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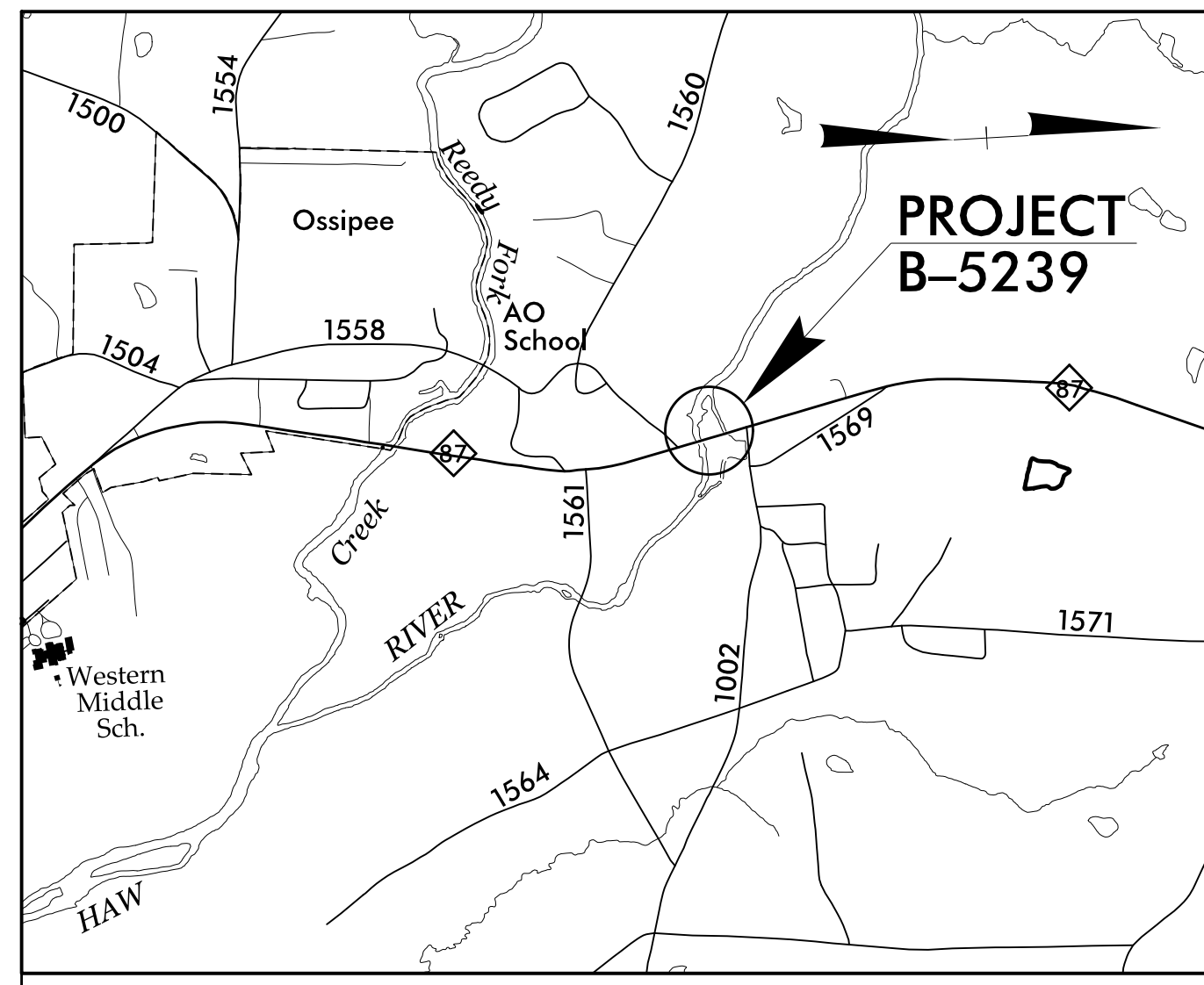
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09/08/19

T.I.P. NO.	SHEET NO.
B-5239	UC-1

TIP PROJECT: B-5239



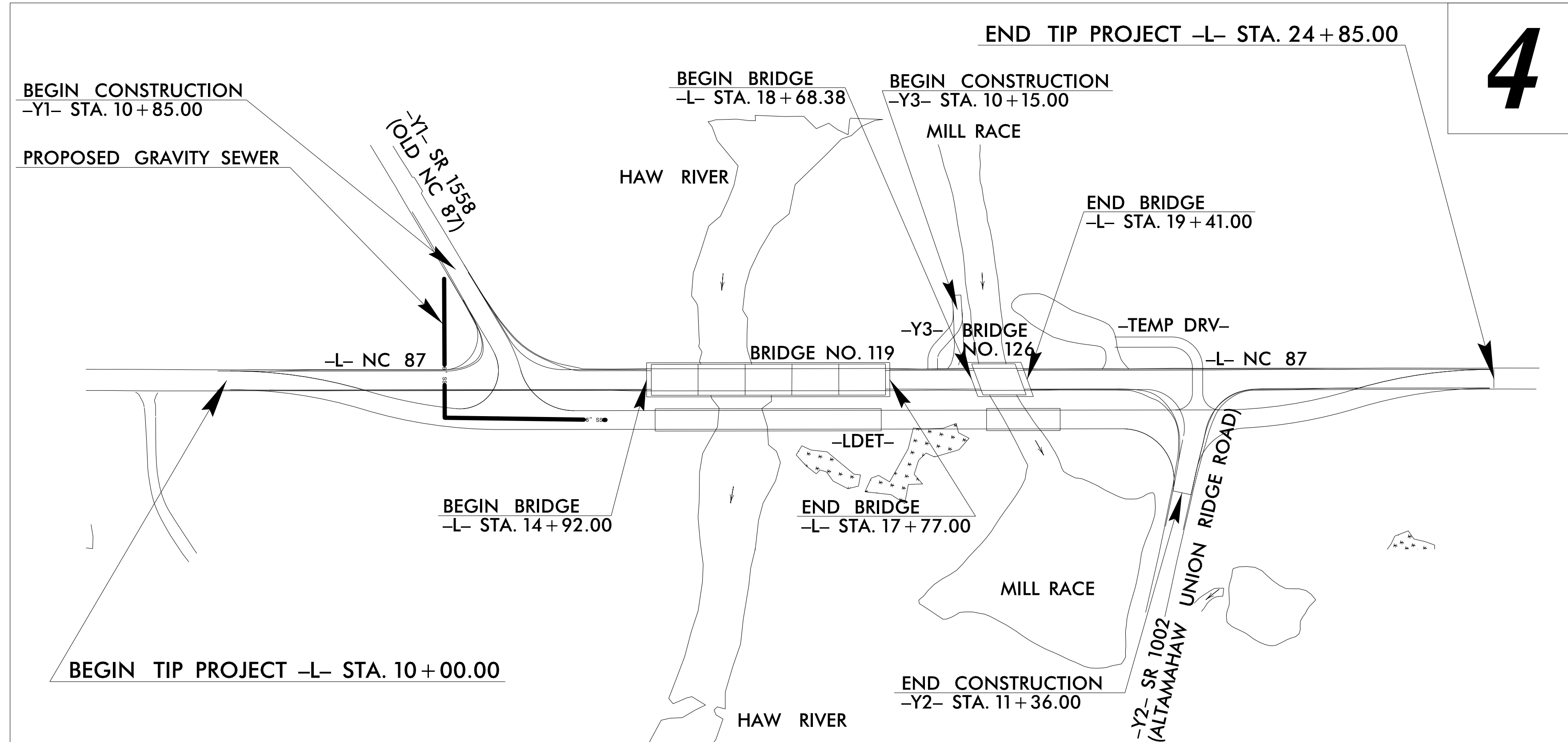
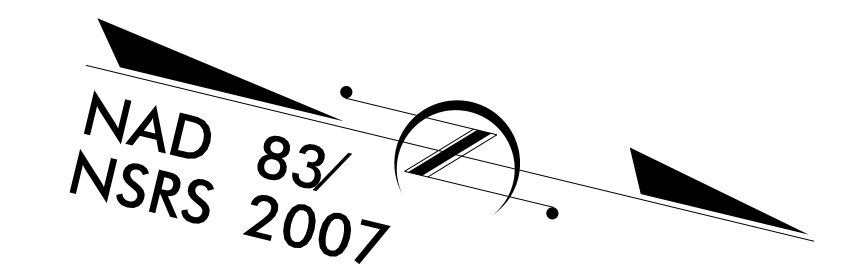
VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

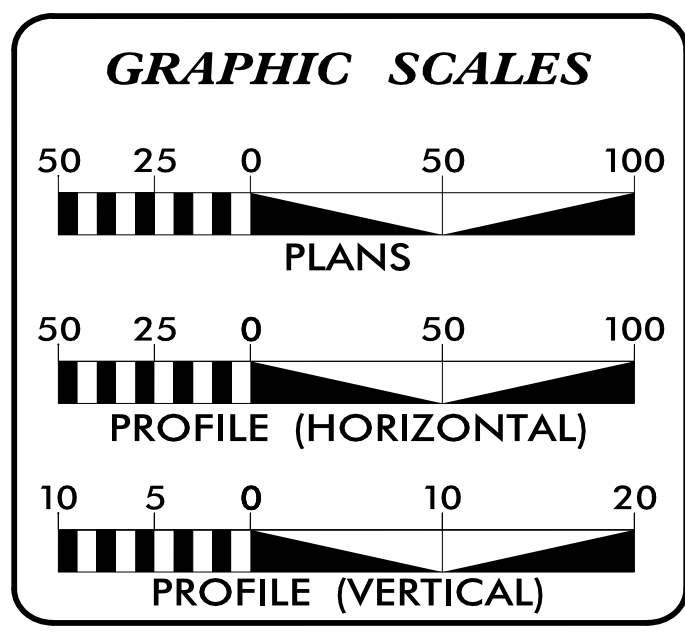
**UTILITY CONSTRUCTION PLANS
ALAMANCE COUNTY**

LOCATION: BRIDGE NO. 126 OVER MILL RACE & NO. 119
OVER HAW RIVER ON NC 87

TYPE OF WORK: SANITARY SEWER RELOCATION



DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-4	UTILITY CONSTRUCTION SHEET
UC-5	PROFILE SHEET

WATER AND SEWER OWNERS ON PROJECT

(A) SANITARY SEWER
ALAMANCE-BURLINGTON SCHOOL SYSTEM

PREPARED IN THE OFFICE OF

THE WOOTEN COMPANY
120 North Baylan Avenue Raleigh, NC 27603-1423
919.828.0531 Fax 919.834.3589
License Number: F-0115

James R. Gregg, P.E. CONSULTANT CONTACT #1
CONSULTANT CONTACT #2
CONSULTANT CONTACT #3

SEAL

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

Donna Jackson, P.E. UTILITIES REGIONAL ENGINEER
Don Proper UTILITIES ENGINEER
Kyle A. Pleasant UTILITIES AREA COORDINATOR
Kyle A. Pleasant UTILITIES COORDINATOR

\$\$\$ SYSTEMS \$\$\$
\$\$\$ DONOR \$\$\$
\$\$\$ USE NAME \$\$\$

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

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	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	PS(W)
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	PS(SS)

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


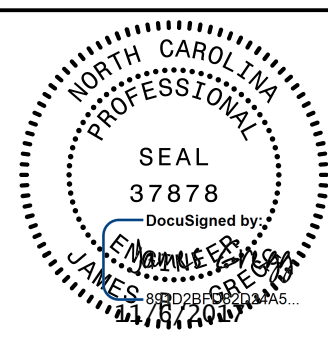
EXISTING UTILITIES SYMBOLS

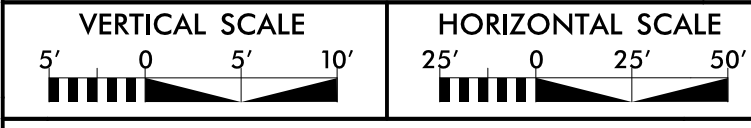
Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission 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 Forced 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)

5/14/99
REV: 2/1/2012

UTILITY CONSTRUCTION

PREPARED IN THE OFFICE OF:  THE WOOTEN COMPANY <small>120 North Roper Avenue Raleigh, NC 27603-1423 919.876.0011 Fax 919.876.2089 License Number: F-0115</small>	PROJECT REFERENCE NO.	SHEET NO.
	B-5239	UC-3
DESIGNED BY: JRG		
DRAWN BY: TK		
CHECKED BY: JRG		
APPROVED BY: JRG		
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
	UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	



UTILITY CONSTRUCTION

NCDOT GENERAL NOTES:

1. THE EXISTING UTILITIES BELONG TO ALAMANCE-BURLINGTON SCHOOL SYSTEM (6" GRAVITY SEWER).
2. THE PROPOSED UTILITY CONSTRUCTION IN ALAMANCE COUNTY SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012.
3. ALL FORCE MAIN/GRAVITY SEWER TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES AND DIVISION OF WATER RESOURCES. 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 AND THE UTILITY OWNER. 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 A MINIMUM OF ONE WEEK PRIOR TO SERVICE INTERRUPTIONS AND TESTING. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPROTUNITY 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.
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.

NCDOT PROJECT SPECIFIC NOTES:

1. PROPOSED GRAVITY SEWER SHALL BE C900 AS INDICATED ON THE CONSTRUCTION DRAWINGS.
2. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS AND APPLICABLE ALAMANCE-BURLINGTON SCHOOL SYSTEM UTILITIES STANDARDS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
3. EXISTING CONDITIONS SURVEY AND PROPOSED ROADWAY PLANS PROVIDED TO THE WOOTEN COMPANY BY NCDOT, APRIL 10, 2017.
4. PROPOSED MANHOLE #3 AND #4 WILL BE INSTALLED WITH A RIM ELEVATION TO MATCH THE TEMPORARY DETOUR ROAD.

ONCE THE DETOUR ROAD HAS BEEN REMOVED, THE CONTRACTOR SHALL ADJUST MANHOLE #3 SO THAT THE RIM ELEVATION MATCHES THE FINAL GRADE ELEVATION. CONTRACTOR SHALL ADJUST MANHOLE #4 SO THAT THE RIM ELEVATION IS 605.7' (APPROXIMATELY 2' ABOVE 100 YEAR FLOOR ELEVATION OF 603.7)
5. UTILITY OWNER 6-INCH SEWER MAIN: ALAMANCE BURLINGTON SCHOOL SYSTEM
JAY FULLER, DIRECTOR OF FACILITIES AND MAINTENANCE
307 PRISON CAMP ROAD
GRAHAM, NC 27253
OFFICE: 336-570-6482
EMAIL: JAY_FULLER@ABSS.K12.NC.US

PROJECT TYPICAL SEWER DETAILS

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

B-5239

SHEET NO.

UC-3A

DESIGNED BY: JRG

DRAWN BY: TK

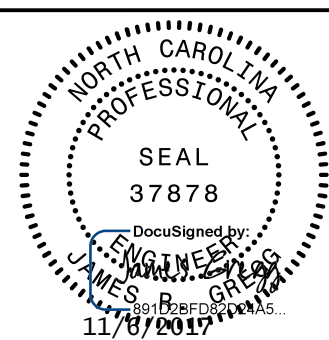
CHECKED BY: JRG

APPROVED BY: JRG

REVISED:

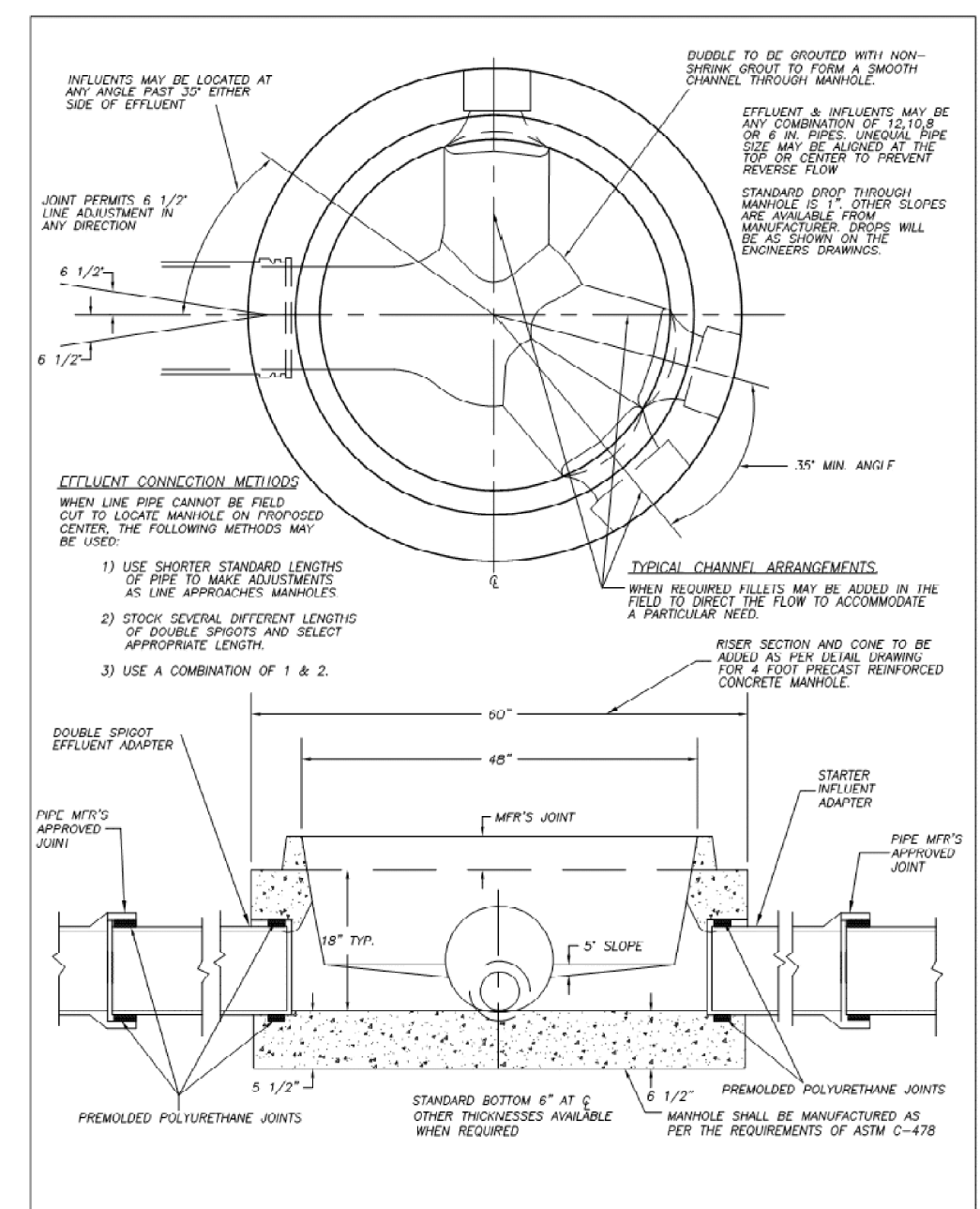
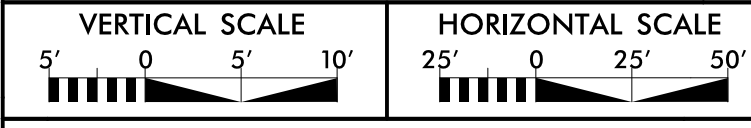
NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

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

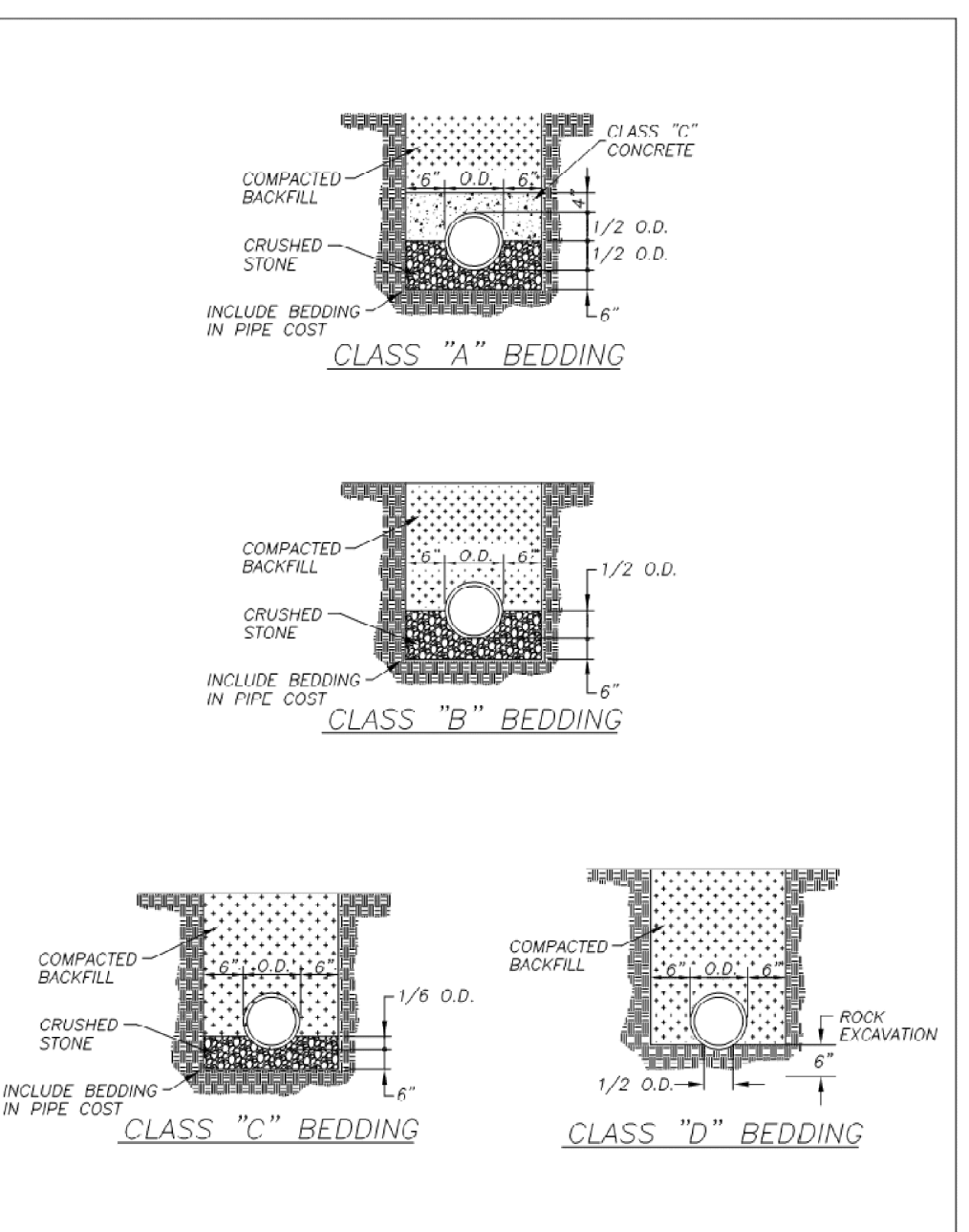


UTILITY CONSTRUCTION
PLANS ONLY

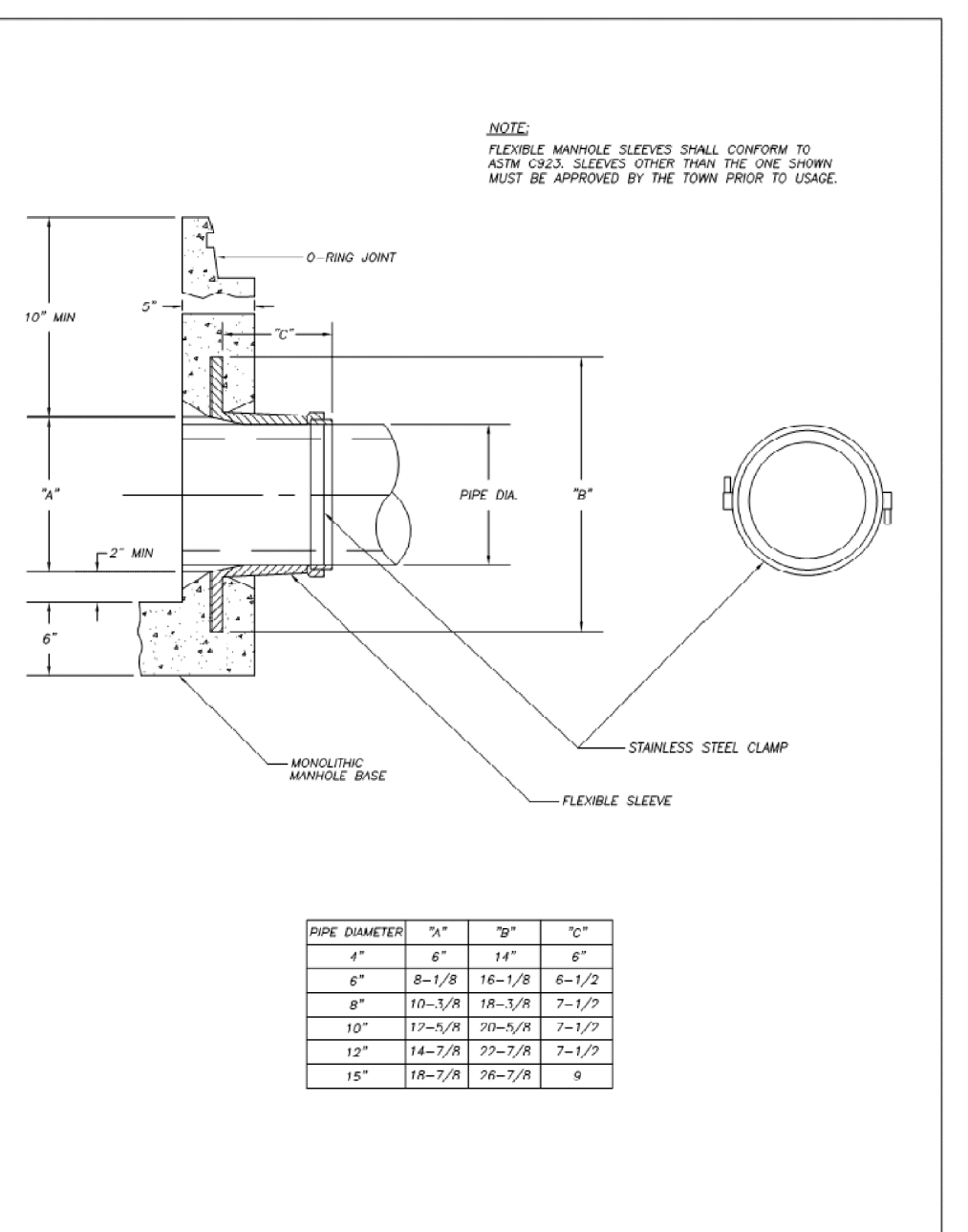
UTILITY CONSTRUCTION



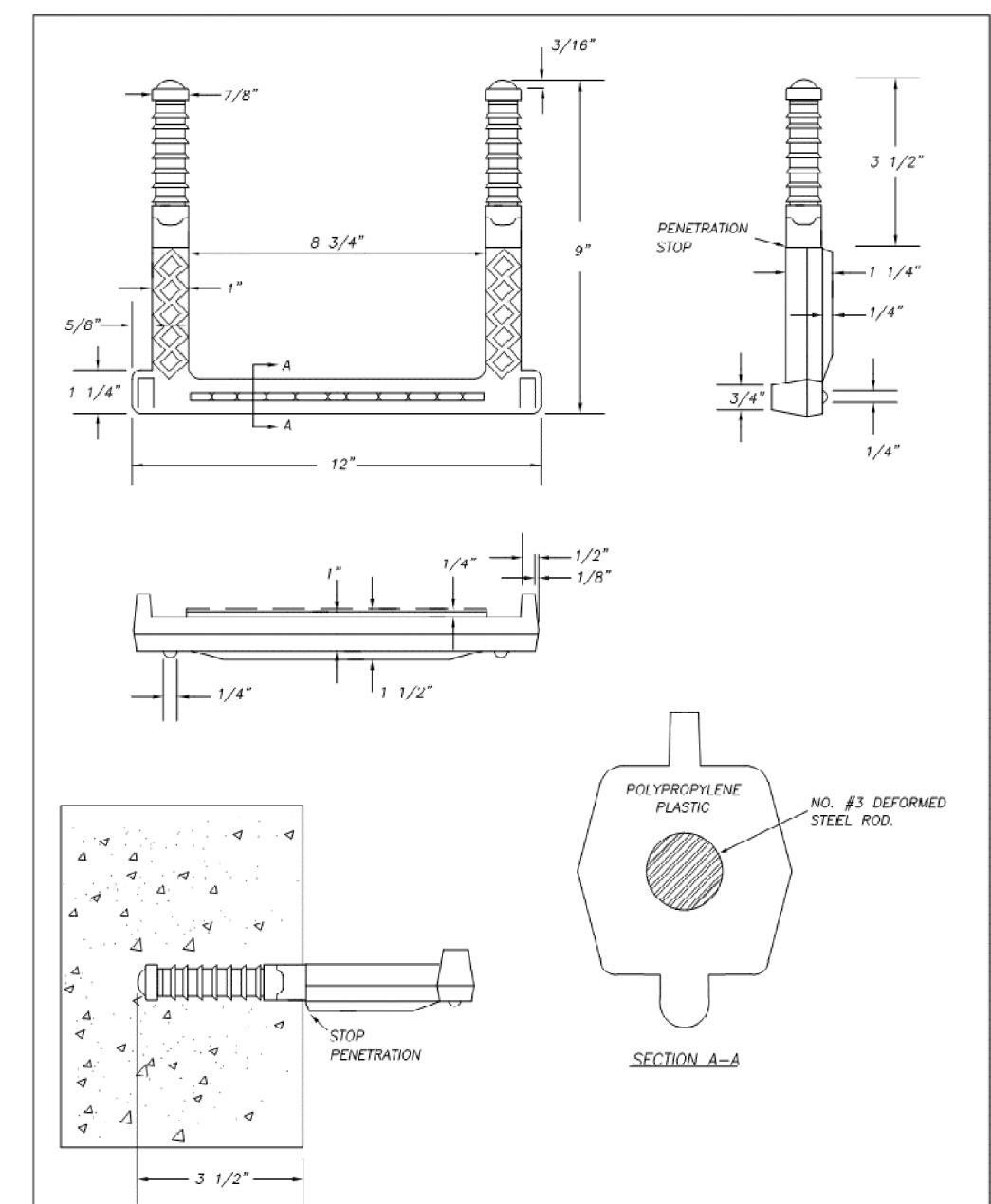
CITY OF GRAHAM **SS-6**
PRECAST REINFORCED CONCRETE MANHOLE WITH PRECAST INVERT
DWG NO. REV.
T02FALS039PHAM 2/11/15
DETAILS0316 DETAILSEWER



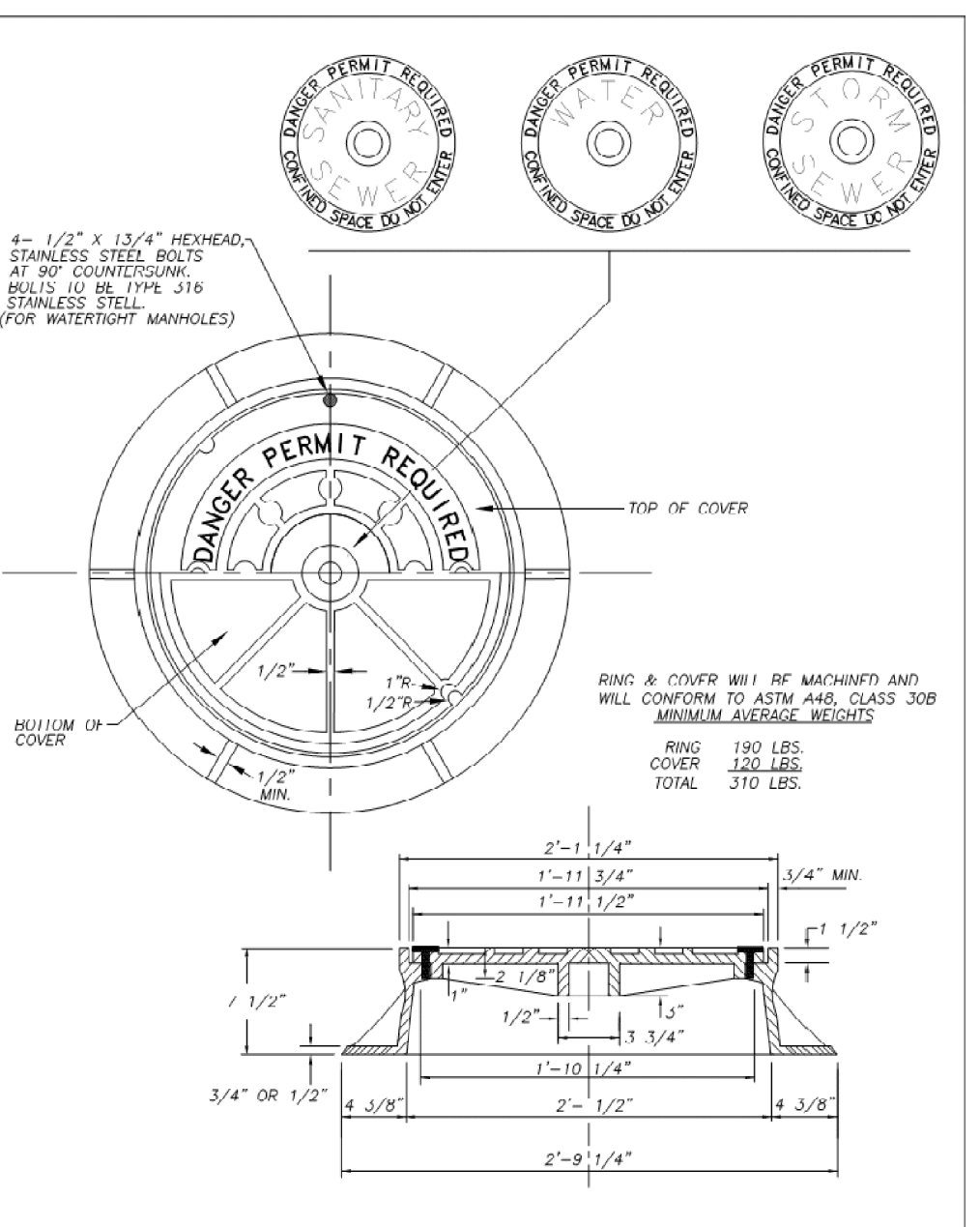
CITY OF GRAHAM **SS-11**
SANITARY SEWER BEDDING
DWG NO. REV.
T02FALS039PHAM 2/11/15
DETAILS0316 DETAILSEWER



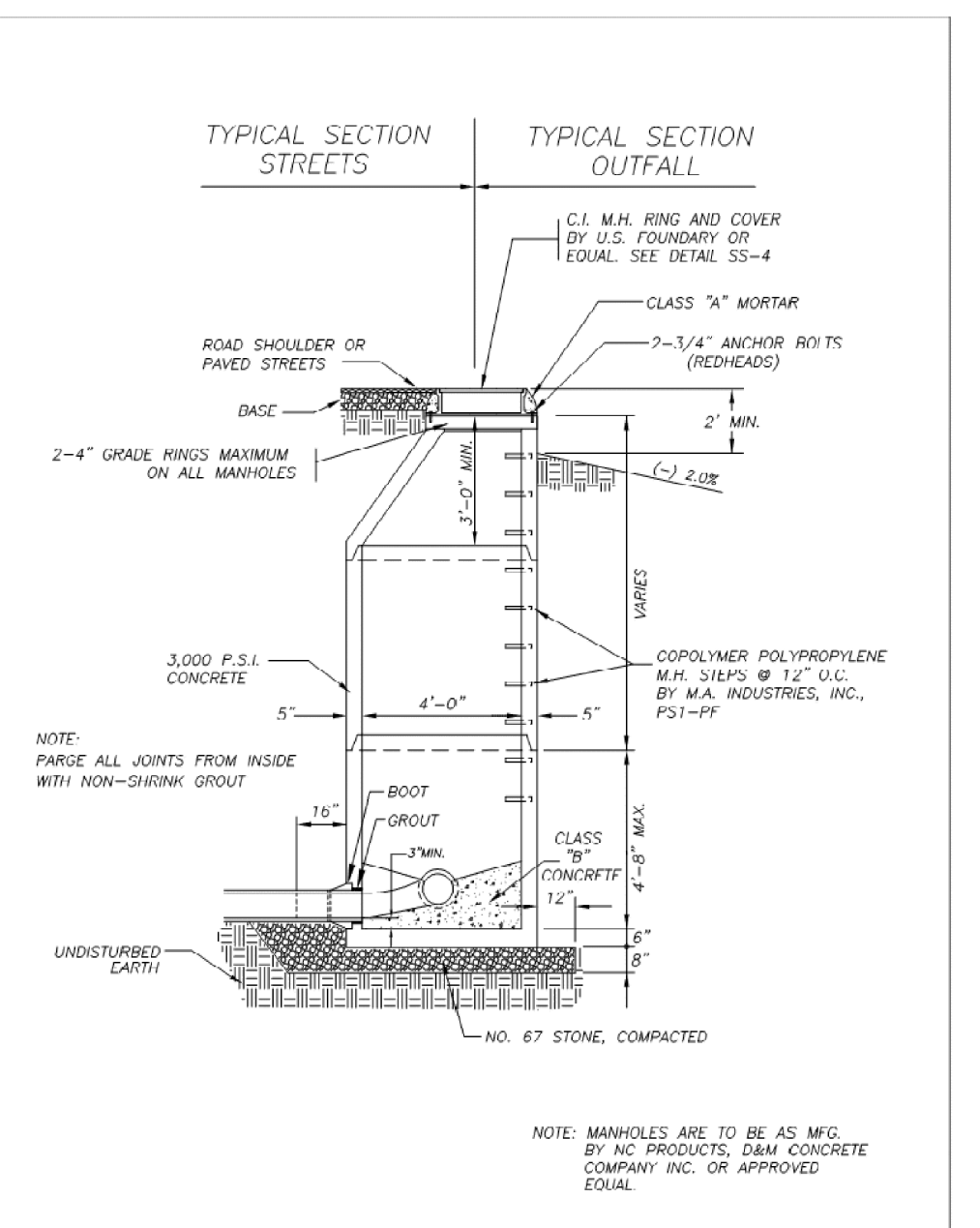
CITY OF GRAHAM **SS-7**
FLEXIBLE MANHOLE SLEEVE
DWG NO. REV.
T02FALS039PHAM 2/11/15
DETAILS0316 DETAILSEWER



CITY OF GRAHAM **SS-5**
POLYPROPYLENE MANHOLE STEP
DWG NO. REV.
T02FALS039PHAM 2/11/15
DETAILS0316 DETAILSEWER



CITY OF GRAHAM **SS-4**
MANHOLE RING AND COVER
DWG NO. REV.
T02FALS039PHAM 2/11/15
DETAILS0316 DETAILSEWER



CITY OF GRAHAM **SS-1**
STANDARD PRECAST MANHOLE
DWG NO. REV.
T02FALS039PHAM 2/11/15
DETAILS0316 DETAILSEWER

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GRAVITY SEWER OWNED BY ALAMANCE-BURLINGTON
 PROFILE SHOWN IS BASED ON STATIONING ALONG
 PROPOSED WATER MAIN ALIGNMENT ALONG
 ROADWAY ALIGNMENT (-L-)
 (SEE SHEET UC-4)

PREPARED IN THE OFFICE OF:



THE WOOTEN COMPANY
 120 North Boker Avenue Raleigh, NC 27603-1423
 919.876.0231 Fax 919.876.2589
 License Number: F-4115



SEWER LINE CONSTRUCTION SHOWN ON THIS SHEET

PROJECT REFERENCE NO.

B-5239

SHEET NO.

UC-5

DESIGNED BY: JRG

DRAWN BY: TK

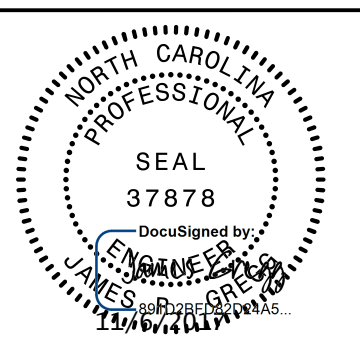
CHECKED BY: JRG

APPROVED BY: JRG

REVISED:

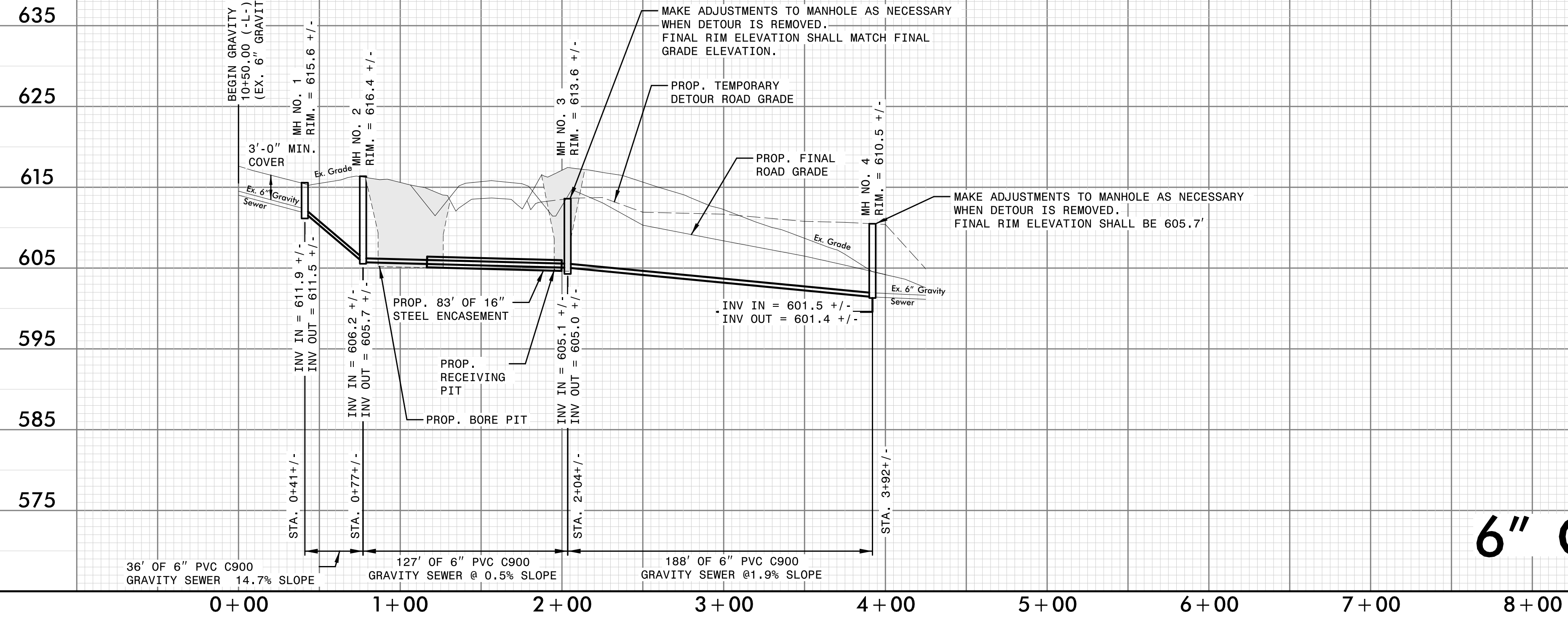
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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



UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION



6" GRAVITY SEWER

5/26/99

Vertical text on the left margin, likely a drawing number or revision code.