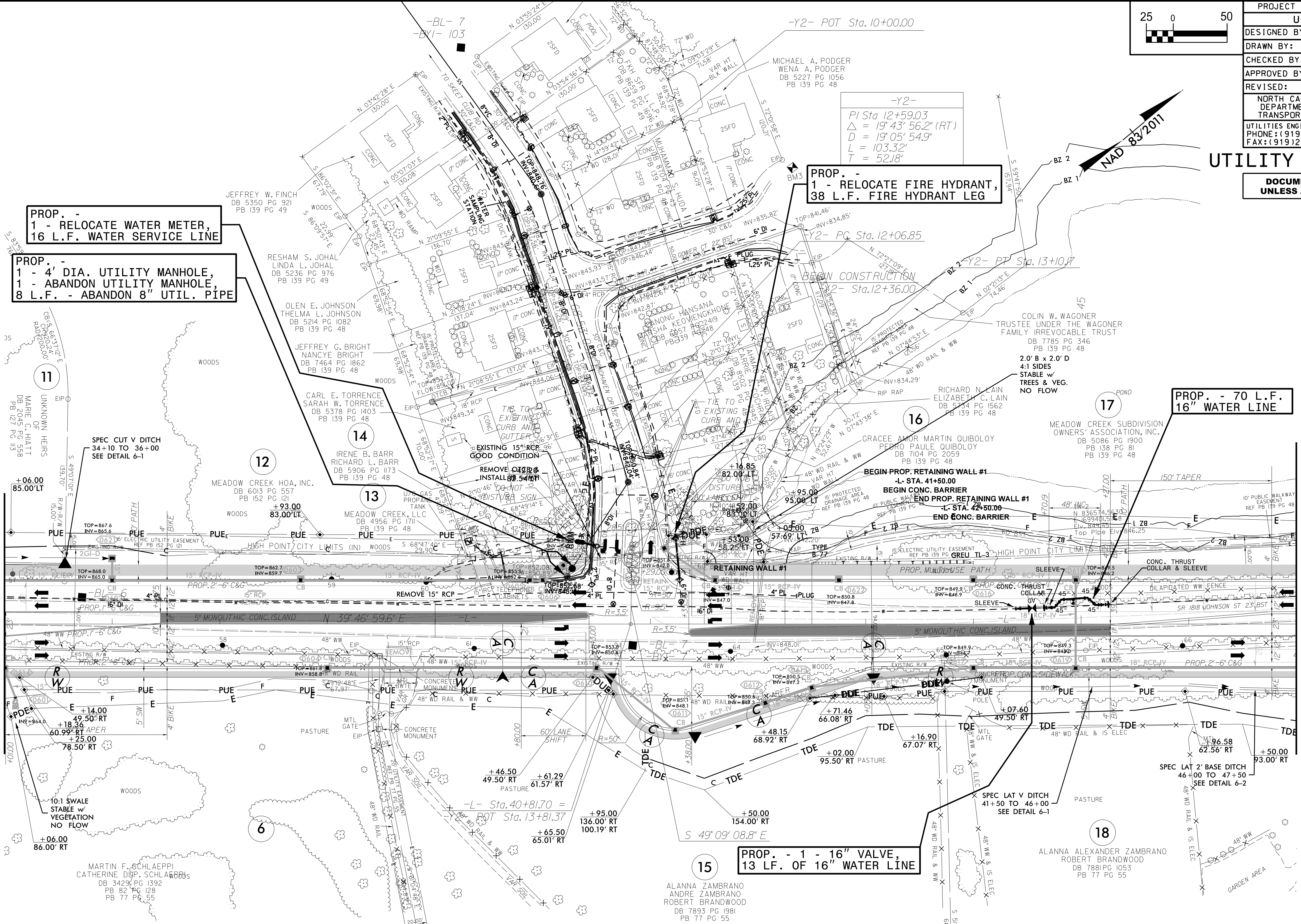
UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-6
DESIGNED BY:	DMP	NORTH CAROLINA PROFESSIONAL SEAL James S. Miller 16832 3/21/2025 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY:	DMP	
CHECKED BY:	DMP	
APPROVED BY:		
REVISED:		

MATCHLINE SEE SHEET UC-5
-L- STA 35+00

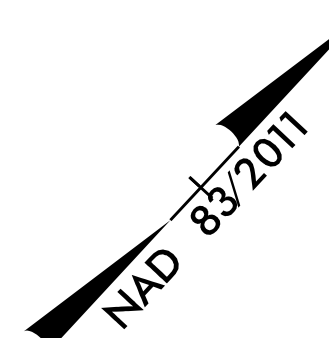
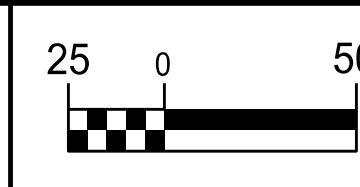
MATCHLINE SEE SHEET UC-7
-L- STA 47+00

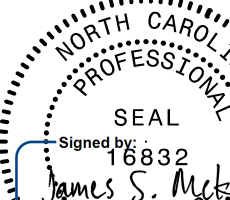


THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2,065 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

5/14/2011

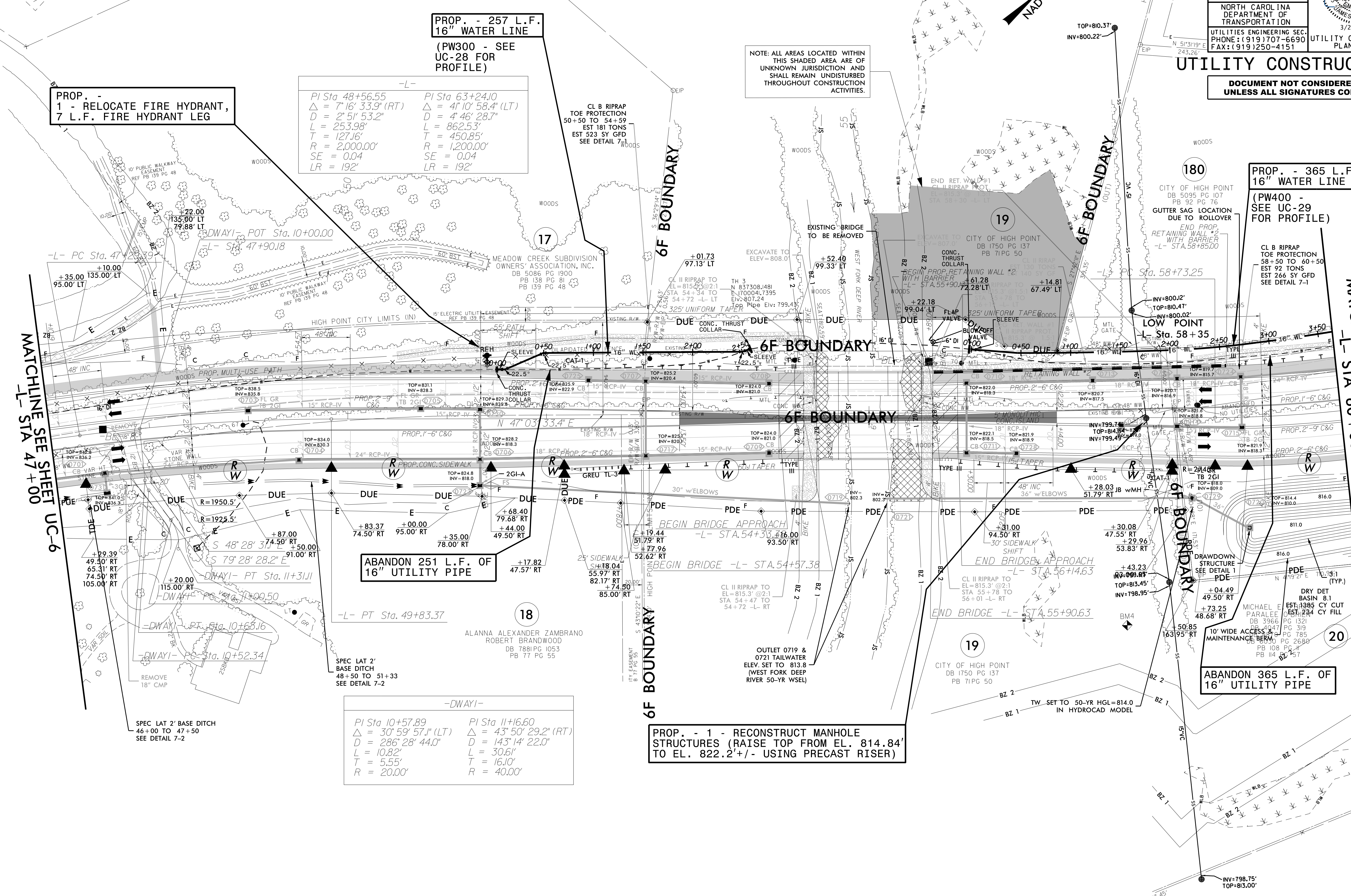
REVISIONS



PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-7
DESIGNED BY: DMP		
DRAWN BY: DMP		
CHECKED BY: DMP		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		
		UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2,425 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

UTILITY CONSTRUCTION PLANS PREPARED BY:

DAVIS • MARTIN • POWELL

ENGINEERS & SURVEYORS

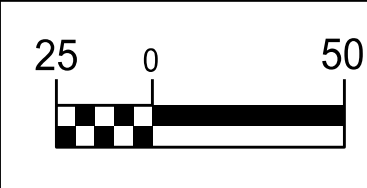
6415 OLD PLANK RD, HIGH POINT, NC 27265

PHONE: (336) 886-4821 FAX: (336) 886-4458

WWW.DMP-INC.COM LICENSE: F-0245

5/14/2011

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1,895 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

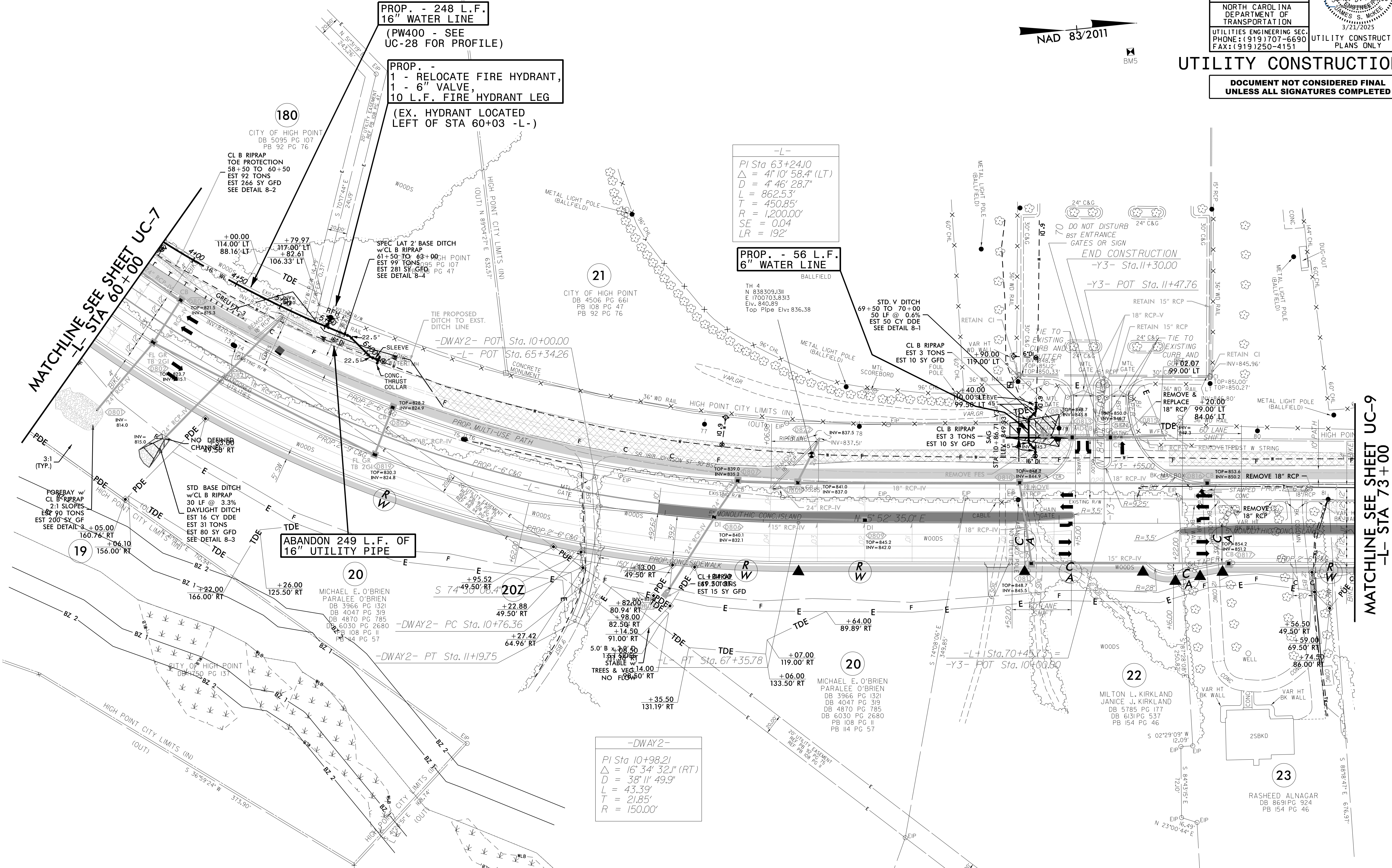


NAD 83/2011

PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-8
DESIGNED BY:	DMP	
DRAWN BY:	DMP	
CHECKED BY:	DMP	
APPROVED BY:		
REVISED:		NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		
UTILITY CONSTRUCTION PLANS ONLY		

UTILITY CONSTRUCTION

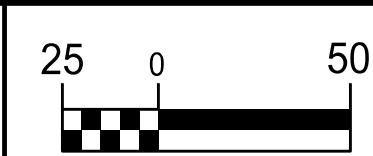
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



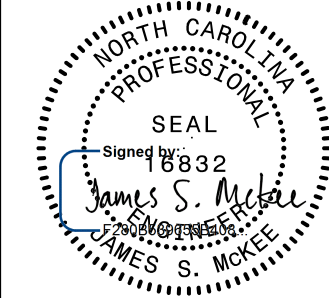
REVISIONS

MATCHLINE SEE SHEET UC-9
-L- STA 73+00

REVISIONS



NAD 83/2011

PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-9
DESIGNED BY:	DMP	
DRAWN BY:	DMP	
CHECKED BY:	DMP	
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		3/21/2023
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

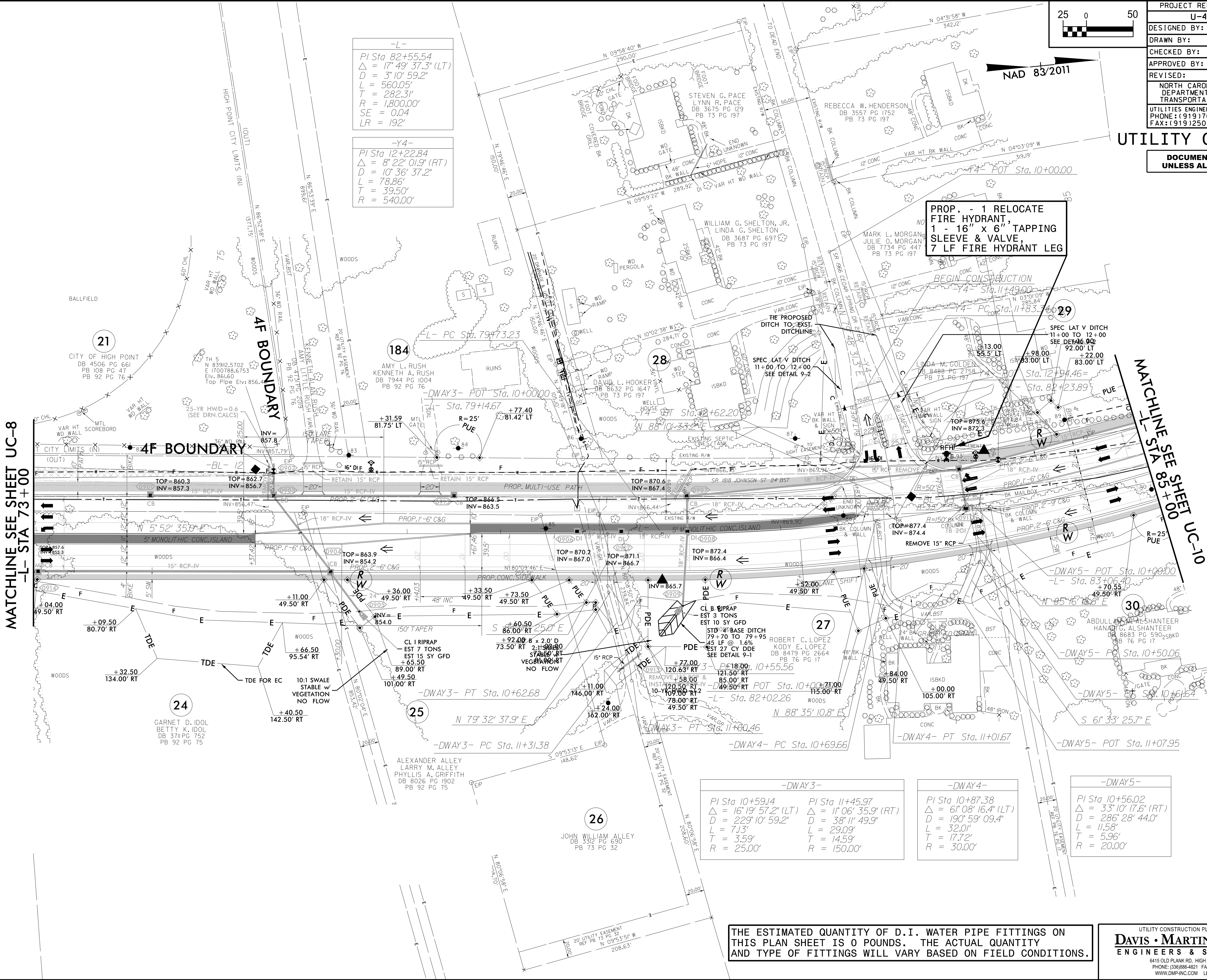
MATCHLINE SEE SHEET UC-8
-L- STA 73+00

MATCHLINE SEE SHEET UC-10
-L- STA 85+00

-L-
PI Sta 82+55.54
 $\Delta = 17^{\circ} 49' 37.3"$ (LT)
D = 560.05'
T = 282.31'
R = 1,800.00'
SE = 0.04
LR = 192'

-Y4-
PI Sta 12+22.84
 $\Delta = 8^{\circ} 22' 01.9"$ (RT)
D = 10' 36' 37.2"
L = 78.86'
T = 39.50'
R = 540.00'

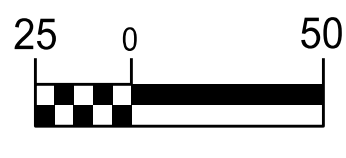
PROP. - 1 RELOCATE
FIRE HYDRANT,
1 - 16" x 6" TAPPING
SLEEVE & VALVE,
7 LF FIRE HYDRANT LEG



5/14/2011

REVISIONS

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2,065 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

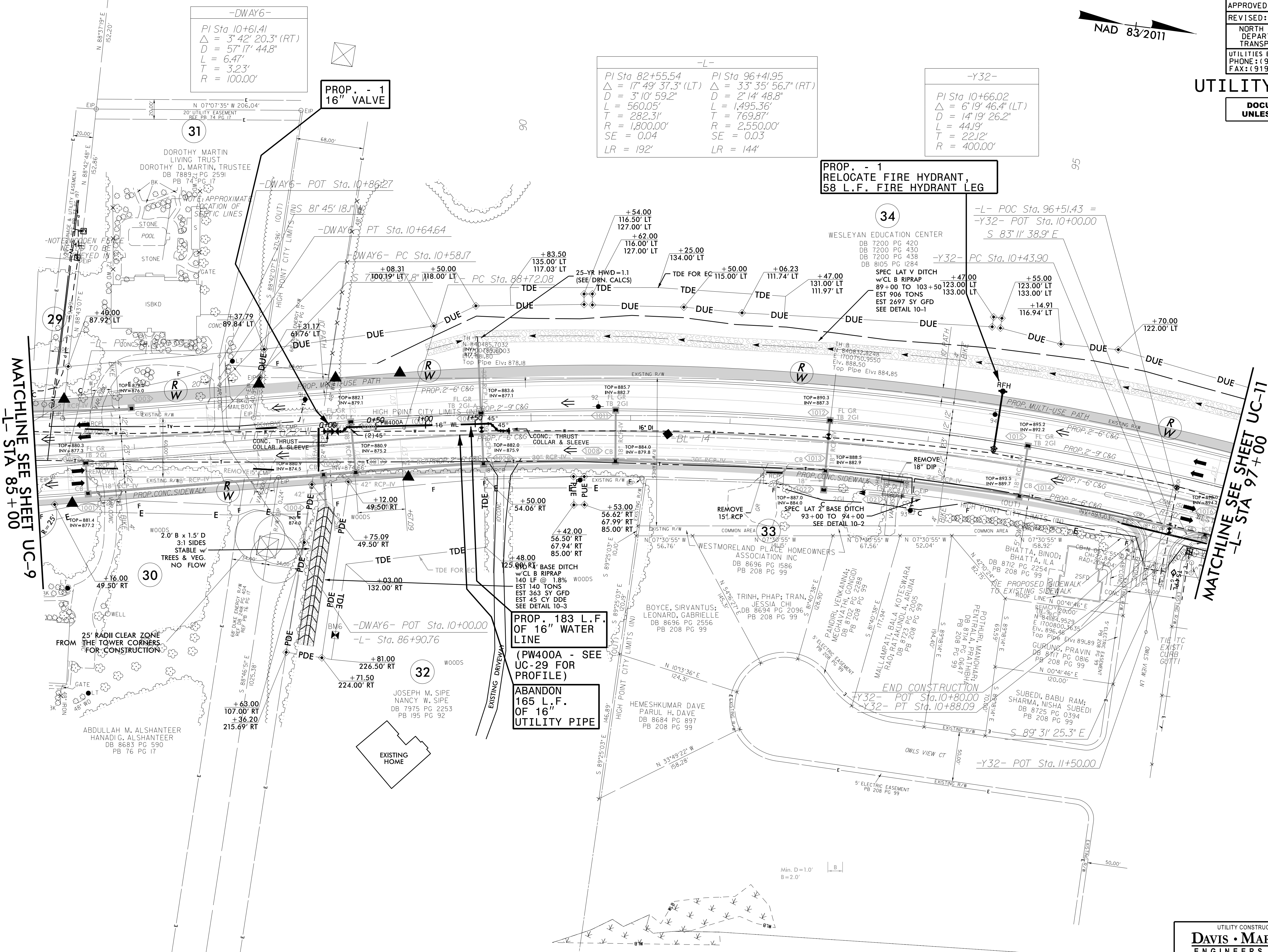


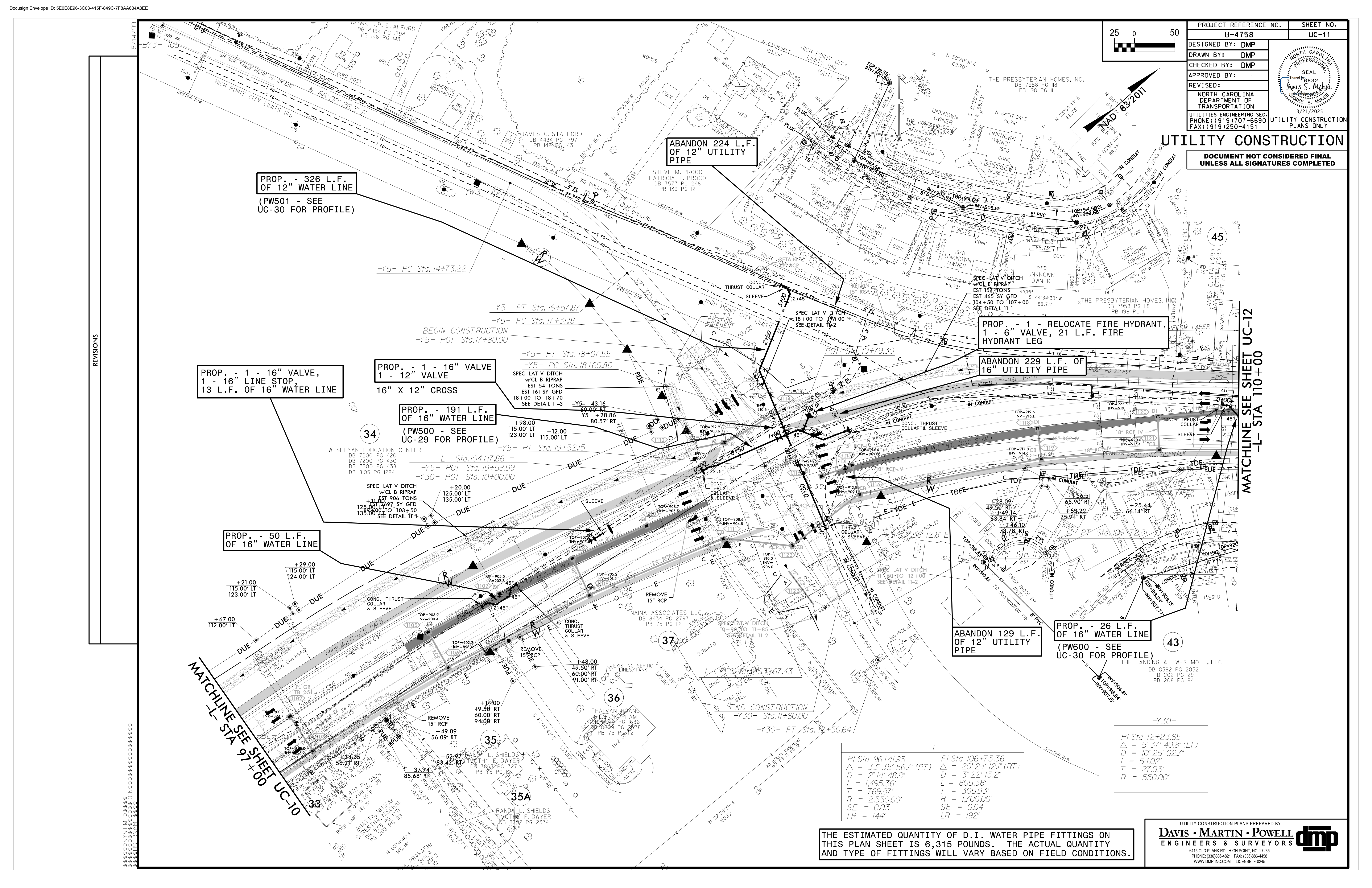
NAD 83/2011

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

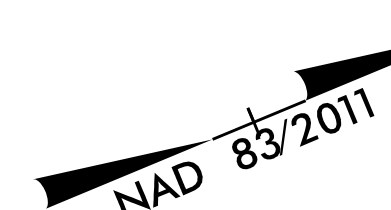
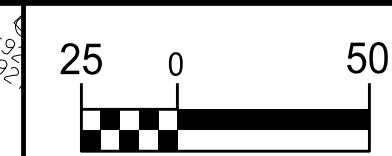
PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-10
DESIGNED BY: DMP		UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY: DMP		
CHECKED BY: DMP		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

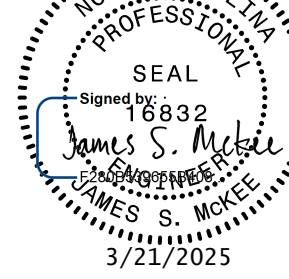






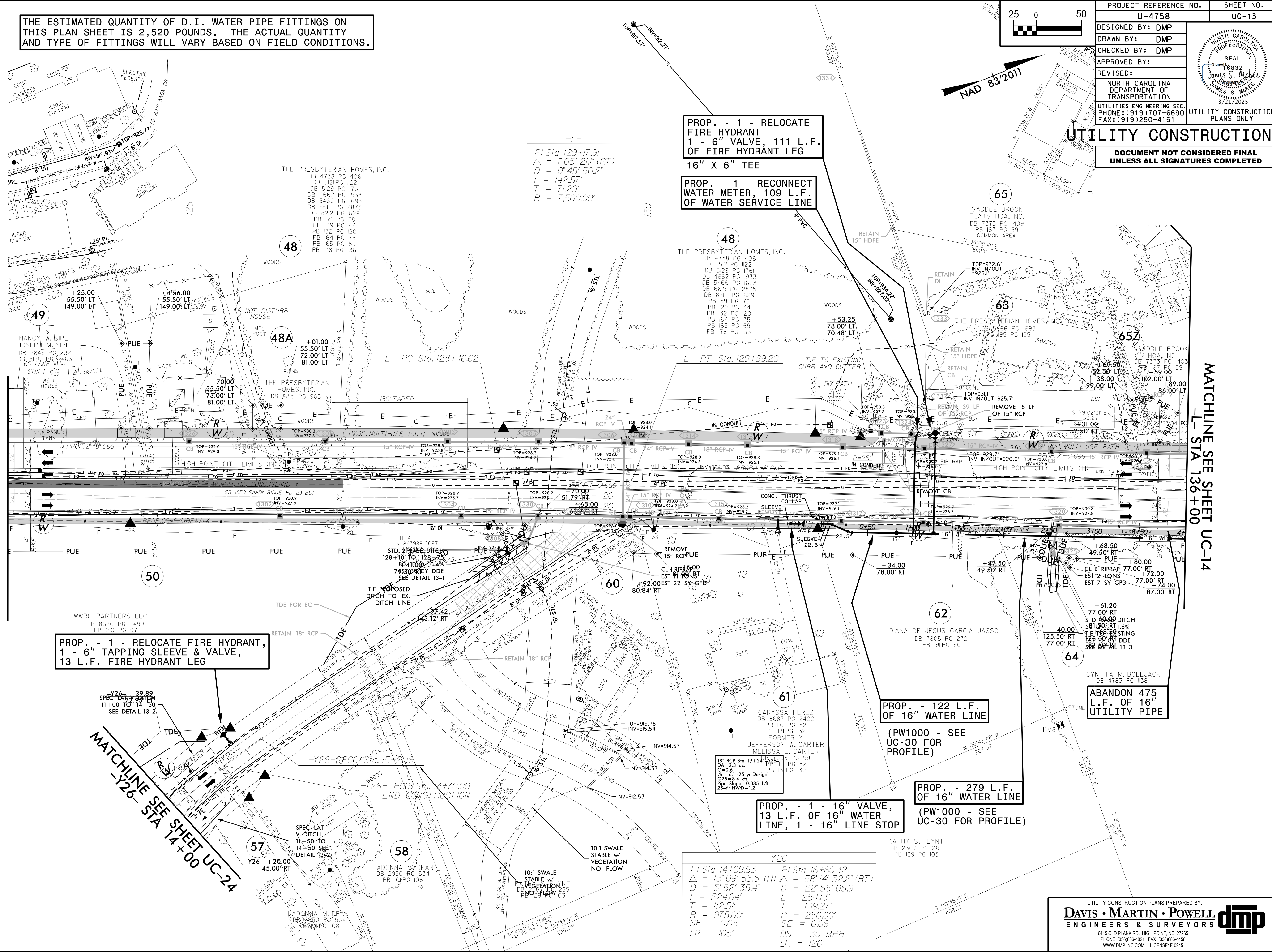
THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2,520 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.



PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-13
DESIGNED BY: DMP		
DRAWN BY: DMP		
CHECKED BY: DMP		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

MATCHLINE SEE SHEET UC-12
-L- STA 123+00

MATCHLINE SEE SHEET UC-14
-L- STA 136+00



PROP. - 1 - RELOCATE FIRE HYDRANT
1 - 6" VALVE, 111 L.F. OF FIRE HYDRANT LEG
16" X 6" TEE

PROP. - 1 - RECONNECT WATER METER, 109 L.F. OF WATER SERVICE LINE

PROP. - 1 - RELOCATE FIRE HYDRANT,
1 - 6" TAPPING SLEEVE & VALVE,
13 L.F. FIRE HYDRANT LEG

PROP. - 122 L.F. OF 16" WATER LINE

PROP. - 279 L.F. OF 16" WATER LINE
(PW1000 - SEE UC-30 FOR PROFILE)

PROP. - 1 - 16" VALVE, 13 L.F. OF 16" WATER LINE, 1 - 16" LINE STOP

-Y26-
PI Sta 14+09.63
 $\Delta = 13^{\circ} 09' 55.5"$ (RT)
 $D = 5^{\circ} 52' 35.4"$
 $L = 224.04'$
 $T = 112.51'$
 $R = 975.00'$
 $SE = 0.05$
 $LR = 105'$

PI Sta 16+60.42
 $\Delta = 58^{\circ} 14' 32.2"$ (RT)
 $D = 22^{\circ} 55' 05.9"$
 $L = 254.13'$
 $T = 139.27'$
 $R = 250.00'$
 $SE = 0.06$
 $DS = 30$ MPH
 $LR = 126'$

MATCHLINE SEE SHEET UC-24
-Y26- STA 14+00

REVISIONS

MATCHLINE SEE SHEET UC-13
-L- STA 136+00

PROP. - 86 L.F.
OF 16" WATER LINE
(PW1000 - SEE
UC-30 FOR PROFILE)
PROP. - 1 - 16" VALVE,
13 L.F. OF 16" WATER
LINE, 1 - 16" LINE STOP

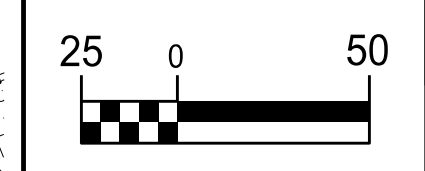
PROP. - 1 - RELOCATE FIRE
HYDRANT, 21 L.F. FIRE
HYDRANT LEG

PROP. - 1 - 16" VALVE,
13 L.F. OF 16" WATER
LINE, 1 - 16" LINE STOP

ABANDON 130 L.F.
OF 16" UTILITY
PIPE

PROP. - 111 L.F.
OF 16" WATER LINE
(PW1100 - SEE
UC-31 FOR PROFILE)

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON
THIS PLAN SHEET IS 1,505 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

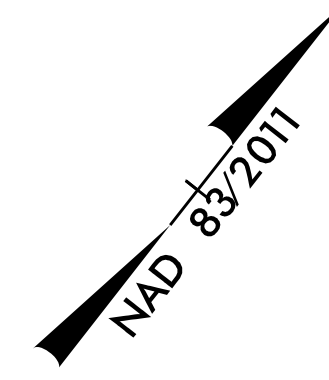


UTILITY CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-14
DESIGNED BY:	DMP	SEAL James S. McKel 6832 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 3/21/2025 UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY:	DMP	
CHECKED BY:	DMP	
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

5/14/2011

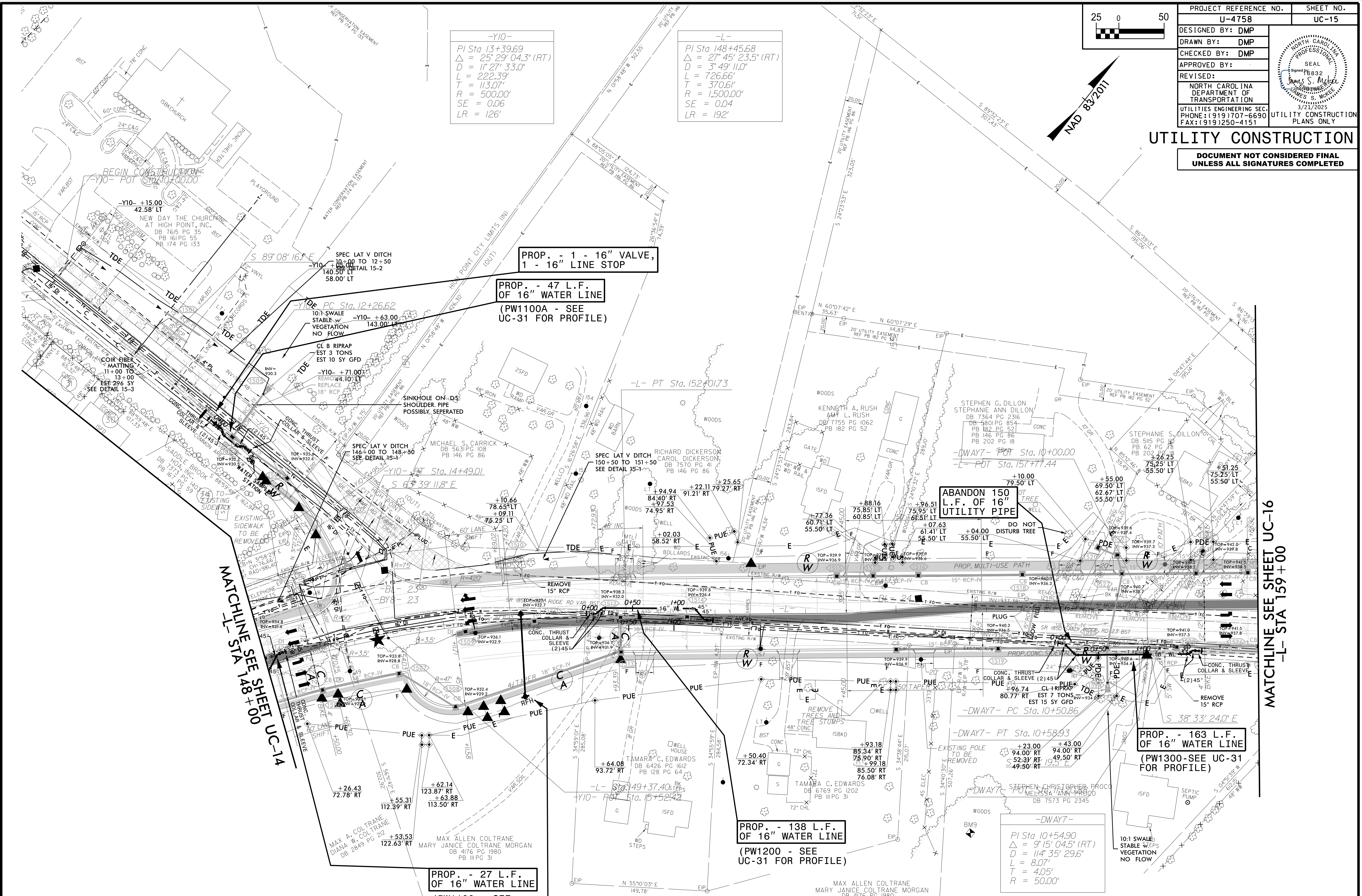
REVISIONS



PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-15
DESIGNED BY: DMP		
DRAWN BY: DMP		
CHECKED BY: DMP		
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

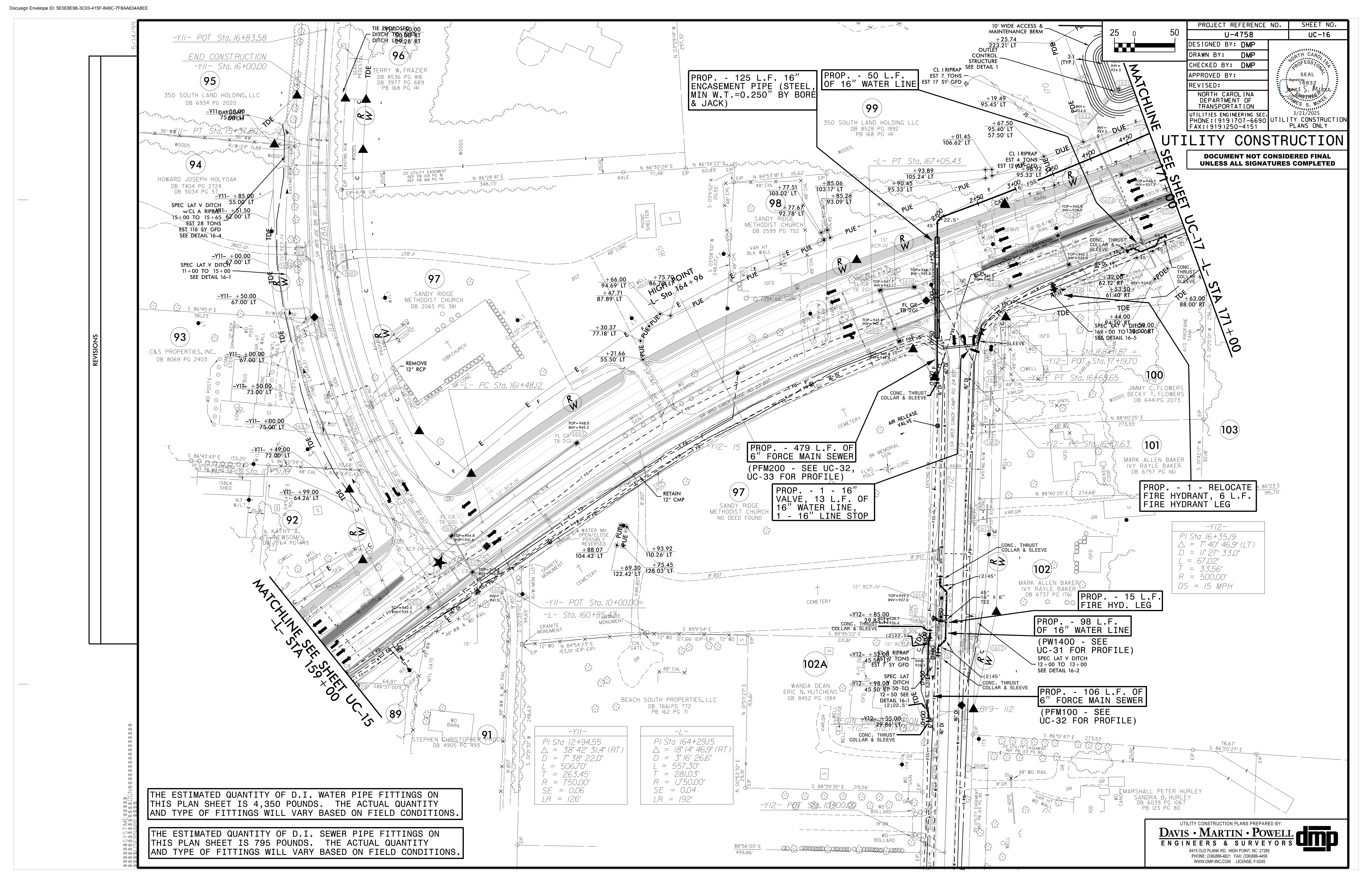
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 6,640 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

UTILITY CONSTRUCTION PLANS PREPARED BY:
DAVIS • MARTIN • POWELL
ENGINEERS & SURVEYORS

6415 OLD PLANK RD, HIGH POINT, NC 27265
PHONE: (336) 886-4821 FAX: (336) 886-4458
WWW.DMP-INC.COM LICENSE: F-0245



PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-16
DESIGNED BY:	DMP	PROFESSIONAL SEAL James S. Martin 3/21/2025 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITY ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY:	DMP	
CHECKED BY:	DMP	
APPROVED BY:		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITY ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON
THIS PLAN SHEET IS 4,350 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

THE ESTIMATED QUANTITY OF D.I. SEWER PIPE FITTINGS ON
THIS PLAN SHEET IS 795 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

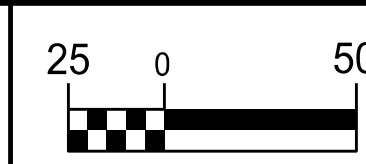
-Y11-
PI Sta 12+94.55
Δ = 38° 42' 31.4" (RT)
D = 7' 38" 22.0"
L = 506.70'
T = 263.45'
R = 750.00'
SE = 0.06
LR = 126'

-L-
PI Sta 164+29.15
Δ = 18° 14' 46.9" (RT)
D = 3' 16" 26.6"
L = 557.30'
T = 281.03'
R = 1,750.00'
SE = 0.04
LR = 192'

-Y12-
PI Sta 16+35.19
Δ = 7° 40' 46.9" (LT)
D = 11' 27" 33.0"
L = 67.02'
T = 33.56'
R = 500.00'
DS = 15 MPH

5/14/2011

REVISIONS

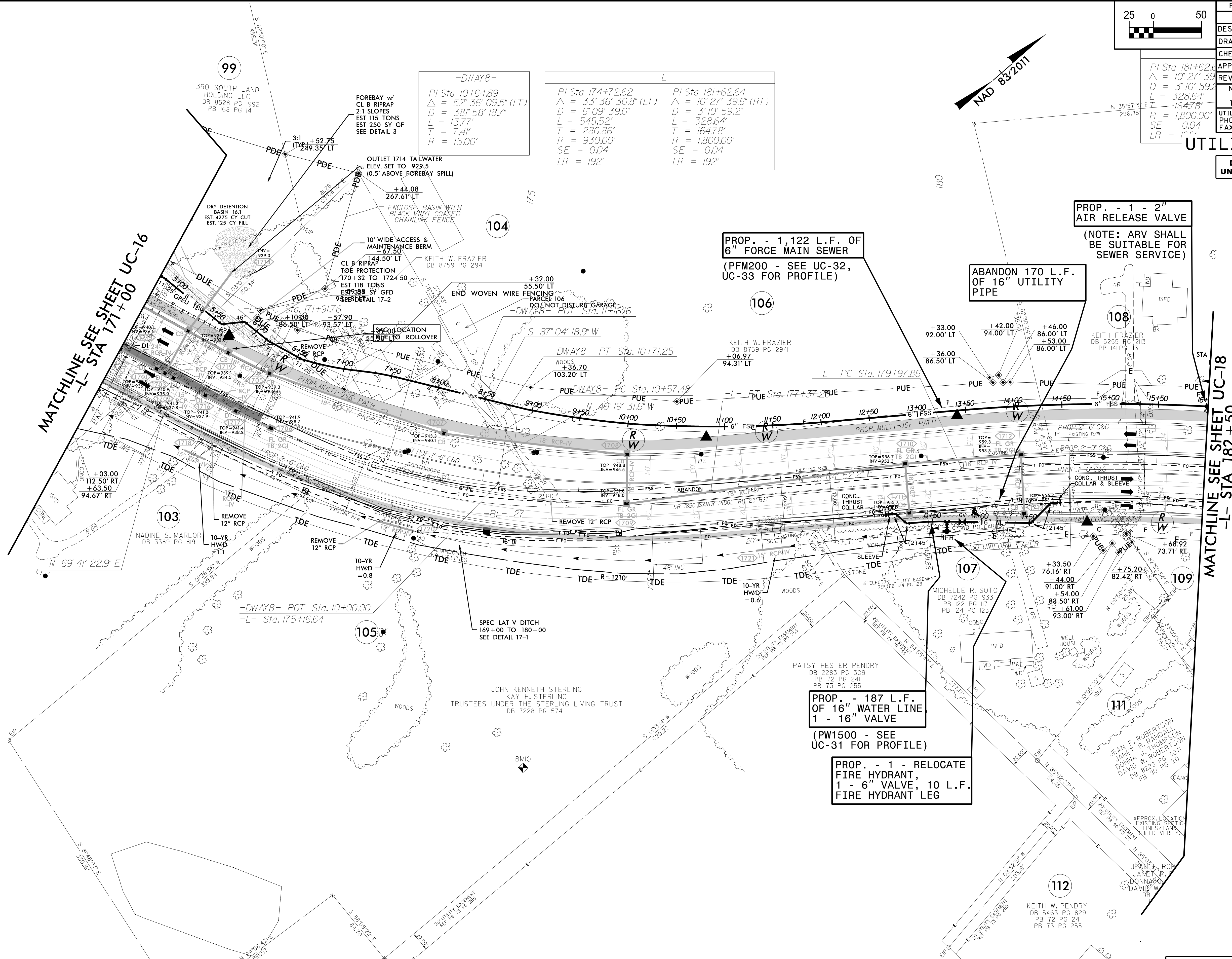


PI Sta 181+62.6
 $\Delta = 10' 27' 39''$
 $D = 3' 10' 59.2''$
 $L = 328.64'$
 $T = 164.78'$
 $R = 1,800.00'$
 $SE = 0.04$
 $LR = 192'$

PROJECT REFERENCE NO.		SHEET NO.
U-4758		UC-17
DESIGNED BY:	DMP	
DRAWN BY:	DMP	
CHECKED BY:	DMP	
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

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



THE ESTIMATED QUANTITY OF D.I. SEWER PIPE FITTINGS ON THIS PLAN SHEET IS 300 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2,370 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

UTILITY CONSTRUCTION PLANS PREPARED BY:
DAVIS • MARTIN • POWELL
ENGINEERS & SURVEYORS
6415 OLD PLANK RD., HIGH POINT, NC 27265
PHONE: (336) 886-4821 FAX: (336) 886-4458
WWW.DMP-INC.COM LICENSE: F-0245