

09/08/99

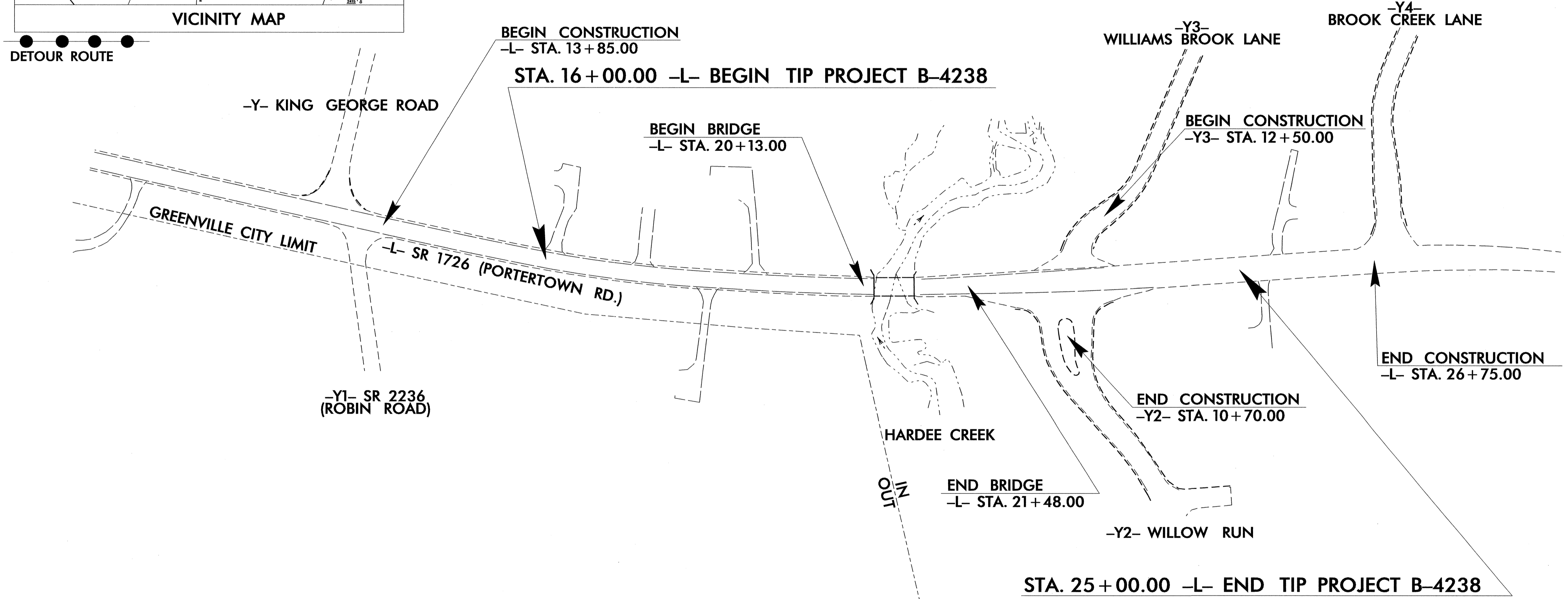
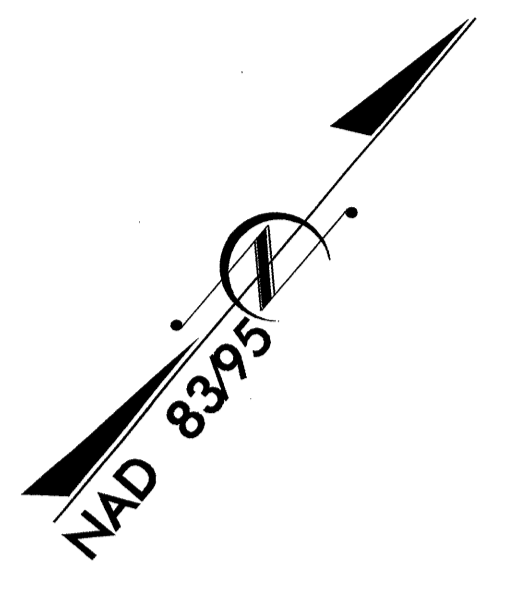
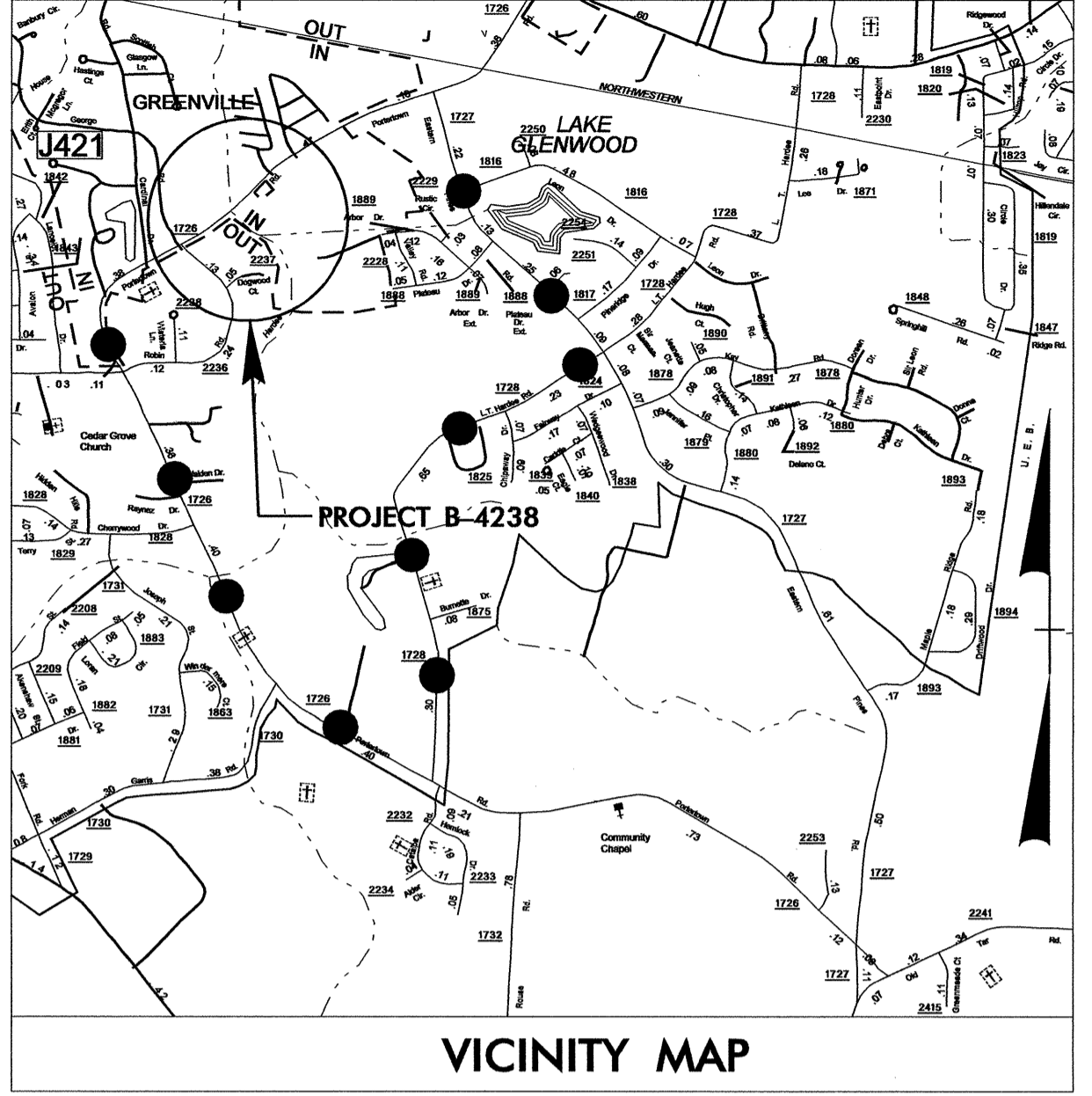
TIP PROJECT: B-4238

T.I.P. NO.	SHEET NO.
B-4238	UC-1

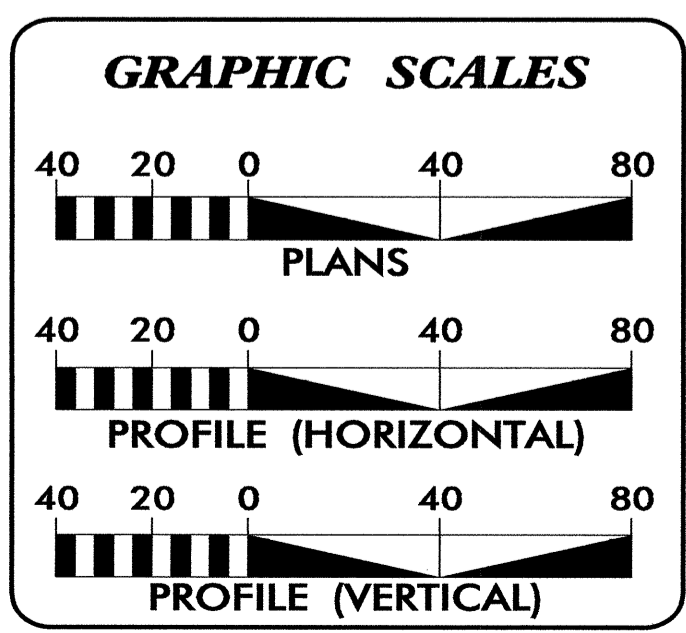
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS**  
**PITT COUNTY**

LOCATION: SR-1726 OVER HARDEE CREEK  
TYPE OF WORK: WATER AND SEWER RELOCATIONS



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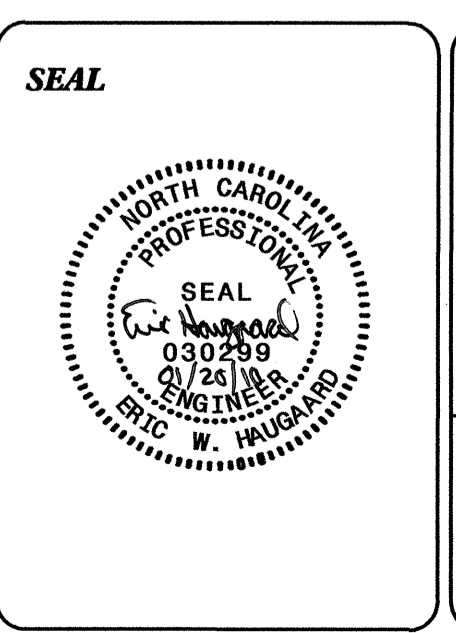


**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	PLAN SHEET
UC-3	PROFILE SHEET
UC-4	DETAIL SHEET

**WATER OWNERS ON PROJECT**

(1) WATER: GREENVILLE UTILITIES COMMISSION  
(2) SANITARY SEWER: GREENVILLE UTILITIES COMMISSION



PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS**  
**UTILITIES ENGINEERING SECTION**

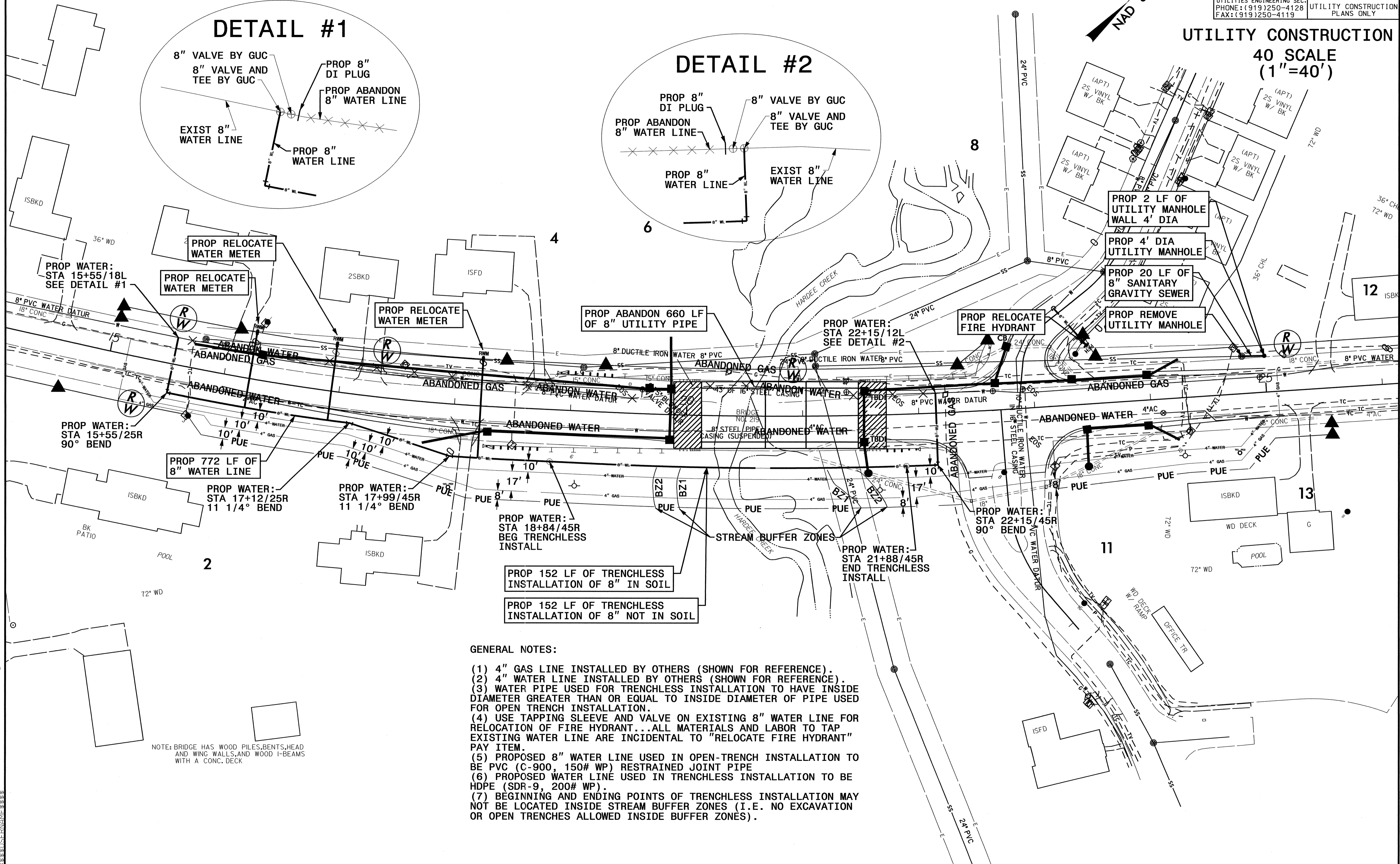
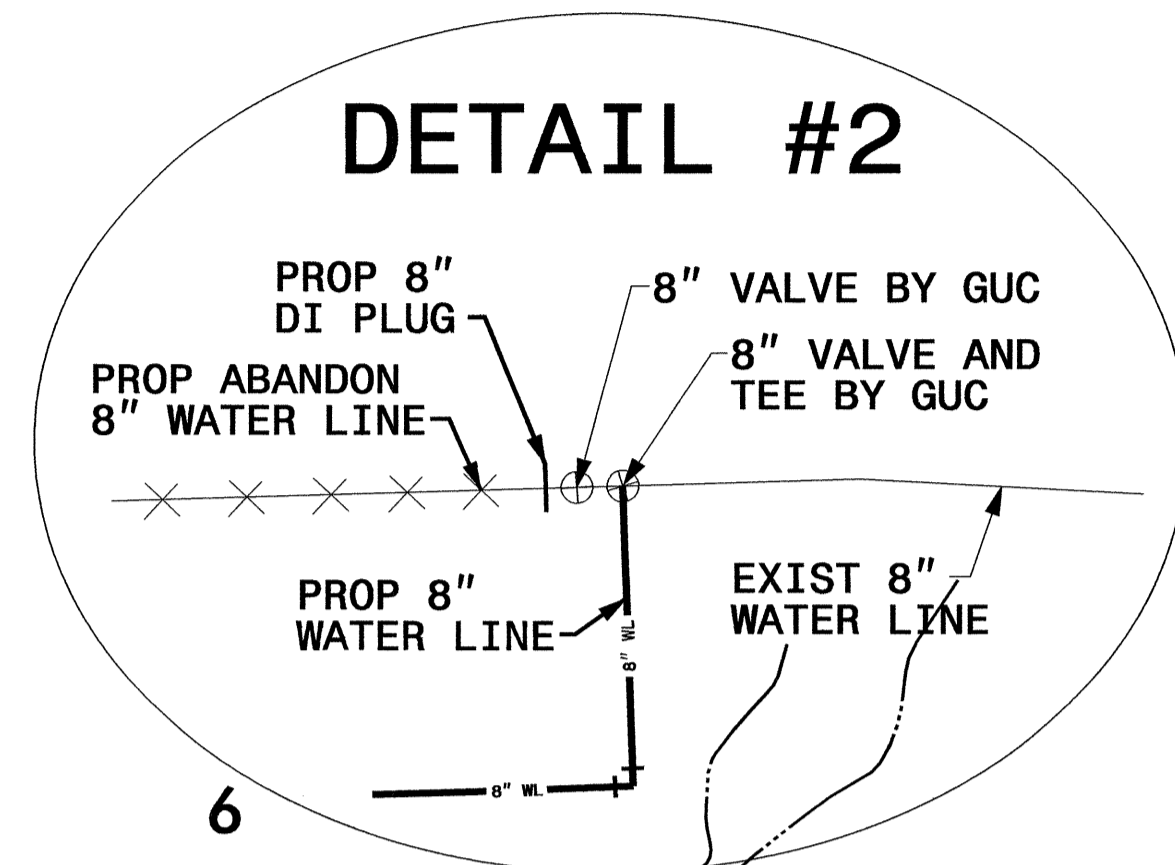
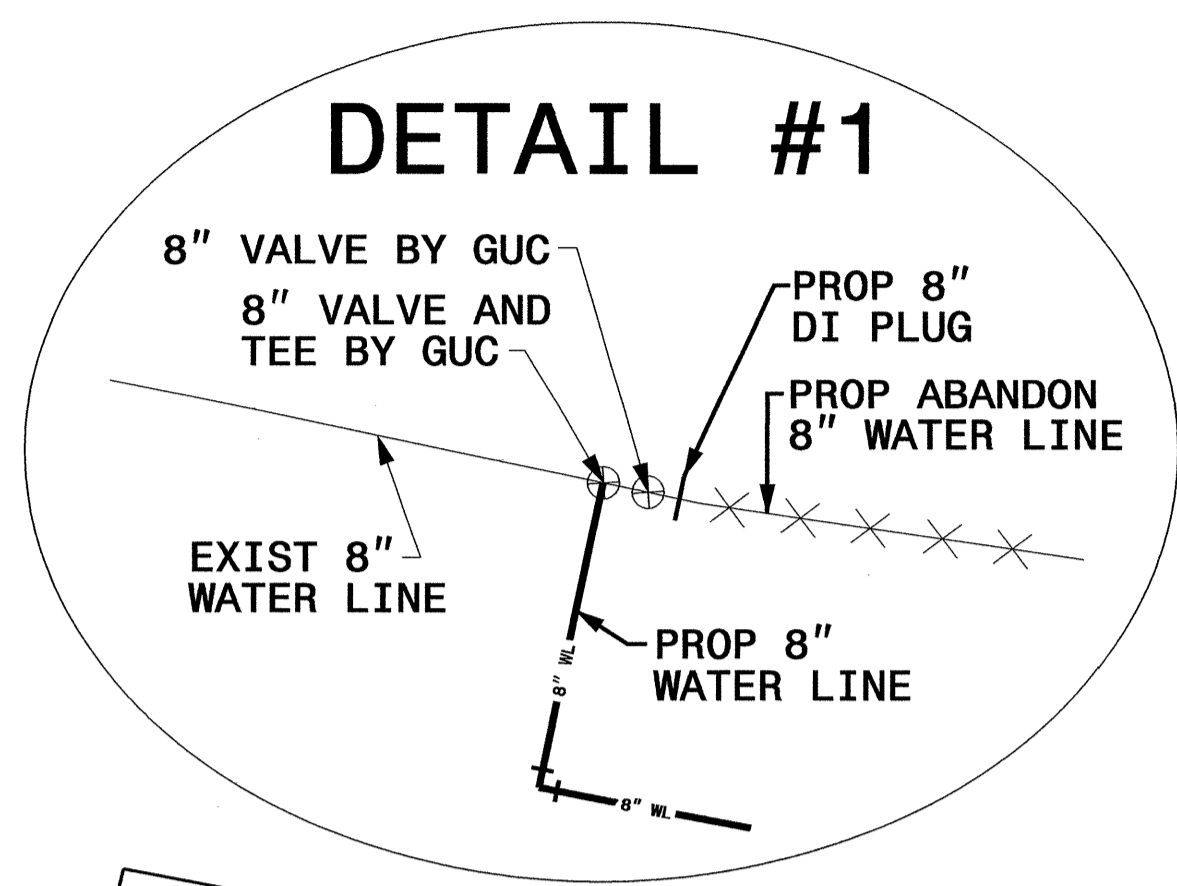
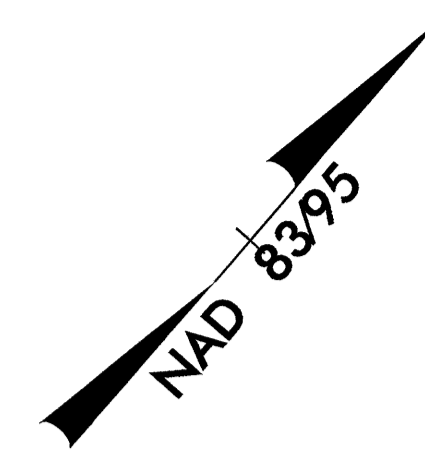
1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

Roger Worthington, P.E. UTILITIES SECTION ENGINEER  
Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER  
Eric Hangaard, P.E. UTILITIES PROJECT DESIGNER

# B-4238 (SR-1726 OVER HARDEE CREEK) RELOCATION PLAN: WATER, SANITARY SEWER

PROJECT REFERENCE NO. B-4238	SHEET NO. UC-2
DESIGNED BY: EWH	
DRAWN BY: EWH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION  
40 SCALE  
(1"=40')



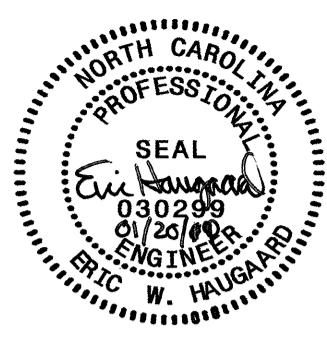
**GENERAL NOTES:**

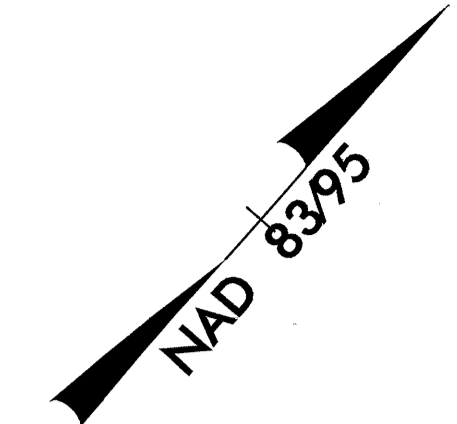
- (1) 4" GAS LINE INSTALLED BY OTHERS (SHOWN FOR REFERENCE).
- (2) 4" WATER LINE INSTALLED BY OTHERS (SHOWN FOR REFERENCE).
- (3) WATER PIPE USED FOR TRENCHLESS INSTALLATION TO HAVE INSIDE DIAMETER GREATER THAN OR EQUAL TO INSIDE DIAMETER OF PIPE USED FOR OPEN TRENCH INSTALLATION.
- (4) USE TAPPING SLEEVE AND VALVE ON EXISTING 8" WATER LINE FOR RELOCATION OF FIRE HYDRANT...ALL MATERIALS AND LABOR TO TAP EXISTING WATER LINE ARE INCIDENTAL TO "RELOCATE FIRE HYDRANT" PAY ITEM.
- (5) PROPOSED 8" WATER LINE USED IN OPEN-TRENCH INSTALLATION TO BE PVC (C-900, 150# WP) RESTRAINED JOINT PIPE
- (6) PROPOSED WATER LINE USED IN TRENCHLESS INSTALLATION TO BE HDPE (SDR-9, 200# WP).
- (7) BEGINNING AND ENDING POINTS OF TRENCHLESS INSTALLATION MAY NOT BE LOCATED INSIDE STREAM BUFFER ZONES (I.E. NO EXCAVATION OR OPEN TRENCHES ALLOWED INSIDE BUFFER ZONES).

NOTE: BRIDGE HAS WOOD PILES, BENTS, HEAD AND WING WALLS, AND WOOD I-BEAMS WITH A CONC. DECK

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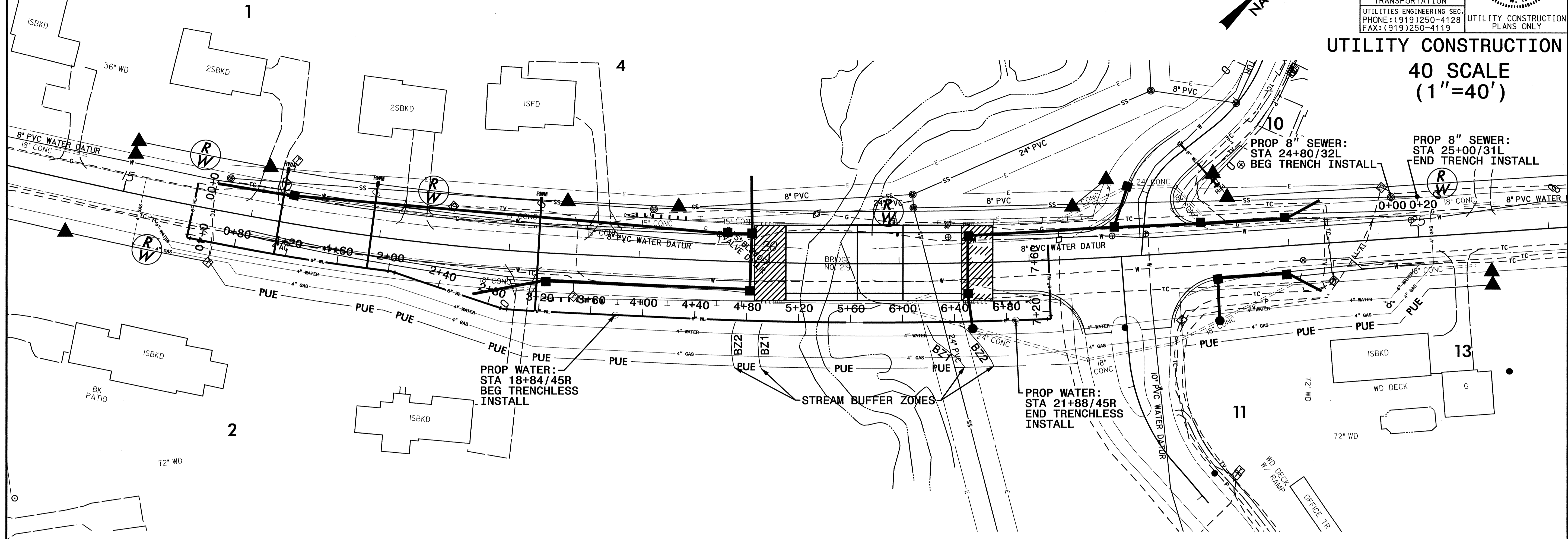
# B-4238 (SR-1726 OVER HARDEE CREEK) WATER AND SANITARY SEWER LINE PROFILES

PROJECT REFERENCE NO. B-4238	SHEET NO. UC-3
DESIGNED BY: EWH	
DRAWN BY: EWH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

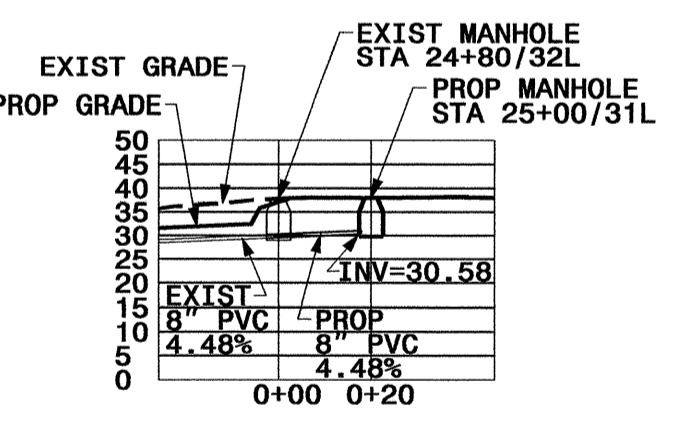
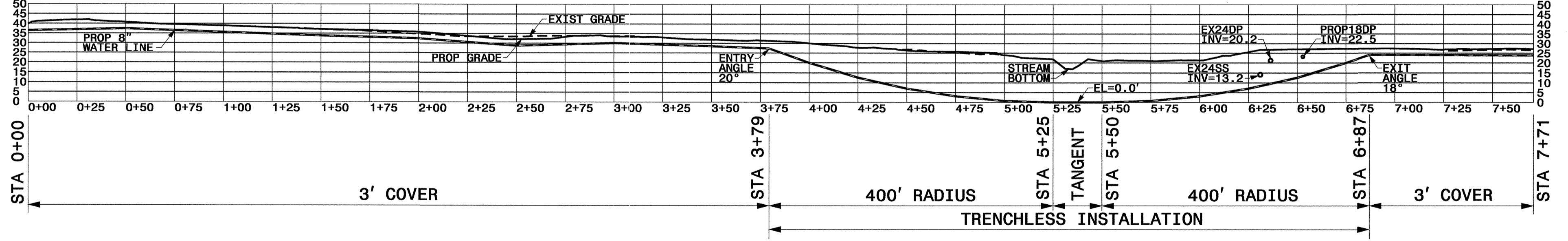


**UTILITY CONSTRUCTION**

**40 SCALE  
(1"=40')**



**8" WATER LINE PROFILE**



**8" SANITARY SEWER LINE PROFILE**

**WATER LINE PROFILE NOTES:**

- (1) WATER LINE PROFILES ARE FOR ENVIRONMENTAL PERMITTING REQUIREMENTS AND ARE SHOWN FOR REFERENCE ONLY. THESE PROFILES ARE SUGGESTED AND CONTRACTOR MAY DEVIATE FROM VERTICAL ALIGNMENTS SHOWN EXCEPT FOR: (1) MINIMUM DEPTH OF PROPOSED WATER LINE BELOW STREAM BED (I.E. MAXIMUM ELEVATION OF PROPOSED WATER LINE BORE PATH BELOW STREAM BED TO NOT EXCEED 0.0' (MEAN SEA LEVEL)) AND (2) BEGINNING AND ENDING POINTS OF TRENCHLESS INSTALLATION MAY NOT BE LOCATED INSIDE STREAM BUFFER ZONES (I.E. NO EXCAVATION OR OPEN TRENCHES ALLOWED INSIDE BUFFER ZONES).
- (2) ELEVATIONS OF EXISTING UTILITIES SHOWN ON PROFILE ARE ASSUMED. CONTRACTOR MUST VERIFY ALL ELEVATIONS OF EXISTING UTILITIES THAT CONFLICT WITH PROPOSED WATER PIPE.
- (3) CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE PATH DESIGNED AND SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER.

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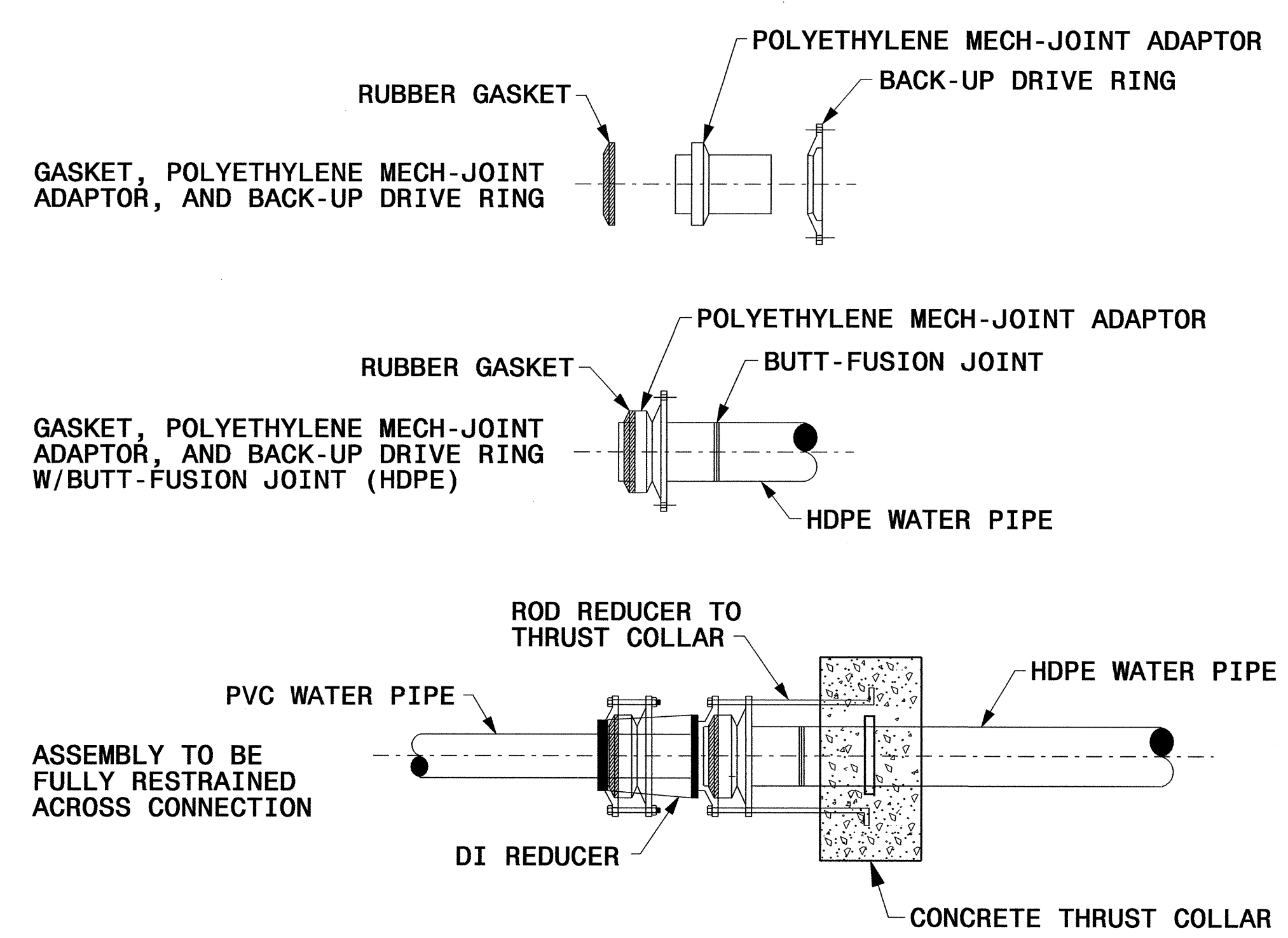
5/14/99

PROJECT REFERENCE NO. B-4238	SHEET NO. UC-4
DESIGNED BY: EWH	
DRAWN BY: EWH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)250-4128 FAX: (919)250-4119	

# B-4238 (SR-1726 OVER HARDEE CREEK) DETAIL SHEET

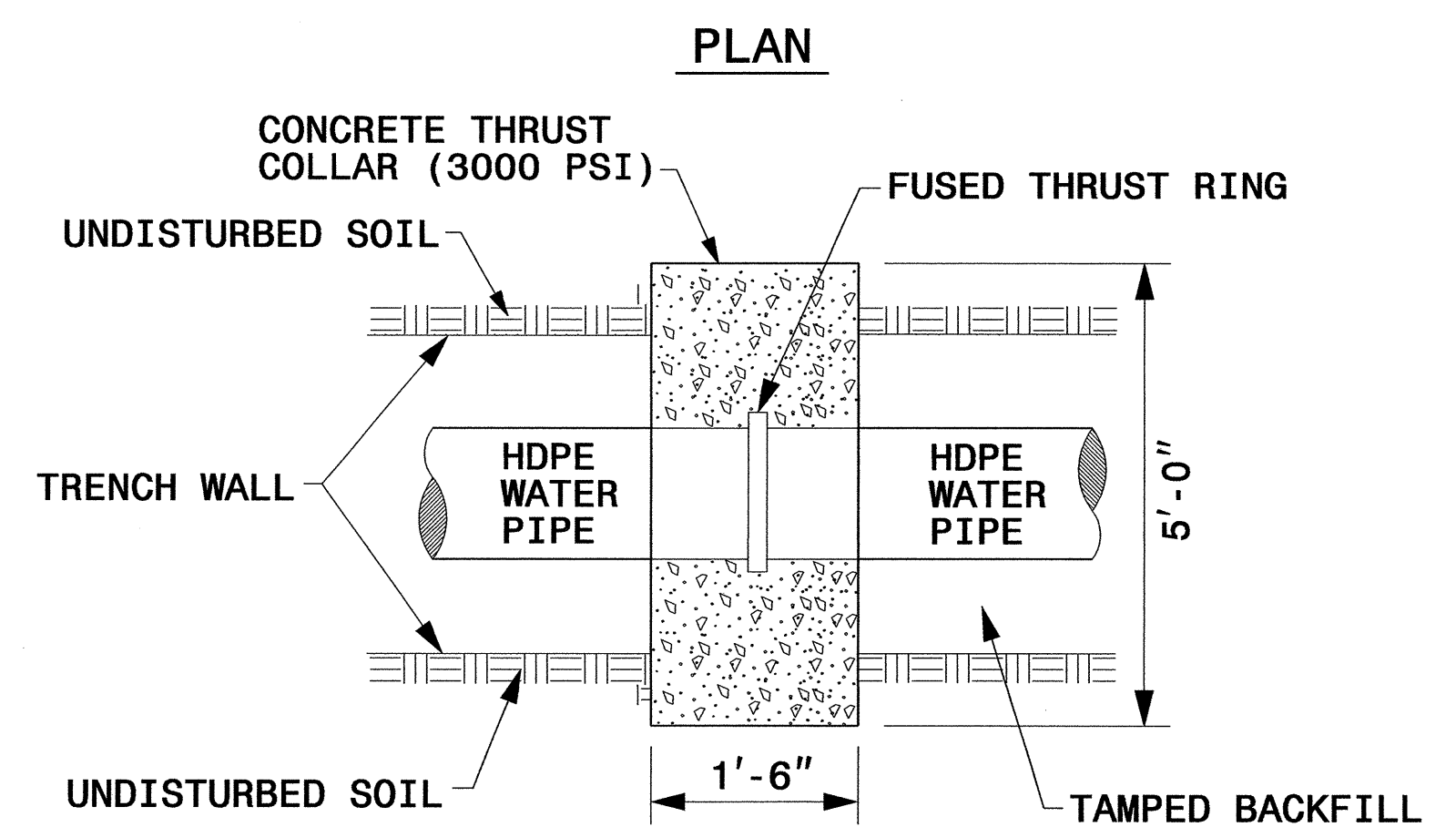
UTILITY CONSTRUCTION  
NO SCALE

## CONNECTOR ASSEMBLY DETAILS

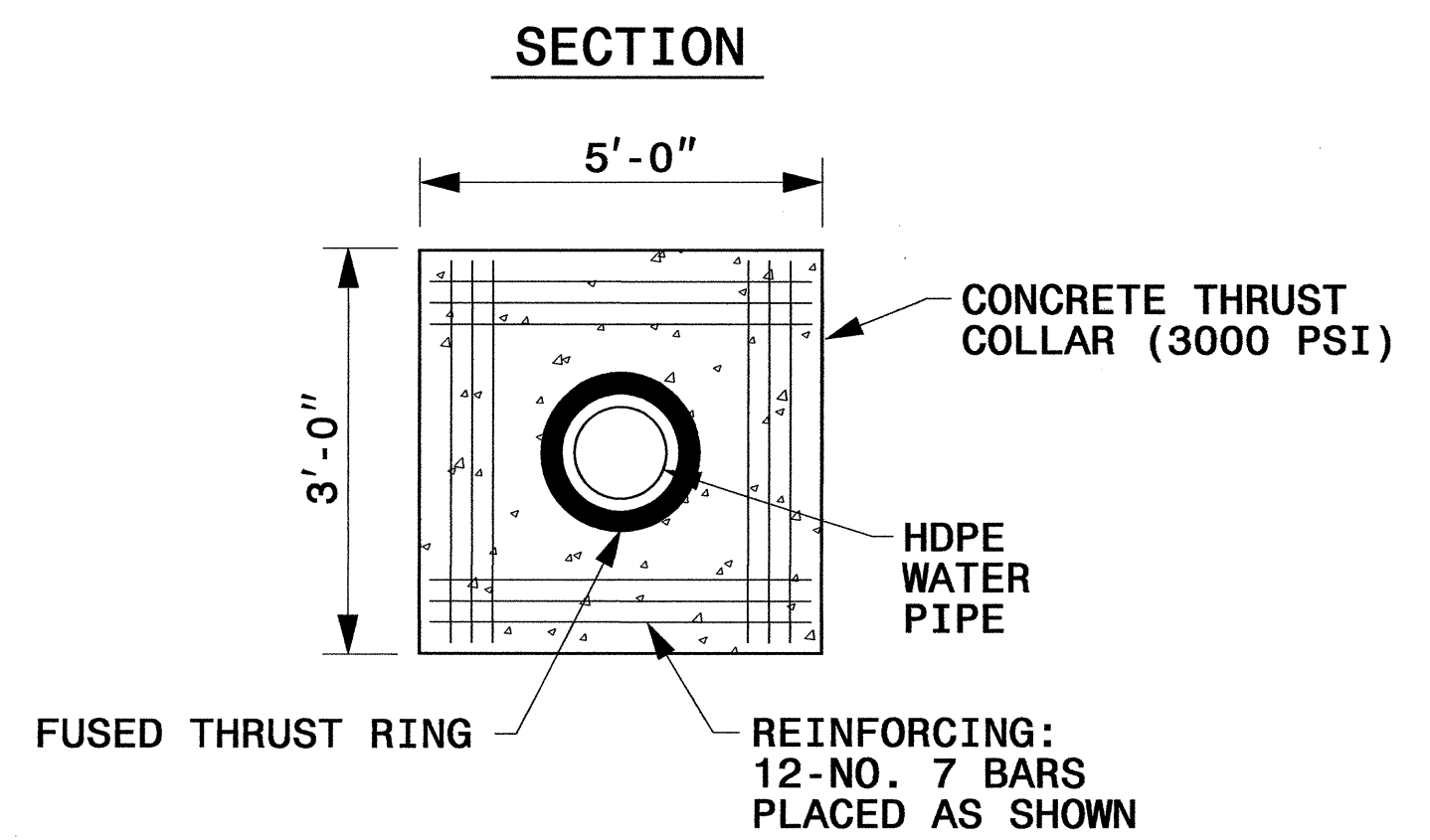


NOTE: POLYETHYLENE MECH-JOINT ADAPTOR SHALL BE CONNECTED TO THE HDPE PIPE AS SPECIFIED BY THE PIPE MANUFACTURER

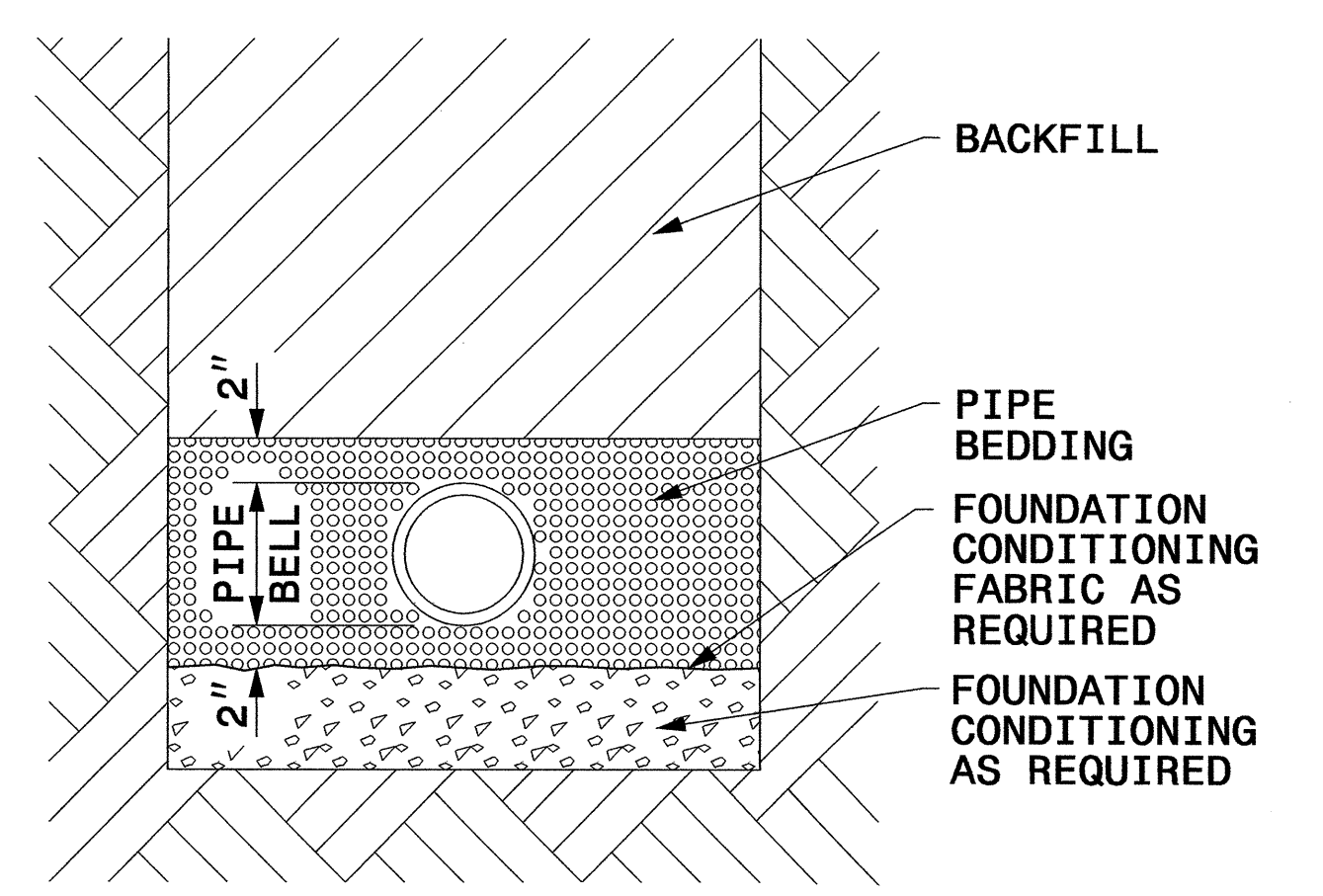
## THRUST COLLAR DETAIL



## THRUST COLLAR DETAIL



## TRENCH DETAIL



PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS II (TYPE 1) OR CLASS III. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.

MAXIMUM TRENCH WIDTH AT TOP OF PIPE	
NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28
6	30
8	32
10	34

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TIP PROJECT: B-4238

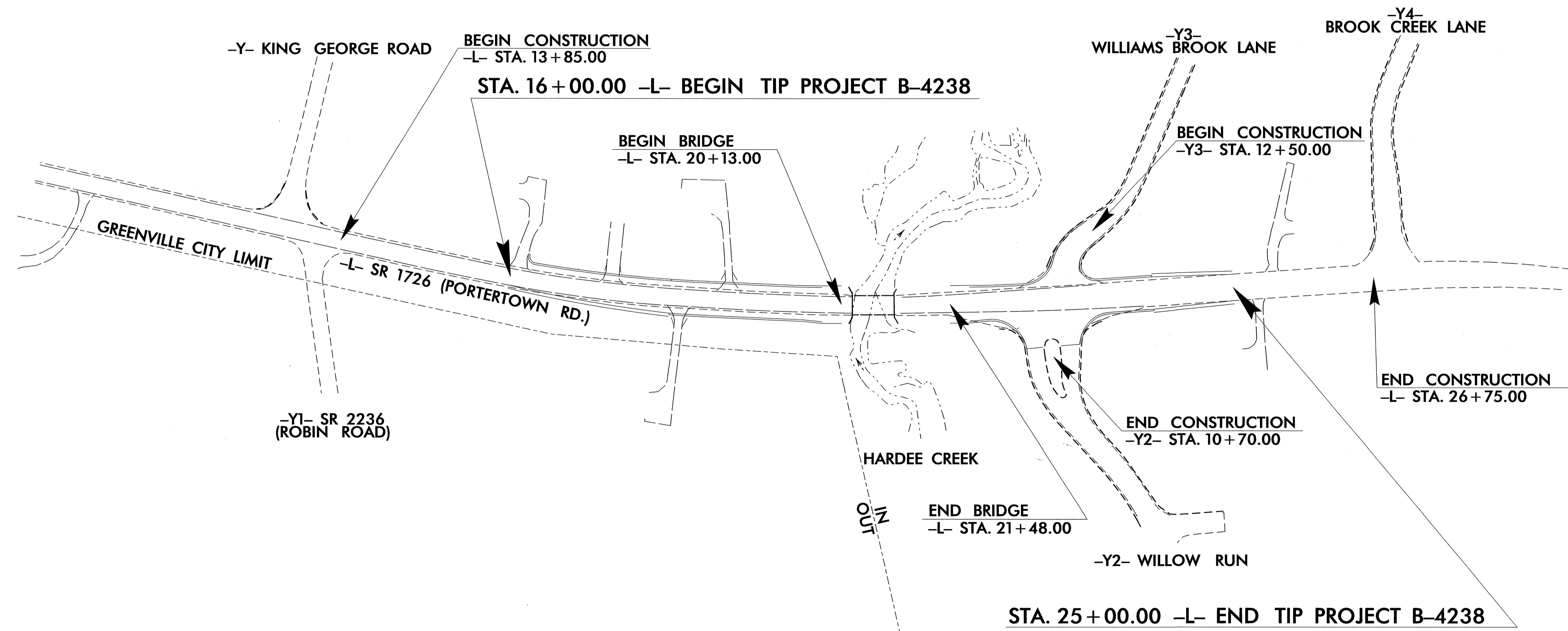
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
B-4238	UO-1

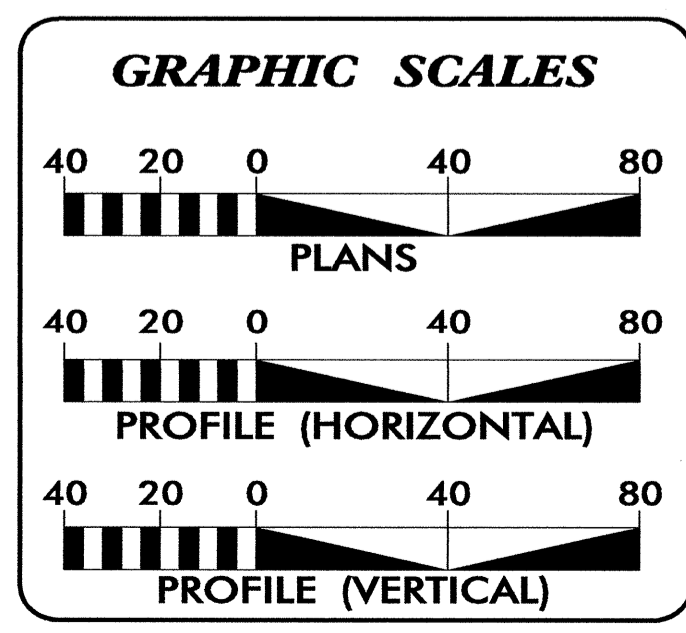
**UTILITIES BY OTHERS PLANS  
PITT COUNTY**

LOCATION: SR-1726 OVER HARDEE CREEK

TYPE OF WORK: GAS AND POWER UTILITY RELOCATIONS



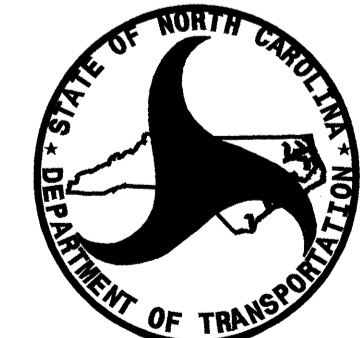
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**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	PLAN SHEET

- UTILITY OWNERS ON PROJECT**
- (1) POWER: GREENVILLE UTILITIES COMMISSION
  - (2) GAS: GREENVILLE UTILITIES COMMISSION
  - (3) TELEPHONE: CENTURYLINK
  - (4) CABLE TELEVISION: TIME WARNER
  - (5) WATER: EASTERN PINES WATER CORPORATION



PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
UTILITIES ENGINEERING  
SECTION**

1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

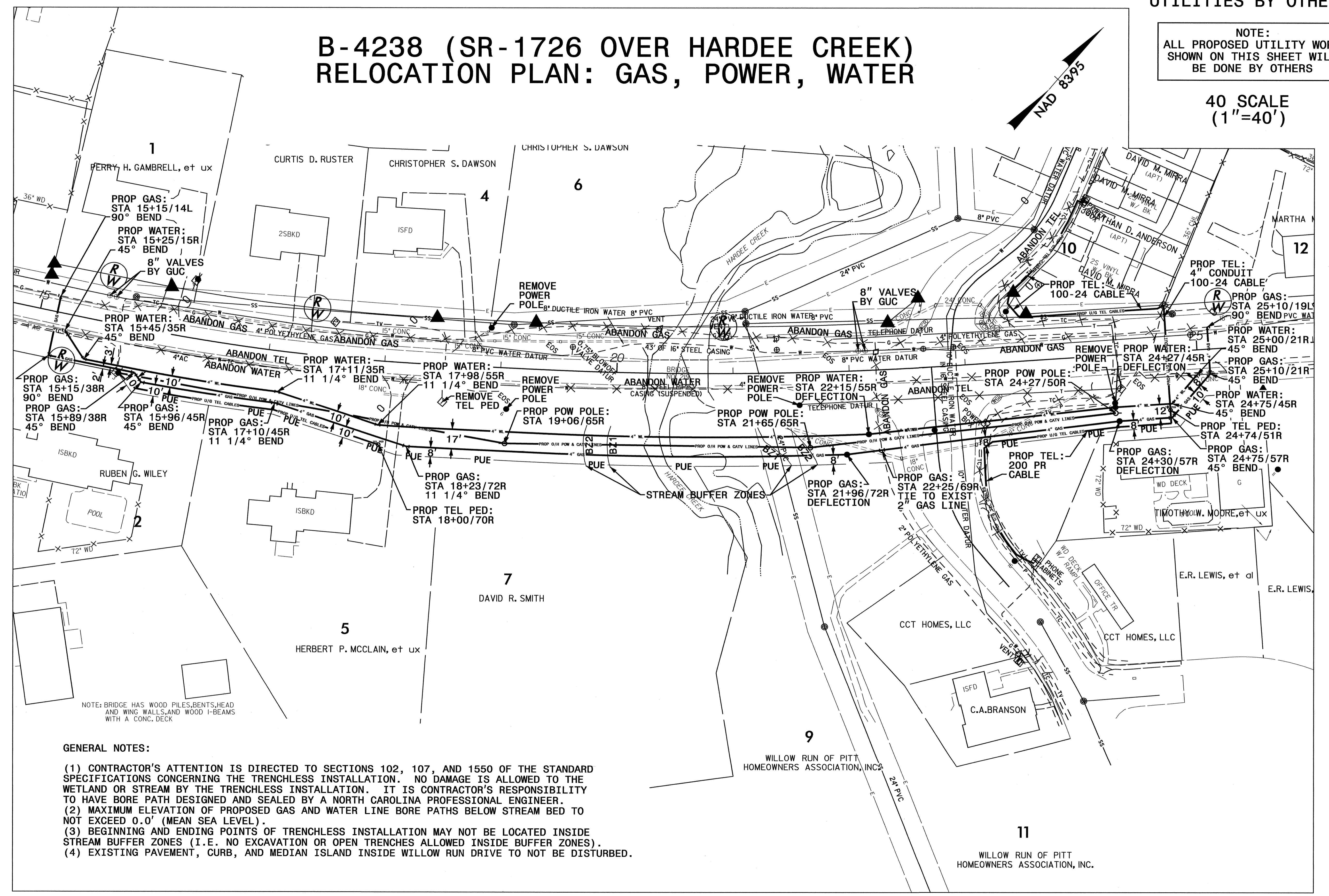
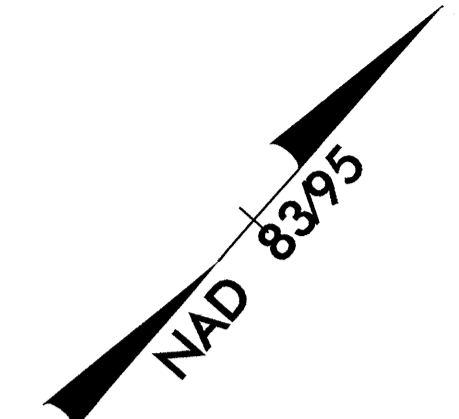
Roger Worthington, P.E. UTILITIES SECTION ENGINEER  
Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER  
Eric Haugaard, P.E. UTILITIES PROJECT DESIGNER

### UTILITIES BY OTHERS

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

40 SCALE  
(1"=40')

# B-4238 (SR-1726 OVER HARDEE CREEK) RELOCATION PLAN: GAS, POWER, WATER



**GENERAL NOTES:**

- (1) CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING THE TRENCHLESS INSTALLATION. NO DAMAGE IS ALLOWED TO THE WETLAND OR STREAM BY THE TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE PATH DESIGNED AND SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER.
- (2) MAXIMUM ELEVATION OF PROPOSED GAS AND WATER LINE BORE PATHS BELOW STREAM BED TO NOT EXCEED 0.0' (MEAN SEA LEVEL).
- (3) BEGINNING AND ENDING POINTS OF TRENCHLESS INSTALLATION MAY NOT BE LOCATED INSIDE STREAM BUFFER ZONES (I.E. NO EXCAVATION OR OPEN TRENCHES ALLOWED INSIDE BUFFER ZONES).
- (4) EXISTING PAVEMENT, CURB, AND MEDIAN ISLAND INSIDE WILLOW RUN DRIVE TO NOT BE DISTURBED.

NOTE: BRIDGE HAS WOOD PILES, BENTS, HEAD AND WING WALLS, AND WOOD I-BEAMS WITH A CONC. DECK

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