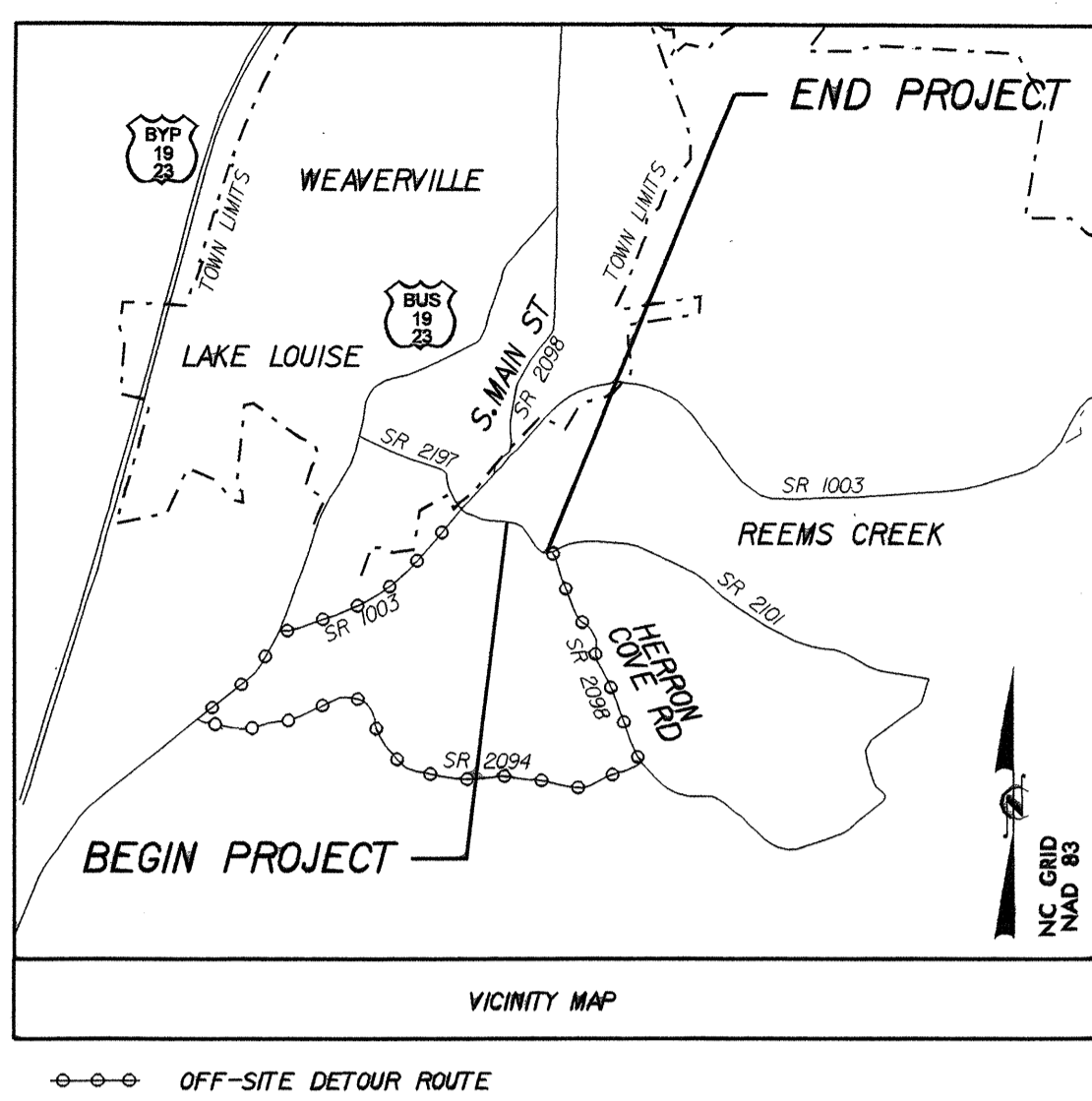


**TIP PROJECT: B-4036**

SEE SHEET 1-A FOR INDEX OF SHEETS  
SEE SHEET 1-B FOR CONVENTIONAL PLAN SHEET SYMBOLS

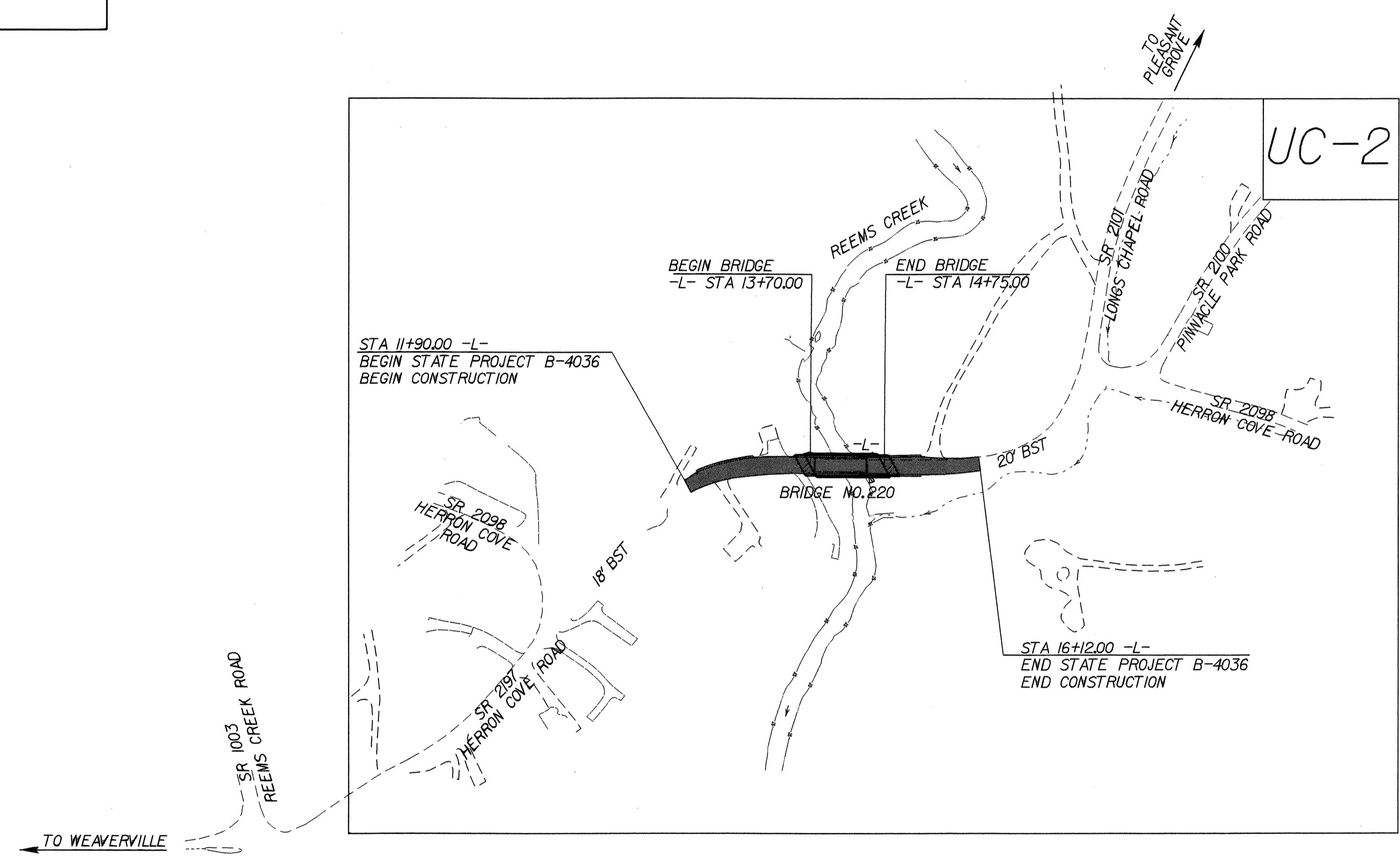


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

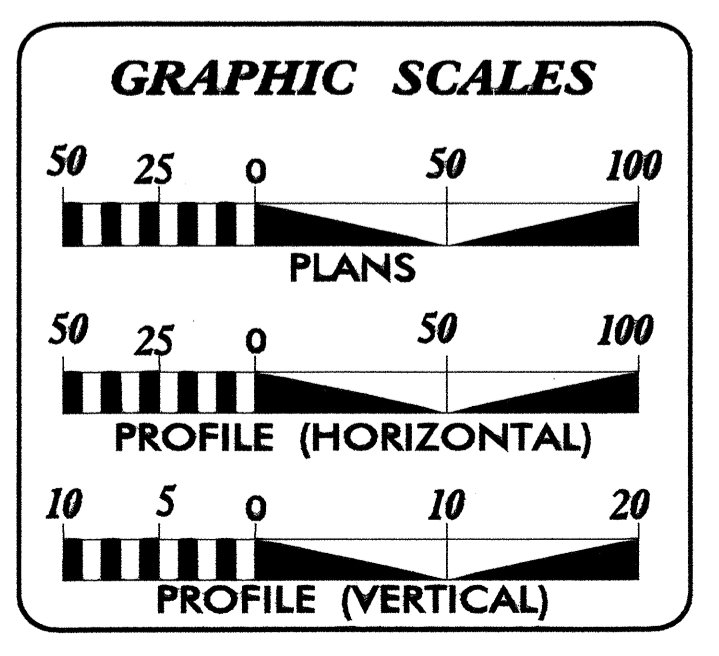
**UTILITY CONSTRUCTION PLANS  
BUNCOMBE COUNTY**

**LOCATION: BRIDGE NO. 220 OVER REEMS CREEK ON SR 2098**  
**TYPE OF WORK: WATER LINE RELOCATION**

T.I.P. NO.	SHEET NO.
B-4036	UC-1

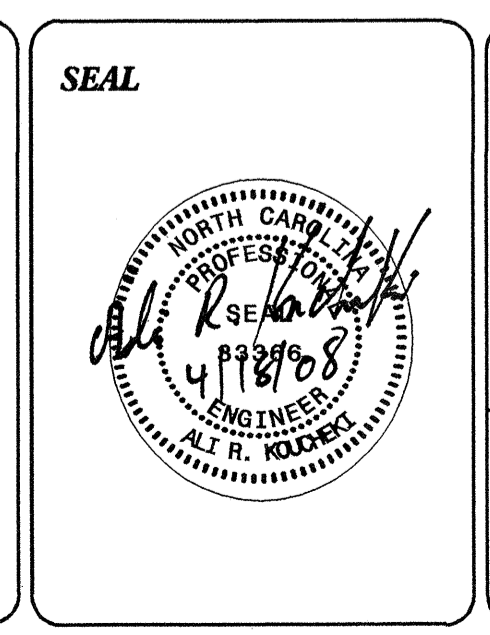


**2006 STANDARD SPECIFICATION FOR ROADS AND STRUCTURES**  
**ALL PIPE 6" AND LARGER WILL BE DI, PC 350**



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY CONSTRUCTION PLAN SHEET

**WATER AND SEWER OWNERS ON PROJECT**  
(1) WATER LINE: TOWN OF WEAVERVILLE  
(2) SANITARY SEWER: METROPOLITAN SEWERAGE DISTRICT (MSD)



PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
PROJECT SERVICES  
UTILITY SECTION**  
1591 MAIL SERVICES CENTER  
RALEIGH, NC 27699-1591  
PHONE (919) 250-4123  
FAX (919) 250-4119

**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**Carl Barclay, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**Ali Koucheh, P.E.** UTILITIES PROJECT DESIGNER

18-APR-2008 07:46  
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\$\$\$\$\$USERNAME\$\$\$\$\$



# UTILITY CONSTRUCTION

**PI Sta 11+88.48**  
 $\Delta = 38^\circ 45' 28.9" (RT)$   
 $D = 28' 38" 52.4"$   
 $L = 135.29'$   
 $T = 70.35'$   
 $R = 200.00'$   
 $SE = 0.08$   
 $RO = SEE PLANS$   
 $* DS = 25 MPH$

**PI Sta 13+03.27**  
 $\Delta = 1^\circ 23' 14.4" (RT)$   
 $D = 1^\circ 27' 33.0"$   
 $L = 99.37'$   
 $T = 49.85'$   
 $R = 500.00'$   
 $SE = SEE PLANS$   
 $RO = SEE PLANS$   
 $* DS = 40 MPH$

**PI Sta 16+06.19**  
 $\Delta = 14^\circ 36' 29.2" (LT)$   
 $D = 15' 16" 43.9"$   
 $L = 95.61'$   
 $T = 48.07'$   
 $R = 375.00'$   
 $SE = SEE PLANS$   
 $RO = SEE PLANS$   
 $* DS = 35 MPH$

**PI Sta 17+16.17**  
 $\Delta = 48^\circ 04' 22.7" (LT)$   
 $D = 40' 55" 32.0"$   
 $L = 117.46'$   
 $T = 62.44'$   
 $R = 140.00'$   
 $SE = EXISTING$   
 $RO = EXISTING$

**WATER LINE OWNED BY TOWN OF WEAVERVILLE**

**SEE UTILITY BY OTHERS PLAN SHEET FOR THE NEW GRAVITY SEWER LINE LOCATION**

**NOTE: CONNECT TO EXISTING WATER LINE ON BOTH SIDES OF THE CREEK**

**PROP. RELOCATE 1-FIRE HYDRANT**

**PROP. RELOCATE 3-WATER METER**

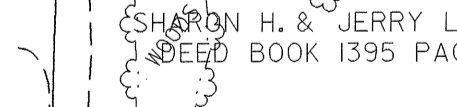
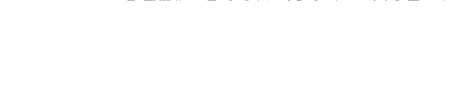
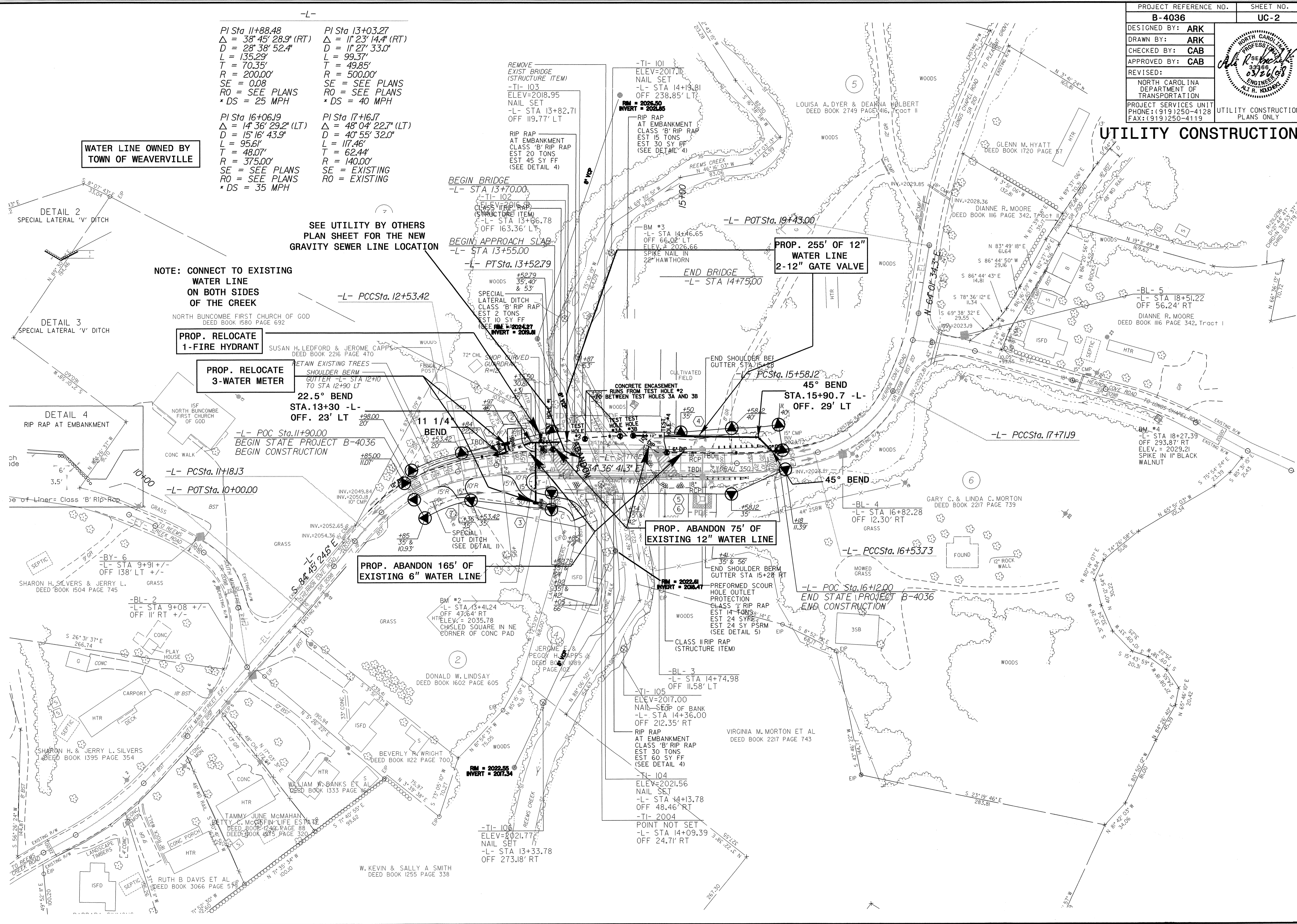
**22.5° BEND STA. 13+30 -L- OFF. 23' LT**

**PROP. ABANDON 165' OF EXISTING 6" WATER LINE**

**PROP. ABANDON 75' OF EXISTING 12" WATER LINE**

**PROP. 255' OF 12" WATER LINE 2-12" GATE VALVE**

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 5/14/99



REMOVE EXIST BRIDGE (STRUCTURE ITEM)  
 -TI- 103  
 ELEV=2018.95  
 NAIL SET  
 -L- STA 13+82.71  
 OFF 119.77' LT

-TI- 101  
 ELEV=2017.11  
 NAIL SET  
 -L- STA 14+13.81  
 OFF 238.85' LT

RIP RAP AT EMBANKMENT  
 CLASS 'B' RIP RAP  
 EST 15 TONS  
 EST 30 SY FF  
 (SEE DETAIL 4)

BM #3  
 -L- STA 14+46.65  
 OFF 66.02' LT  
 ELEV. = 2026.66  
 SPIKE NAIL IN 2" HAWTHORN

END BRIDGE  
 -L- STA 14+75.00

CONCRETE ENCASMENT RUNS FROM TEST HOLE #2 BETWEEN TEST HOLES 3A AND 3B

TEST HOLE #3  
 TEST HOLE #4  
 TEST HOLE #5

PREFORMED SCOUR HOLE OUTLET PROTECTION CLASS 'B' RIP RAP EST 14 TONS EST 24 SY PSRM (SEE DETAIL 5)

CLASS II RIP RAP (STRUCTURE ITEM)  
 -BL- 3  
 -L- STA 14+74.98  
 OFF 11.58' LT

-TI- 105  
 ELEV=2017.00  
 NAIL SET  
 -L- STA 14+36.00  
 OFF 212.35' RT

RIP RAP AT EMBANKMENT CLASS 'B' RIP RAP EST 30 TONS EST 60 SY FF (SEE DETAIL 4)

-TI- 104  
 ELEV=2021.56  
 NAIL SET  
 -L- STA 14+13.78  
 OFF 48.46' RT

-TI- 2004  
 POINT NOT SET  
 -L- STA 14+09.39  
 OFF 24.71' RT

W. KEVIN & SALLY A SMITH  
 DEED BOOK 1255 PAGE 338

SHARON H. & JERRY L. SILVERS  
 DEED BOOK 1395 PAGE 354

BEVERLY W. WRIGHT  
 DEED BOOK 1122 PAGE 700

WILLIAM W. BANKS ET AL  
 DEED BOOK 1333 PAGE 102

TAMMY JUNE McMAHAN  
 DEED BOOK 1240 PAGE 88

RUTH B DAVIS ET AL  
 DEED BOOK 3066 PAGE 573

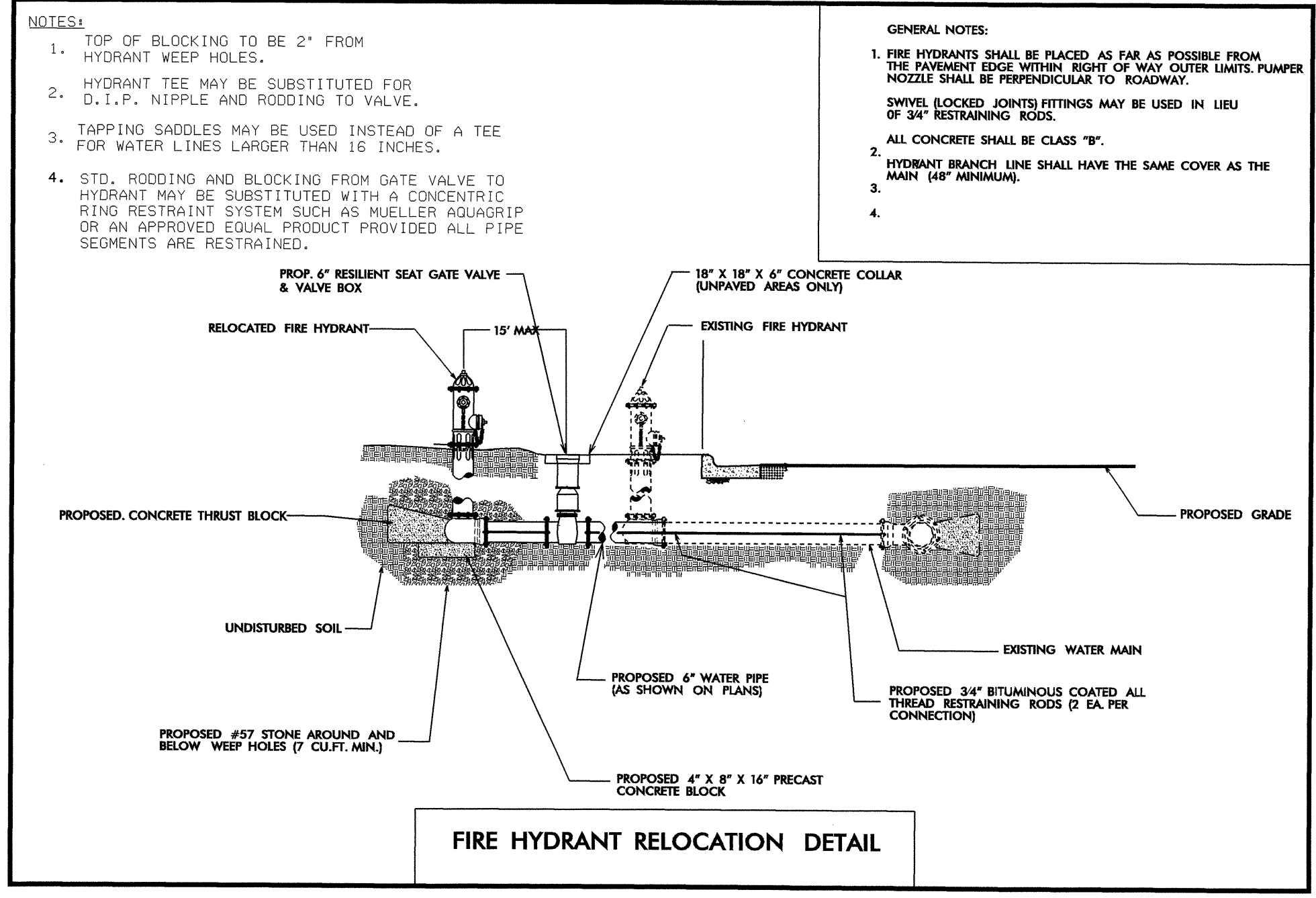
SHARON H. & JERRY L. SILVERS  
 DEED BOOK 1504 PAGE 745

SHARON H. & JERRY L. SILVERS  
 DEED BOOK 1504 PAGE 745

5/14/99

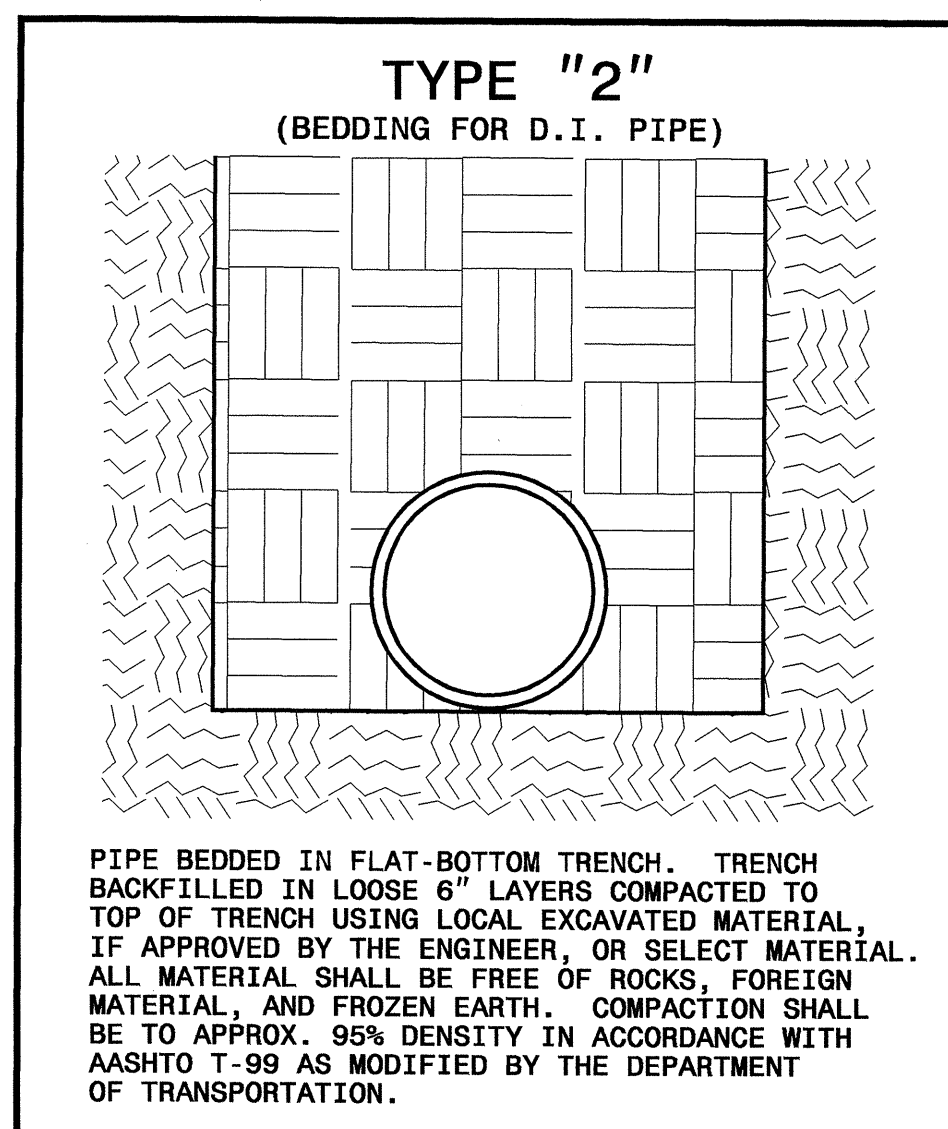
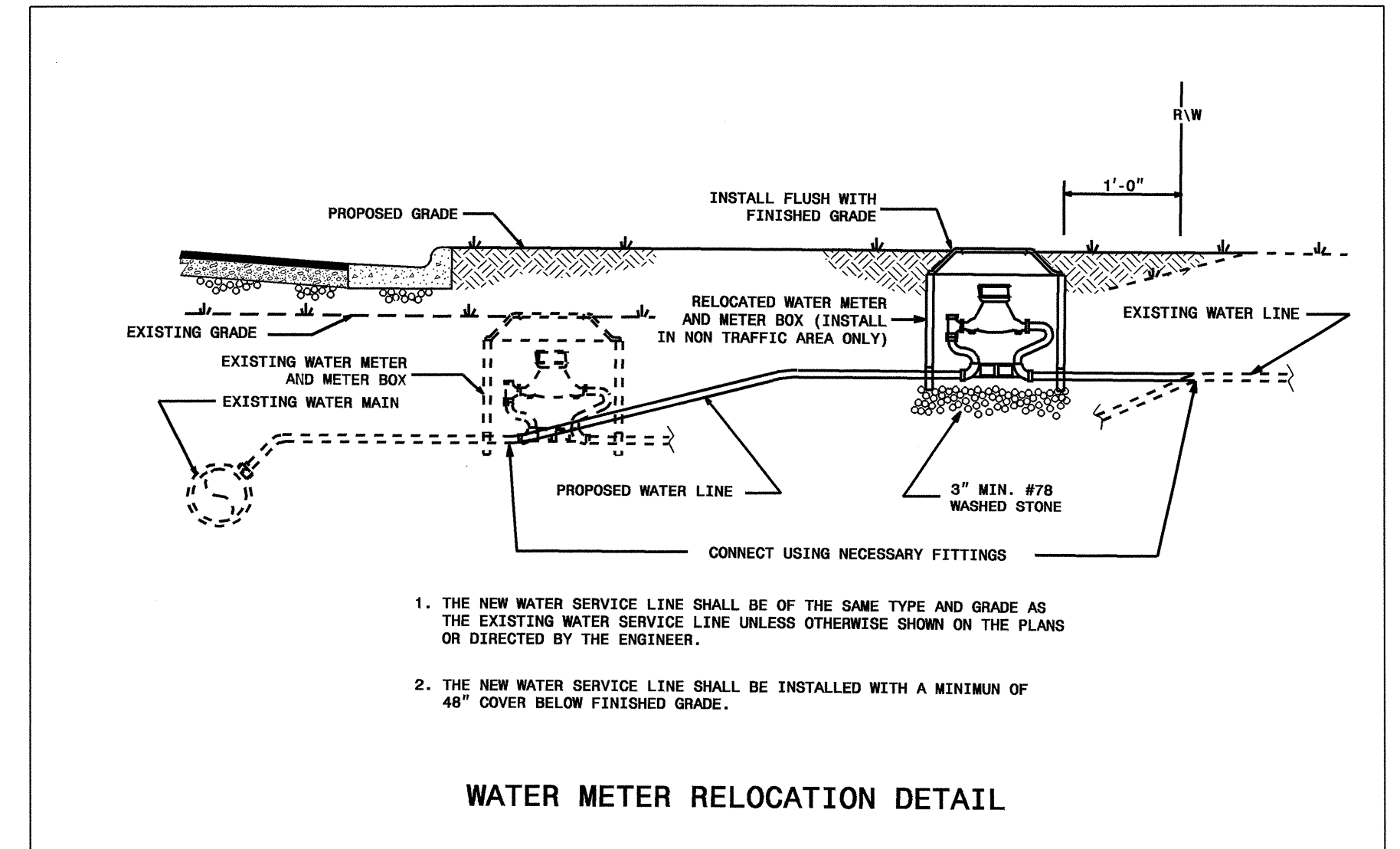
PROJECT REFERENCE NO.	SHEET NO.
<b>B-4036</b>	<b>UC-3</b>
DESIGNED BY: <b>ARK</b>	
DRAWN BY: <b>ARK</b>	
CHECKED BY: <b>CAB</b>	
APPROVED BY: <b>CAB</b>	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

**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		

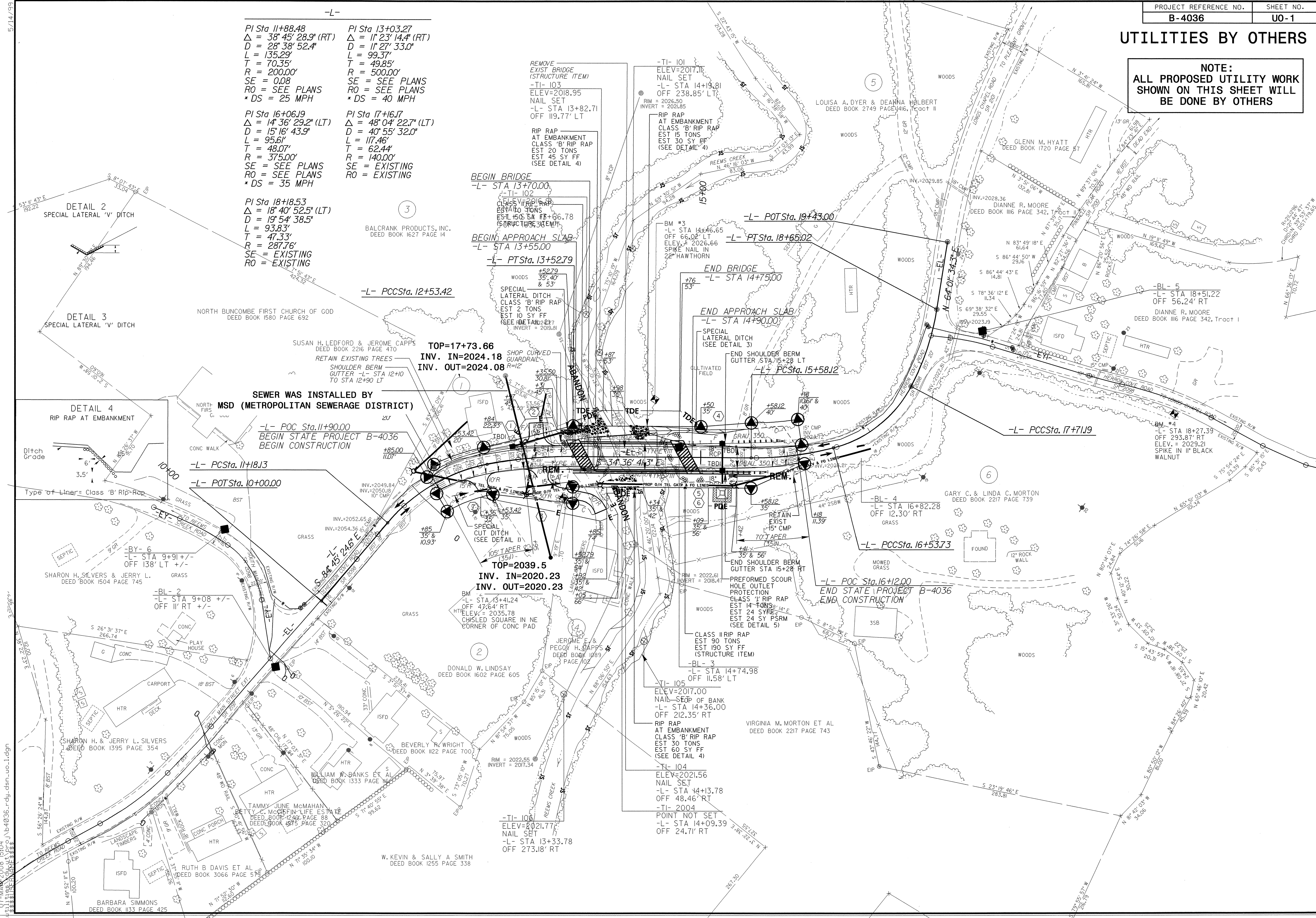


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## UTILITIES BY OTHERS

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



PI Sta 16+06.19  
Δ = 14° 36' 29.2" (LT)  
D = 15' 16" 43.9"  
L = 95.61'  
T = 48.07'  
R = 375.00'  
SE = SEE PLANS  
RO = SEE PLANS  
\* DS = 35 MPH

PI Sta 17+16.17  
Δ = 48° 04' 22.7" (LT)  
D = 40' 55" 32.0"  
L = 117.46'  
T = 62.44'  
R = 140.00'  
SE = EXISTING  
RO = EXISTING

PI Sta 18+18.53  
Δ = 18° 40' 52.5" (LT)  
D = 19' 54" 38.5"  
L = 93.83'  
T = 47.33'  
R = 287.76'  
SE = EXISTING  
RO = EXISTING

SEWER WAS INSTALLED BY  
MSD (METROPOLITAN SEWERAGE DISTRICT)

-L- POC Sta. 11+90.00  
BEGIN STATE PROJECT B-4036  
BEGIN CONSTRUCTION

-L- PCSta. 11+81.3  
-L- POTSta. 10+00.00

-L- POC Sta. 12+53.42

-L- POC Sta. 15+28.12

-L- POC Sta. 16+12.00

-L- POC Sta. 16+53.73

-L- POC Sta. 17+71.9

-L- POC Sta. 18+27.39

-L- POC Sta. 18+51.22

-L- POC Sta. 19+43.00

-L- POC Sta. 19+43.00

-L- POC Sta. 19+43.00

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