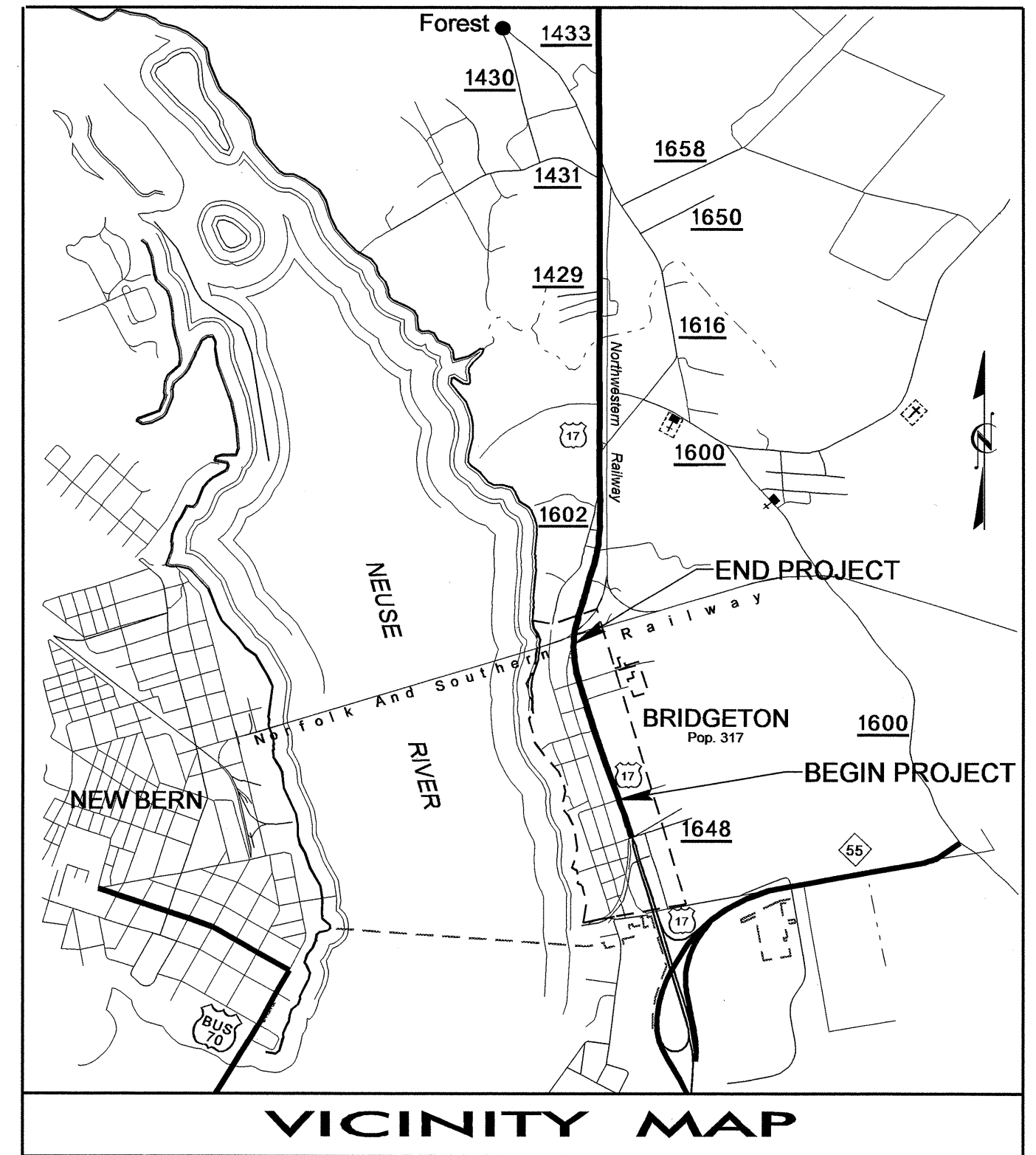


05/08/99

T.I.P. NO.	SHEET NO.
R-3403AA	UC-1

**TIP PROJECT: R-3403AA**

See Sheet I-A For Index of Sheets See Sheet I-B For Conventional Symbols



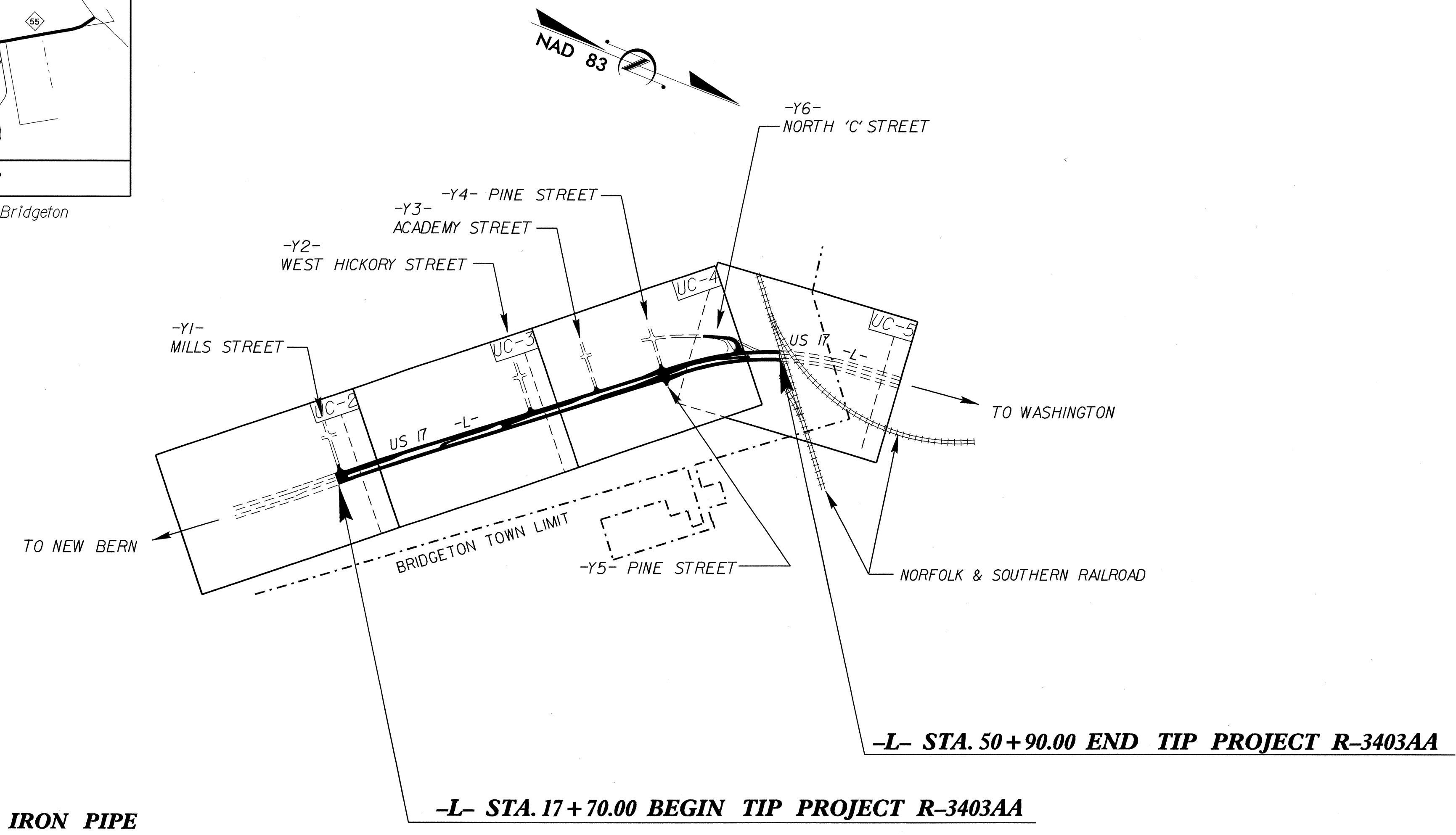
This Project is partially within the Municipal Boundaries of Bridgeton

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

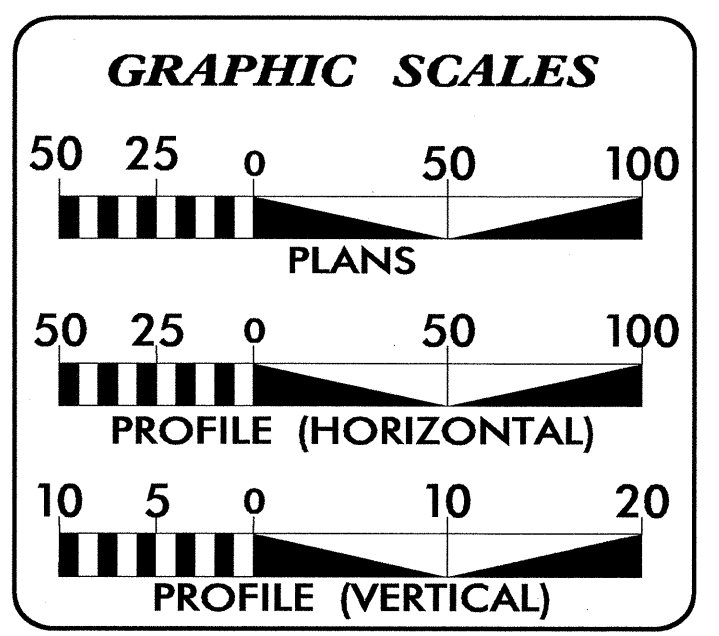
## UTILITY CONSTRUCTION PLANS CRAVEN COUNTY

**LOCATION: US 17 FROM MILLS STREET  
TO NORFOLK & SOUTHERN RAILROAD**

**TYPE OF WORK: WATER AND SEWER RELOCATION**



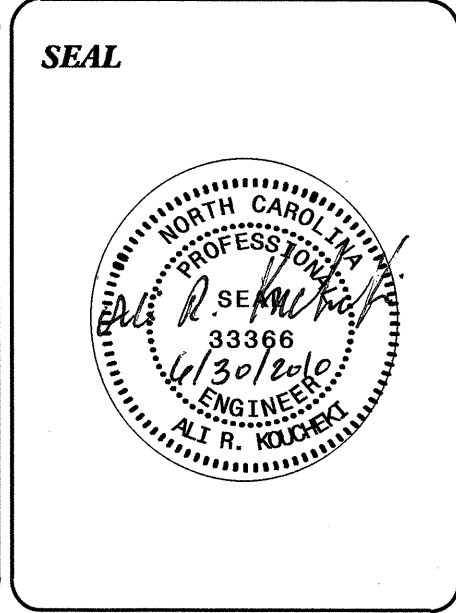
**ALL FORCEMAIN WILL BE DUCTILE IRON PIPE**



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2 THRU UC-5	UTILITY CONSTRUCTION PLAN SHEETS
UC-6	DETAIL SHEET

**WATER AND SEWER OWNERS ON PROJECT**

(1) WATER—FIRST CRAVEN SANITARY DISTRICT  
(2) SANITARY SEWER—TOWN OF BRIDGETON



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

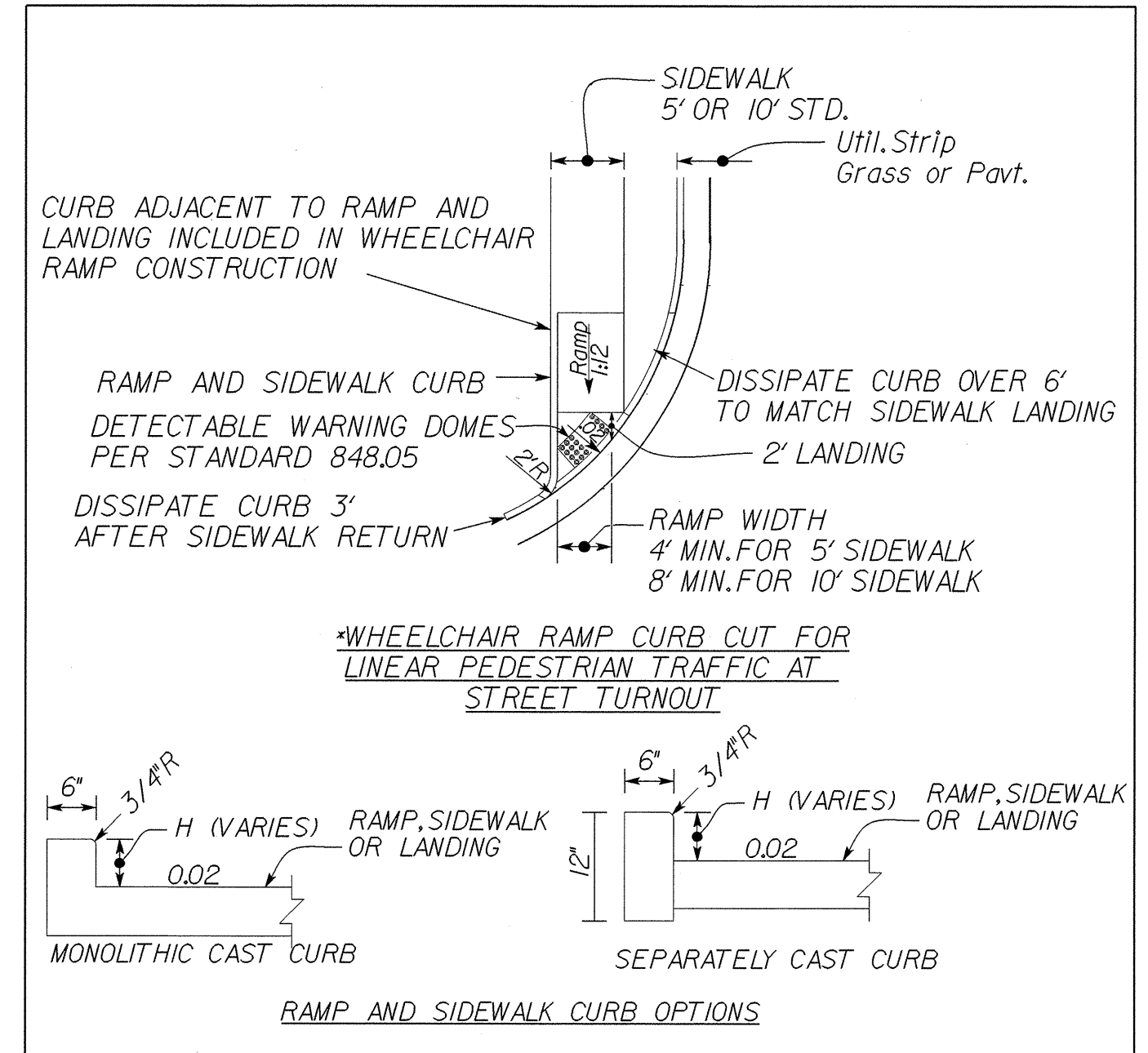
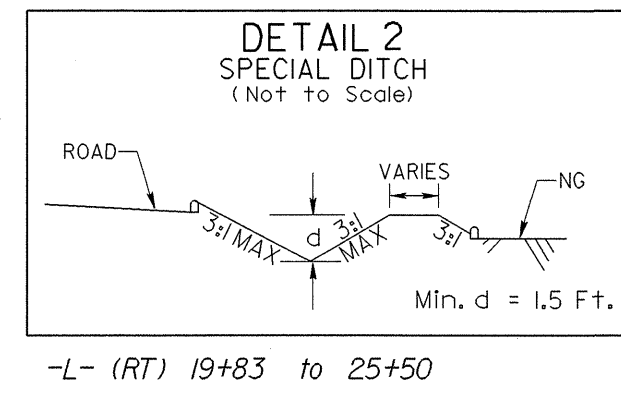
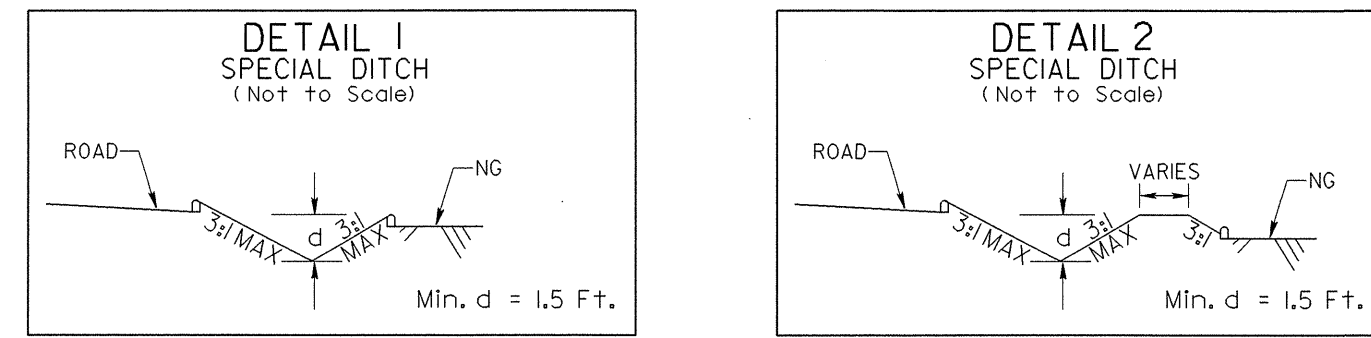
1591 MAIL SERVICES CENTER  
RALEIGH, NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

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

29-JUN-2010 12:39  
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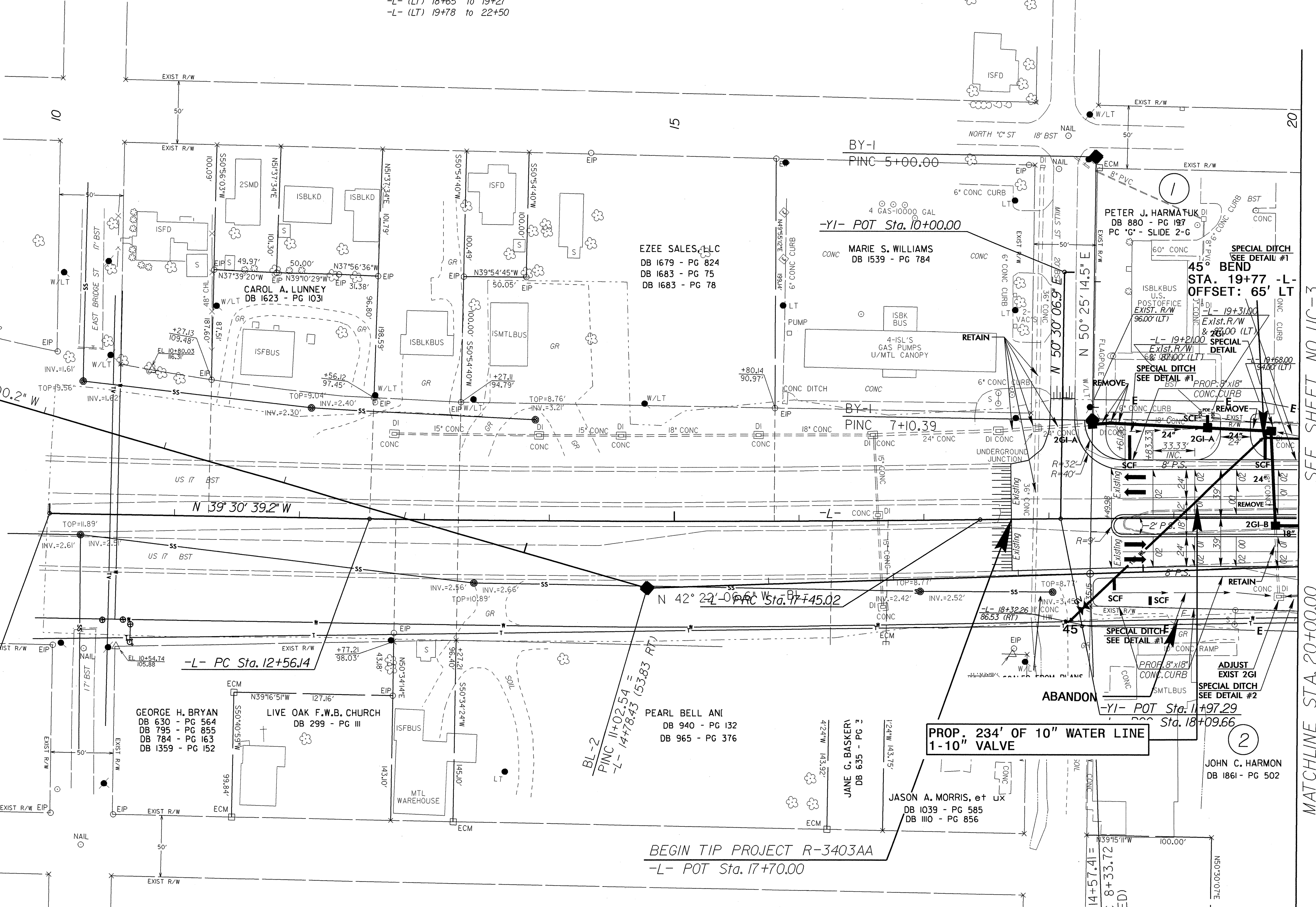
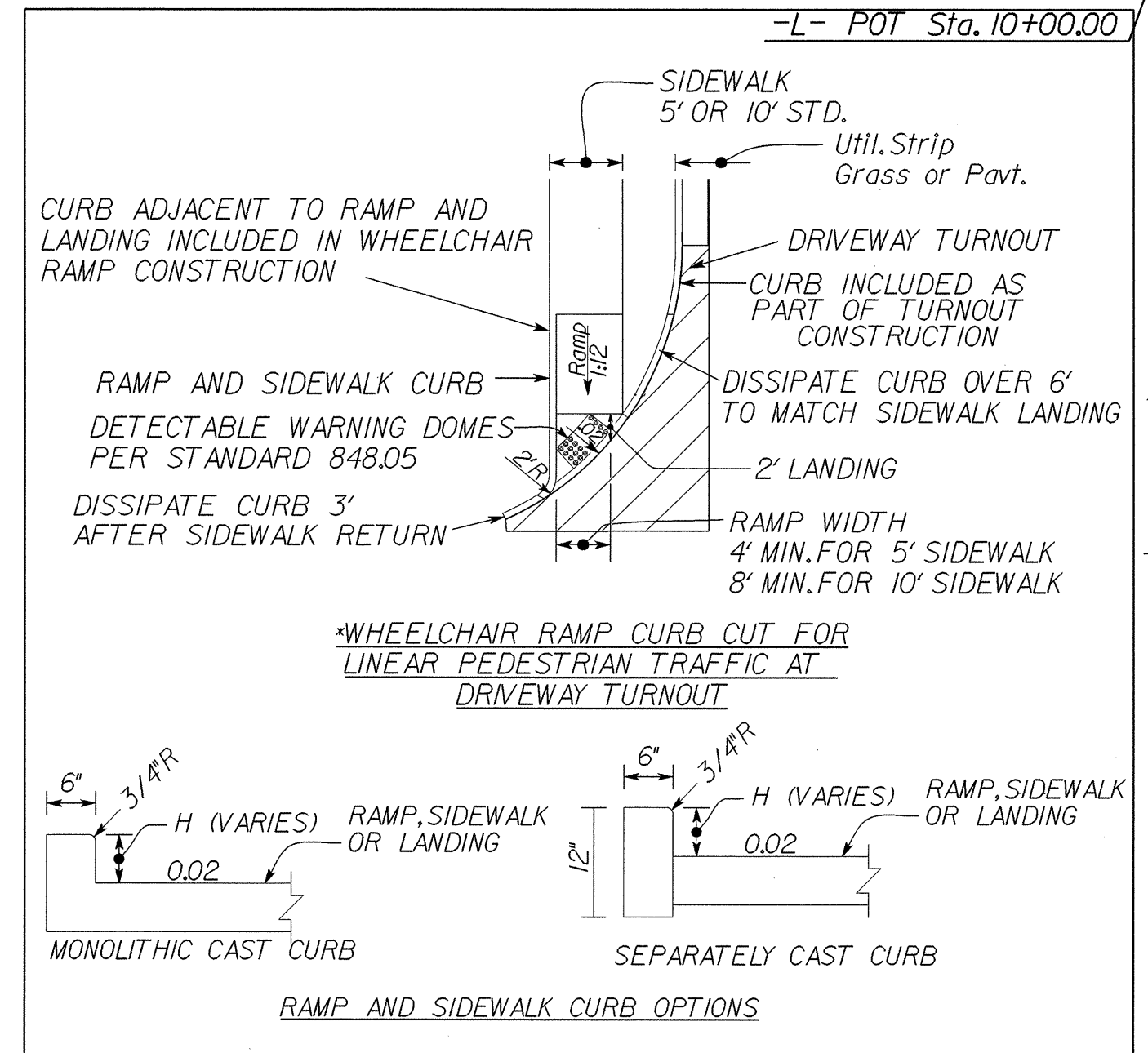


**UTILITY CONSTRUCTION**



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY MCDOT FOR MONUMENT "R3403-4" WITH MAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 532123.2763111 EASTING: 2581086.8260111 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987844 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R3403-4" TO L- STATION IS 17+70.00 S 22° 28' 24.93" E 28997.09 FEET ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS MVD 29



PI Sta 15+00.60  
 $\Delta = 1' 45'' 00.0''$  (LT)  
 $D = 0' 21'' 28.7''$   
 $L = 488.88'$   
 $T = 244.46'$   
 $R = 16,006.00'$

PI Sta 19+71.52  
 $\Delta = 2' 09'' 45.5''$  (RT)  
 $D = 0' 28'' 38.9''$   
 $L = 452.94'$   
 $T = 226.50'$   
 $R = 12,000.00'$

SEE SHEET NO. UC-3  
 MATCHLINE STA. 20+00.00

REVISIONS

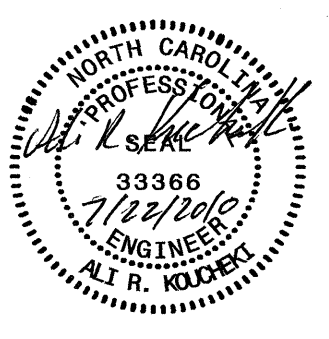
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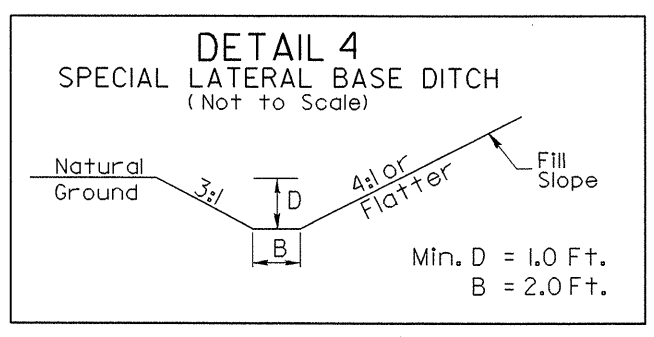
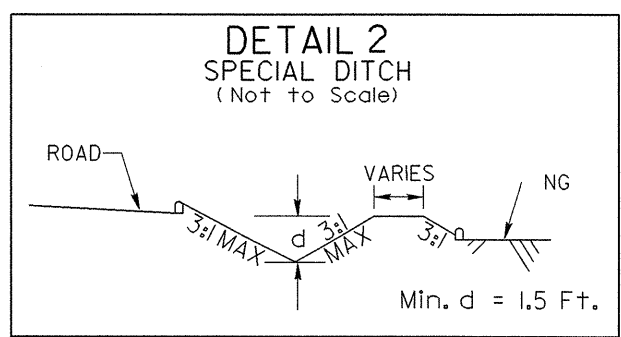
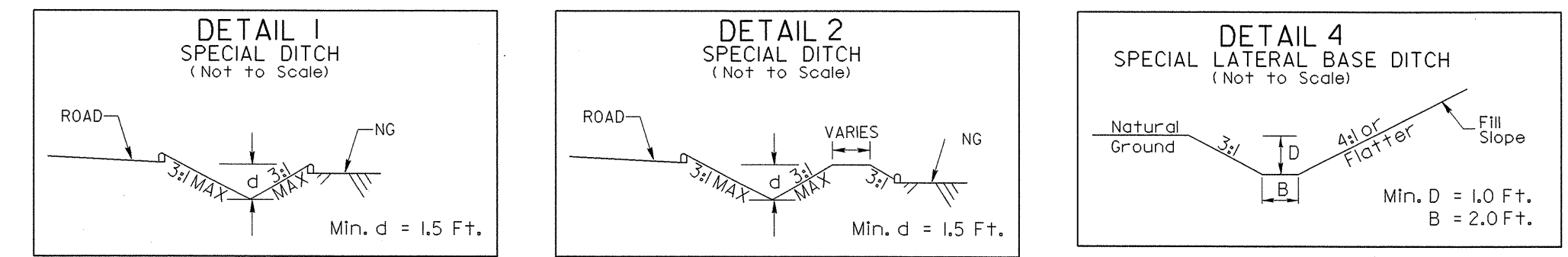








UTILITY CONSTRUCTION

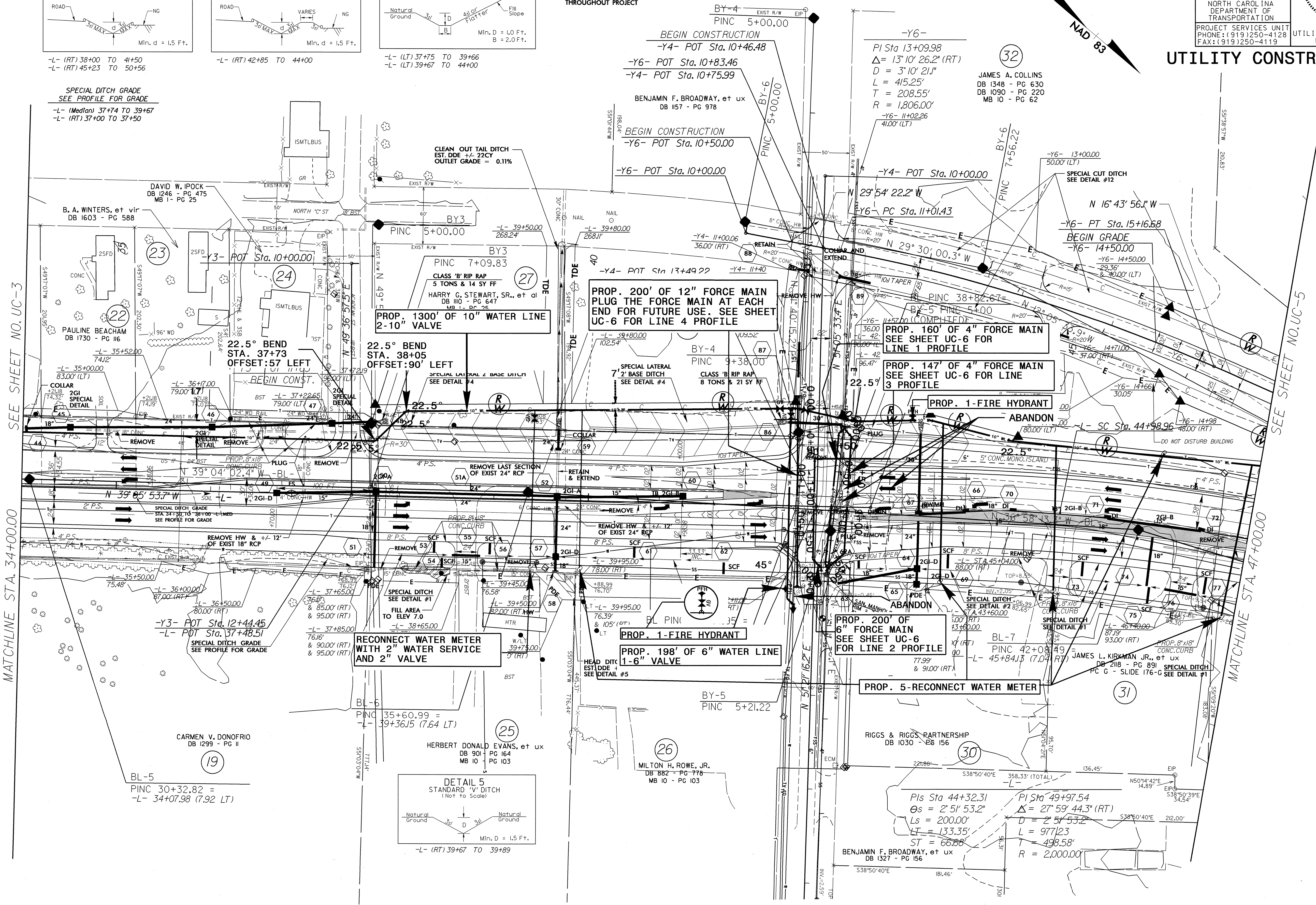


SCF = SPECIAL CONCRETE FLUME

NOTE: DRIVE PIPES TO BE RAISED 3-INCHES ABOVE DITCH LINE THROUGHOUT PROJECT

SPECIAL DITCH GRADE  
 SEE PROFILE FOR GRADE

-L- (Median) 37+74 TO 39+67  
 -L- (RT) 37+00 TO 37+50



SEE SHEET NO. UC-3

MATCHLINE STA. 34+00.00

SEE SHEET NO. UC-5

MATCHLINE STA. 47+00.00

REVISIONS

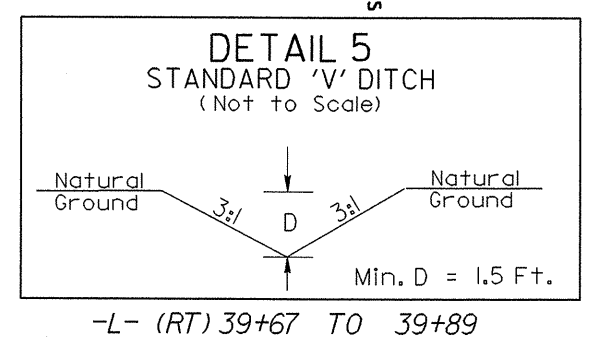
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19

CARMEN V. DONOFRIO  
 DB 1299 - PG 11

BL-5  
 PINC 30+32.82 =  
 -L- 34+07.98 (7.92 LT)



RECONNECT WATER METER  
 WITH 2" WATER SERVICE  
 AND 2" VALVE

HERBERT DONALD EVANS, et ux  
 DB 901 - PG 164  
 MB 10 - PG 103

PROP. 1-FIRE HYDRANT  
 PROP. 198' OF 6" WATER LINE  
 1-6" VALVE

MILTON H. ROWE, JR.  
 DB 882 - PG 178  
 MB 10 - PG 103

PROP. 5-RECONNECT WATER METER

RIGGS & RIGGS PARTNERSHIP  
 DB 1030 - PG 156

PI Sta 44+32.31  
 Os = 2' 51' 53.2"  
 Ls = 200.00'  
 Lt = 133.35'  
 ST = 66.68'

PI Sta 49+97.54  
 Δ = 27' 59' 44.3" (RT)  
 D = 2' 51' 53.2"  
 L = 977.123  
 T = 498.58'  
 R = 2,000.00'

JAMES A. COLLINS  
 DB 1348 - PG 630  
 DB 1090 - PG 220  
 MB 10 - PG 62

PROP. 160' OF 4" FORCE MAIN  
 SEE SHEET UC-6 FOR  
 LINE 1 PROFILE

PROP. 147' OF 4" FORCE MAIN  
 SEE SHEET UC-6 FOR LINE  
 3 PROFILE

PROP. 200' OF  
 6" FORCE MAIN  
 SEE SHEET UC-6  
 FOR LINE 2 PROFILE

PROP. 200' OF 12" FORCE MAIN  
 PLUG THE FORCE MAIN AT EACH  
 END FOR FUTURE USE. SEE SHEET  
 UC-6 FOR LINE 4 PROFILE

PROP. 1300' OF 10" WATER LINE  
 2-10" VALVE

22.5° BEND  
 STA. 37+73  
 OFFSET: 57' LEFT

22.5° BEND  
 STA. 38+05  
 OFFSET: 90' LEFT

PAULINE BEACHAM  
 DB 1730 - PG 116

DAVID W. IPOCK  
 DB 1246 - PG 475  
 MB 1 - PG 25

B. A. WINTERS, et vir  
 DB 1603 - PG 588

19

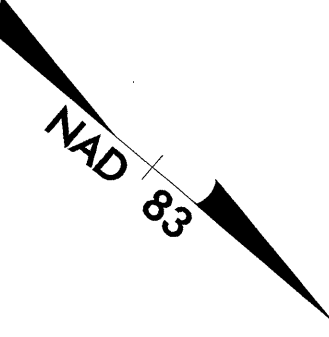
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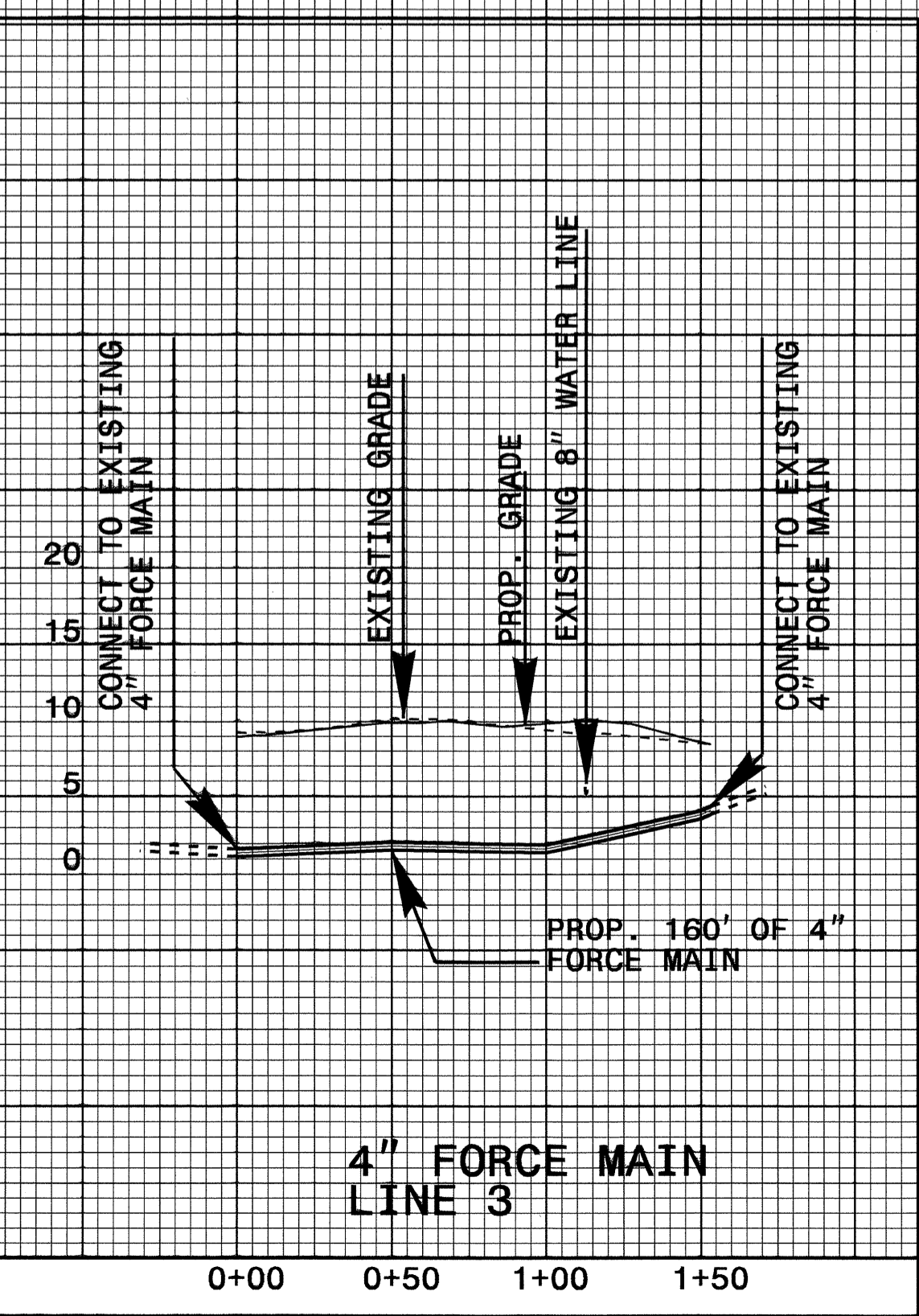
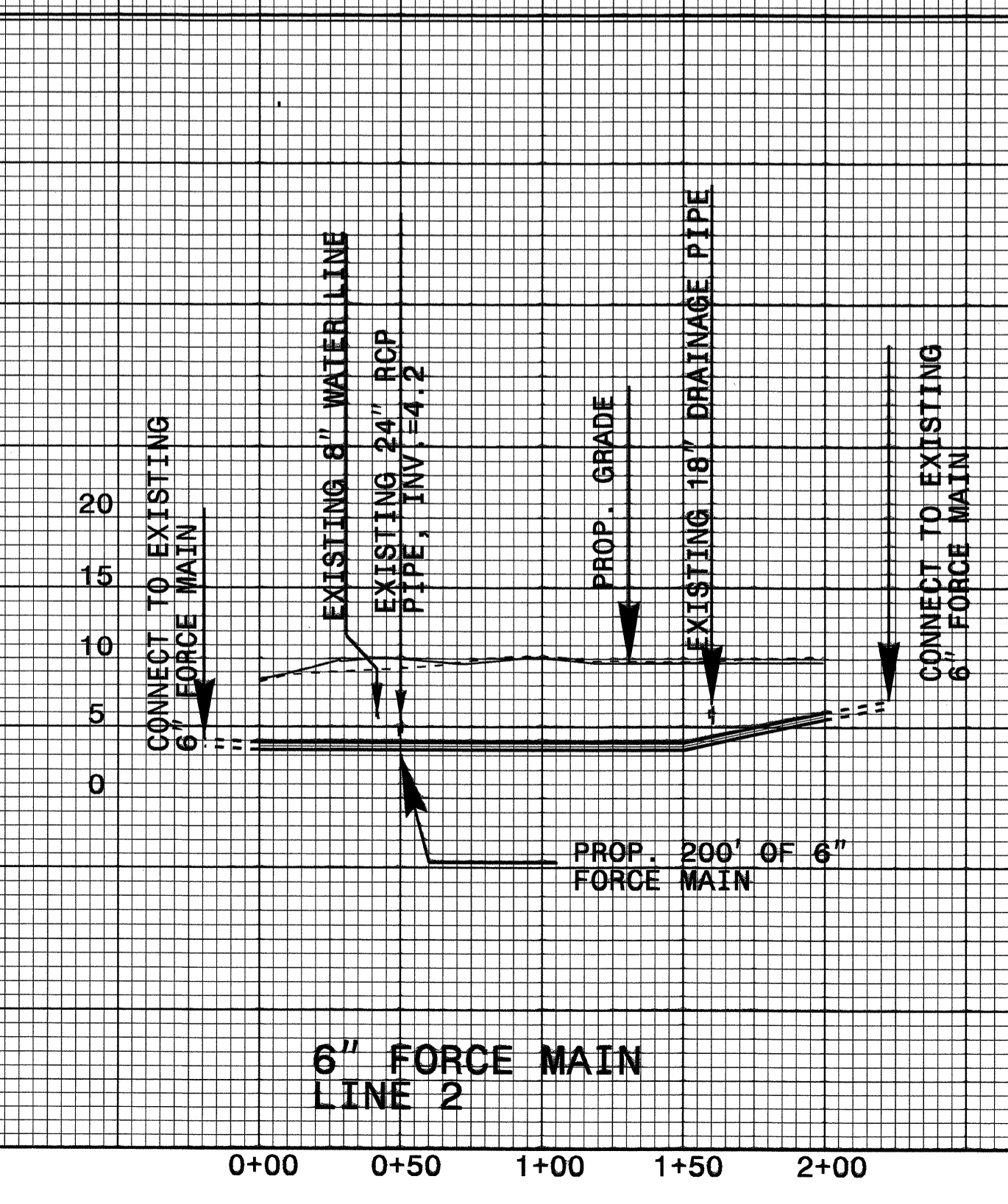
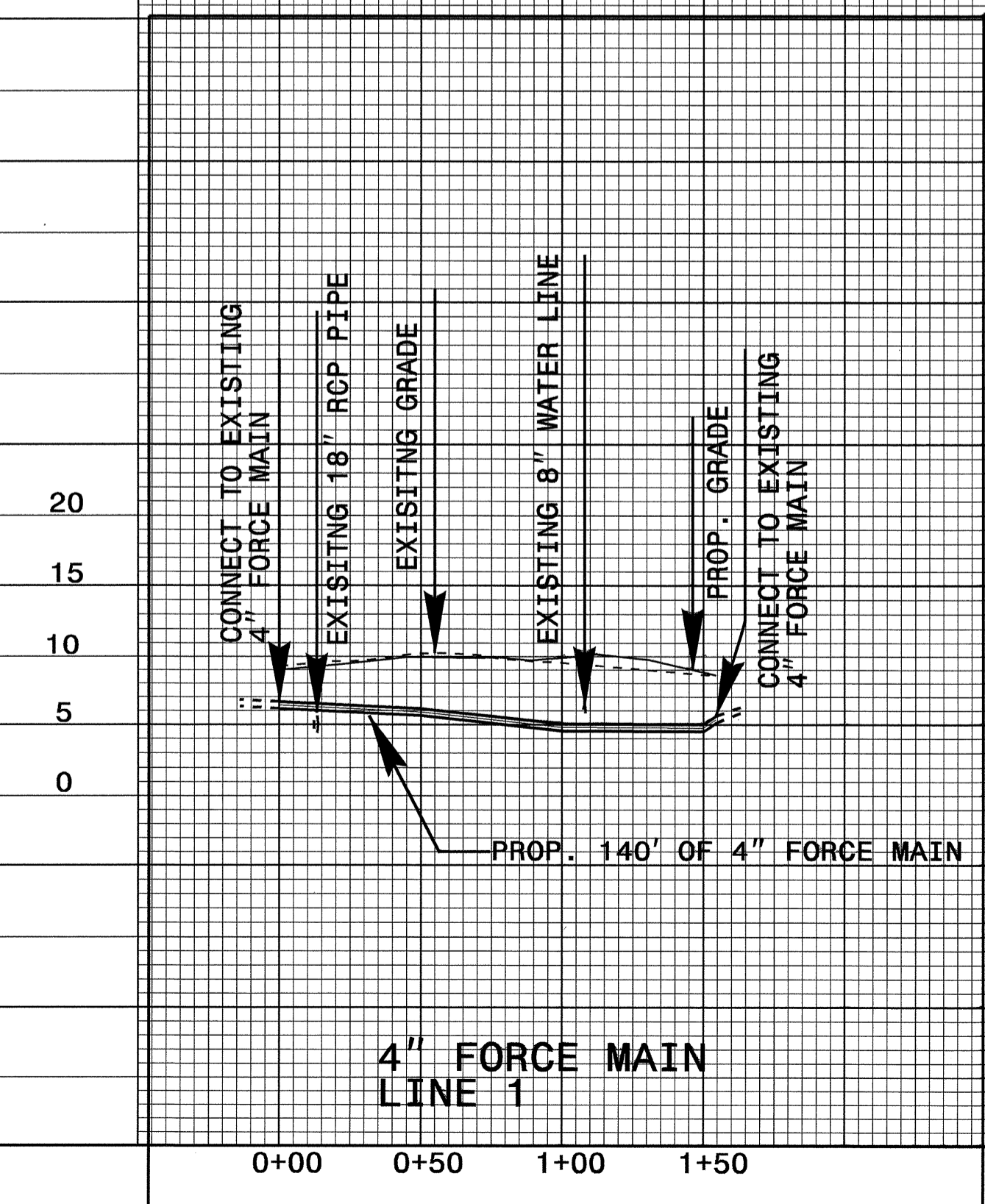
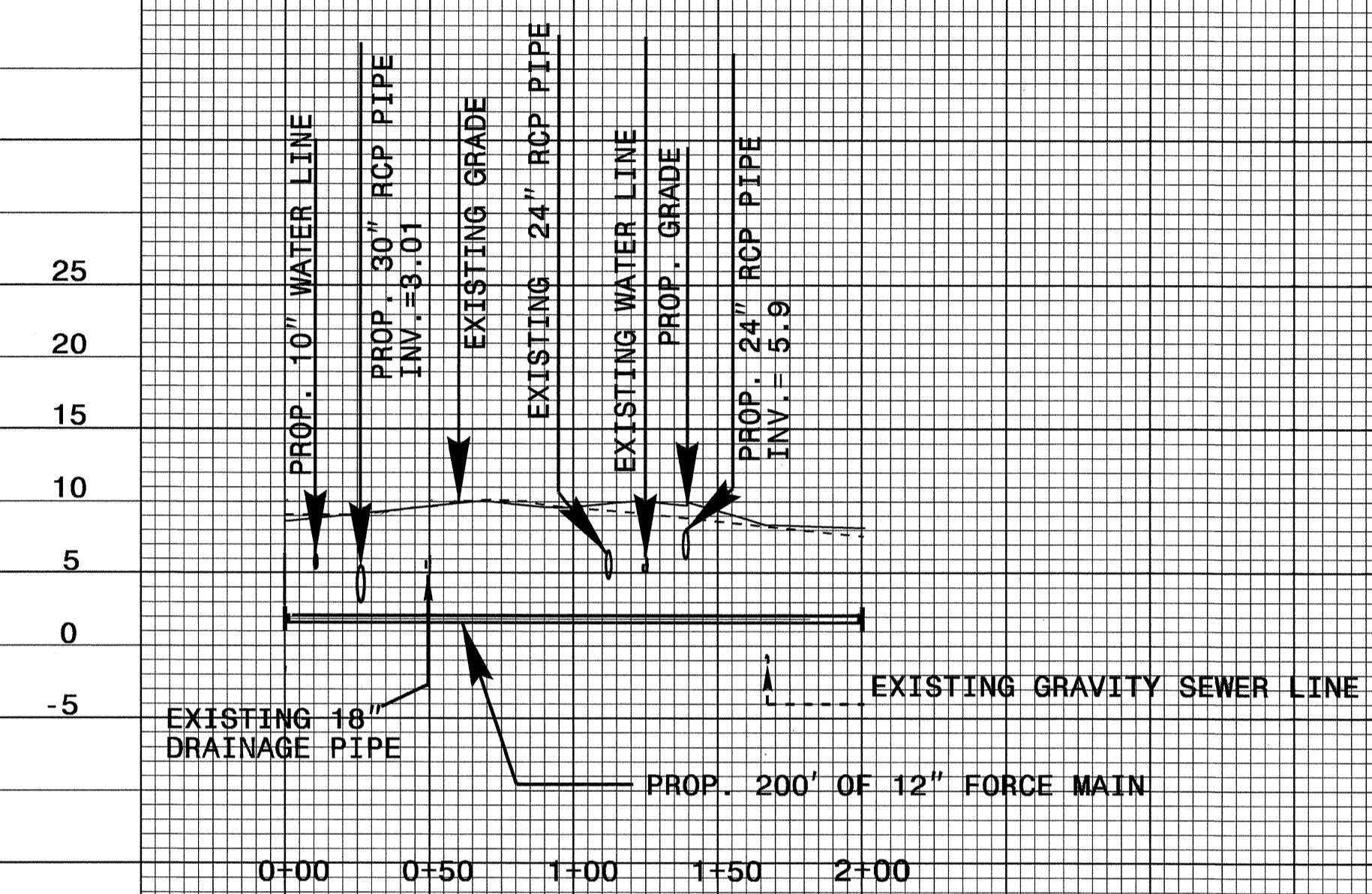




5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-3403AA	UC-6
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 250-4128 FAX: (919) 250-4119	

# UTILITY CONSTRUCTION

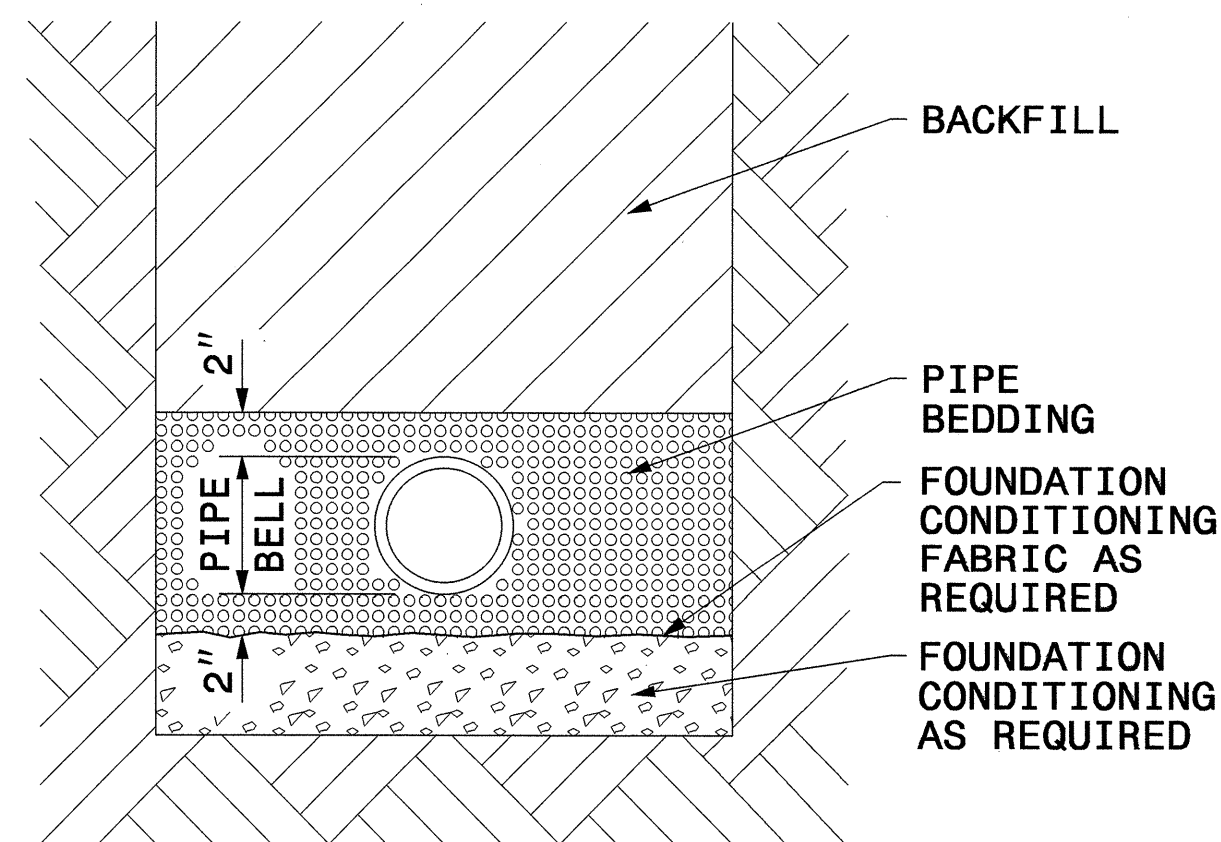


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**UTILITY CONSTRUCTION**

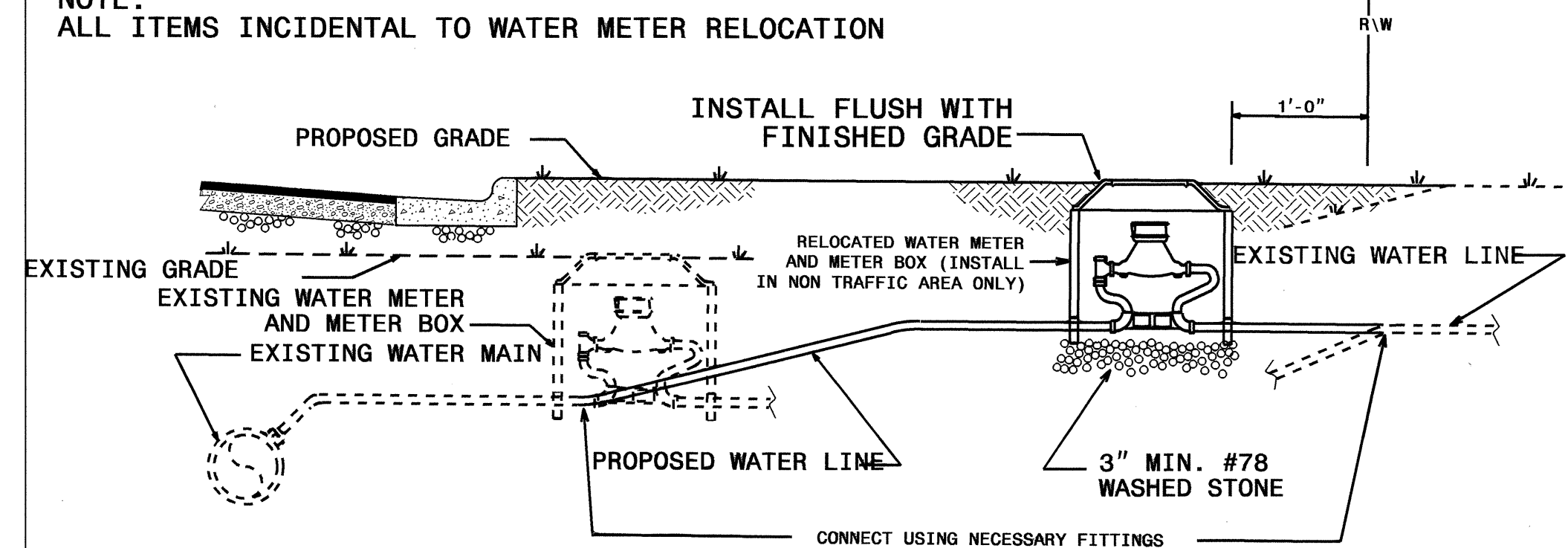
**TRENCH DETAIL**



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
12	36

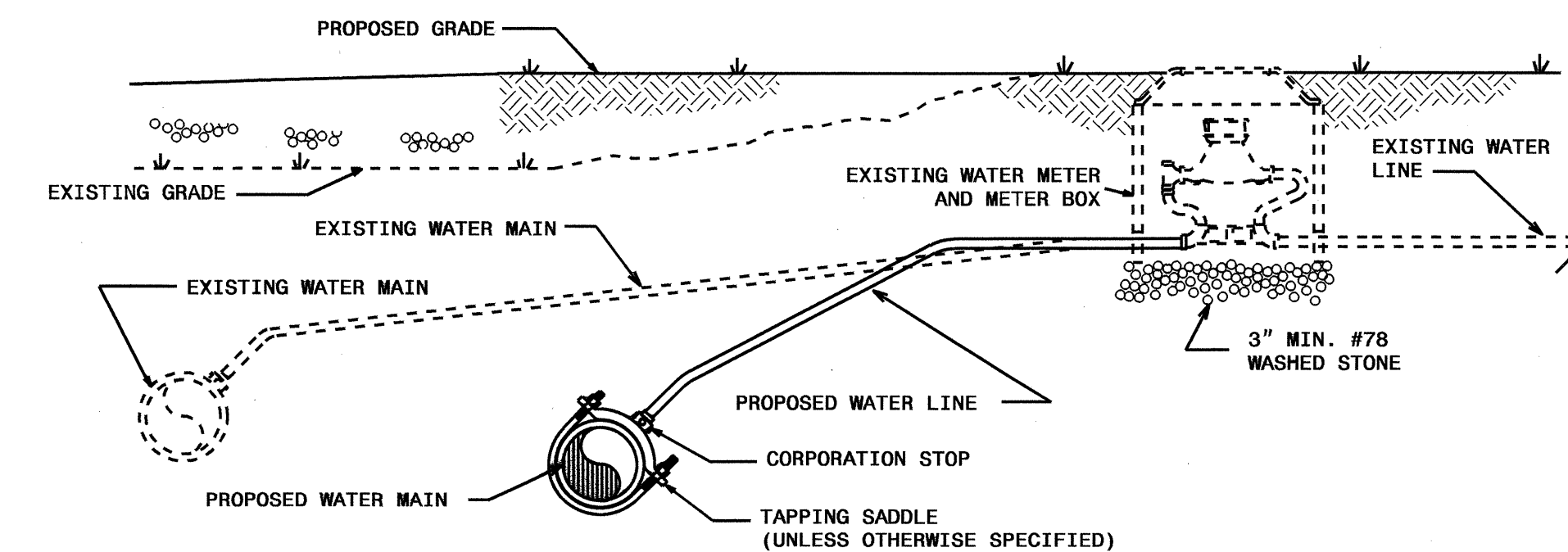
**NOTE:**  
ALL ITEMS INCIDENTAL TO WATER METER RELOCATION



1. RELOCATION SHALL INCLUDE THE REMOVAL AND INSTALLATION AT THE APPROPRIATE LOCATION OF THE WATER METER, METER SETTER AND YOKE, METER VALVES, AND METER BOX WITH LID
2. THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
3. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER BELOW FINISHED GRADE.

**WATER METER RELOCATION DETAIL**

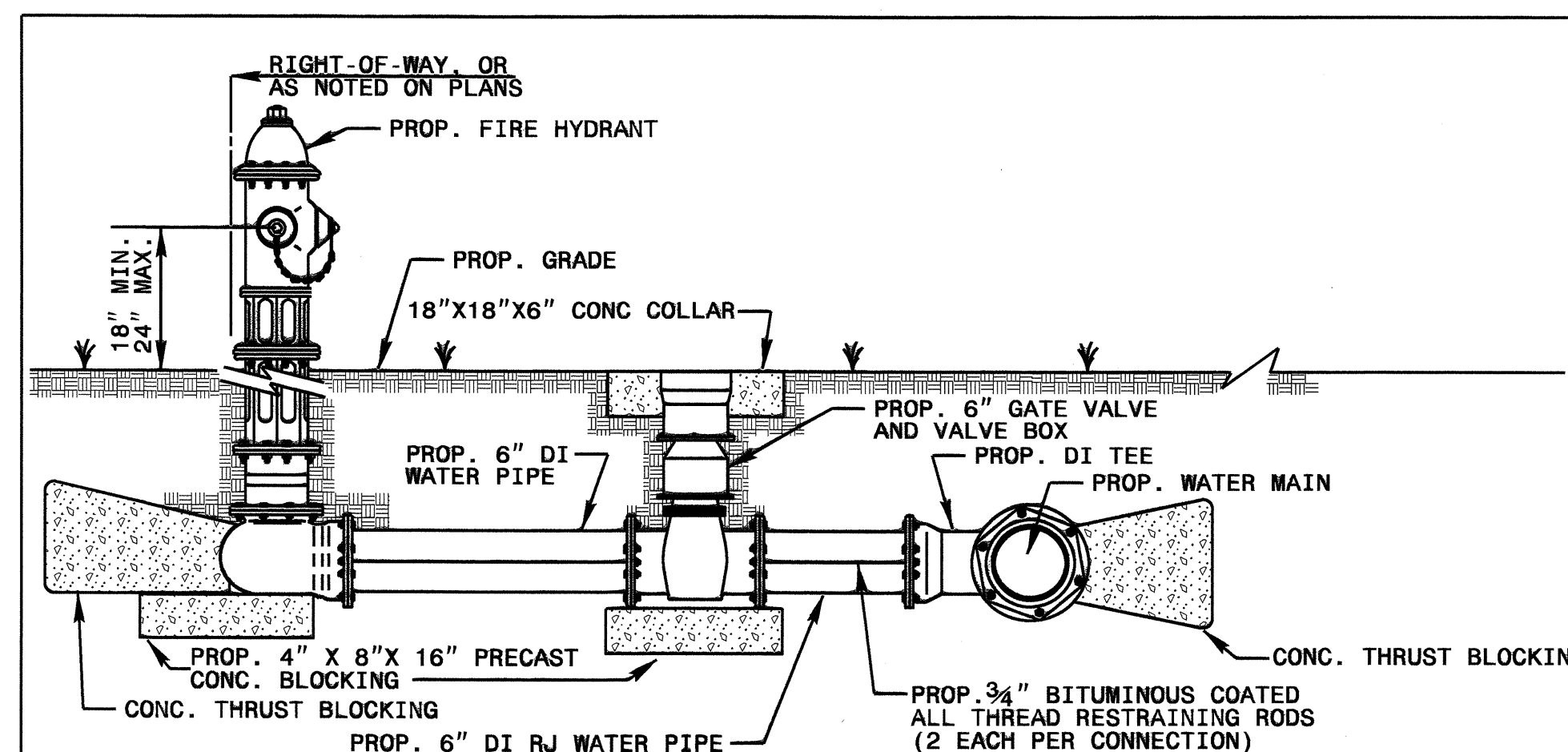
**NOTE:**  
ALL ITEMS INCIDENTAL TO WATER METER RECONNECTION



**NOTES:**

1. THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
2. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER BELOW FINISHED GRADE.

**RECONNECT EXISTING WATER METER DETAIL**



**FIRE HYDRANT INSTALLATION DETAIL (UNPAVED AREAS)**

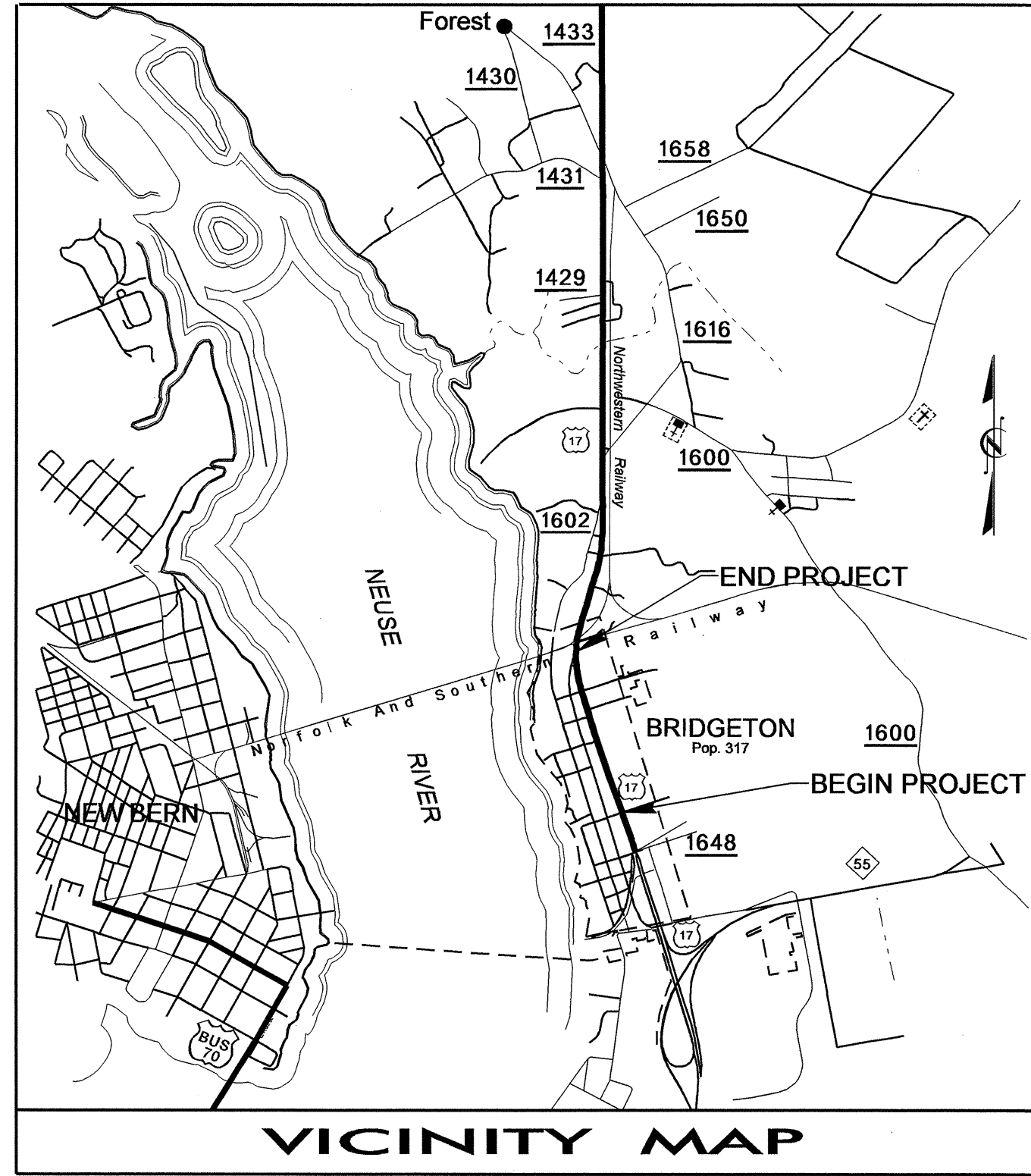


09/08/99

**TIP PROJECT: R-3403AA**

T.I.P. NO.	SHEET NO.
R-3403AA	UO-1

See Sheet I-A For Index of Sheets See Sheet I-B For Conventional Symbols



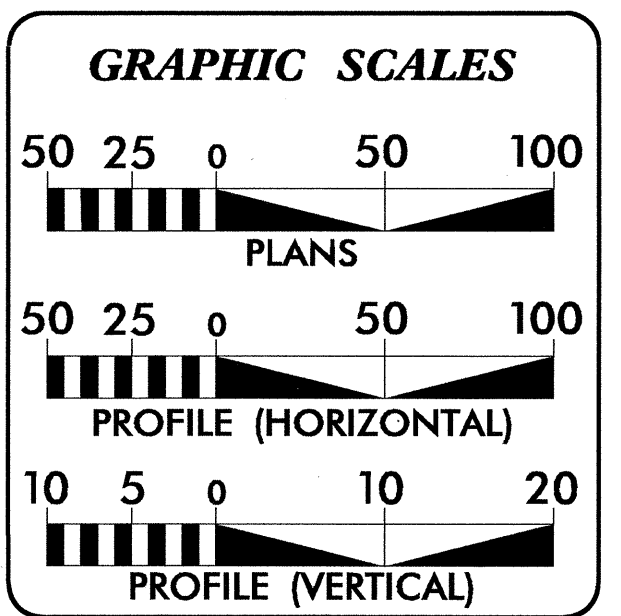
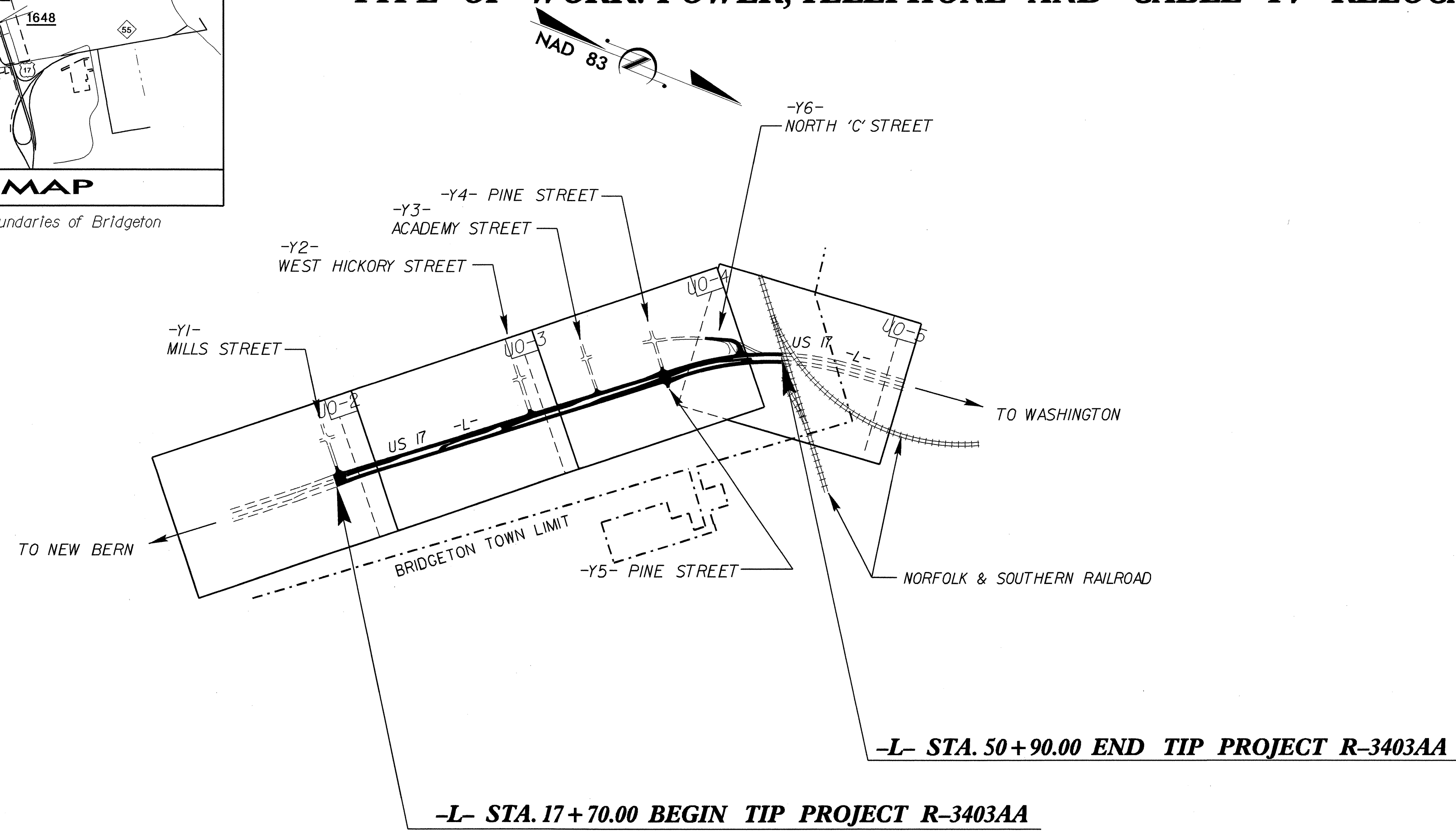
This Project is partially within the Municipal Boundaries of Bridgeton

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITY BY OTHERS PLANS  
CRAVEN COUNTY**

**LOCATION: US 17 FROM MILLS STREET  
TO NORFOLK & SOUTHERN RAILROAD**


**TYPE OF WORK: POWER, TELEPHONE AND CABLE TV RELOCATION**



**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2 THRU UO-5	UTILITY BY OTHERS PLAN SHEETS

- UTILITY OWNERS ON PROJECT**
- (1) PROGRESS ENERGY-POWER
  - (2) CENTURY LINK- TELEPHONE
  - (3) SUDDEN LINK-CABLE VISION



PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
DESIGN SERVICES  
UTILITY SECTION**

1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 258-4128  
FAX (919) 258-4119

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

15 JUL -2010 14:40  
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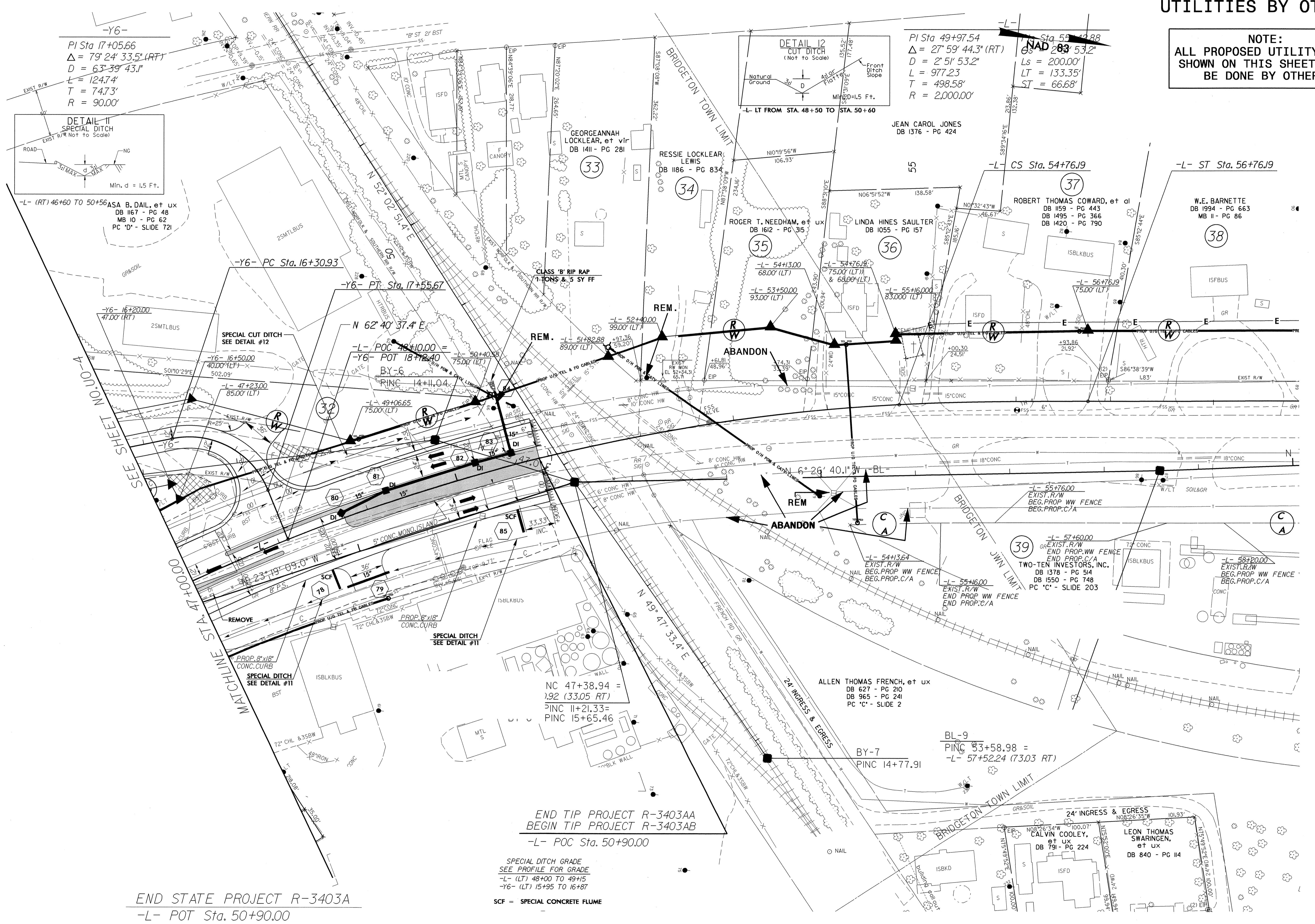




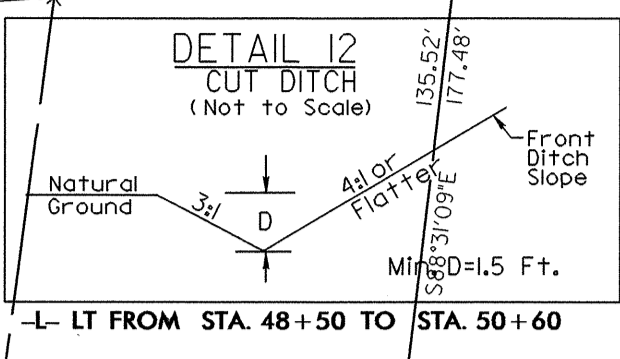
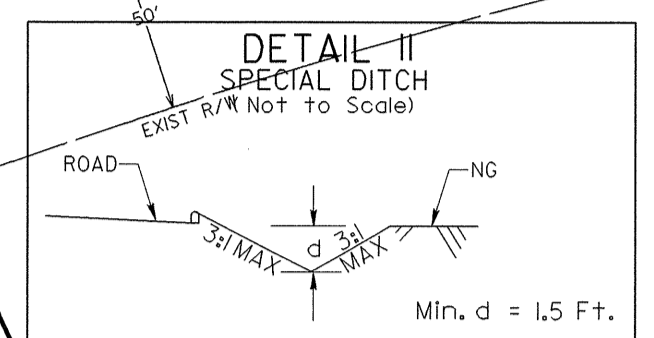


UTILITIES BY OTHERS

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



-Y6-  
PI Sta 17+05.66  
 $\Delta = 79^\circ 24' 33.5''$  (RT)  
D = 63'-39' 43.1"  
L = 124.74'  
T = 74.73'  
R = 90.00'



PI Sta 49+97.54  
 $\Delta = 27^\circ 59' 44.3''$  (RT)  
D = 2'-51' 53.2"  
L = 977.23'  
T = 498.58'  
R = 2,000.00'

Sta 50+99.88  
NAD 83 53.2'  
Ls = 200.00'  
LT = 133.35'  
ST = 66.68'

-L- (RT) 46+60 TO 50+56  
ASA B. DAIL, et ux  
DB 1167 - PG 48  
MB 10 - PG 62  
PC 'D' - SLIDE 721

-Y6- PC Sta. 16+30.93  
-Y6- PT Sta. 17+55.67

-L- POC 46+10.00 =  
-Y6- POT 18+12.40  
BY-6  
PINC 14+11.04

NC 47+38.94 =  
1.92 (33.05 RT)  
PINC 11+21.33 =  
PINC 15+65.46

BL-9  
PINC 53+58.98 =  
-L- 57+52.24 (73.03 RT)

END TIP PROJECT R-3403AA  
BEGIN TIP PROJECT R-3403AB  
-L- POC Sta. 50+90.00

SPECIAL DITCH GRADE  
SEE PROFILE FOR GRADE  
-L- (LT) 48+00 TO 49+15  
-Y6- (LT) 15+95 TO 16+87

SCF = SPECIAL CONCRETE FLUME

END STATE PROJECT R-3403A  
-L- POT Sta. 50+90.00

REVISIONS

SEE SHEET NO. U0-4  
MATCHLINE STA. 47+00.00

8/17/99

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