

See Sheet I-A For Index of Sheets

T.I.P. NO.	SHEET NO.
R-5703	UC-1

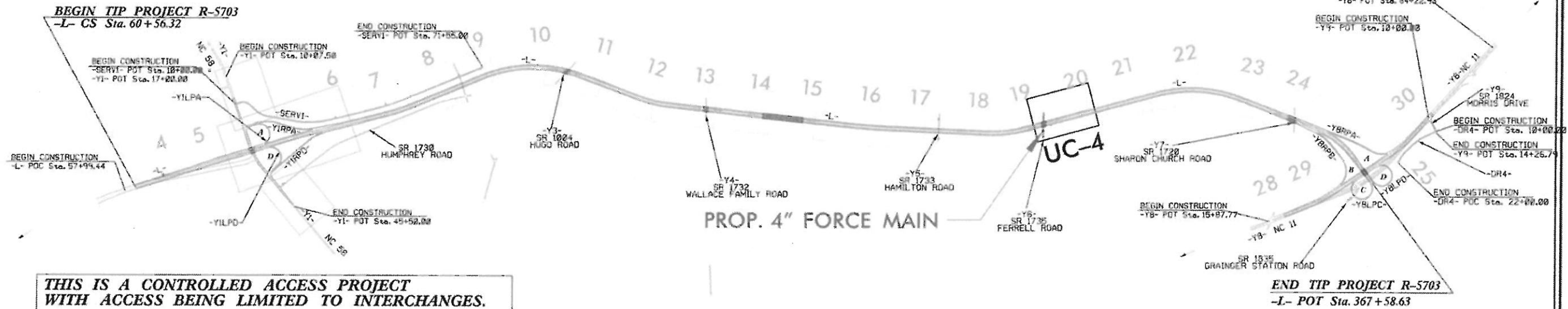
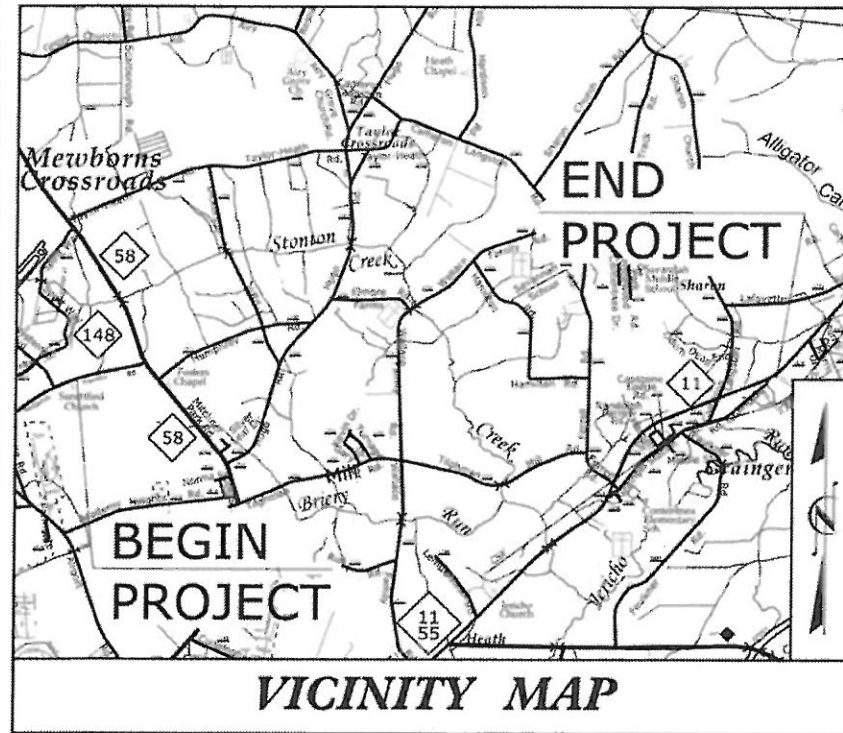
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
LENOIR COUNTY**

LOCATION: NC 148 (HARVEY PARKWAY) FROM NC 58 TO NC 11

TYPE OF WORK: UTILITY RELOCATION

TIP PROJECT: R-5703

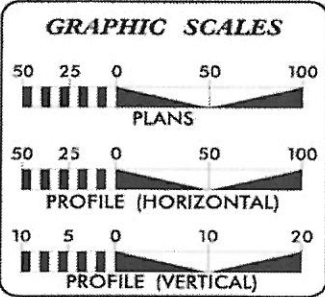


**THIS IS A CONTROLLED ACCESS PROJECT
WITH ACCESS BEING LIMITED TO INTERCHANGES.**

**CLEARING ON THIS PROJECT SHALL BE PERFORMED
TO THE LIMITS ESTABLISHED BY METHOD III.**

**THIS PROJECT IS NOT WITHIN ANY MUNICIPAL
BOUNDARIES.**

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES 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 SHEETS

WATER AND SEWER OWNERS ON PROJECT

(A) FORCE MAIN - HUGO AUTO SALES

PREPARED IN THE OFFICE OF

THE WOOTEN COMPANY
ENGINEERING, PLANNING, ARCHITECTURE
220 North Station Avenue, Raleigh, NC 27603-3427
919.833.0001 Fax 919.833.2000
License Number: 7-1020

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

SEAL

**DIVISION OF HIGHWAYS
UTILITIES UNIT**
1555 MAIL SERVICE CENTER
RALEIGH, NC 27699-4555
PHONE (919) 707-6500
FAX (919) 250-4151

Bo Hemphill, P.E. UTILITIES REGIONAL ENGINEER
Kifah Kamil UTILITIES ENGINEER
Kyle Pleasant UTILITIES AREA COORDINATOR
C. Dayton Martin, III UTILITIES COORDINATOR

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	
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


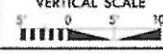
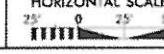
EXISTING UTILITIES SYMBOLS

Power Pole		*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.		

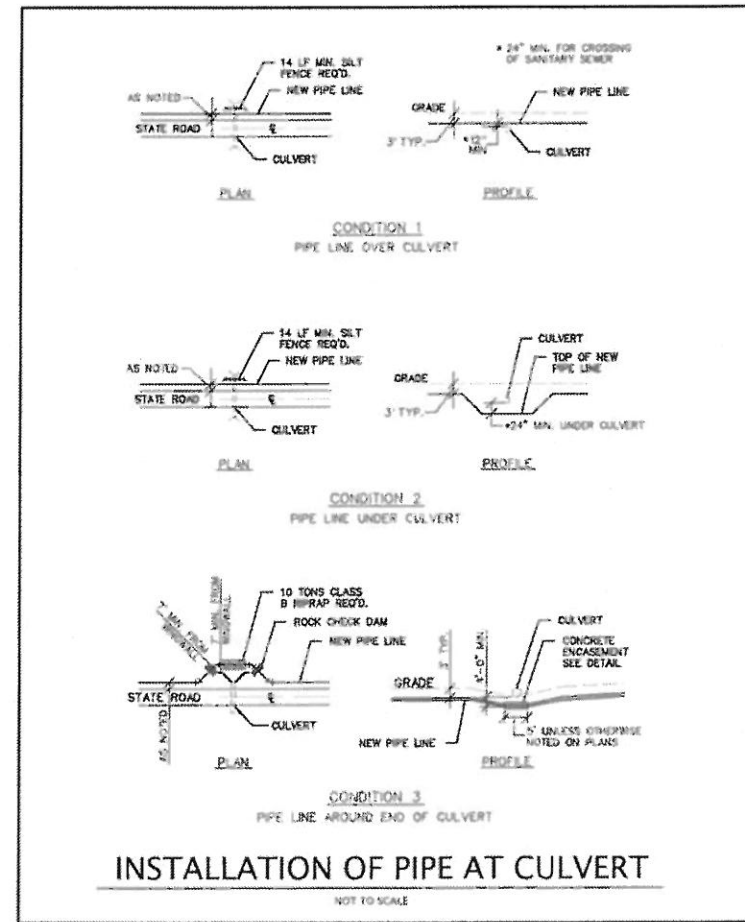
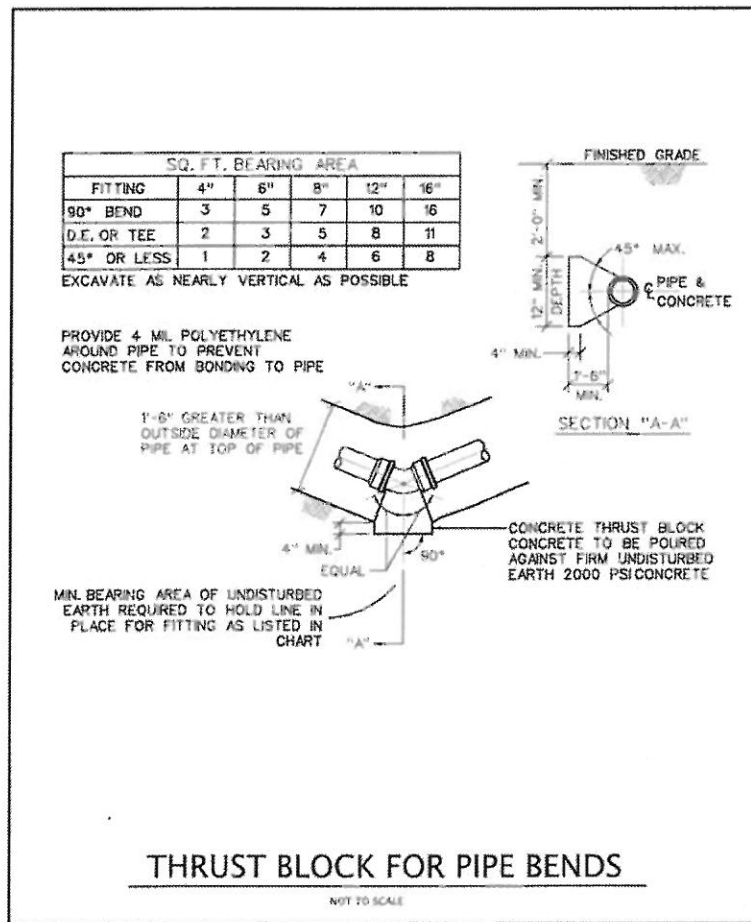
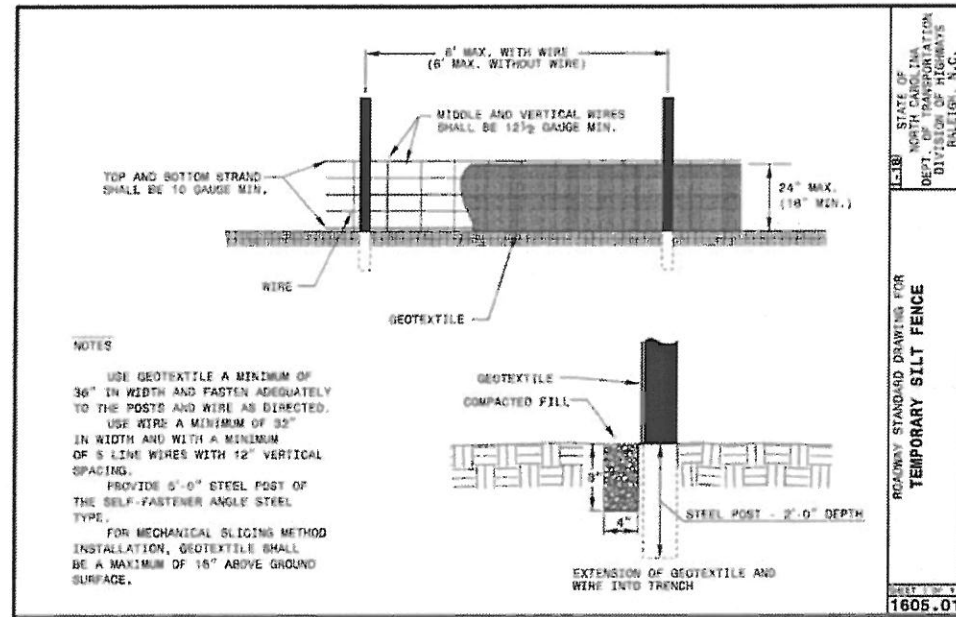
*For Existing Utilities
Utility Line Drawn from Record (Type as Shown)
Designated Utility Line (Type as Shown)

REV: 2/1/2012

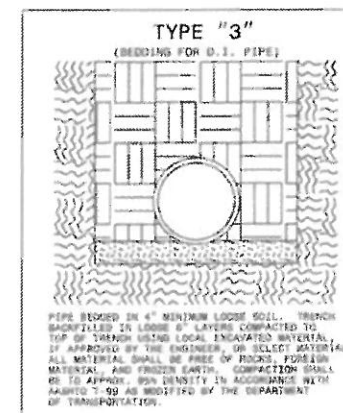
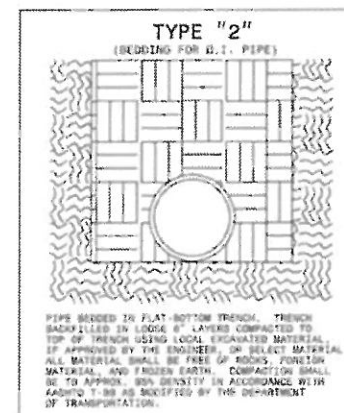
PROJECT TYPICAL DETAILS

PREPARED IN THE OFFICE OF:  THE WOOTEN COMPANY <small>10000 Wooten Road, Raleigh, NC 27615 (919) 707-6600 (919) 707-6600 (919) 250-4101</small>	PROJECT REFERENCE NO. R-5703	SHEET NO. UC-3A
	DESIGNED BY: JRG DRAWN BY: TK CHECKED BY: JRG APPROVED BY: JRG REVISED:	
VERTICAL SCALE 	HORIZONTAL SCALE 	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE (919) 707-6600 FAX (919) 250-4101		



UTILITY CONSTRUCTION



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		



UTILITY CONSTRUCTION

PREPARED IN THE OFFICE OF:  THE WOOTEN COMPANY <small>100 North Hope Street, Raleigh, NC 27602 919.433.1000 • www.thewootencompany.com License Number: 7-0101</small>	PROJECT REFERENCE NO. R-5703	SHEET NO. UC-3
	DESIGNED BY: JRG DRAWN BY: TK CHECKED BY: JRG APPROVED BY: JRG REVISED: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. <small>PHONE: (919) 707-6693 FAX: (919) 250-4151</small>	 James R. Owsen Professional Engineer License No. 27878 Seal Document Not Considered Final Unless All Signatures Completed UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

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 2012.
2. THE EXISTING UTILITIES BELONG TO HUGO AUTO SALES.
3. ALL FORCE MAINS TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, WASTEWATER 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.

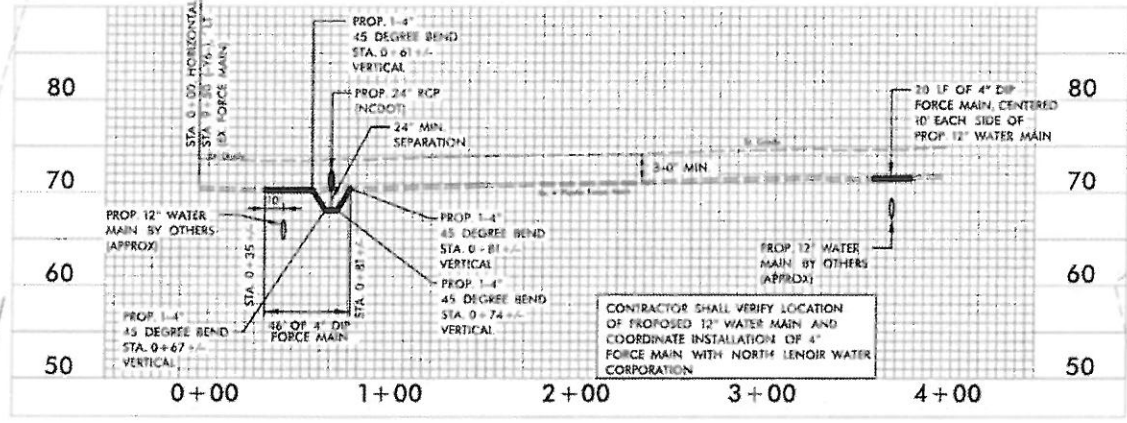
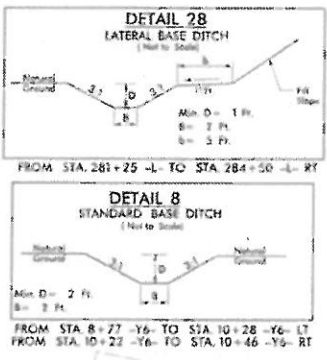
6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING 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 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.

PROJECT SPECIFIC NOTES:

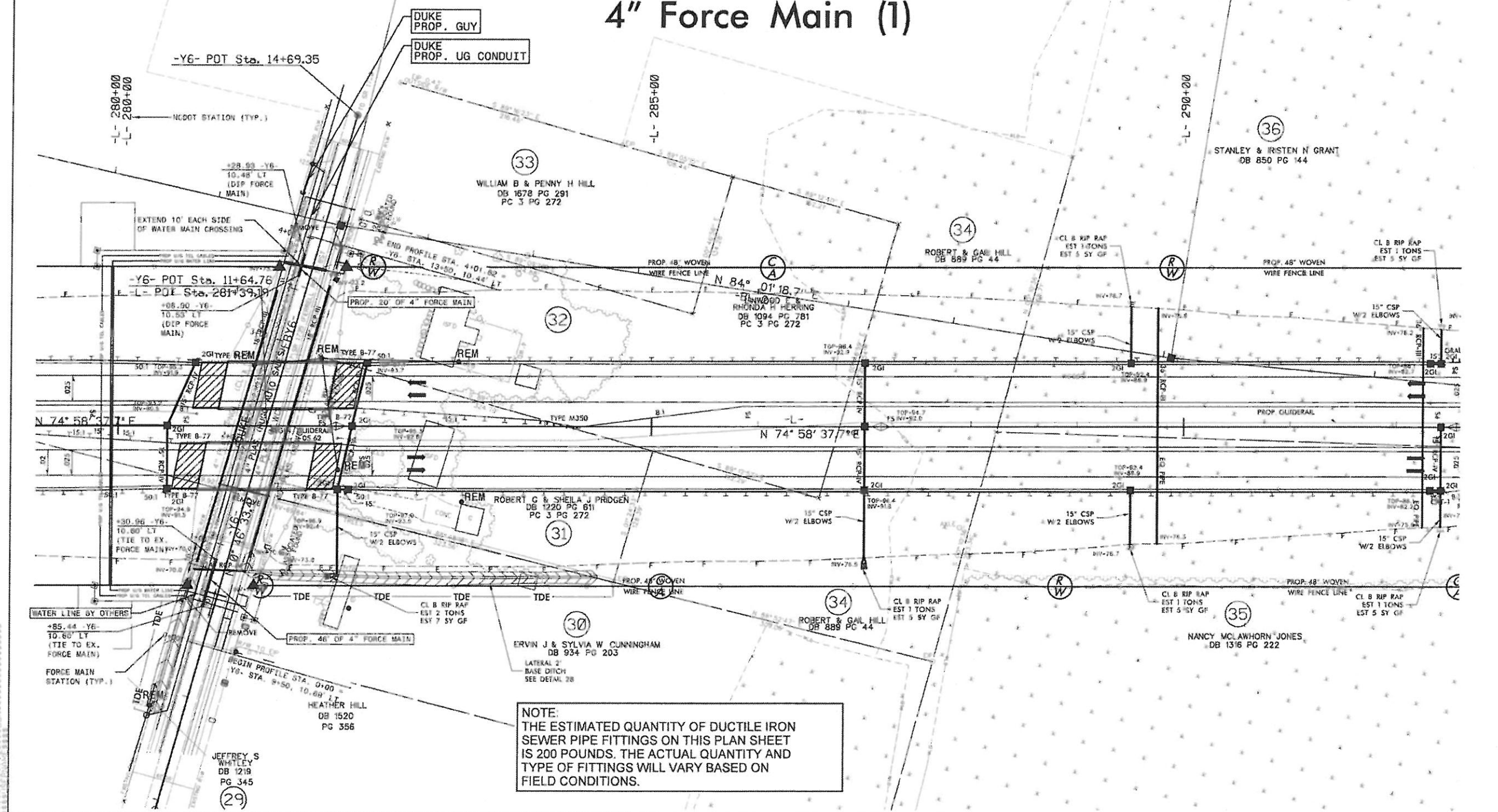
1. ALL PROPOSED FORCE MAIN SHALL BE D.I. (DUCTILE IRON) PIPE.
2. EXISTING CONDITIONS SURVEY AND PROPOSED ROADWAY PLANS PROVIDED TO THE WOOTEN COMPANY BY NCDOT, AUGUST 07, 2017.
3. CONTRACTOR SHALL NOTIFY UTILITY OWNER (JONAS HOWARD 252-522-4140) A MINIMUM OF 24 HOURS PRIOR TO BEGINNING WORK AND PRIOR TO SHUT DOWN FOR CONNECTION.
4. SHUT DOWN AND CONNECTION MUST BE MADE OUTSIDE OF NORMAL BUSINESS HOURS, WHICH ARE MONDAY THROUGH FRIDAY 8AM TO 5PM.

FORCE MAIN OWNED BY HUGO AUTO SALES
PROFILE SHOWN IS BASED ON STATIONING ALONG
ROADWAY ALIGNMENT -Y6-

PREPARED IN THE OFFICE OF: THE WOOTEN COMPANY <small>12000 Apple Creek Road, Raleigh, NC 27615-1000</small> <small>919.876.1000</small>	PROJECT REFERENCE NO.	R-5703	SHEET NO.	UC-4
	DESIGNED BY	JRG		
	DRAWN BY	TR		
	CHECKED BY	JRG		
APPROVED BY		JRG		
REVISED:				
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION				
FORCE MAIN CONSTRUCTION SHOWN ON THIS SHEET		UTILITIES ENGINEERING, SEC. PHONE (919) 707-6690 FAX (919) 230-4151		



4" Force Main (1)



NOTE:
 THE ESTIMATED QUANTITY OF DUCTILE IRON SEWER PIPE FITTINGS ON THIS PLAN SHEET IS 200 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

JEFFREY S
 WHITLEY
 DB 1219
 PG 345
 (29)