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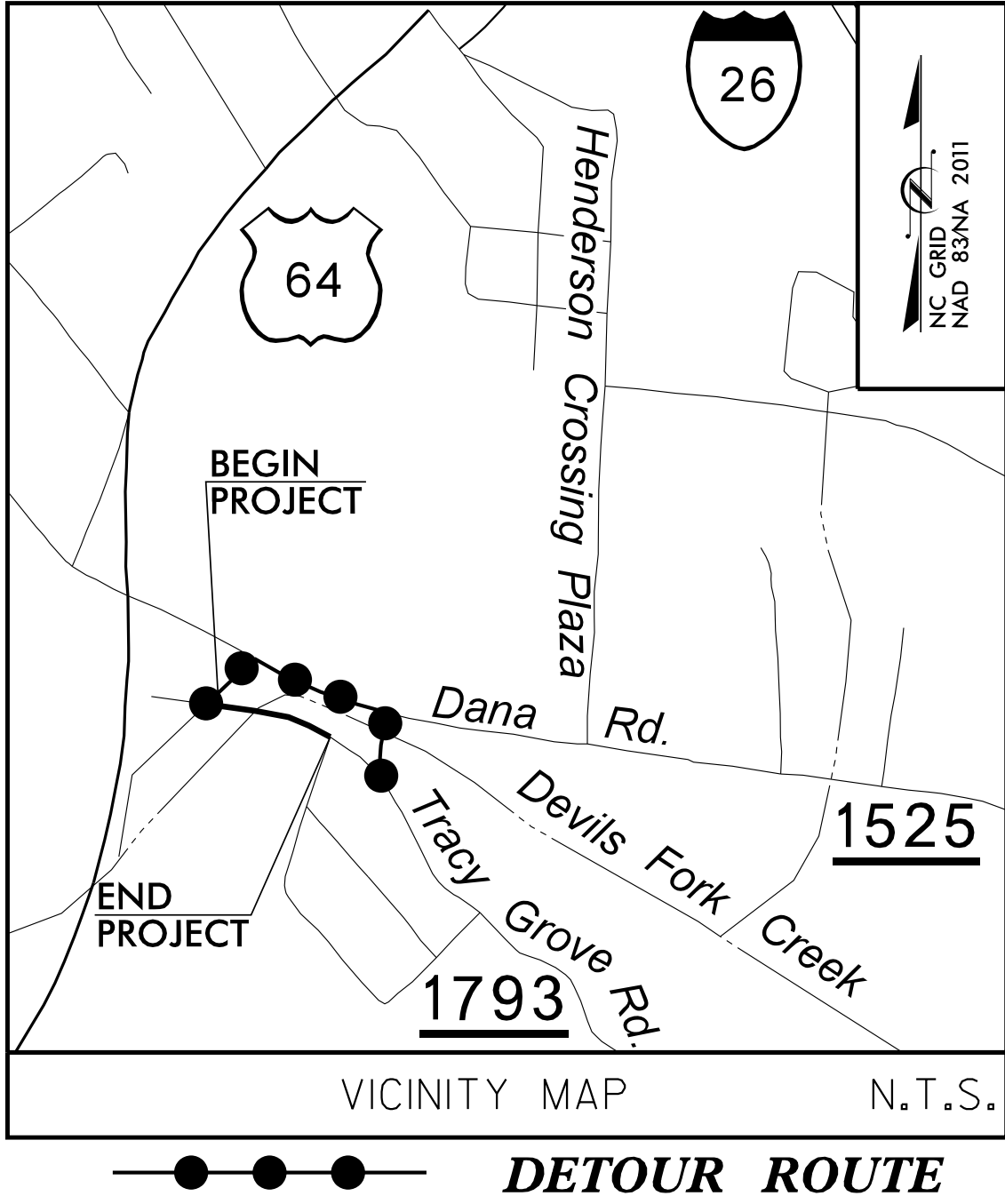
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6/3/24

V&M PROJECT #31640-05 Hendersonville B-5929\Utilities\B5929.UTL UC-1.dgn
V:\Asheville\structures\31640-05 Hendersonville B-5929\Utilities\B5929.UTL UC-1.dgn

TIP PROJECT: B-5929

CONTRACT: DN01162



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

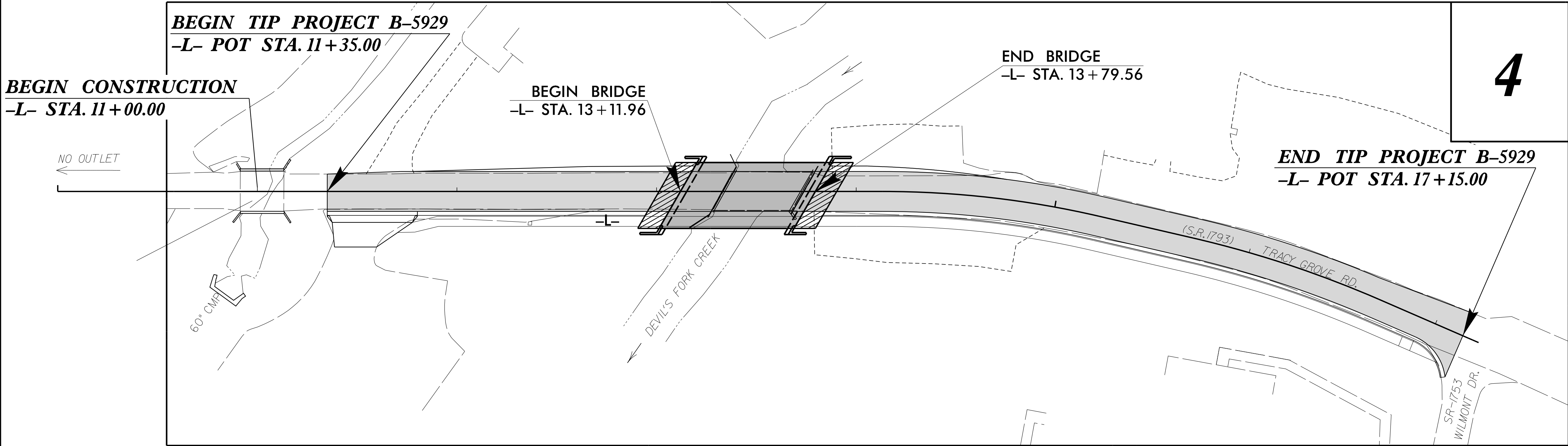
UTILITY CONSTRUCTION PLANS
HENDERSON COUNTY

LOCATION: BRIDGE NO. 440350 OVER DEVILS FORK CREEK
ON TRACY GROVE ROAD (S.R. 1793)

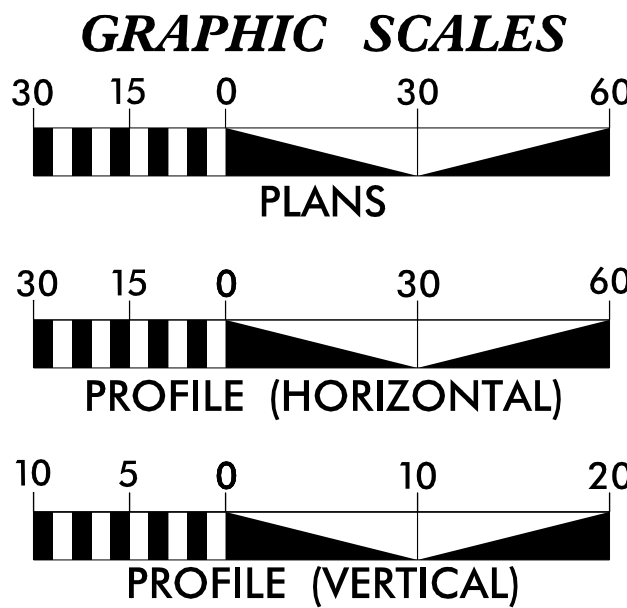
TYPE OF WORK: WATER & SEWER LINE CONSTRUCTION;
WATER LINE REMOVAL & SEWER LINE
REMOVAL /ABANDONMENT

T.I.P. NO.	SHEET NO.
B-5929	UC-1

UTILITY CONST. PLANS
DATE: AUGUST 24, 2026



DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3 - UC-3A	NOTES
UC-3B - UC-3E	DETAILS
UC-4 - UC-4A	UTILITY PLAN & PROFILE

UTILITY OWNERS ON PROJECT

(1) WATER & SEWER - CITY OF HENDERSONVILLE

Prepared in the Office of:
JOHNSON, MIRMIRAN, & THOMPSON, INC. SEAL:
2550 West Tyvola Road, Suite 120,
Charlotte NC, 28217

JMT

Marie Peedin, P.E. UTILITY PROJECT ENGINEER
Nicholas Asaro, PLS PROJECT UTILITY COORDINATOR
Emily Morris, E.I. PROJECT UTILITY DESIGNER



DIVISION OF HIGHWAYS
UTILITIES UNIT
1555 MAIL SERVICES CENTER
RALEIGH, NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

Byron Sanders, P.E.	UTILITIES REGIONAL ENGINEER
Bob Golding	DIVISION UTILITIES ENGINEER
Amy Dupree	UTILITIES AREA COORDINATOR
Bill Green	DIVISION UTILITIES COORDINATOR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STRUCTURE 440350
HENDERSON COUNTY

PROJECT REFERENCE NO.	SHEET NO.
B-5929	UC-2

UTILITIES PLAN SHEET SYMBOLS

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	

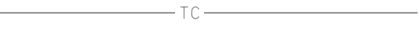
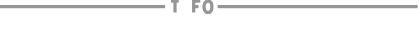
PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

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	

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	AATUR
End of Information	E.O.I.

*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) _____ W _____
Designated Utility Line (Type as Shown) _____ W _____

6/3/24

STRUCTURES/31640-05/UTILITIES/UC-3.DGN

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 OR LATEST EDITION AND THE CONTRACT SPECIAL PROVISIONS.
2. THE EXISTING UTILITIES BELONG TO THE CITY OF HENDERSONVILLE. CONTACT: CHRIS CONARD, CONSTRUCTION & INSPECTION DIVISION MANAGER; 828-243-3238; CCONARD@HVLNC.GOV
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 TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER, AGREEMENTS BETWEEN THE UTILITY OWNER 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 OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER 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 SYSTEMS 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, OR ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT SITE. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE NCDOT STANDARD SPECIFICATIONS.

UTILITY CONSTRUCTION

PROJECT SPECIFIC NOTES

1. WATER CONSTRUCTION ON THIS SITE IS AUTHORIZED BY PERMITS ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND AUTHORIZED BY THE REPRESENTATIVES OF NCDEQ, THE CITY OF HENDERSONVILLE, THE OWNER OR THE ENGINEER. THE PERMITS REQUIRE CERTIFICATION OF COMPLETION OF THE WATER SYSTEMS BY THE ENGINEER AND THE APPLICANT PRIOR TO ISSUANCE OF FINAL OPERATION APPROVAL.
2. MATERIALS AND INSTALLATION FOR WATER CONSTRUCTION SHALL CONFORM TO THE LATEST VERSIONS OF CITY SPECIFICATION AND DETAILS AND AWWA STANDARDS AND REQUIREMENTS.
3. CONTRACTOR SHALL NOTIFY NC811 & APPROPRIATE UTILITIES AGENCIES PRIOR TO PERFORMING ANY WORK.
4. REGULAR WORKING HOURS SHALL BE FROM 7:00 A.M. TO 5:00 P.M. MONDAY THROUGH FRIDAY, EXCEPT IN CASES OF EMERGENCY OR OTHERWISE APPROVED IN WRITING BY THE CITY OF AUTHORIZED REPRESENTATIVES. THE CONTRACTOR SHALL ENSURE THE CONSTRUCTION SITE IS SAFE FOR ANY PERSONS WHO MAY BE ON SITE DURING NON-WORKING HOURS.
5. ALL PERSONS SHALL BE COURTEOUS AND RESPECTFUL TO THE PUBLIC. CURSING OR FOUL LANGUAGE IS NOT PERMITTED AND WILL NOT BE TOLERATED.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL ON ALL ROADWAYS DURING THE PROJECT. THE CONTRACTOR SHALL NOTIFY LOCAL EMERGENCY, SCHOOL AND OTHER NECESSARY AUTHORITIES PRIOR TO ANY STREET CLOSING OR TRAFFIC CHANGE.
7. THE CONTRACTOR AT HIS OWN EXPENSE SHALL KEEP THE CONSTRUCTION SITE AND ADJACENT PUBLIC AND PRIVATE ROADWAYS CLEAN DURING THE PROJECT. THE CONTRACTOR IS ALSO RESPONSIBLE FOR CONTROLLING DUST WITHIN THE PROJECT AREA.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES, GRADES AND ELEVATIONS SHOWN ON THE PLANS OR AS GIVEN BY THE ENGINEER IN THE FIELD.

9. CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND THE ELEVATION FOR ALL UTILITIES, DRAINAGE AND OTHER UNDERGROUND FACILITIES BOTH EXISTING AND PROPOSED, AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION. REPAIRS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
11. DURING CONSTRUCTION THE CONTRACTOR SHALL MAINTAIN THE OPERATION OF EXISTING UTILITIES WITH THE LEAST AMOUNT OF SERVICE INTERRUPTION POSSIBLE IN COORDINATION WITH THE CITY OF HENDERSONVILLE. CONTINUOUS SERVICE, PUBLIC HEALTH AND SAFETY CONSIDERATIONS SHALL EXCEED ALL OTHERS AND CONTRACTOR'S SCHEDULE, PLANS AND WORK SHALL AT ALL TIMES BE SUBJECT TO ALTERATION AND REVISION IF NECESSARY FOR THESE CONSIDERATIONS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY OR PERMANENT RELOCATION OF STRUCTURES AND UTILITIES, INCLUDING BUT NOT LIMITED TO POLES, SIGNS, FENCES, HYDRANTS, VALVES, PIPING, CONDUITS AND DRAINS THAT INTERFERE WITH THE POSITIONING OF THE WORK AS SHOWN ON THE DRAWINGS.
13. CONTRACTOR SHALL BE REQUIRED TO CONFORM AND COMPLY WITH ALL RESTRICTIONS AND EASEMENT CONDITIONS AND IS RESPONSIBLE FOR ALL RELATED INCIDENTAL COSTS INVOLVED.
14. EXISTING WATER SERVICES SHALL BE REPLACED TO THE EXISTING METER UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY. SPLICING OF THE WATER SERVICE ON THE DOWNSTREAM SIDE OF THE METER IS NOT PERMITTED.

STRUCTURE 440350
HENDERSON COUNTY

PROJECT REFERENCE NO.		SHEET NO.	
B-5929		UC-3	
DESIGNED BY:	ELM		
DRAWN BY:	ELM		
CHECKED BY:	MUP		
APPROVED BY:	MUP		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

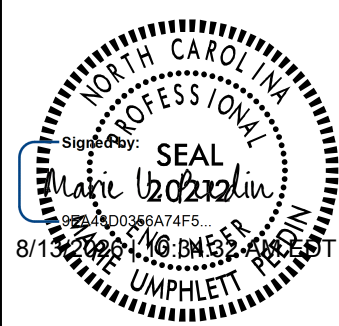
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Johnson, Mirmiran, & Thompson Inc.
2550 West Tyvola Road, Suite 120,
Charlotte, NC 28217
License No: C-3097

UTILITY CONSTRUCTION

STRUCTURE 440350
HENDERSON COUNTY

PROJECT REFERENCE NO.		SHEET NO.
B-5929		UC-3A
DESIGNED BY:	ELM	
DRAWN BY:	ELM	
CHECKED BY:	MUP	
APPROVED BY:	MUP	
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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Johnson, Mirmiran, & Thompson Inc.
2550 West Tyvola Road, Suite 120,
Charlotte, NC 28217
License No: C-3097

PROJECT SPECIFIC NOTES:

15. ALL DISTURBED AREAS, INCLUDING BUT NOT LIMITED TO ASPHALT, CONCRETE, DRIVEWAYS, ROADS, LANDSCAPING, SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION THAN THE ORIGINAL SITE. GRASS AND LANDSCAPED AREAS FILL MATERIAL MUST BE REPLACED IN TRENCH TO GRADE AS SOON AS WATERLINE CONSTRUCTION ALLOWS. ADEQUATE SEEDING AND STRAW OR MULCH SHALL THEN BE APPLIED TO THE DISTURBED TRENCH AREA. ADDITIONAL FILL AND SITE RESTORATION MAY BE REQUIRED WITHIN THE WARRANTY PERIOD AT THE CITY'S DISCRETION.

16. CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES TO CONTROL RUNOFF AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES THAT MAY BE LEVIED DUE TO RUNOFF FROM CONSTRUCTION.

17. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW ALL APPLICABLE FEDERAL, STATE AND LOCAL HEALTH AND SAFETY REGULATIONS PERTAINING TO CONSTRUCTION OPERATIONS.

18. ALL WATER MAINS SHALL HAVE 3 FEET MINIMUM COVER.

19. INSTALL FERROUS PIPING FOR BOTH WATER AND SEWER WITHIN 10 FT. OF A CROSSING IF:

19.1. SEWER LINE CROSSES OVER WATER, OR

19.2. VERTICAL CLEARANCE BETWEEN WATER AND SEWER IS LESS THAN 18 INCHES.

19.3. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SEWER AND WATER MAINS UNLESS LAID IN SEPARATE TRENCHES WITH THE BOTTOM OF THE WATER LINE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE OR USE FERROUS MATERIAL FOR BOTH WATER AND SEWER.

DISCLAIMER:

THE STANDARD WATER DETAILS ARE FOR THE SOLE USE OF PROJECTS DIRECTLY FOR, OR THOSE PROJECTS IN WHICH OWNERSHIP WILL BE TRANSFERRED TO THE CITY OF HENDERSONVILLE. THESE TYPICALS ARE INTENDED TO SHOW THE CITY OF HENDERSONVILLE'S EXPECTATIONS FOR THE GENERAL LAYOUT, ARRANGEMENT, AND THE QUALITY OF EQUIPMENT AND MATERIALS FOR WATER DISTRIBUTIONSYSTEM ITEMS AND THEIR RELATED APPURTENANCES. IT REMAINS THE SOLE RESPONSIBILITY OF THE ENGINEER IN RESPONSIBLE CHARGE (ERC) OF EACH APPLICATION TO DETERMINE, DESIGN TO, AND CERTIFY TO THE DESIGN PARAMETERS FOR EACH INSTALLATION. THE ERC MUST ALSO ENSURE THE DESIGN COMPLIES WITH THE MINIMUM DESIGN CRITERIA OF NC DIVISION OF ENVIRONMENTAL QUALITY AND ALL LOCAL AND STATE LAWS AND REGULATIONS.

20. MAINTAIN 18 INCHES VERTICAL SEPARATION BETWEEN STORM DRAIN AND WATER, OR INSTALL FERROUS MATERIAL WATER LINE WITHIN 10 FEET EACH SIDE OF CROSSING.

21. TAPS GREATER THAN ONE-INCH IN DIAMETER IN EXISTING, ACTIVE WATER MAIN ARE TO BE PERFORMED BY THE CITY UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY. TAPS IN NEW CONSTRUCTION ARE TO BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH CITY REQUIREMENTS.

22. ALL WATER METERS WILL BE SET BY CITY STAFF UNLESS THE CONTRACTOR IS GRANTED WRITTEN PERMISSION BY THE CITY.

22.1. THE CONTRACTOR WILL PROVIDE THE CITY NOTICE OF 10 WORKING DAYS MINIMUM PRIOR TO THE DATE OF METER INSTALLATION.

22.2. THE CONTRACTOR WILL PROVIDE A LICENSED PLUMBER DURING THE METER INSTALLATION TO VERIFY LINES SERVICES IN ALL MULTI-METER BOXES.

23. ALL PUBLIC WATER MAIN CONSTRUCTION SHALL BE PERFORMED BY A NORTH CAROLINA LICENSED UTILITY CONTRACTOR.

24. ALL WATER APPURTENANCES ARE TO BE MADE USING LEAD FREE MATERIALS. PIPE, FITTINGS, VALVES, HYDRANTS, PIPE CLAMPS, RESTRAINTS, FLANGES, CASTINGS, REBAR, HATCHES, INLETS, METER BOXES AND ALL OTHER CAST IRON COMPONENTS SHALL BE MANUFACTURED IN THE USA.

25. RESTRAINED JOINTS BY AN APPROVED PIPE MANUFACTURER ARE TO BE USED FOR ALL PUBLIC WATER LINES WHERE THRUST RESTRAINING IS REQUIRED IN ACCORDANCE WITH THE PLANS AND MANUFACTURER'S SPECIFICATION. CONCRETE THRUST BLOCKS ARE PERMITTED ONLY WHERE CONNECTIONS ARE MADE TO EXISTING WATER LINES OR WHERE THE USE OF MECHANICAL RESTRAINT IS NOT FEASIBLE.

26. ALL FIRE HYDRANTS, VAULTS, BACKFLOW PREVENTERS, HOT BOXES AND WATER METERS ARE TO BE INSTALLED ON RELATIVELY FLAT AREAS OUTSIDE OF PAVEMENT.

27. TAMPERING WITH OR ILLEGAL USE OF THE PUBLIC WATER SUPPLY WILL RESULT IN SUSPENSION OF WATER SERVICE, INCLUDING DOMESTIC AND COMMERCIAL, UNTIL FINAL APPROVAL BY THE CITY IS ISSUED. A PERSON FOUND TO BE USING WATER ILLEGALLY SHALL BE SUBJECT TO PENALTIES OR FINES, AS PRESCRIBED AND APPROVED BY CITY COUNCIL.

TESTING & INSPECTION:

1. NOTIFY THE CITY OF HENDERSONVILLE AND ENGINEER AT LEAST 5 WORKING DAYS BEFORE STARTING CONSTRUCTION OF WATER FACILITIES TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE. THE ENGINEER SHALL PERIODICALLY INSPECT THE PROGRESS OF INSTALLATION AT A MINIMUM AND SHALL COMPLETE A FINAL WATER CERTIFICATION.

2. ALL CHANGES TO THE APPROVED CONSTRUCTION PLANS AND SUBMITTALS MUST BE APPROVED IN WRITING BY THE CITY & NCDOT PRIOR TO IMPLEMENTATION IN THE FIELD.

3. THE CONTRACTOR SHALL FURNISH SECURE AND PROVIDE ALL NECESSARY TESTING MATERIALS, EQUIPMENT, LABOR. THE CONTRACTOR SHALL COORDINATE TESTING, FLUSHING, DISINFECTION, AND BACTERIOLOGICAL SAMPLING WITH CITY INSPECTOR.

4. THE ENGINEER OF CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION INSPECTORS 72 HOURS (MINIMUM) PRIOR TO ANY WATER MAIN OR TESTING OPERATIONS. AT A MINIMUM CITY STAFF SHALL BE NOTIFIED PRIOR TO TAPS, TESTING, FLUSHING, DISINFECTION'S, AND SAMPLING.

5. PRESSURE TEST WATER MAINS TO 200 PSI MIN. FOR A MINIMUM OF TWO HOURS IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND AWWA C600.

6. DISINFECT WATER LINES AND PROVIDE ACCEPTABLE BACTERIOLOGICAL TEST FROM A CERTIFIED TESTING LABORATORY IN ACCORDANCE WITH CITY REQUIREMENTS AND AWWA C651. THE CONTRACTOR MAY ELECT TO USE THE CITY'S CERTIFIED TESTING LABORATORY.

7. PRIVATELY OWNED FIRE SYSTEMS SHALL BE APPROVED BY THE APPROPRIATE LOCAL PERMITTING AUTHORITY. THE CITY ENGINEERING OR WATER SEWER DEPARTMENTS ARE NOT RESPONSIBLE FOR ENSURING COMPLIANCE WITH APPROPRIATE FIRE PROTECTION REGULATIONS. THE CITY DOES NOT PROVIDE ANY GUARANTEE OF ITS WATER SYSTEM'S CAPABILITY TO DELIVER WATER FLOW AND RESIDUAL PRESSURE THE FIRE PERMITTING AUTHORITY MAY REQUIRE.

8. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE USC APPROVED AND REVIEWED BY THE CITY'S ENVIRONMENTAL COMPLIANCE COORDINATOR. PROTECTION OF THE PUBLIC WATER DISTRIBUTION SYSTEM SHALL BE ASSURED BY INSPECTION OF THE INSTALLATION AND TESTING OF BACKFLOW PREVENTION ASSEMBLY. THIS ASSEMBLY INSTALLATION MUST BE TESTED BY A LICENSED PLUMBER AND TEST RESULTS SUBMITTED TO THE CITY BEFORE USE OF CONSTRUCTION WATER.

9. CONSTRUCTION WATER SOURCING MUST BE APPROVED IN WRITING BY THE CITY. CONSTRUCTION WATER CONNECTIONS SHALL BE PAIRED WITH AN IRRIGATION METER AND APPROVED BACKFLOW PREVENTION ASSEMBLY. THIS ASSEMBLY INSTALLATION MUST BE TESTED BY A LICENSED PLUMBER AND TEST RESULTS SUBMITTED TO THE CITY BEFORE USE OF CONSTRUCTION WATER.

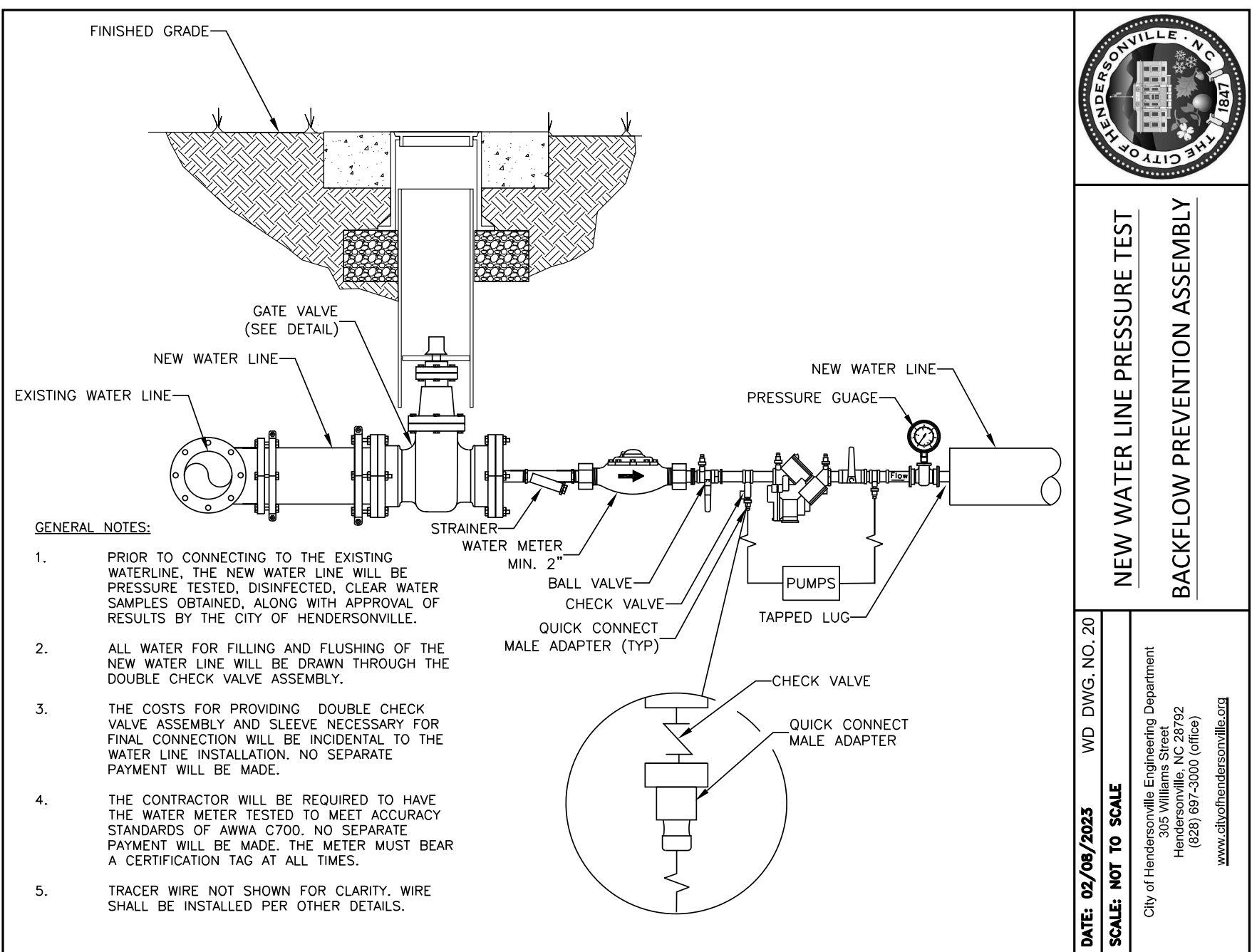
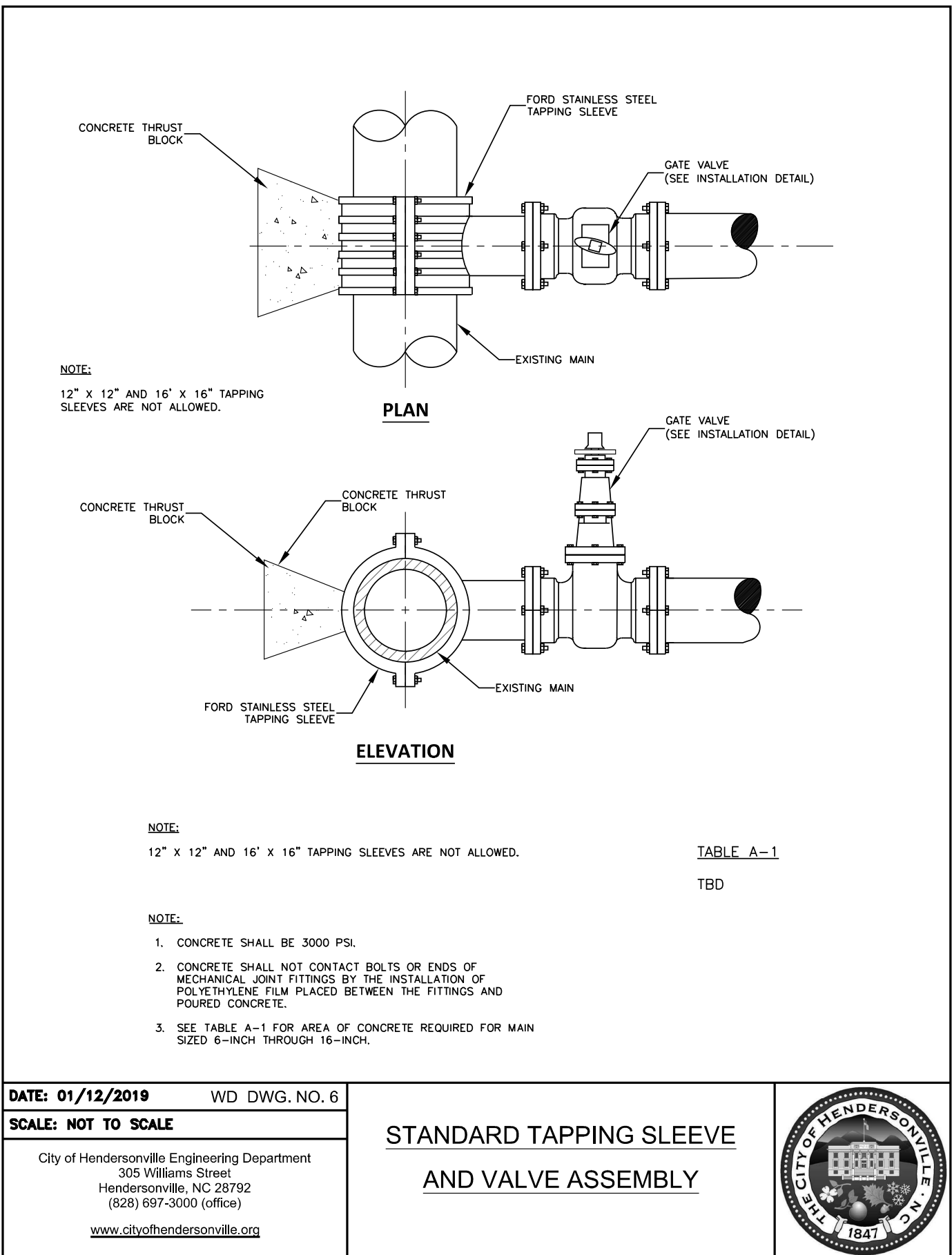
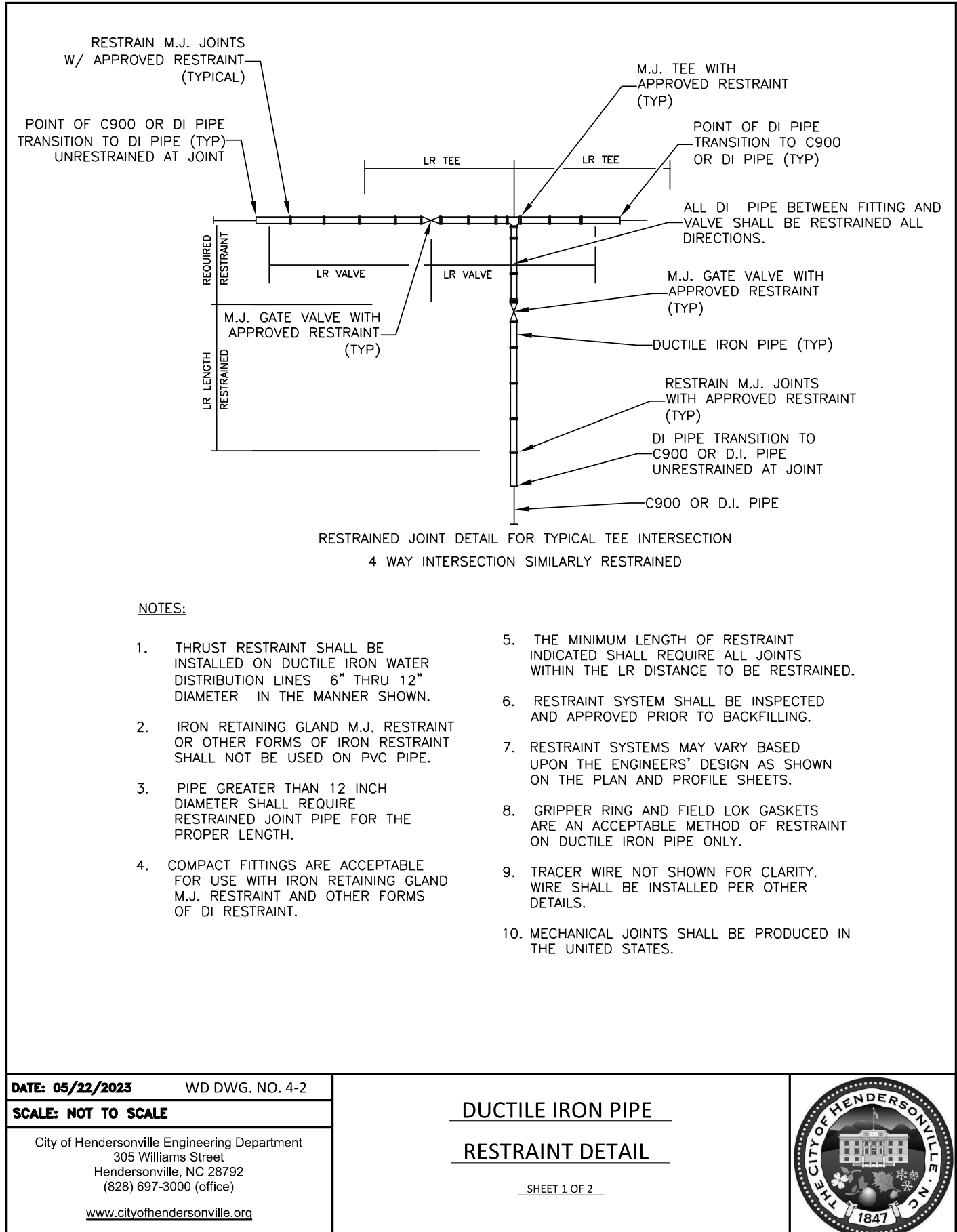
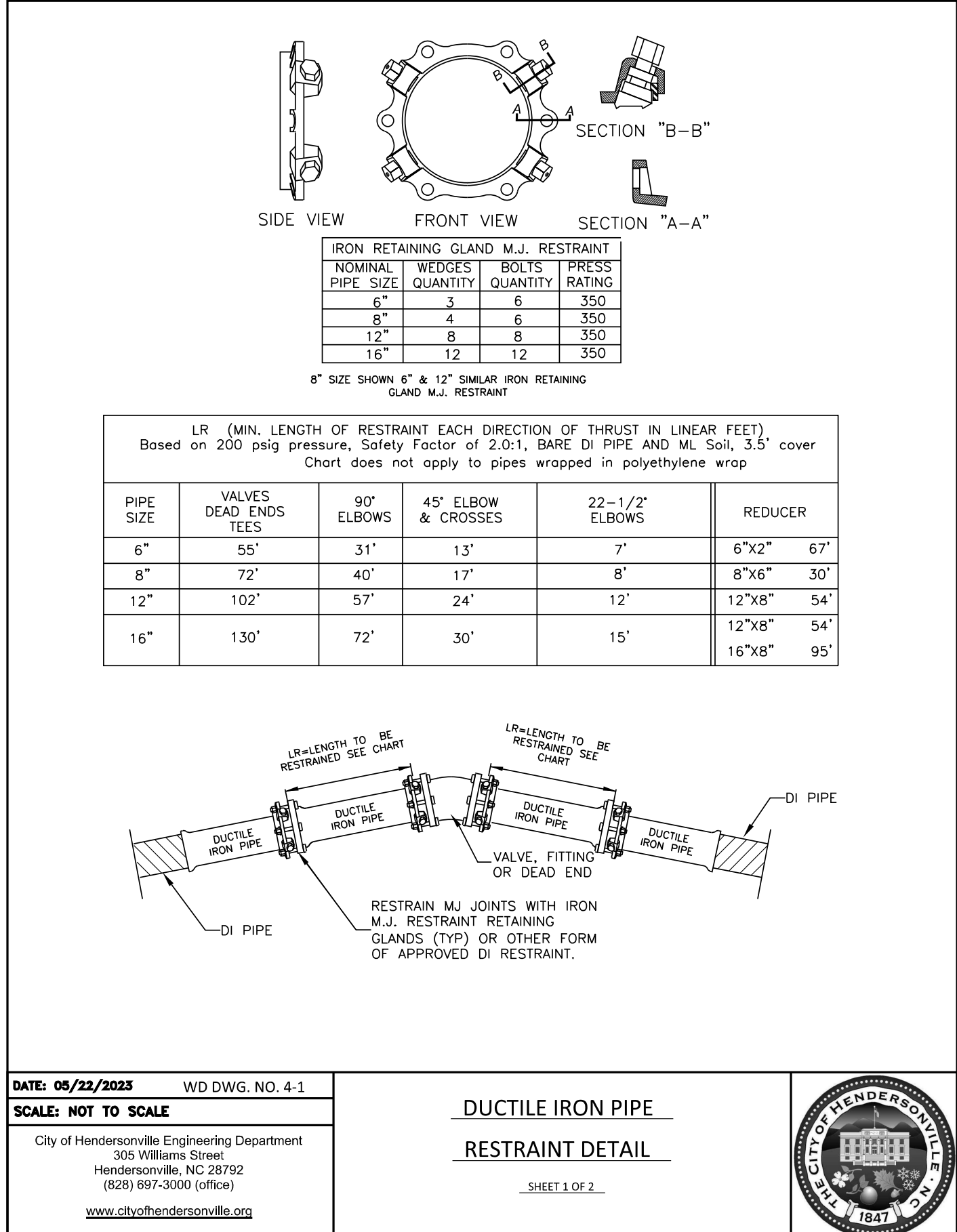
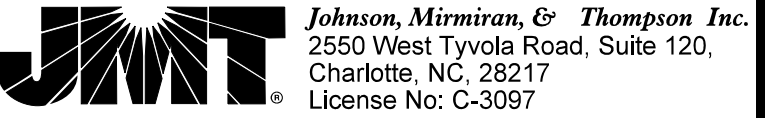
10. SECURE FINAL WRITTEN ACCEPTANCE FROM THE CITY OF HENDERSONVILLE PRIOR TO ACTIVATION OF THE SYSTEM. WATER SERVICE WILL NOT BE PROVIDED UNTIL WRITTEN ACCEPTANCE OF THE SYSTEM IS ISSUED BY THE CITY.

11. THE ENGINEER SHALL SUPPLY THE CITY WITH FINAL AS-BUILT DRAWINGS AND COMPLETE ALL PROJECT CLOSE OUT REQUIREMENTS.

STRUCTURE 440350
HENDERSON COUNTY

UTILITY CONSTRUCTION

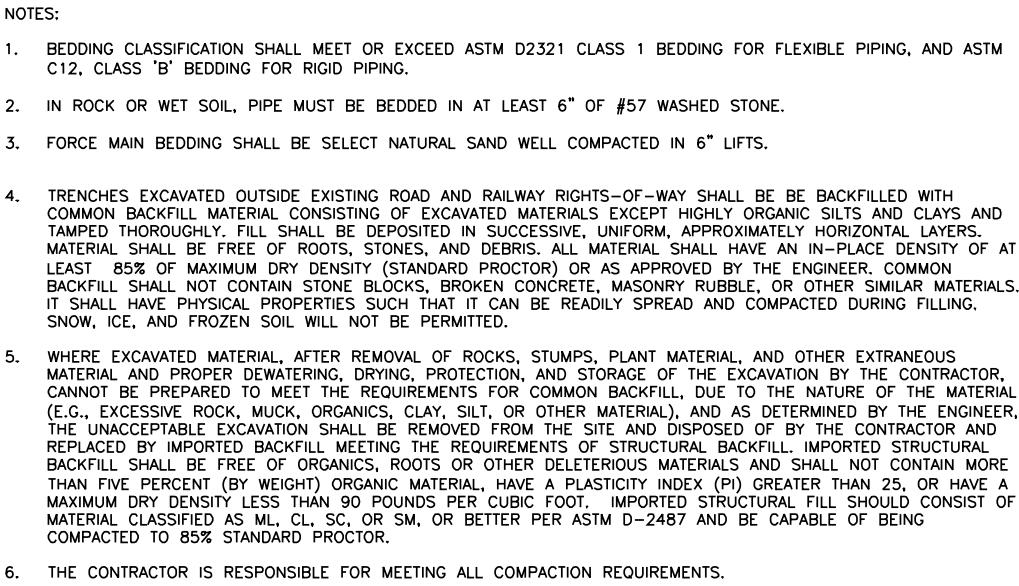
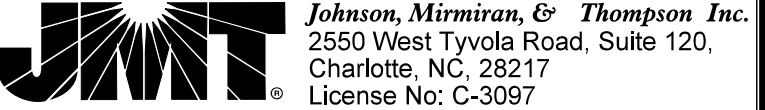
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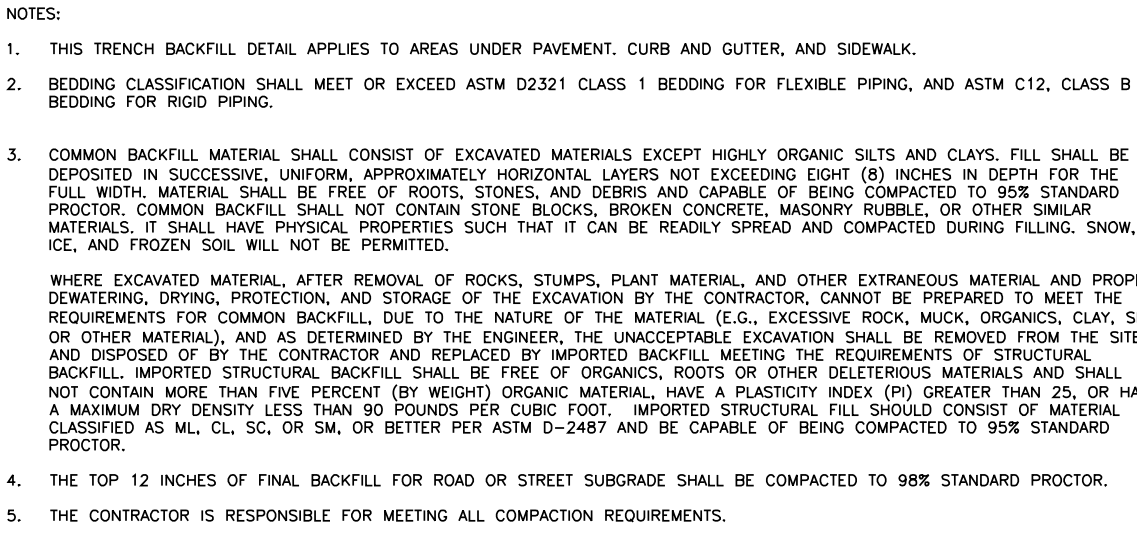
STRUCTURE 440350
HENDERSON COUNTY

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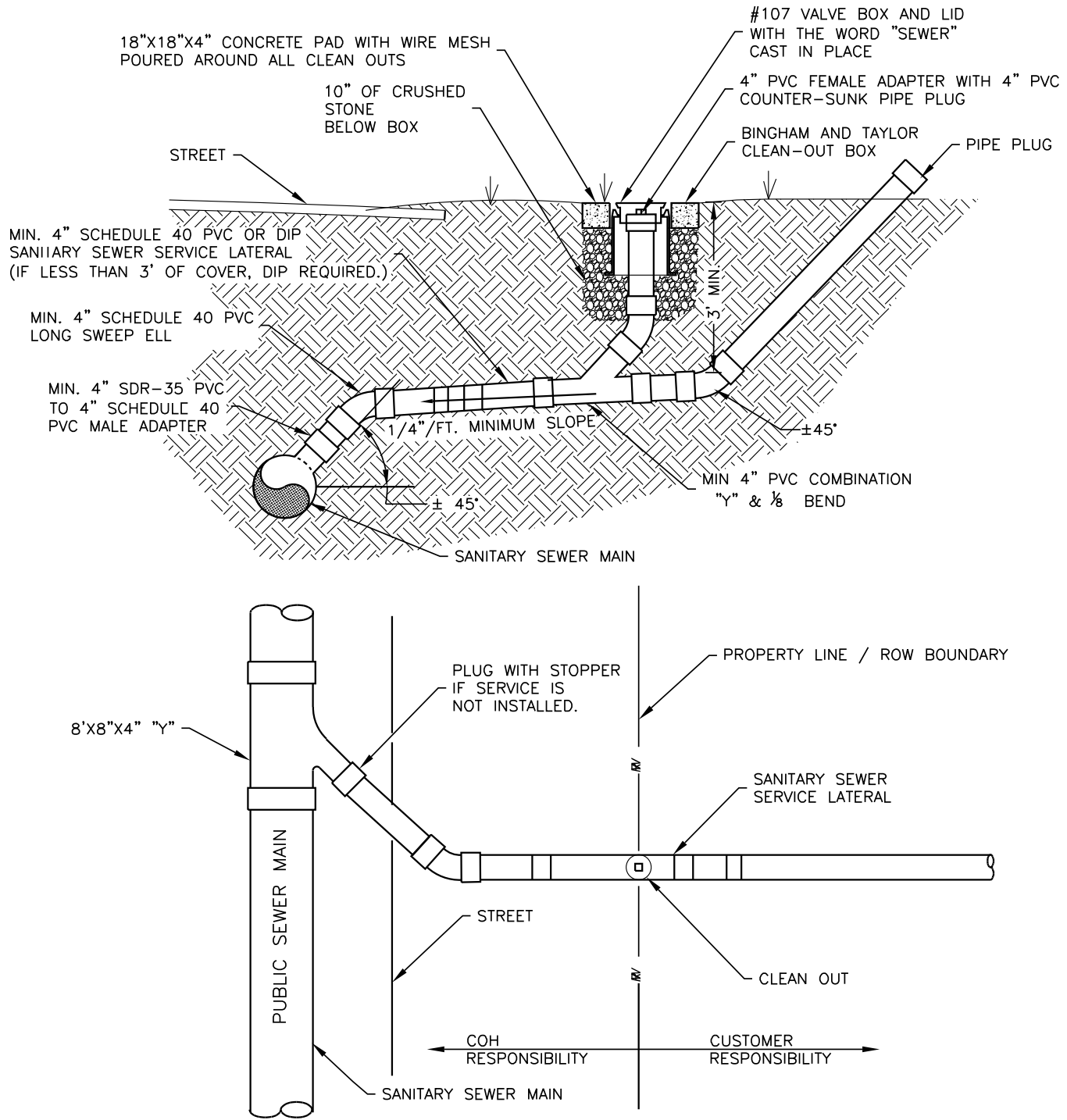
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DATE: 10/19/2023	SS-D DWG. NO. 1	
SCALE: NOT TO SCALE		
City of Hendersonville Engineering Department 305 Williams Street Hendersonville, NC 28392 (828) 897-3000 (office) www.cityofhendersonville.org		<u>GRAVITY SEWER</u> <u>TRENCH CONSTRUCTION</u> <u>OUTSIDE PAVEMENT</u>



DATE: 10/19/2023	SS-D DWG. NO. 2
SCALE: NOT TO SCALE	
City of Hendersonville Engineering Department 305 Williams Street Hendersonville, NC 28702 (828) 697-3000 (office) www.cityofhendersonville.org	<u>GRAVITY SEWER</u> <u>TRENCH CONSTRUCTION</u> <u>UNDER PAVEMENT</u> 



DATE: 10/19/2023	SS-D DWG. NO. 4
SCALE: NOT TO SCALE	
City of Hendersonville Engineering Department 305 Williams Street Hendersonville, NC 28792 (828) 697-3000 (office) www.cityofhendersonville.org	

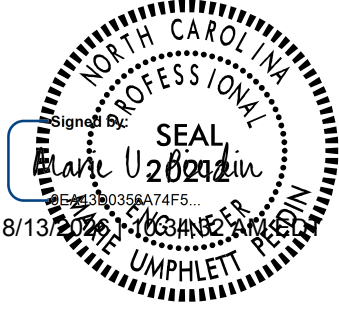
STANDARD SERVICE CONNECTION

LATERAL AND CLEANOUT



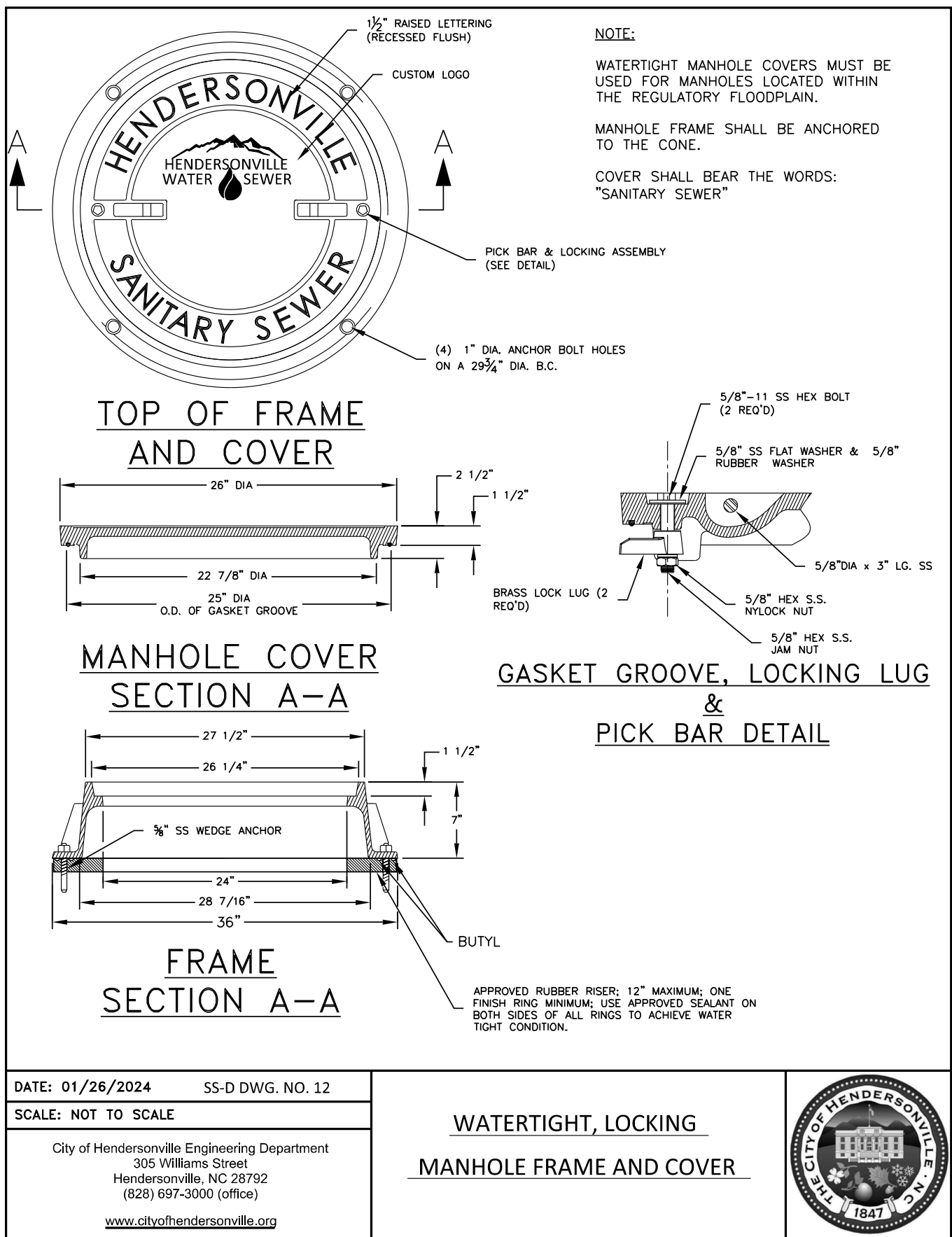
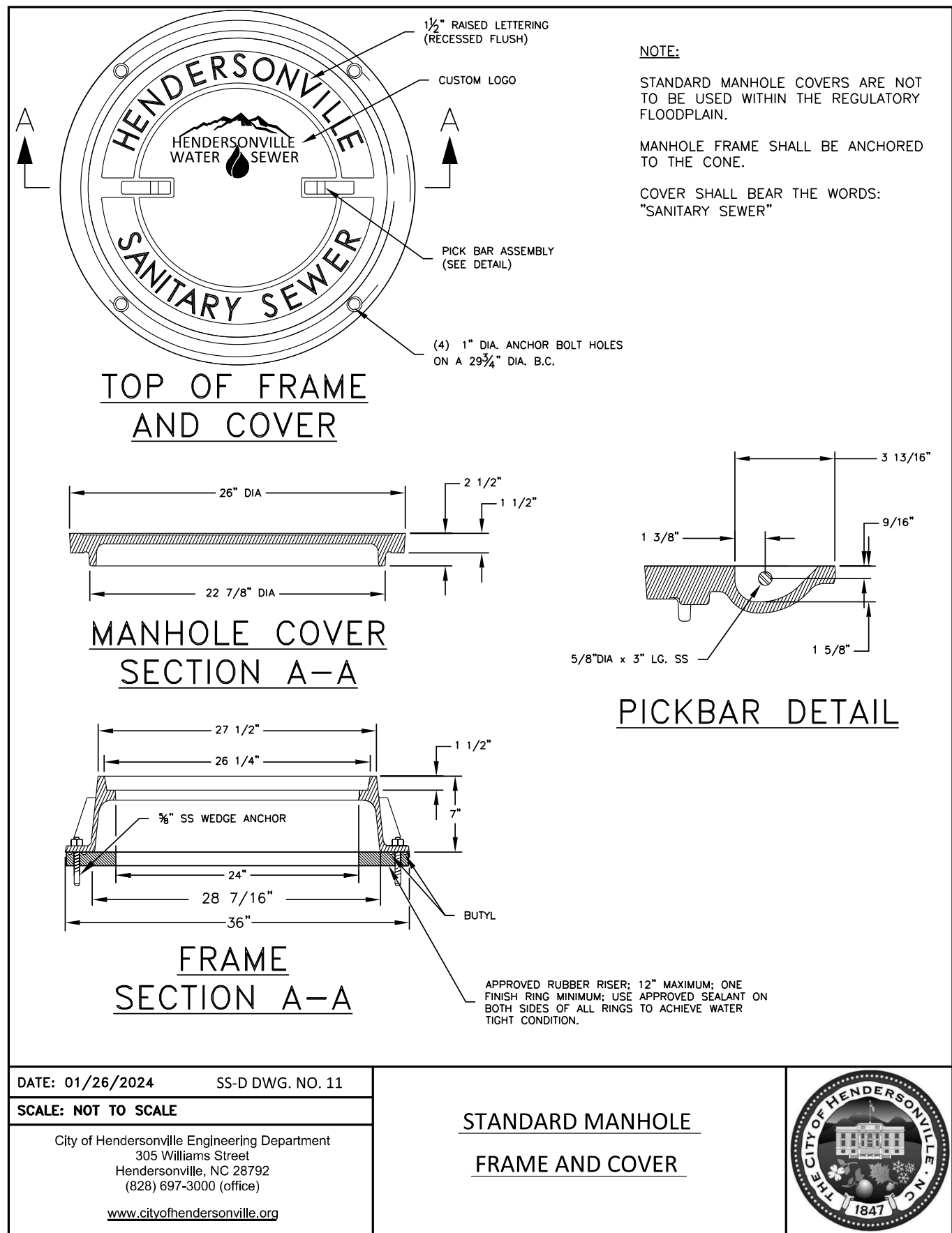
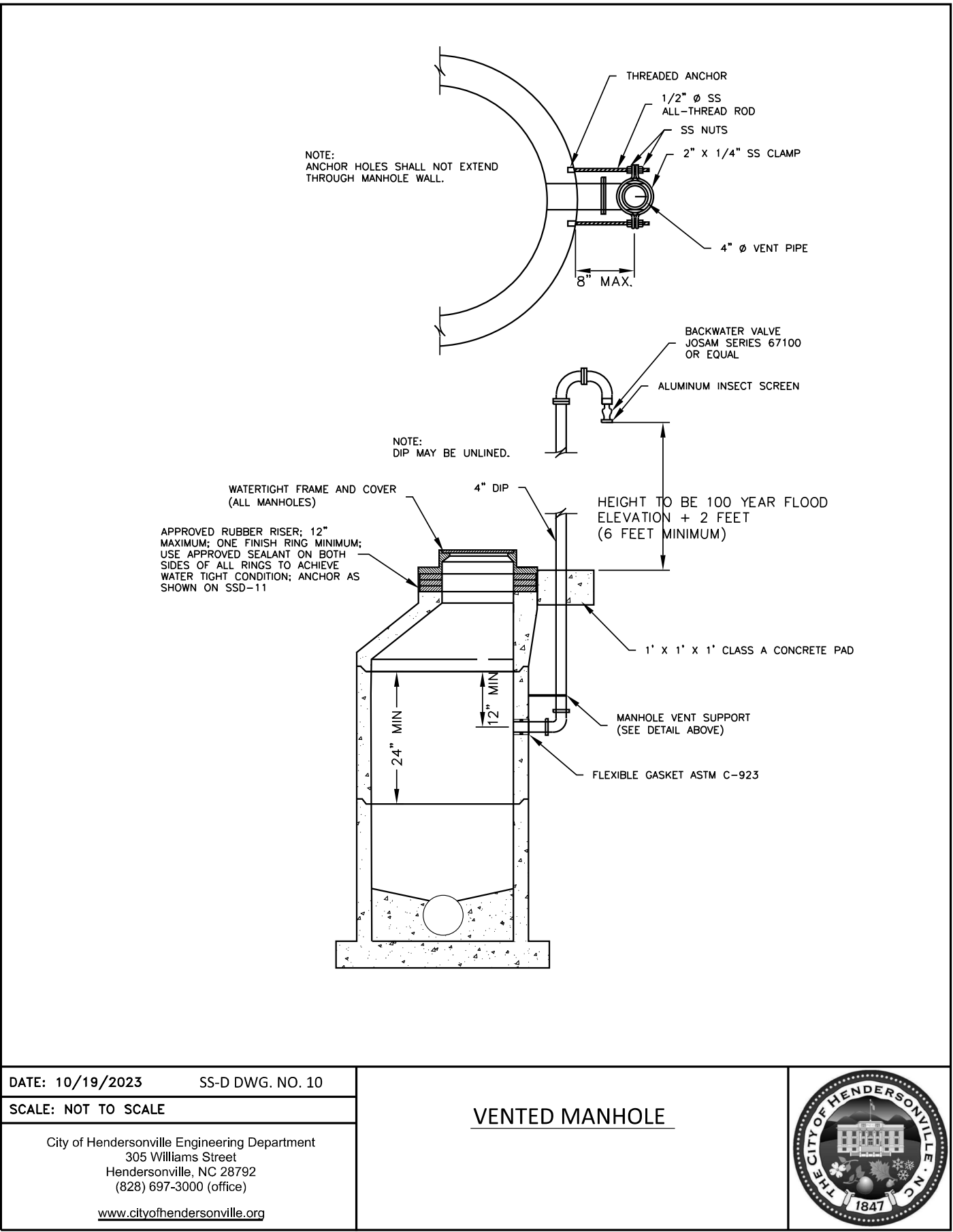
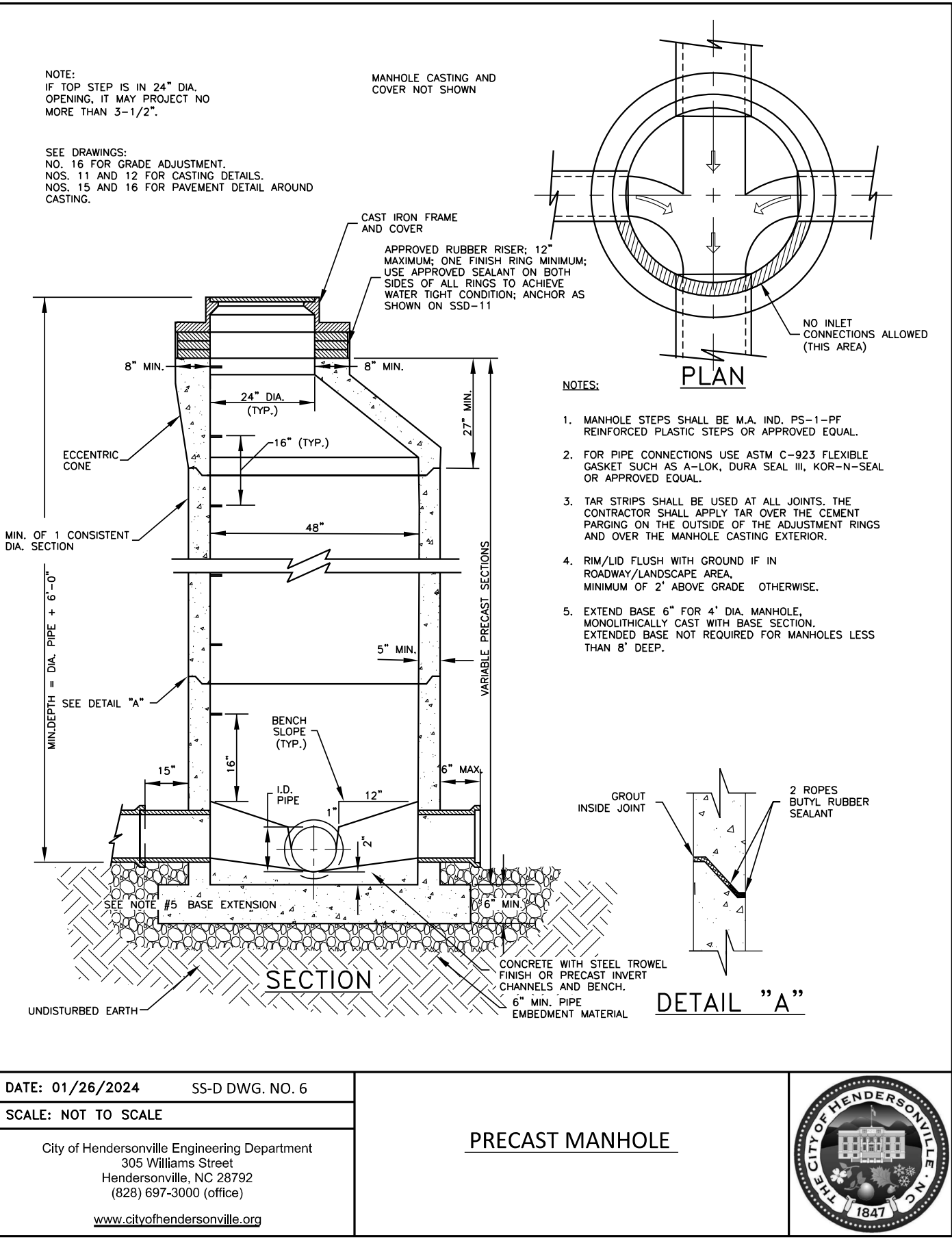
CITY OF HENDERSONVILLE PROJECT SPECIFIC DETAILS

STRUCTURE 440350
HENDERSON COUNTY

PROJECT REFERENCE NO.	SHEET NO.
B-5929	UC-3D
DESIGNED BY: ELM	
DRAWN BY: ELM	
CHECKED BY: MUP	
APPROVED BY: MUP	
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

JMT Johnson, Mirmiran, & Thompson Inc.
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License No: C-3097



STRUCTURE 440350
HENDERSON COUNTY

UTILITY CONSTRUCTION

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6/28/24

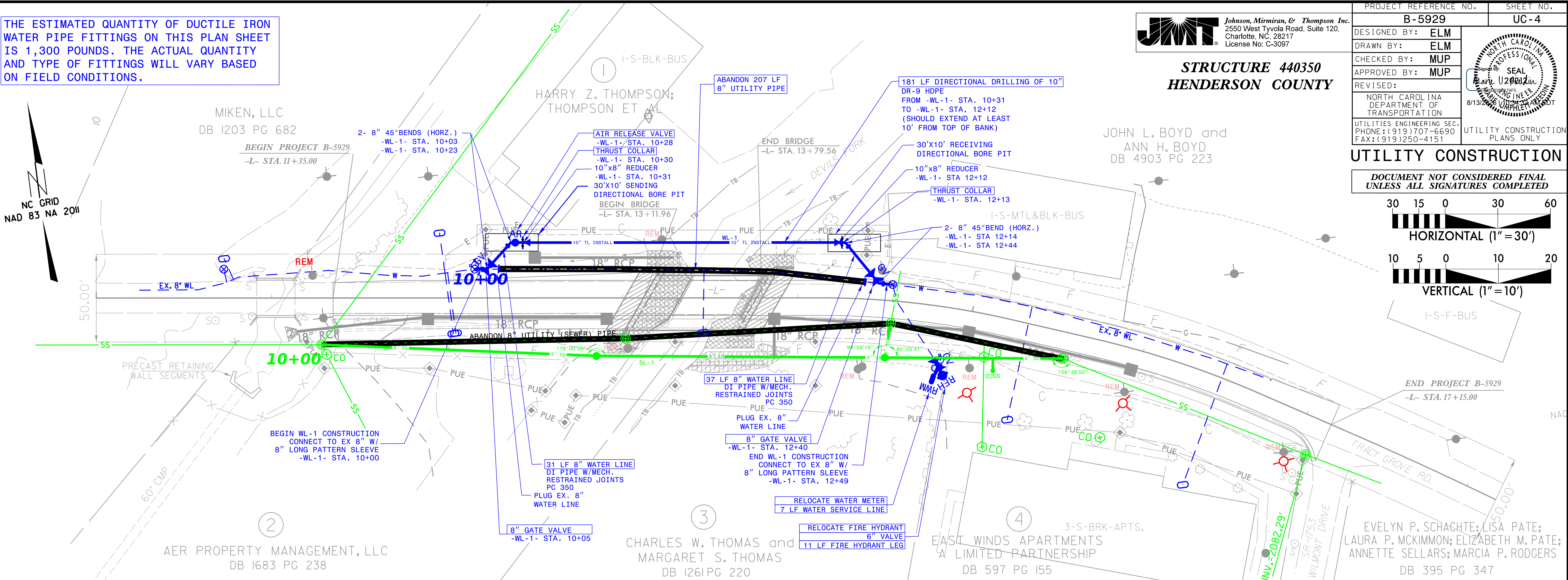
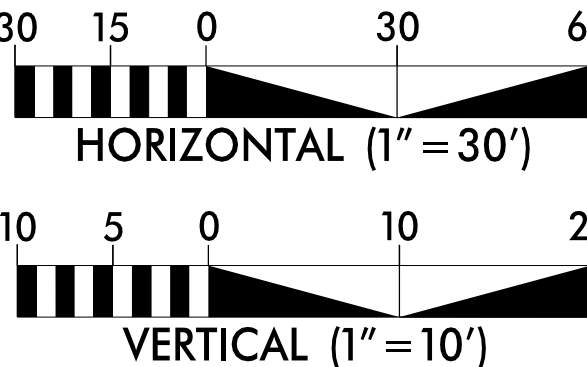
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1,300 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

JMT Johnson, Mirmiran, & Thompson Inc.
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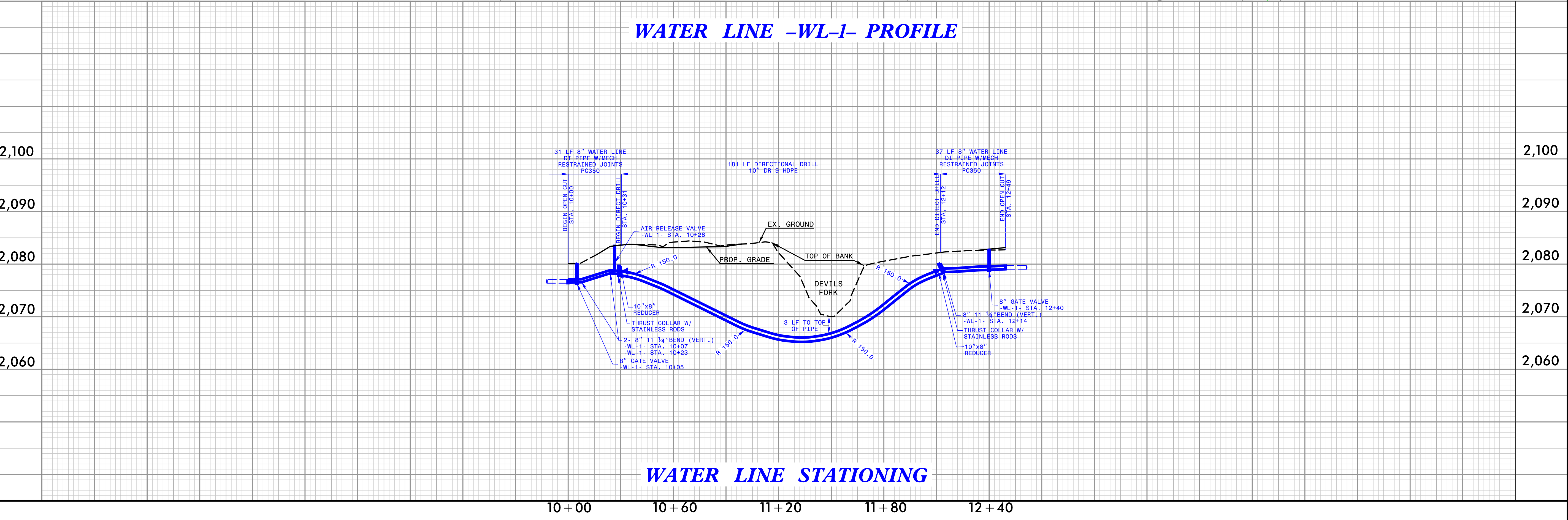
**STRUCTURE 440350
HENDERSON COUNTY**

PROJECT REFERENCE NO.	SHEET NO.
B-5929	UC-4
DESIGNED BY: ELM	
DRAWN BY: ELM	
CHECKED BY: MUP	
APPROVED BY: MUP	
REVISED:	UTILITY CONSTRUCTION PLANS ONLY
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

UTILITY CONSTRUCTION
*DOCUMENT NOT CONSIDERED FINAL
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WATER LINE -WL-1- PROFILE



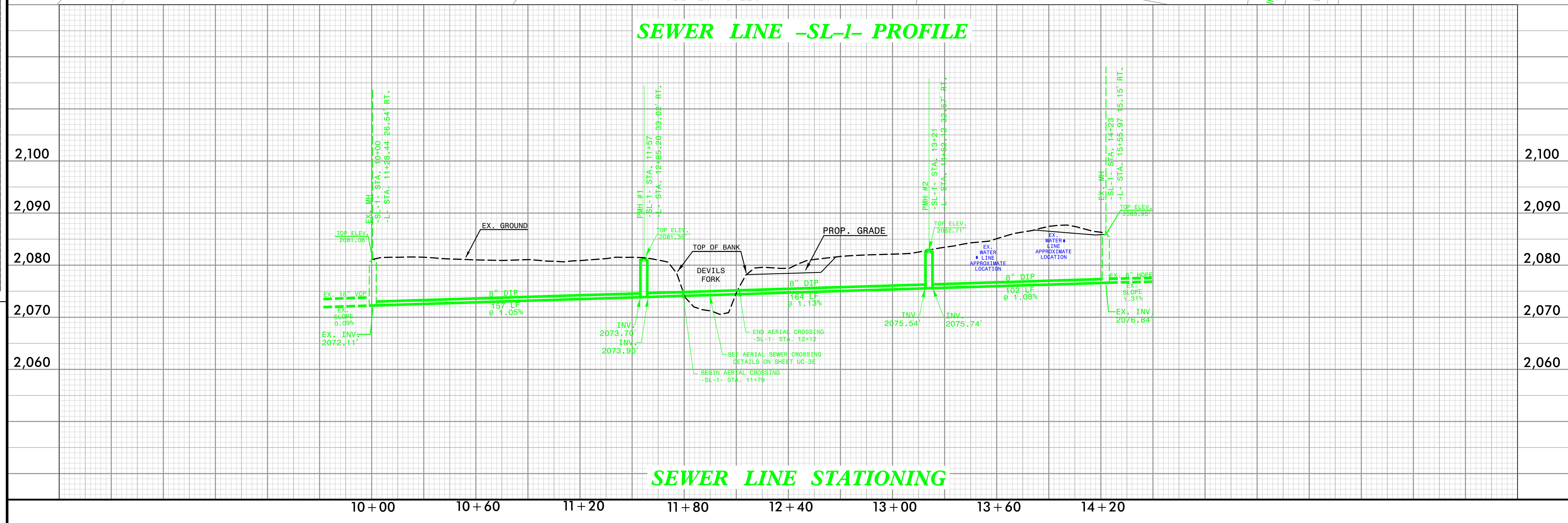
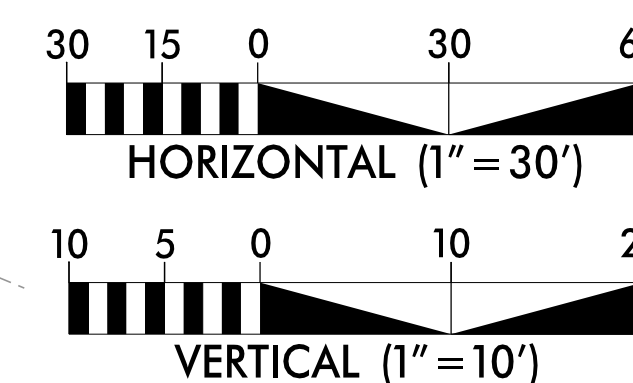
WATER LINE STATIONING

REVISIONS

Signed by: SEAL
NAME U20021in
0400335074FS
8/13/2026 10:31:27 AM

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



11/15/17
V&M PROJECT: #31640-05
STRUCTURES\31640-05\UTILITIES\B5929_UTL_UO-1.DGN

TIP PROJECT: B-5929
CONTRACT: 7500019705

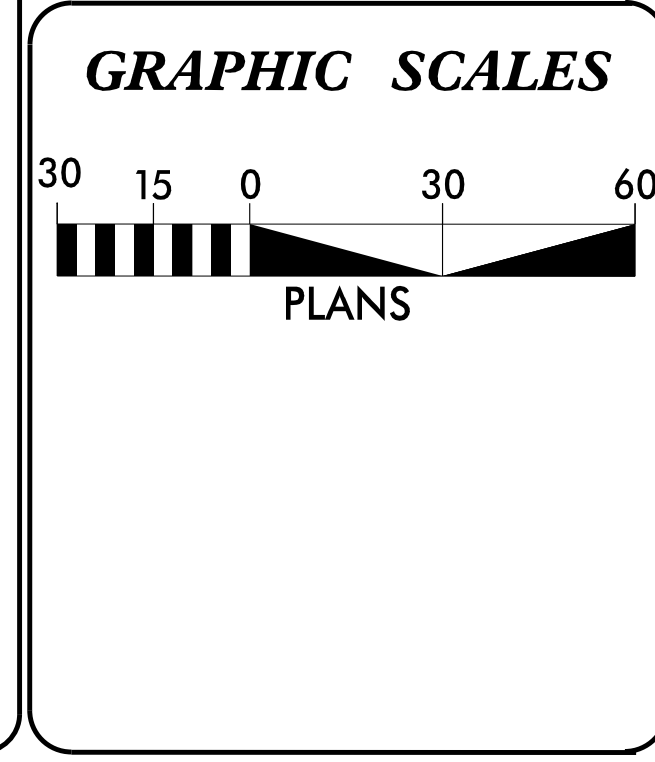
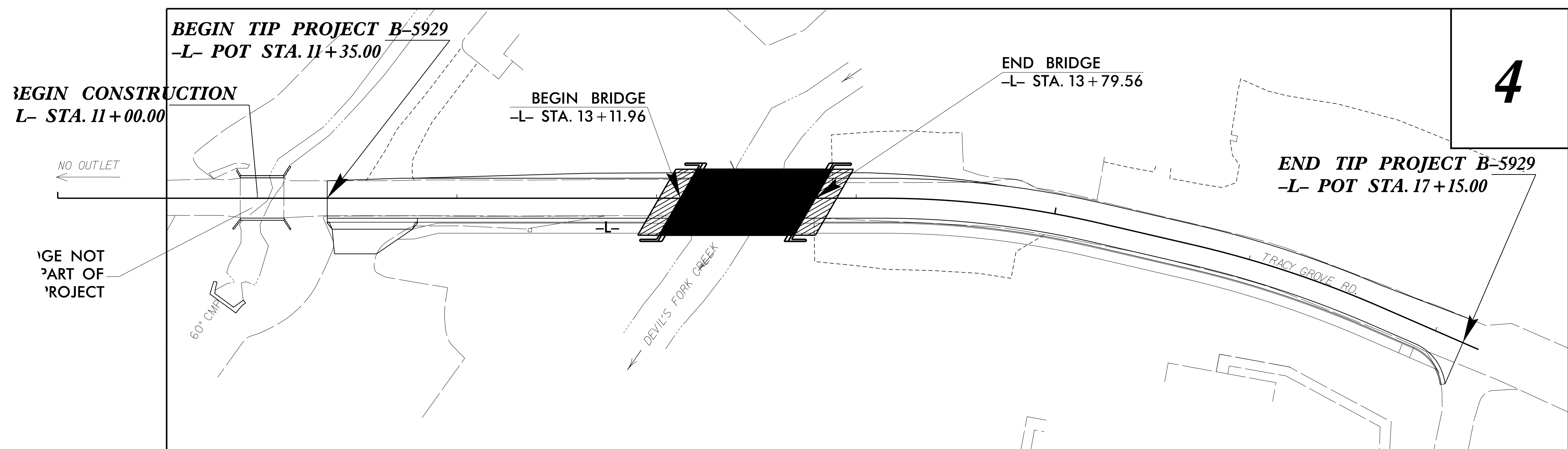
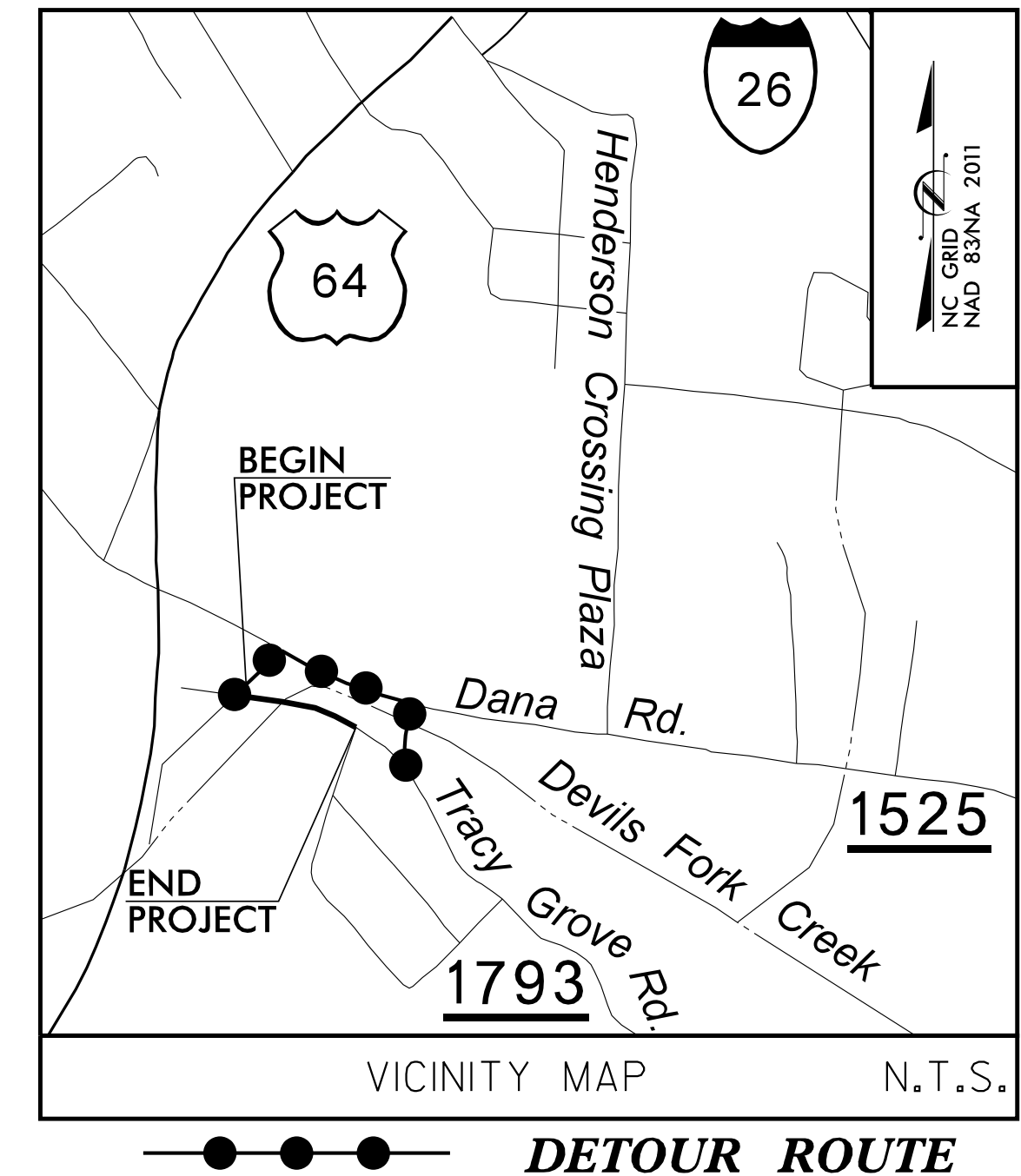
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES BY OTHERS
HENDERSON COUNTY

LOCATION: BRIDGE NO. 440350 OVER DEVILS FORK CREEK
ON TRACY GROVE ROAD
TYPE OF WORK: AERIAL POWER, TELEPHONE, & CATV

PROJECT REFERENCE NO.	SHEET NO.
B-5929	UO-1

NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET IS DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	UBO PLAN SHEET

- UTILITY OWNERS WITH CONFLICTS
- (1) POWER - DUKE ENERGY
 - (2) TELEPHONE - AT&T
 - (3) CATV - OPTIMUM

PREPARED IN THE OFFICE OF:

JMT.

JOHNSON, MIRMIRAN, & THOMPSON, INC.
2550 West Tyvola Road, Suite 120,
Charlotte, NC, 28217

Nicholas Asaro, P.L.S. UTILITY PROJECT MANAGER
James Montgomery PROJECT UTILITY COORDINATOR
Shane Waidner PROJECT UTILITY CADD

DIVISION OF HIGHWAYS
DIVISION 14
253 WEBSTER ROAD
SYLVA, NC 28779
PHONE (828) 586-2141
FAX (828) 586-4043

Robert Dyer REGIONAL UTILITY COORDINATOR
Robert Wilcox DIVISION 14 UTILITY ENGINEER

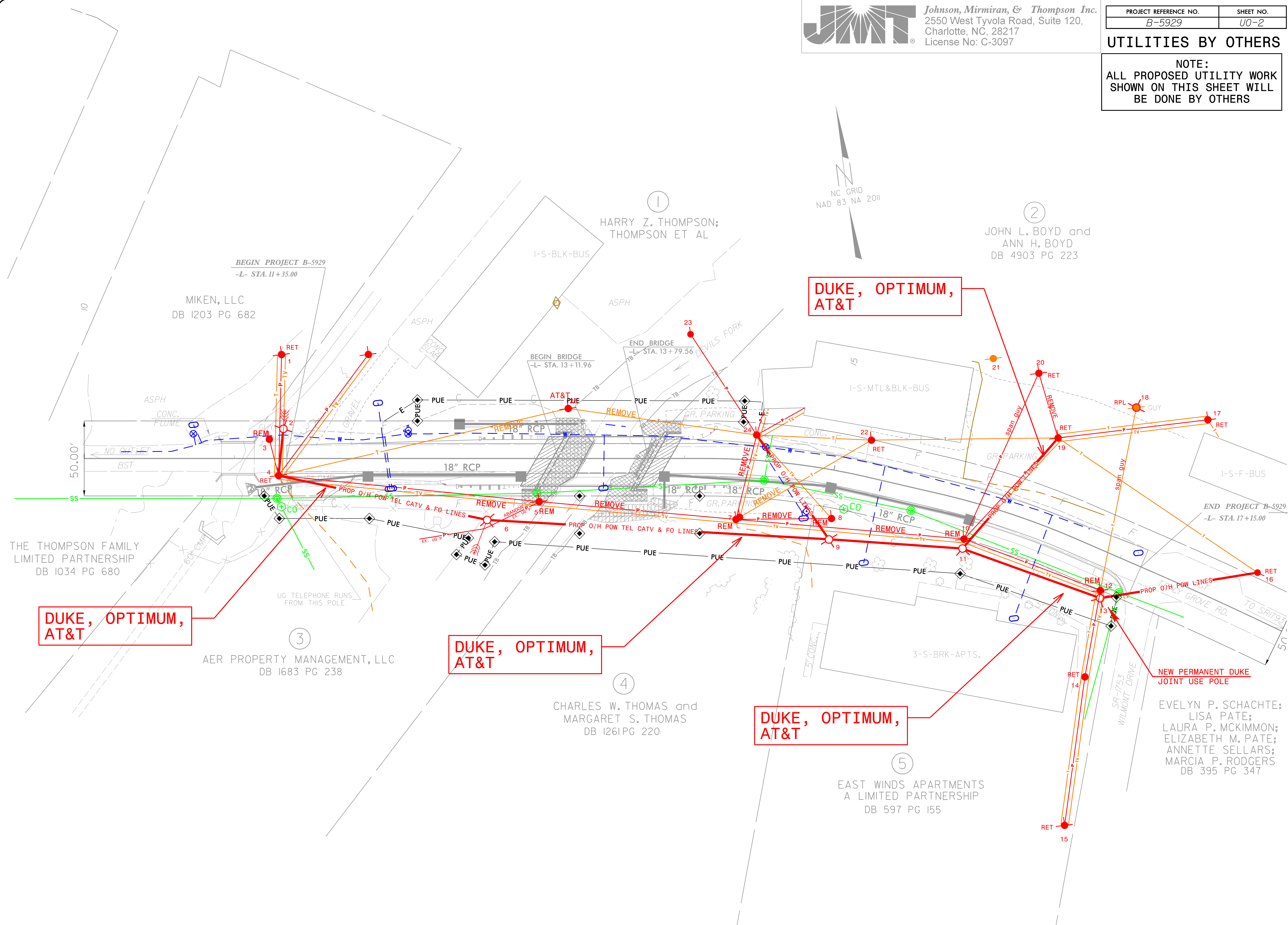


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Charlotte, NC, 28217
License No: C-3097

PROJECT REFERENCE NO.	SHEET NO.
B-5929	U0-2

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK
SHOWN ON THIS SHEET WILL
BE DONE BY OTHERS



PROJECT: B-5929

CONTRACT: 7500019705