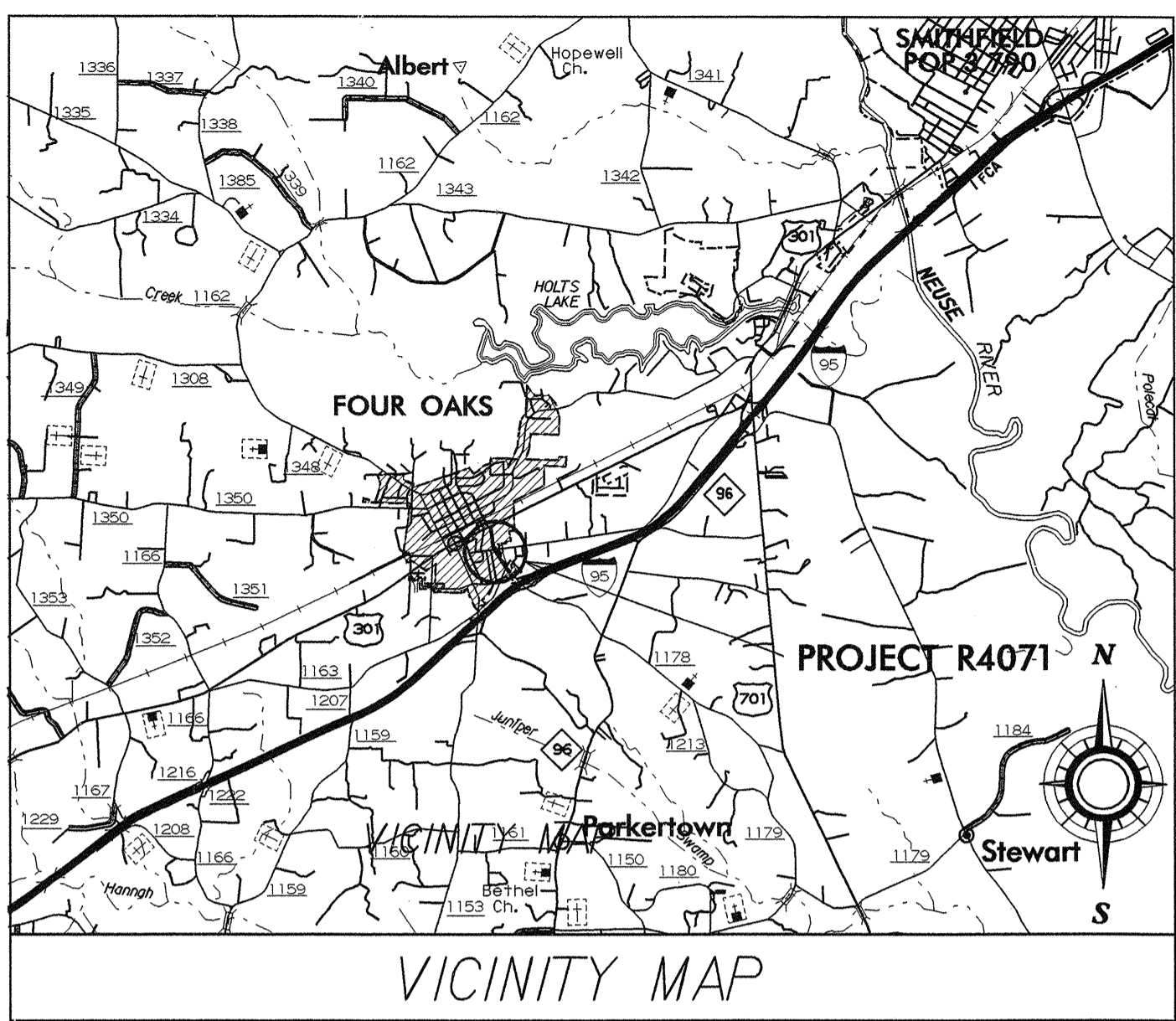


09/08/99

TIP PROJECT: R-4071

CONTRACT: C201888



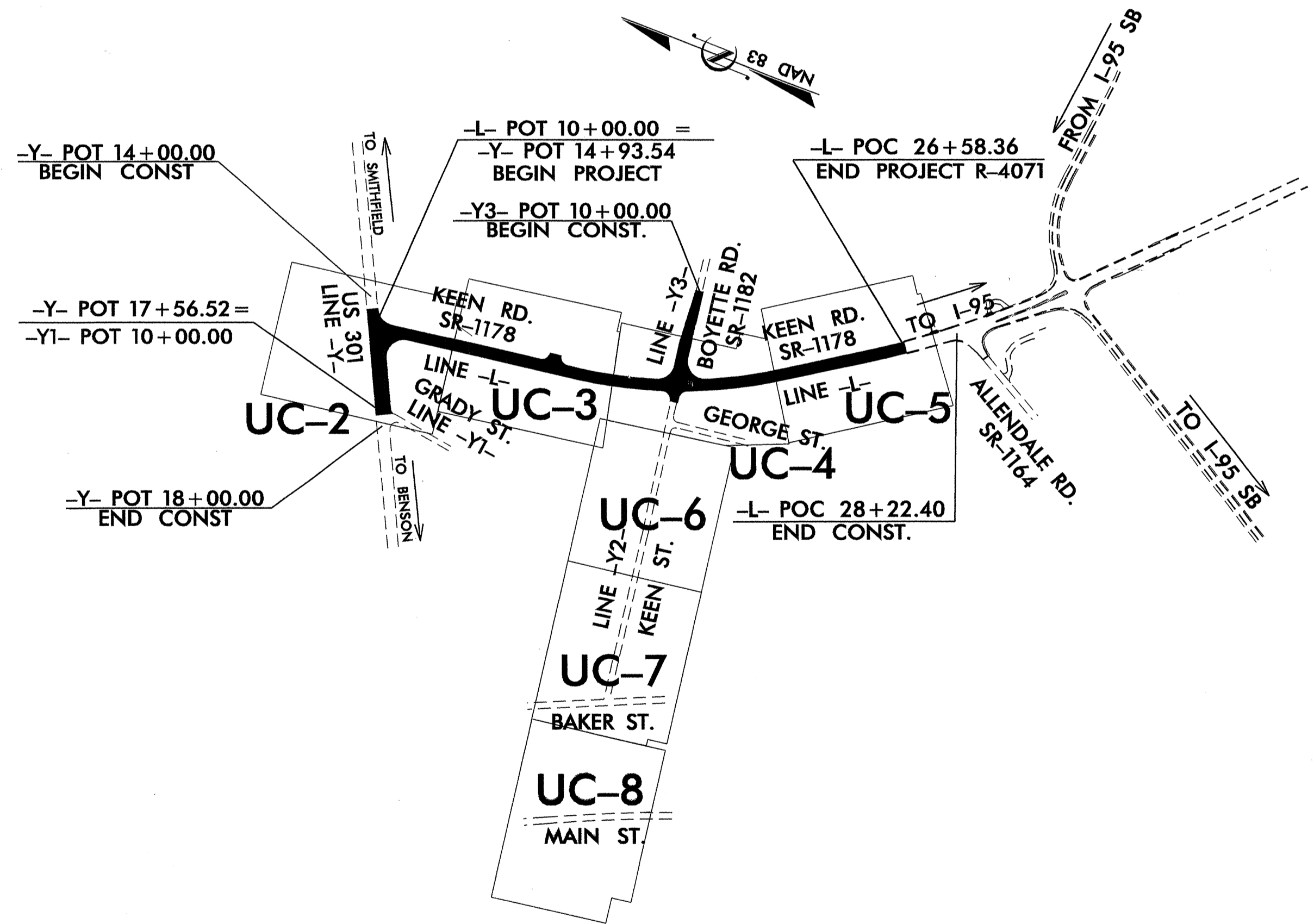
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
JOHNSTON COUNTY**

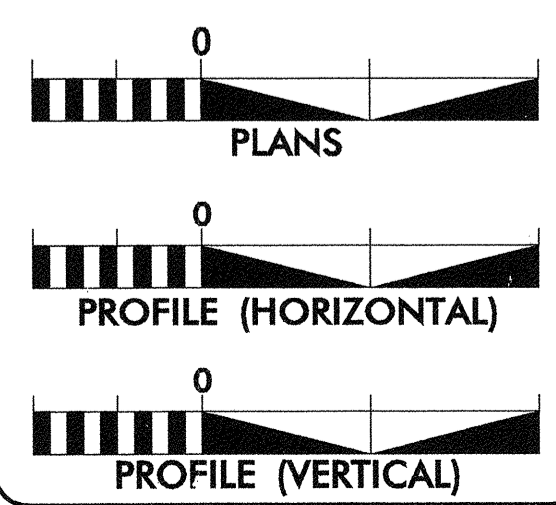
LOCATION: SR 1178 (KEEN ROAD) FROM US-301 TO 164' NORTH WEST OF SR 1164 (ALLENDALE ROAD)

TYPE OF WORK: UTILITY CONSTRUCTION (WATER & SEWER)

T.I.P. NO.	SHEET NO.
R-4071	UC-1



GRAPHIC SCALES



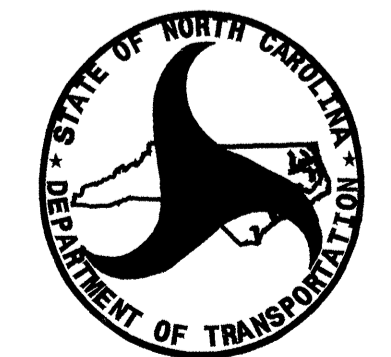
INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
UC-1	TITLE SHEET
UC-2 THRU UC-8	UTILITY CONSTRUCTION PLAN SHEETS
UC-9	PROFILE SHEET
UC-10	DETAILS SHEET

WATER AND SEWER OWNERS ON PROJECT

- (1) WATER - TOWN OF FOUR OAKS
- (2) SANITARY SEWER - TOWN OF FOUR OAKS
- (3) WATER - JOHNSTON COUNTY (16" DI)

SEAL



PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
PROJECT SERVICES
UTILITY SECTION**
1591 MAIL SERVICES CENTER
RALEIGH, NC 27699-1591
PHONE (919) 250-4128
FAX (919) 250-4119

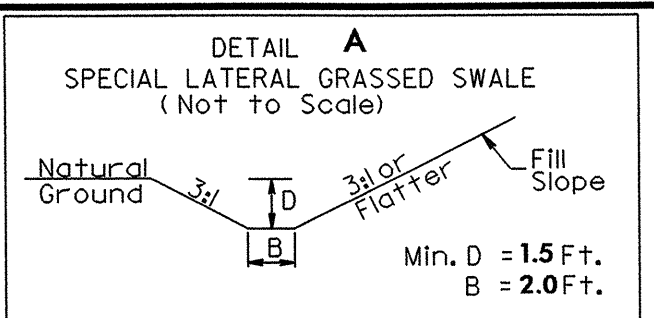
Roger Worthington, P.E. UTILITIES SECTION ENGINEER
R. B. WILKINS, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
MICHAEL R. BRIGHT UTILITIES PROJECT DESIGNER

19-MAR-2007 08:36
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5/14/99
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11:53:58 AM

★ EXISTING SIGNAL TO BE UPGRADED
FOR -L- PROFILE, SEE SHEET NO. 13
FOR -Y- PROFILE, SEE SHEET NO. 15

TRADE OIL COMPANY
DB 2343 PG 303
PB 61PG 282



PROJECT REFERENCE NO. **R-4071** SHEET NO. **UC-2**
DESIGNED BY: **MRB**
DRAWN BY: **MRB**
CHECKED BY: **RBW**
APPROVED BY: **RBW**
REVISED:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
PROJECT SERVICES UNIT
PHONE: (919) 250-4128
FAX: (919) 250-4119
UTILITY CONSTRUCTION PLANS ONLY

-Y- POT 14+00.00
BEGIN CONST

-L- POT 10+00.00 =
-Y- POT 14+93.55
BEGIN PROJECT R-4071

PROP. 155' OF 8" SANITARY GRAVITY SEWER

PROP. 210' OF ABANDON 8" UTILITY PIPE

PROP. MH B1
SEWER LINE 1
STA. 0+64
+94.04 / 30' RT.

PROP. 64' OF 8" SANITARY GRAVITY SEWER

PROP. MH A1
SEWER LINE 1
STA. 0+00
+60.60 / 85.12' RT.

PROP. 264' OF 6" WATER LINE
PROP. 1 - 6" TAPPING VALVE

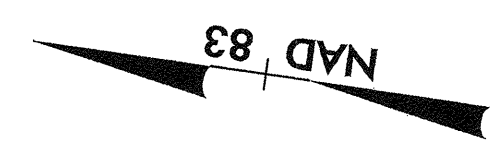
8600	ADT	2004
16000		2025
2800		6000
5200		11600
3200	SR 1178	
6400	KEEN RD.	
9000		
17200		

DATUM DESCRIPTION
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "12704-1" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 612598.5189(FT) EASTING: 2169588.9221(FT) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987440 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NGVD 29

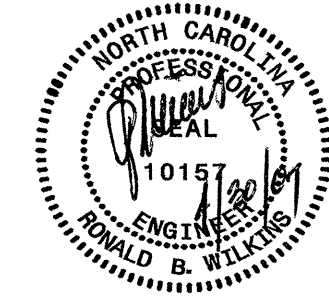
LINE -Y1-
PI Sta 10+92.72
Δ = 6' 40" 48.0" (RT)
D = 7' 09" 43.1"
L = 93.27'
T = 46.69'
R = 800.00'

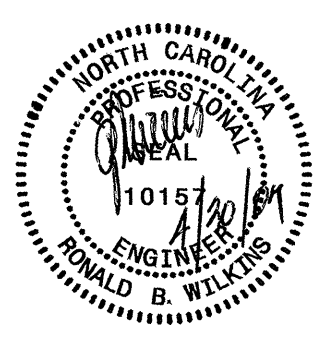
-Y- POT 17+40.00
END CONST
-Y- POT 17+56.52 =
-Y1- POT 10+00.00

MCLAMB, ANTHONY W.
& DONNA RENEE
DB 1519 PG 854

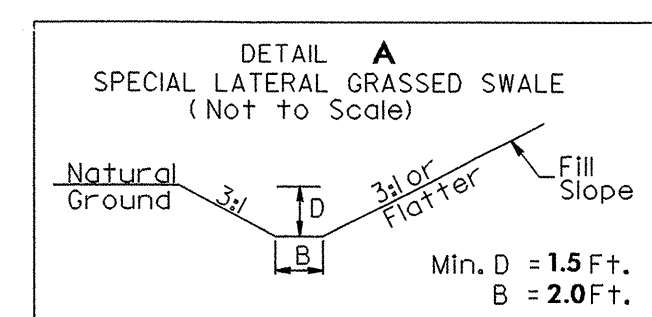


MATCHLINE -L- 12+50.00 SEE SHEET UC-3

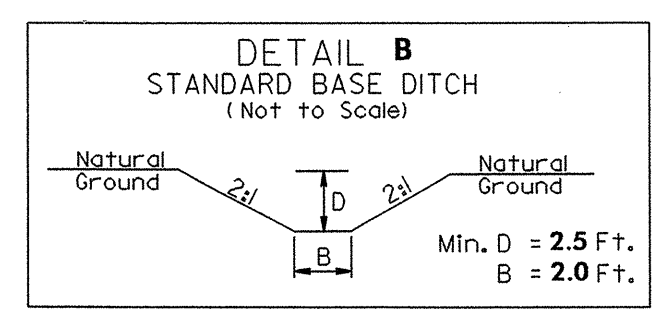




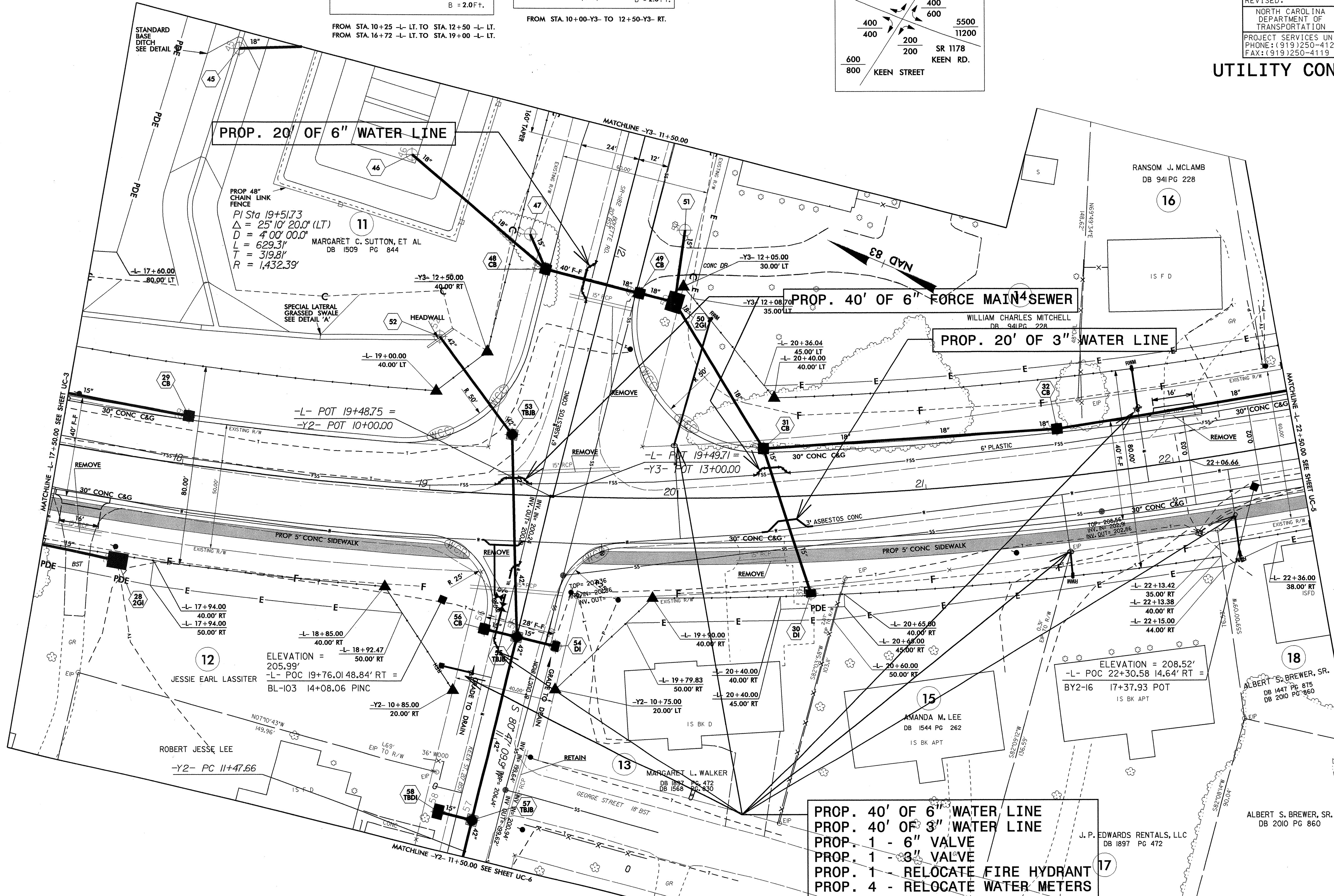
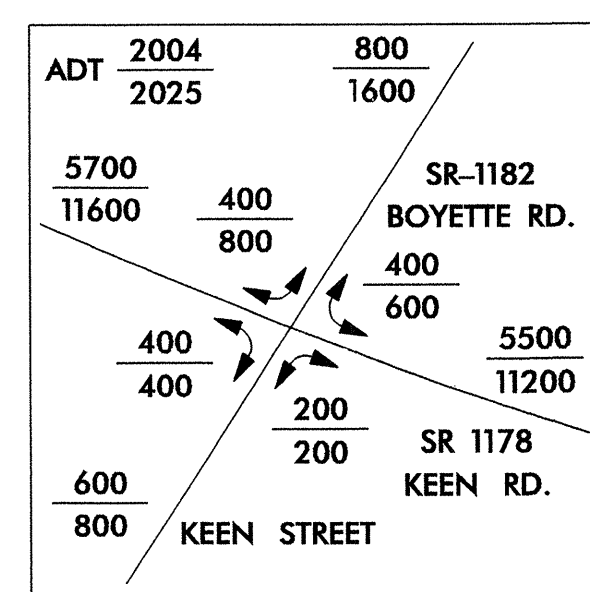
UTILITY CONSTRUCTION



FROM STA. 10+25 -L- LT. TO STA. 12+50 -L- LT.
 FROM STA. 16+72 -L- LT. TO STA. 19+00 -L- LT.



FROM STA. 10+00-Y3- TO 12+50-Y3- RT.



- PROP. 40' OF 6" WATER LINE
- PROP. 40' OF 3" WATER LINE
- PROP. 1 - 6" VALVE
- PROP. 1 - 3" VALVE
- PROP. 1 - RELOCATE FIRE HYDRANT
- PROP. 4 - RELOCATE WATER METERS

5/14/99
 15-MAR-2007 10:34
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5/14/99

DEBORAH A. RAYNOR
DB 1913 PG 446

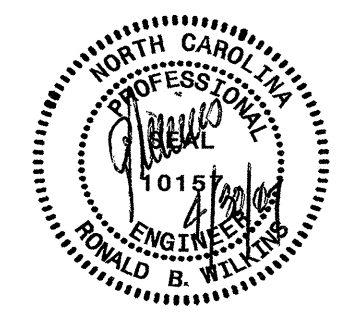
JOSEPHINE L. RAYNOR
DB 2377 PG 674

JOSEPHINE L. RAYNOR
DB 2377 PG 674

JOSEPHINE L. RAYNOR
DB 2377 PG 674

PROJECT REFERENCE NO. **R-4071** SHEET NO. **UC-5**

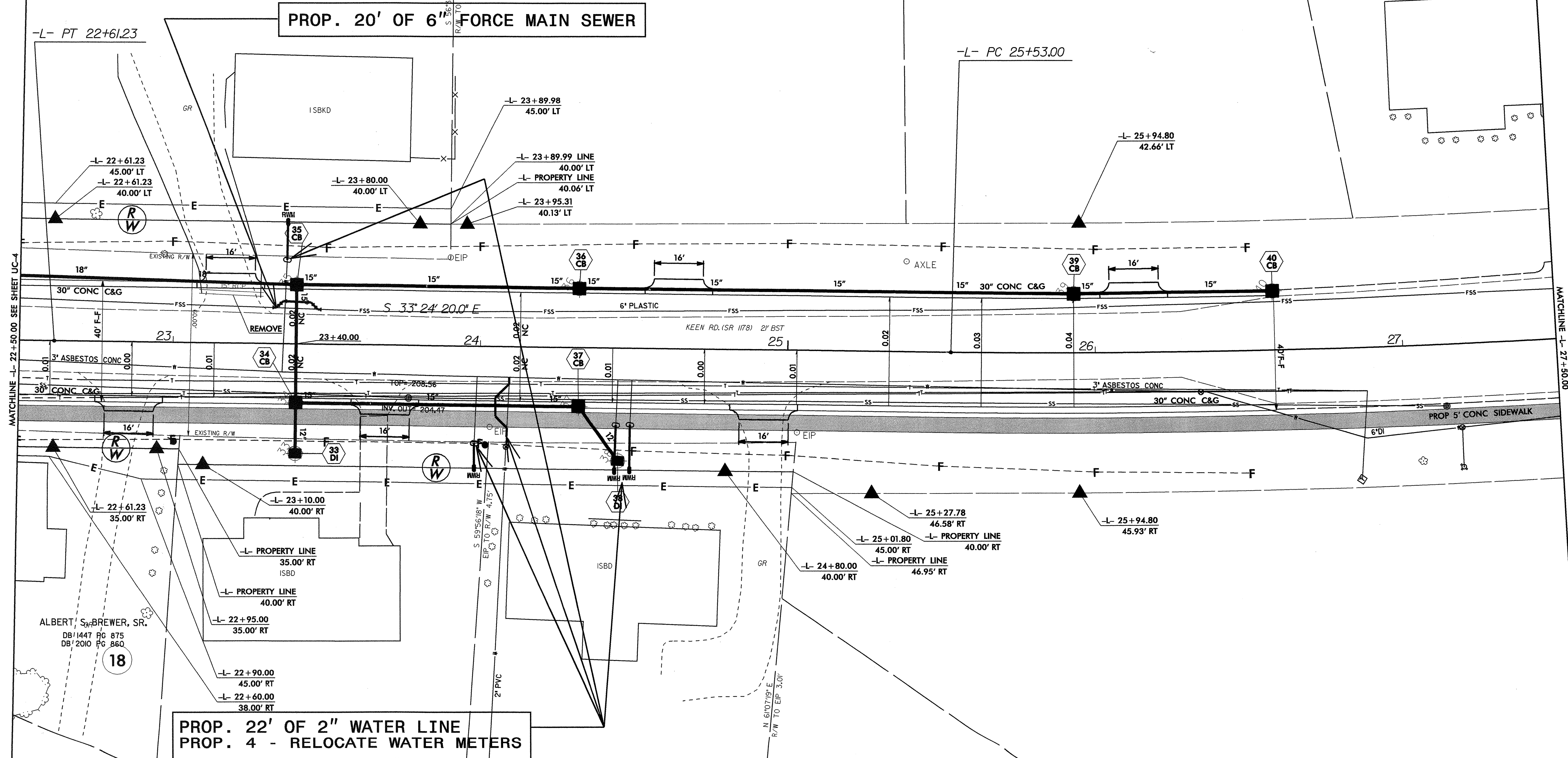
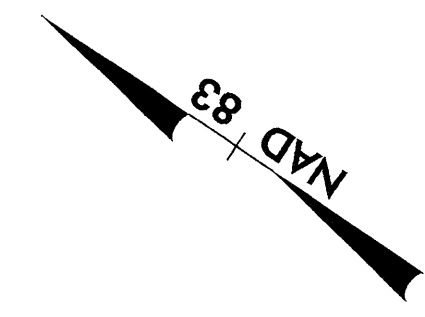
DESIGNED BY: **MRB**
DRAWN BY: **MRB**
CHECKED BY: **RBW**
APPROVED BY: **RBW**
REVISED:



NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION
PROJECT SERVICES UNIT
PHONE: (919) 250-4128
FAX: (919) 250-4119

UTILITY CONSTRUCTION
PLANS ONLY

UTILITY CONSTRUCTION



PROP. 20' OF 6" FORCE MAIN SEWER

**PROP. 22' OF 2" WATER LINE
PROP. 4 - RELOCATE WATER METERS**

MATCHLINE -L- 22+50.00 SEE SHEET UC-4

MATCHLINE -L- 27+50.00

16-MAR-2007 09:29
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USER:RWB

ALBERT S. BREWER, SR.
DB 1447 PG 875
DB 2010 PG 860

MICHAEL SHERMAN
DB 2861 PG 801

NEAL P. KEENE
DB 2966 PG 341

NABIL ABDELSALAM QADOURA,
DB 2377 PG 676

19

18

20

21

27

24

25


26

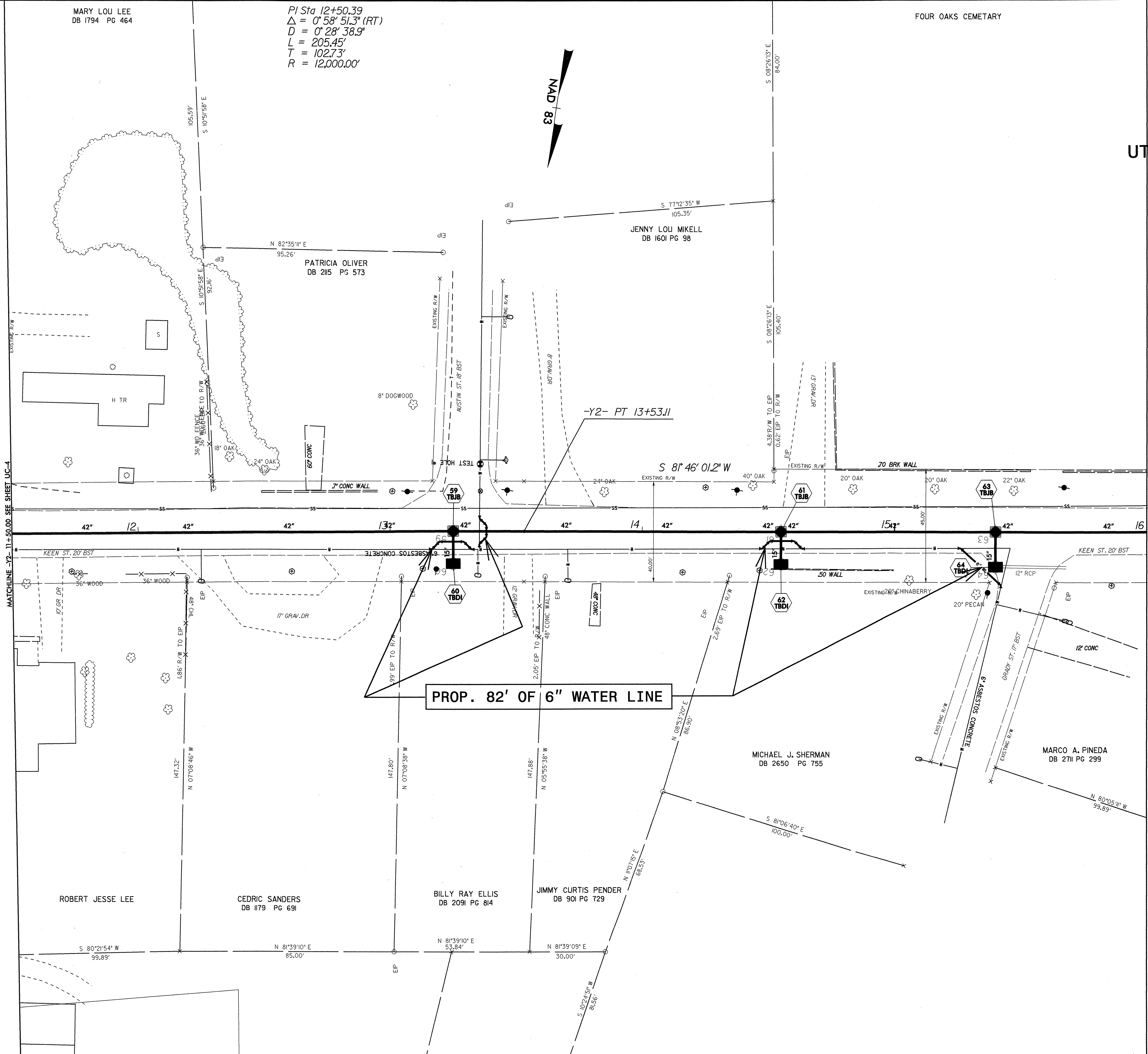
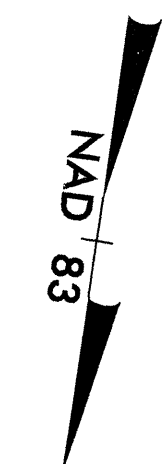
5/14/99

MARY LOU LEE
DB 1794 PG 464

PI Sta 12+50.39
 $\Delta = 0^\circ 58' 51.3" (RT)$
 $D = 0^\circ 28' 38.9"$
 $L = 205.45'$
 $T = 102.73'$
 $R = 12,000.00'$

FOUR OAKS CEMETARY

PROJECT REFERENCE NO. R-4071	SHEET NO. UC-6
DESIGNED BY: MRB	
DRAWN BY: MRB	
CHECKED BY: RBW	
APPROVED BY: RBW	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	



MATCHLINE -Y2- 11+50.00 SEE SHEET UC-4

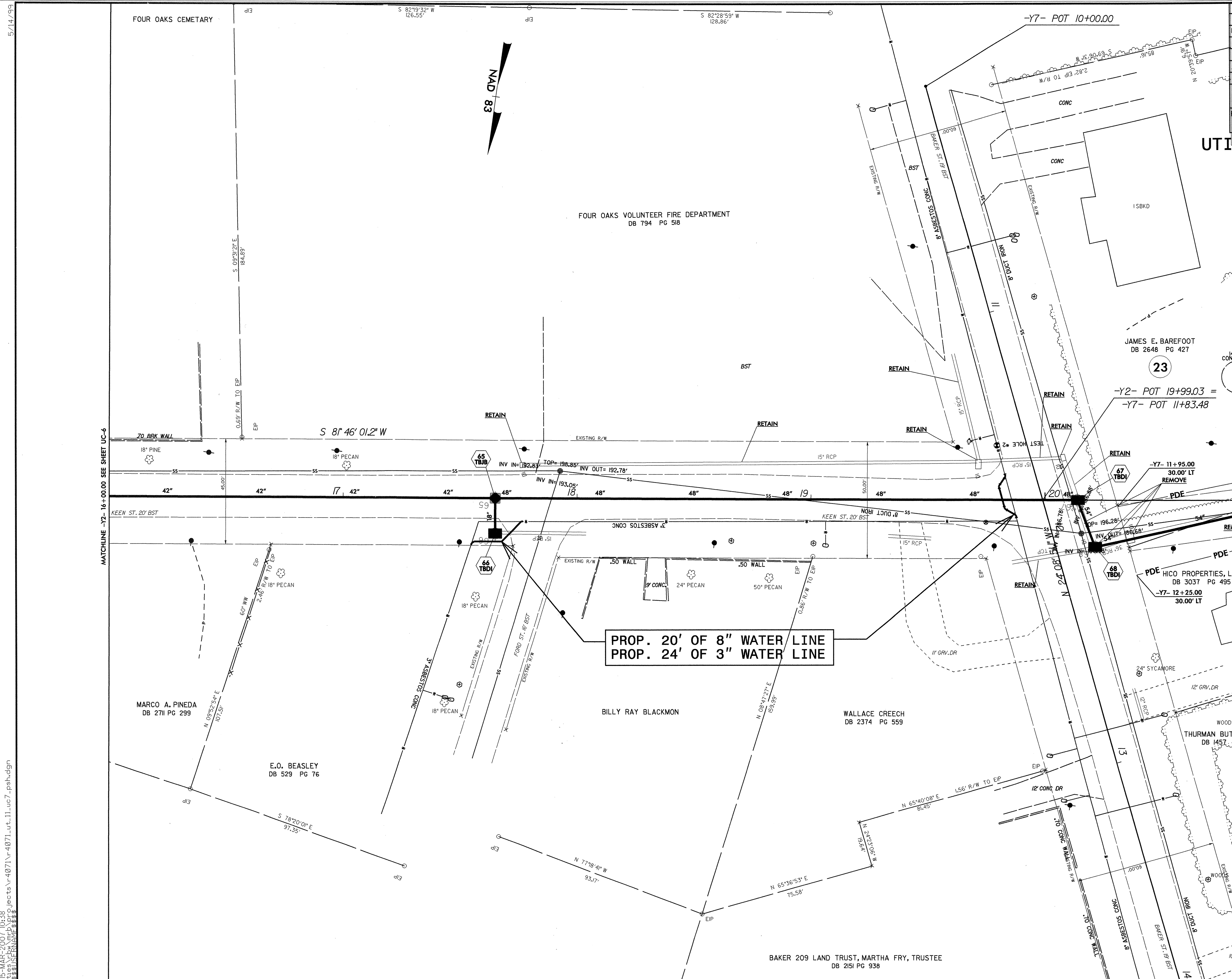
MATCHLINE -Y2- 16+00.00 SEE SHEET UC-7

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15-MAR-2007 10:37
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\$\$\$\$\$USERNAME\$\$\$\$\$

PROJECT REFERENCE NO.	SHEET NO.
R-4071	UC-7
DESIGNED BY: MRB	
DRAWN BY: MRB	
CHECKED BY: RBW	
APPROVED BY: RBW	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



**PROP. 20' OF 8" WATER LINE
PROP. 24' OF 3" WATER LINE**

5/14/99
 MATCHLINE -Y2- 16+00.00 SEE SHEET UC-6
 MATCHLINE -Y2- 21+00.00 SEE SHEET UC-8
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5/14/99

16-MAR-2007 10:34
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PROJECT REFERENCE NO.	SHEET NO.
R-4071	UC-8
DESIGNED BY: MRB	
DRAWN BY: MRB	
CHECKED BY: RBW	
APPROVED BY: RBW	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT SERVICES UNIT PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

$P/ Sta 11+93.37$
 $\Delta = 4' 25' 46.0" (LT)$
 $D = 1' 08' 45.3"$
 $L = 386.54'$
 $T = 193.37'$
 $R = 5,000.00'$

TERRY BROWN
DB 817 PG 166

27

**PROP. MH A3
 SEWER LINE 3
 STA. 0+00
 +17.78 / 45.00' LT.**

UTILITY CONSTRUCTION

PROP. 25' OF 8" SANITARY GRAVITY SEWER

**PROP. MH B3
 SEWER LINE 3
 STA. 0+25
 +42.78 / 44.00' LT.**

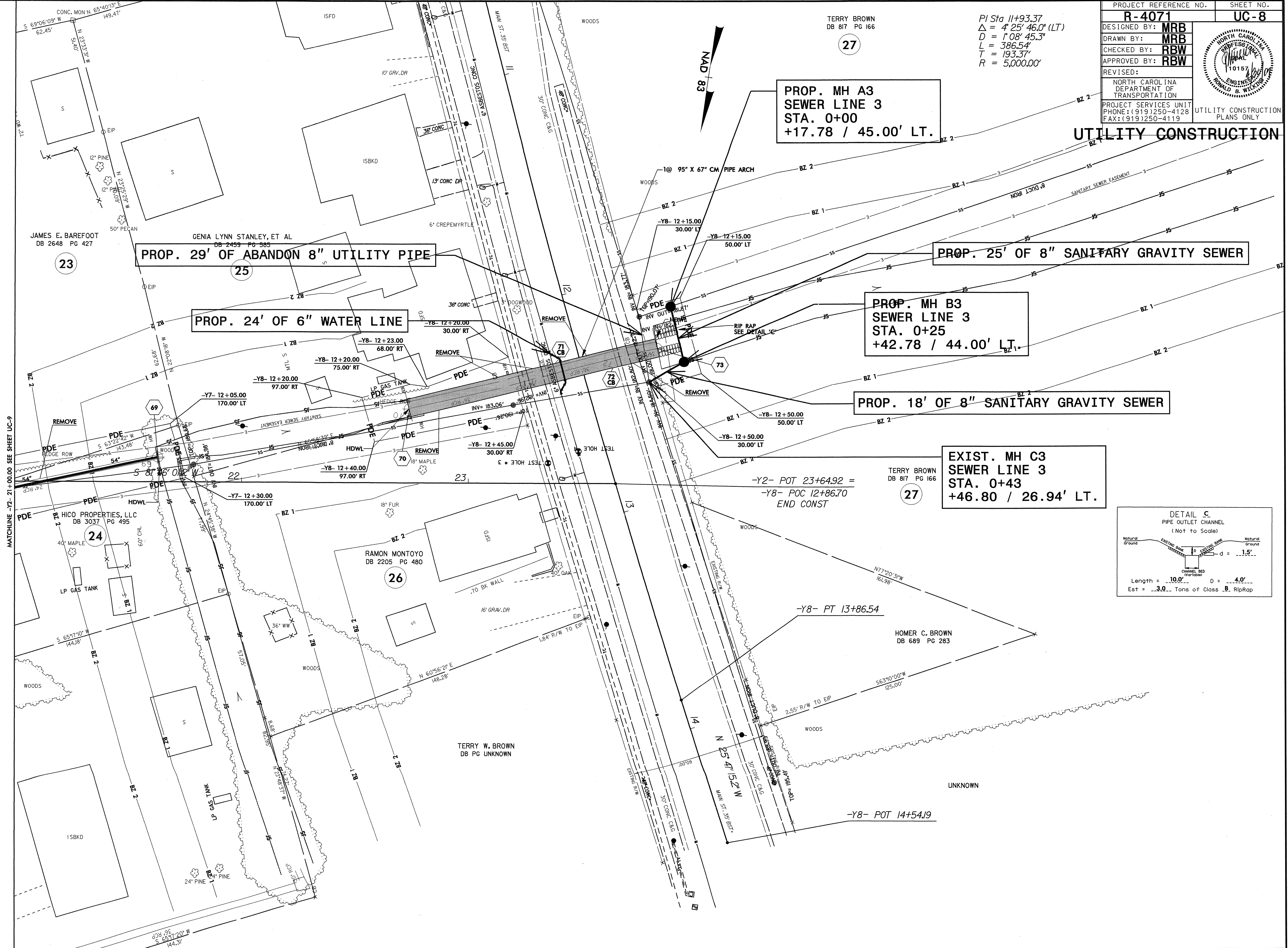
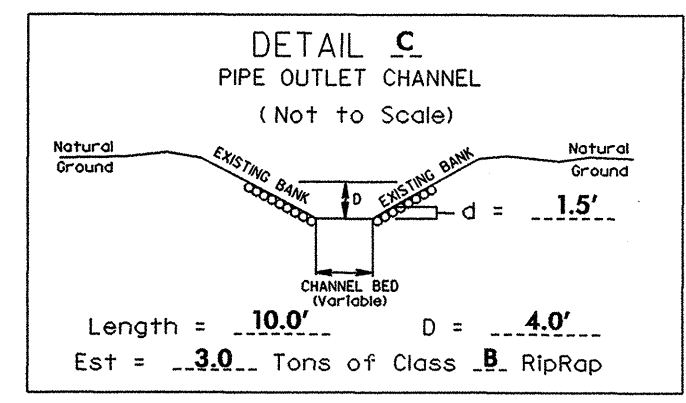
PROP. 18' OF 8" SANITARY GRAVITY SEWER

**EXIST. MH C3
 SEWER LINE 3
 STA. 0+43
 +46.80 / 26.94' LT.**

TERRY BROWN
DB 817 PG 166

27

$-Y2- POT 23+64.92 =$
 $-Y8- POC 12+86.70$
 END CONST



23

25

PROP. 24' OF 6" WATER LINE

24

26

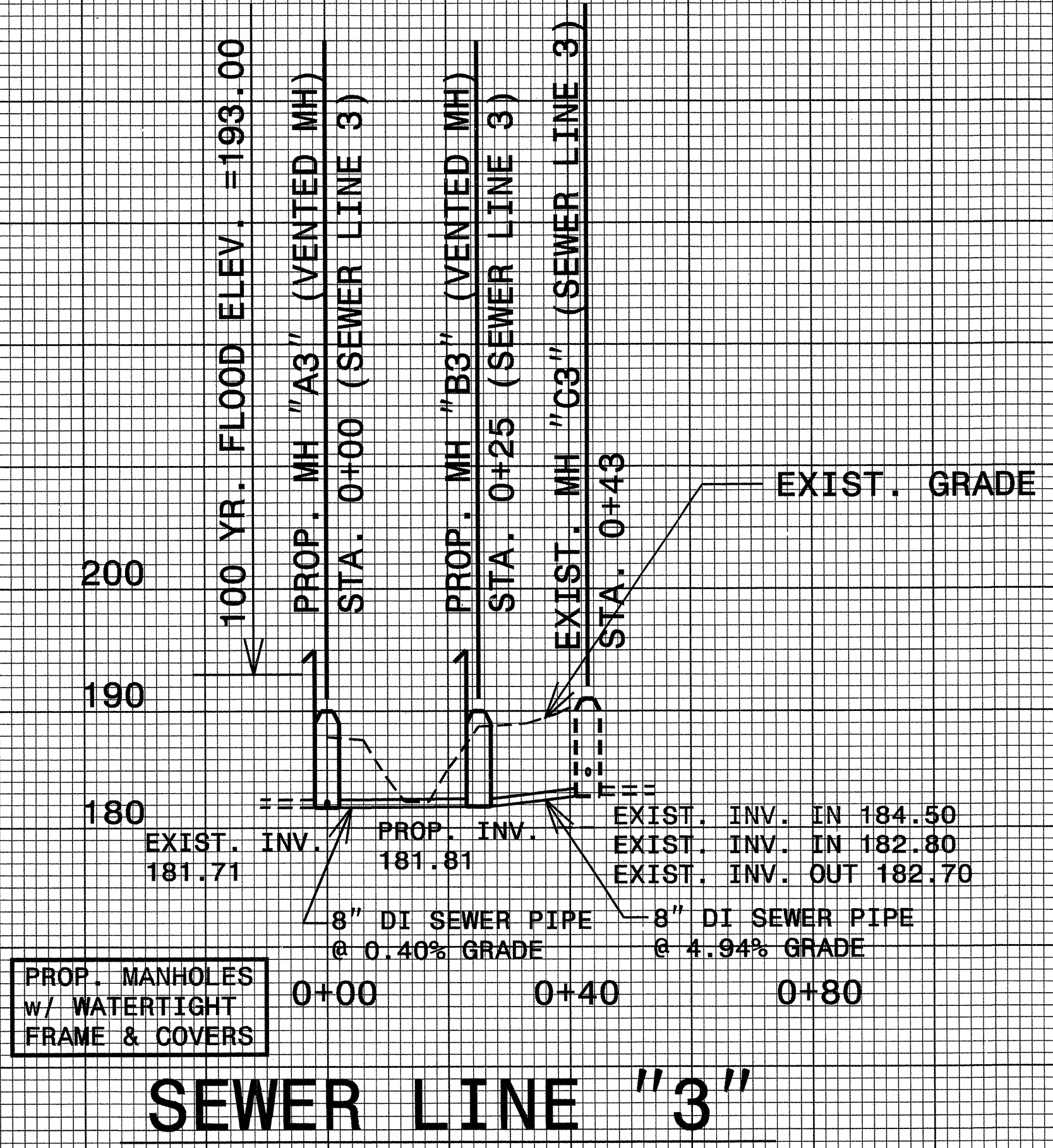
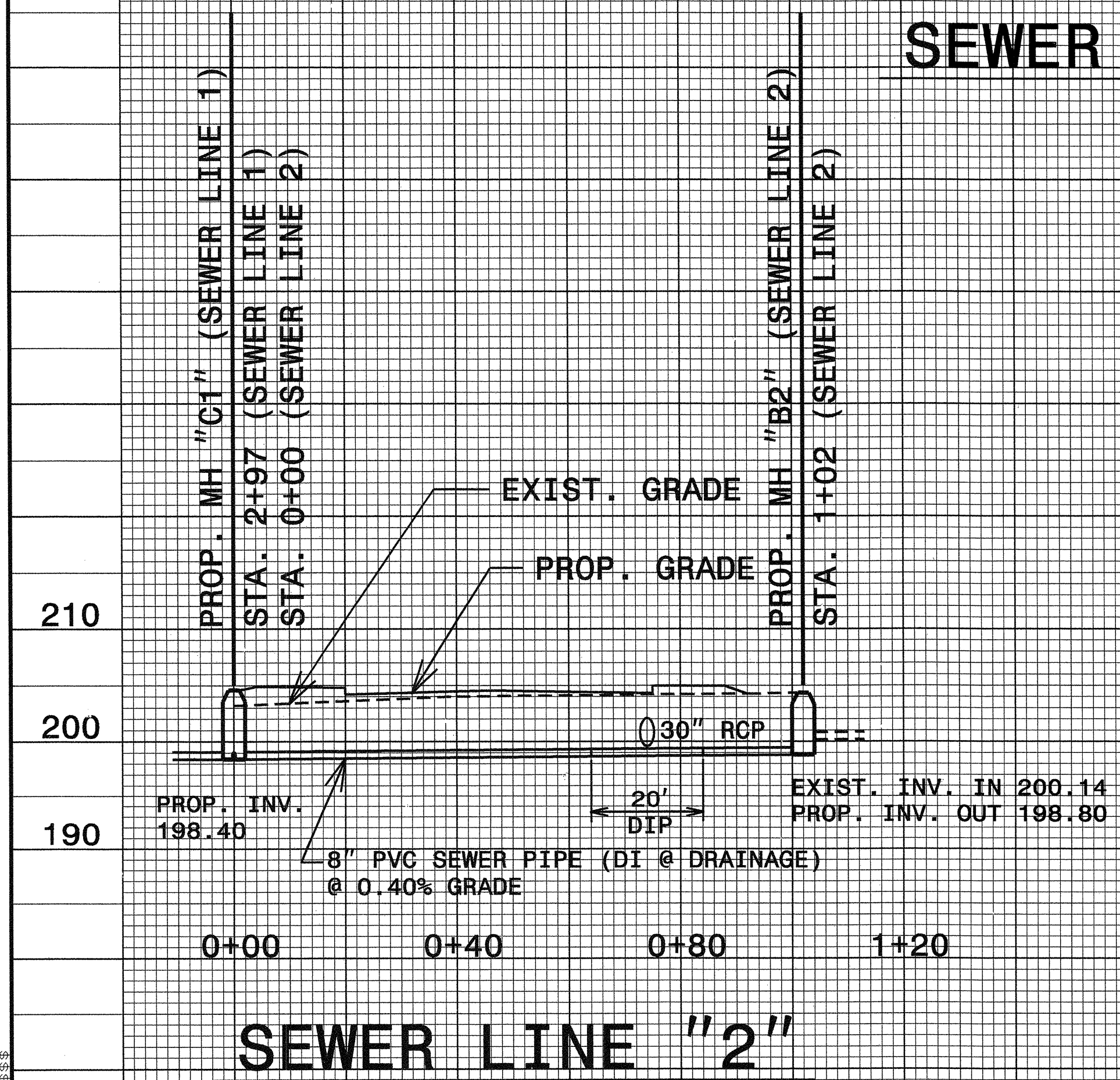
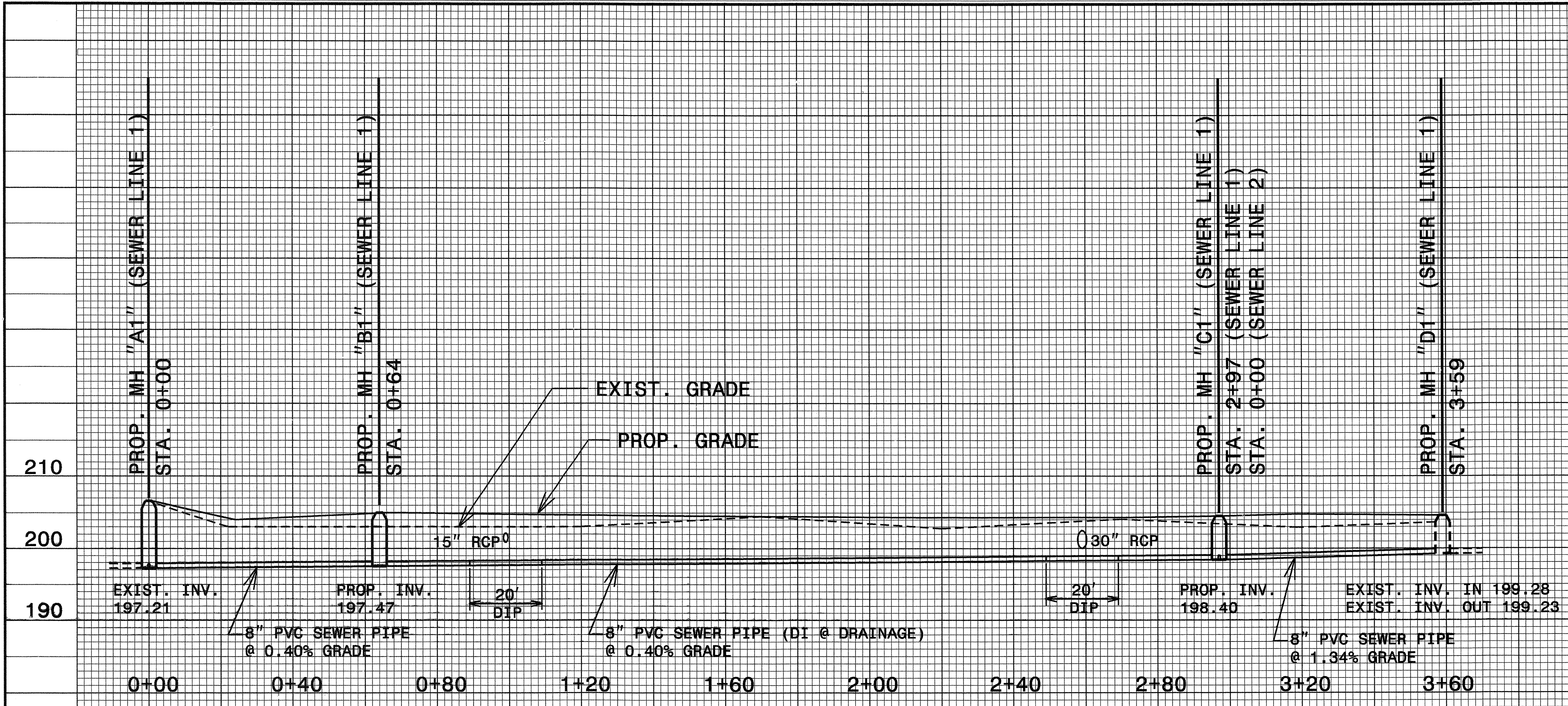
TERRY W. BROWN
DB PG UNKNOWN

HOMER C. BROWN
DB 689 PG 283

UNKNOWN

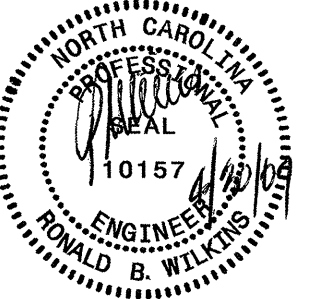
5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-4071	UC-9
DESIGNED BY: MRB	
DRAWN BY: MRB	
CHECKED BY: RBW	
APPROVED BY: RBW	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

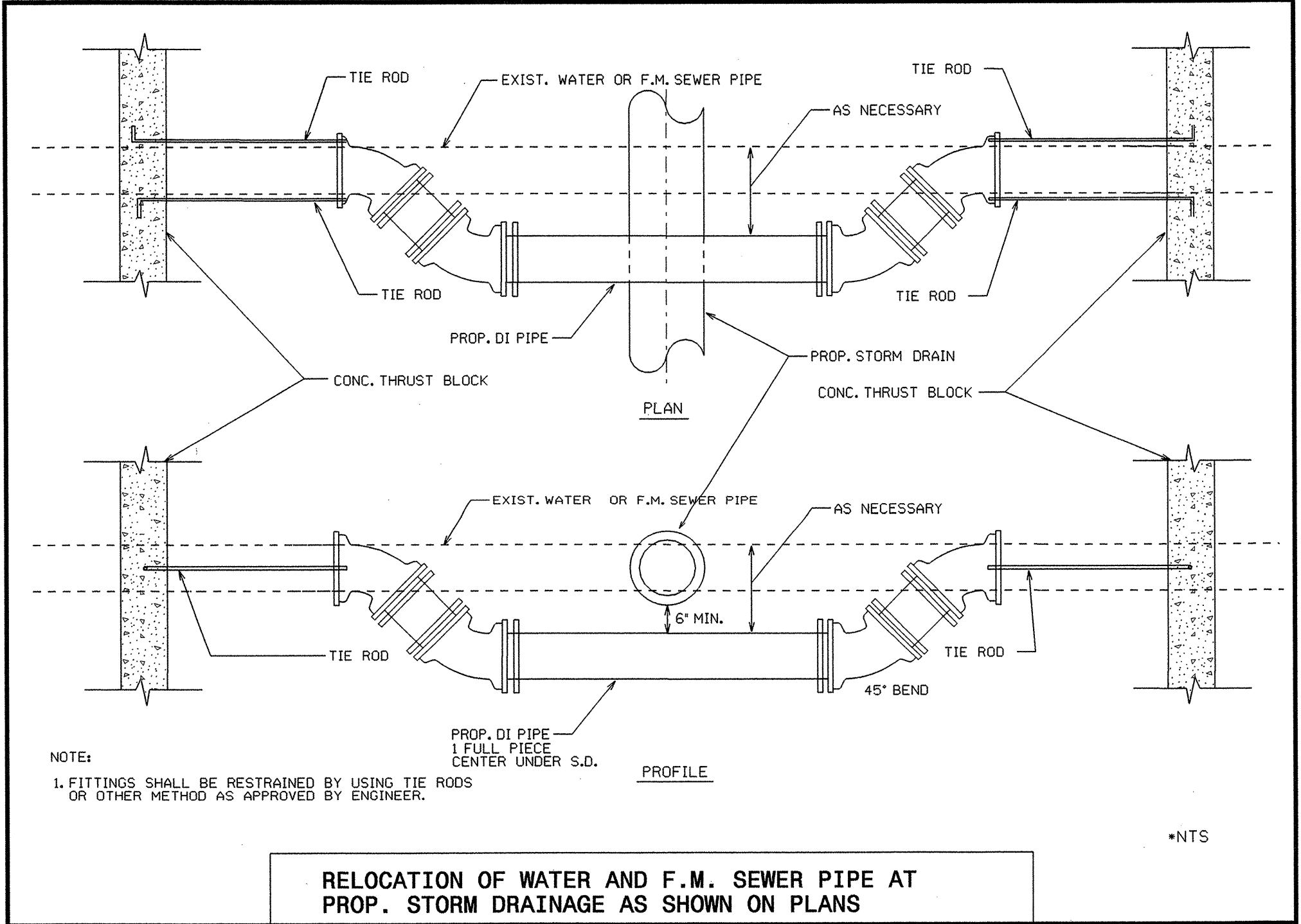
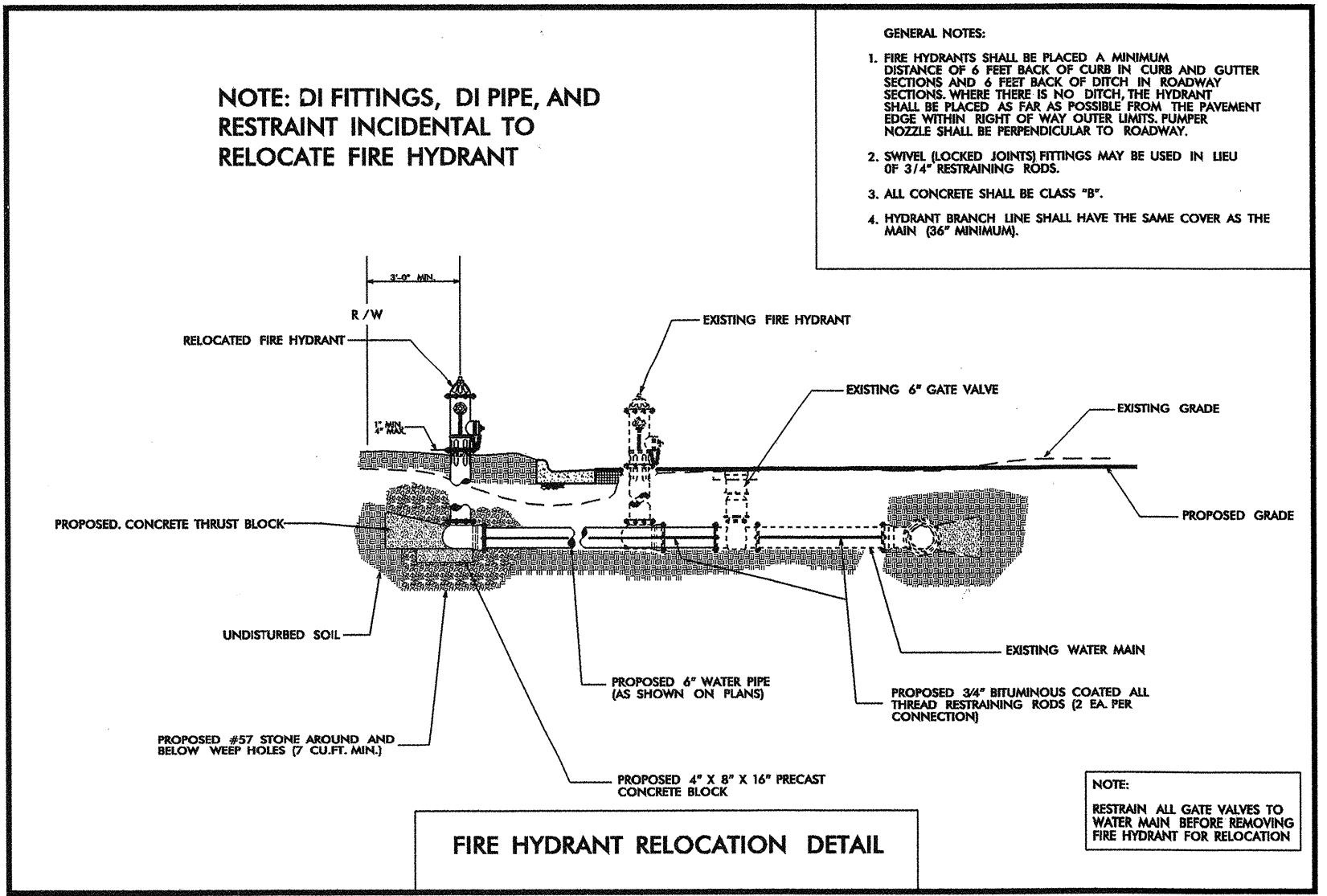
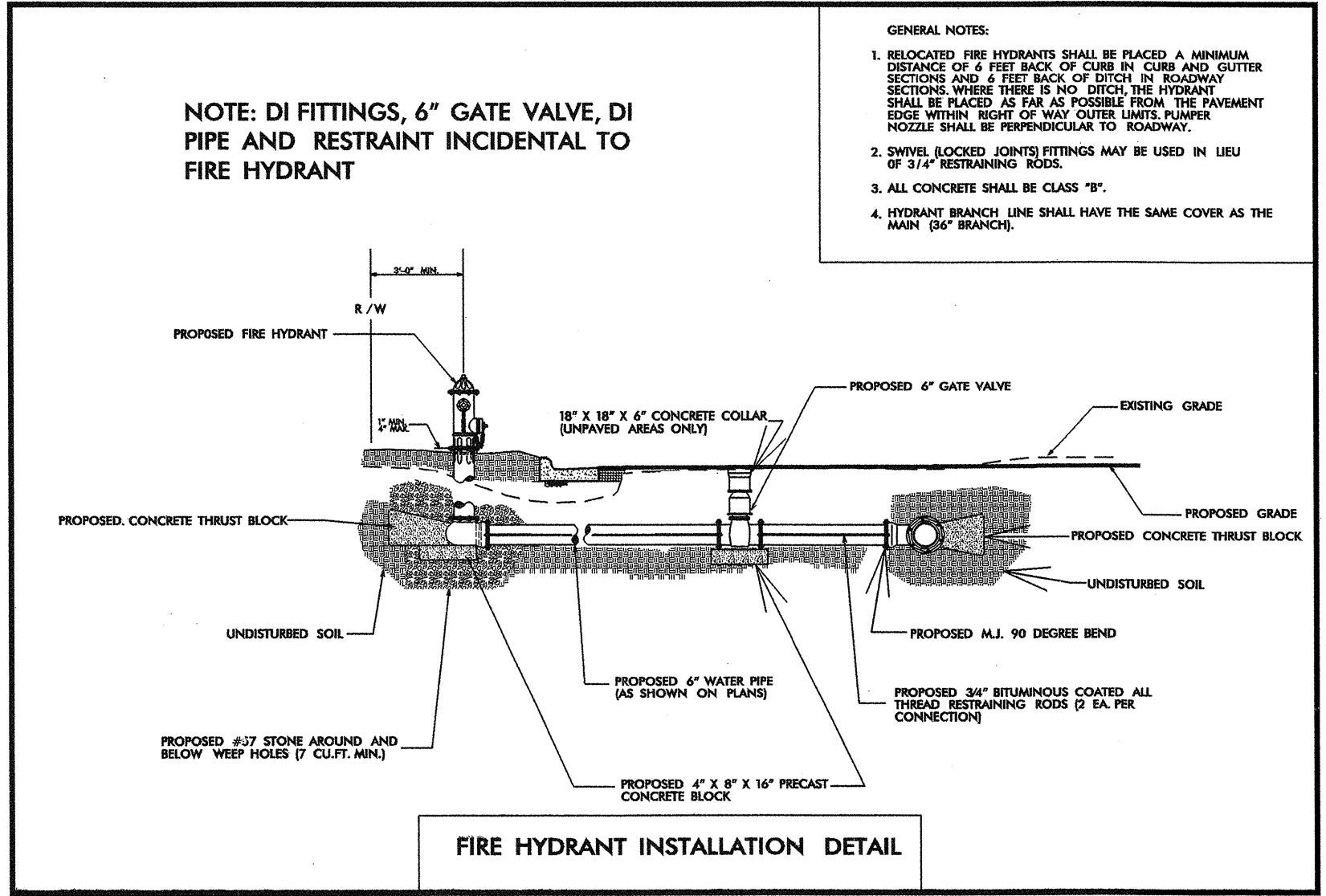
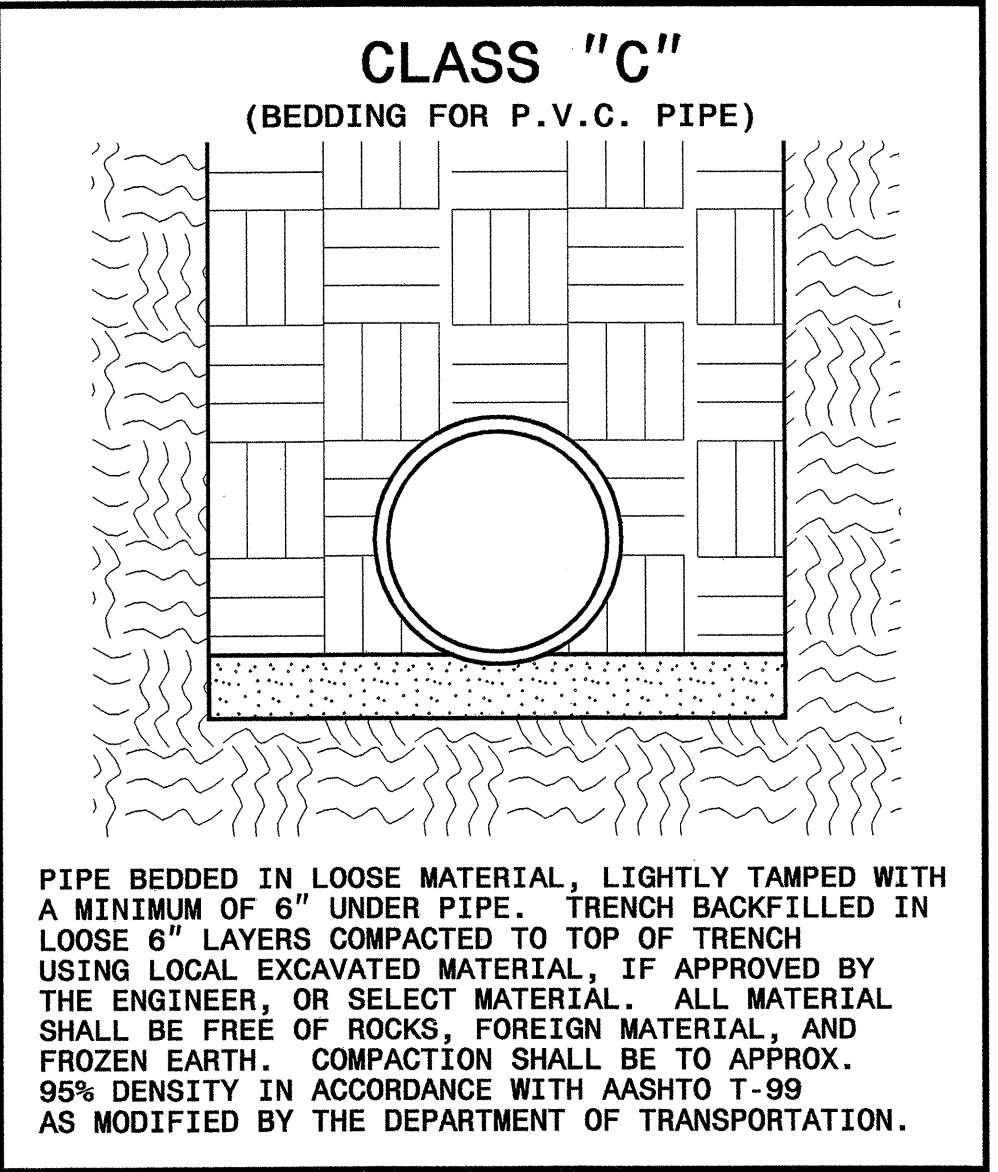
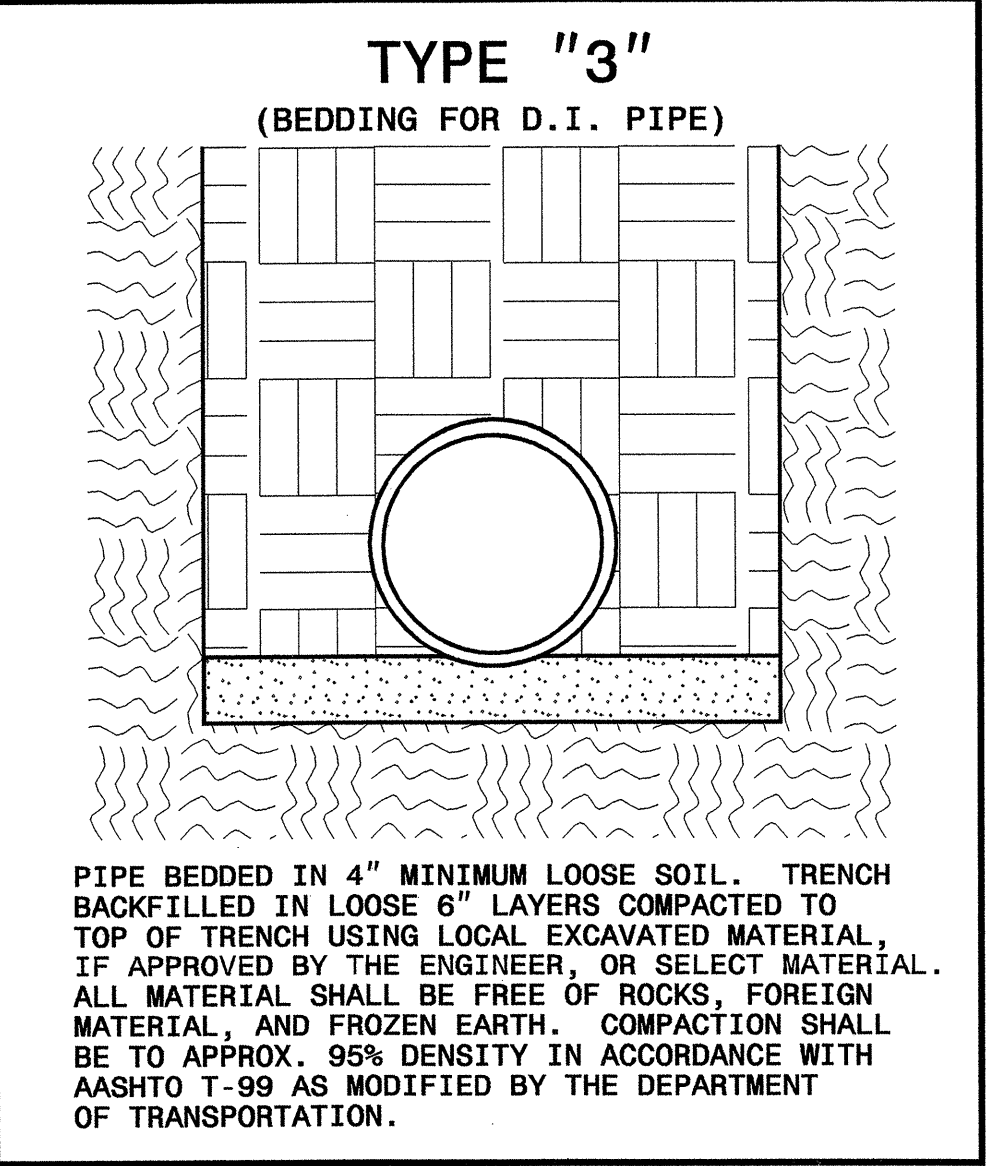
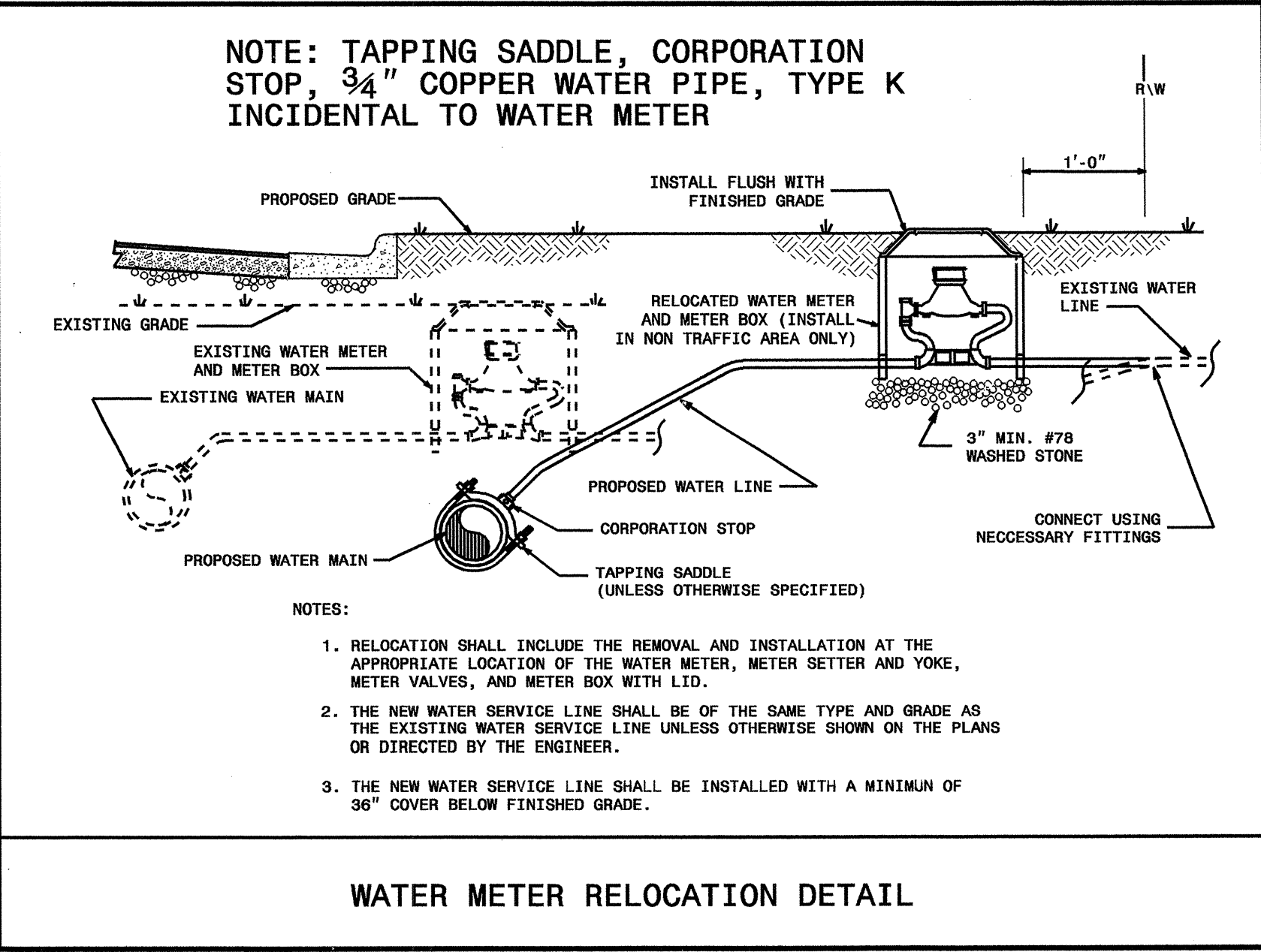
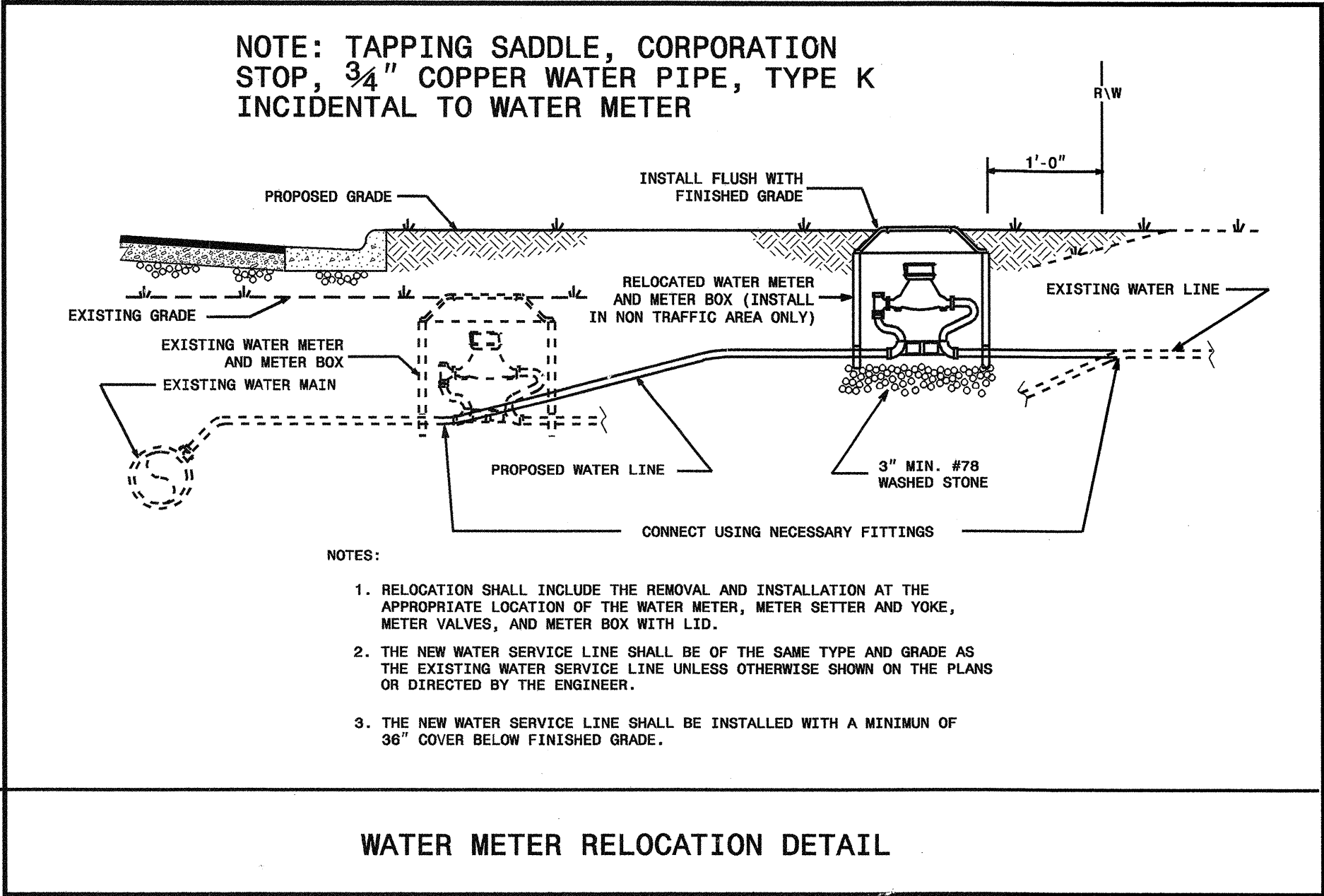


PROP. MANHOLES w/ WATERTIGHT FRAME & COVERS

5-MAR-2007 10:41 C:\Users\rbw\My Documents\Projects\4071\4071-uc_9_posh.dgn



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		

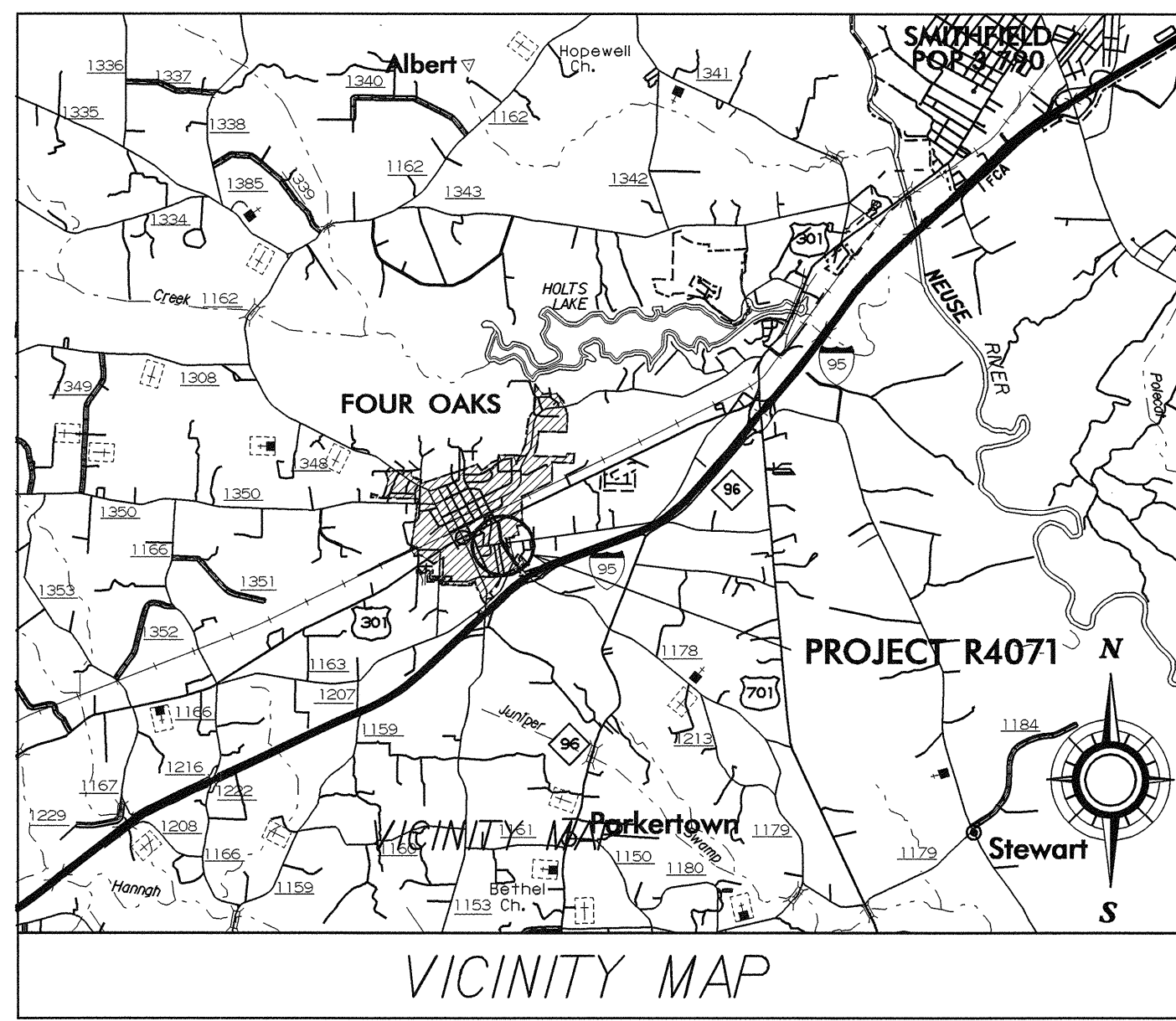
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
JOHNSTON COUNTY**

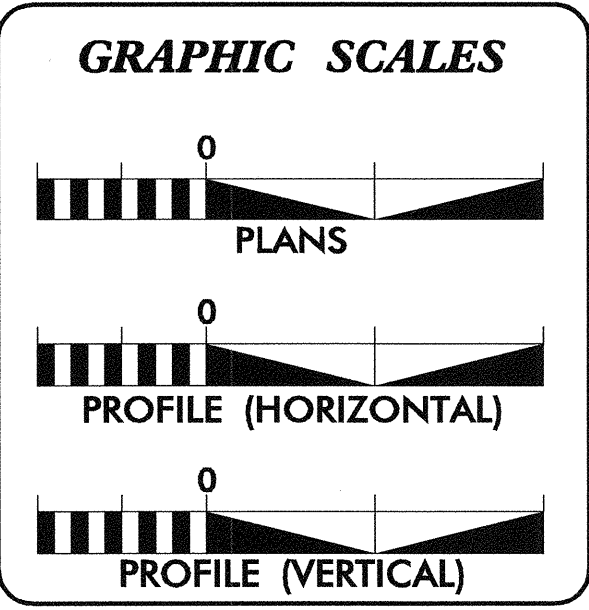
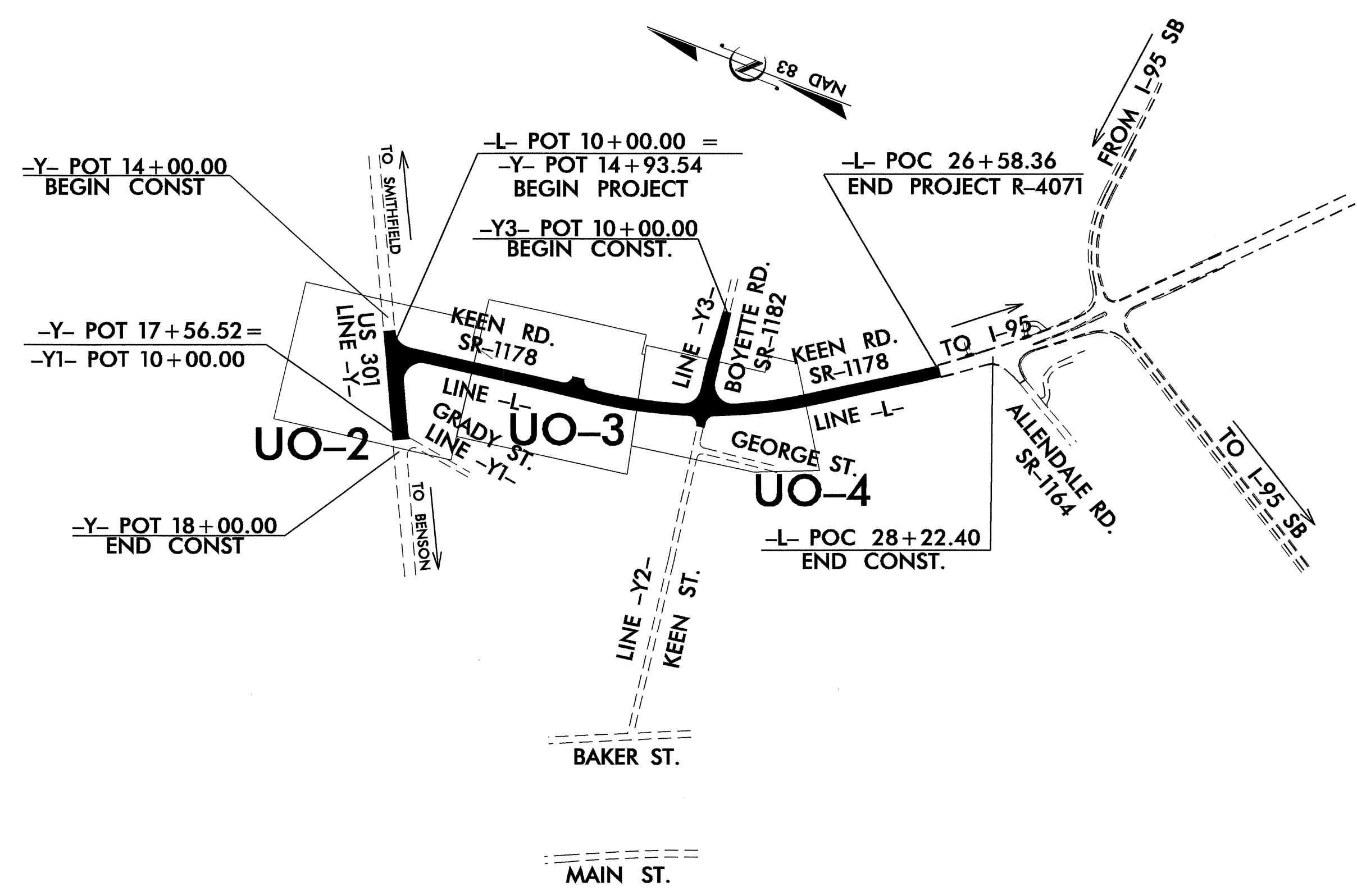
**LOCATION: SR 1178 (KEEN ROAD) FROM US-301 TO 164' NORTH WEST
OF SR 1164 (ALLENDALE ROAD)**

TYPE OF WORK: UTILITIES BY OTHERS



TIP PROJECT: R-4071

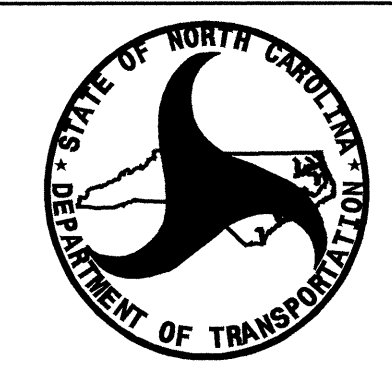
CONTRACT: C201888



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2 THRU UO-4	UTILITIES BY OTHERS PLAN SHEETS

- WATER AND SEWER OWNERS ON PROJECT**
- (1) PROGRESS ENERGY - POWER DISTRIBUTION
 - (2) EMBARQ - TELEPHONE
 - (3) TIME WARNER CABLE - CATV



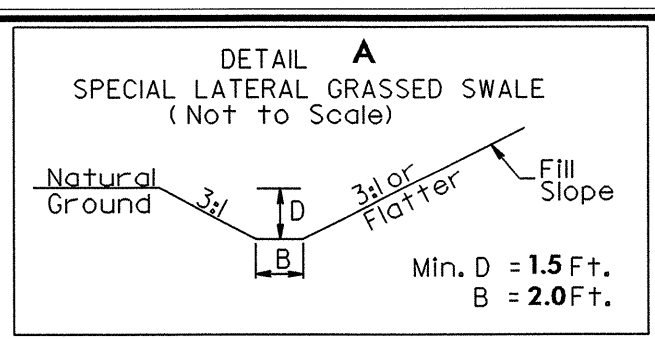
PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
 PROJECT SERVICES
 UTILITY SECTION**
 1591 MAIL SERVICES CENTER
 RALEIGH NC 27699-1591
 PHONE (919) 250-4128
 FAX (919) 250-4119

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
R. B. WILKINS, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
MICHAEL R. BRIGHT UTILITIES PROJECT DESIGNER

5/14/2007 14:44
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★ EXISTING SIGNAL TO BE UPGRADED
 FOR -L- PROFILE, SEE SHEET NO. 13
 FOR -Y- PROFILE, SEE SHEET NO. 15

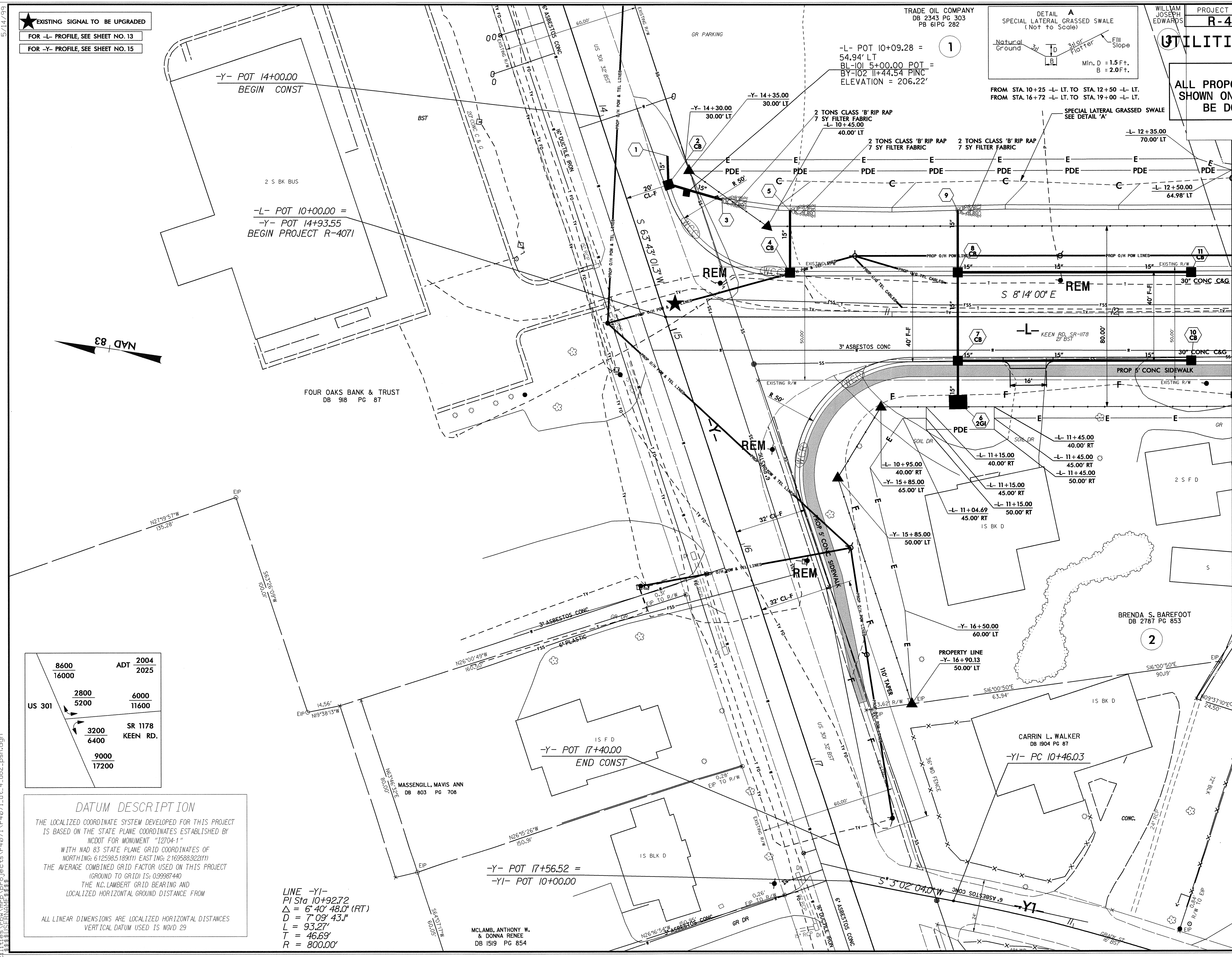
TRADE OIL COMPANY
 DB 2343 PG 303
 PB 61PG 282



PROJECT REFERENCE NO. **R-4071**
 SHEET NO. **U0-2**

UTILITIES BY OTHERS

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



8600	ADT 2004
16000	2025
2800	6000
5200	11600
3200	SR 1178
6400	KEEN RD.
9000	
17200	

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "12704-1" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 6125985.189(11) EASTING: 2169588.922(11) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987440 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NGVD 29

LINE -Y1-
 PI Sta 10+92.72
 $\Delta = 6' 40'' 48.0''$ (RT)
 $D = 7' 09'' 43.1''$
 $L = 93.27'$
 $T = 46.69'$
 $R = 800.00'$

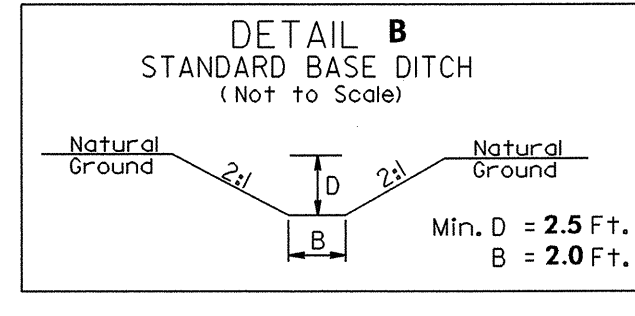
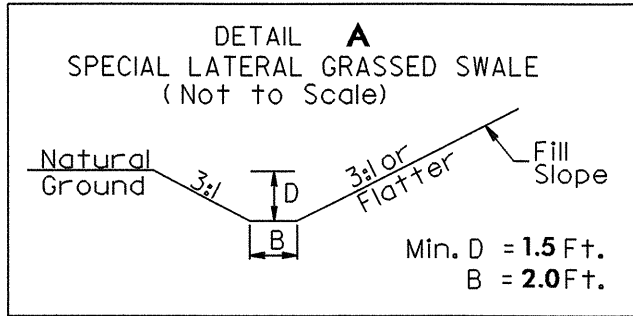
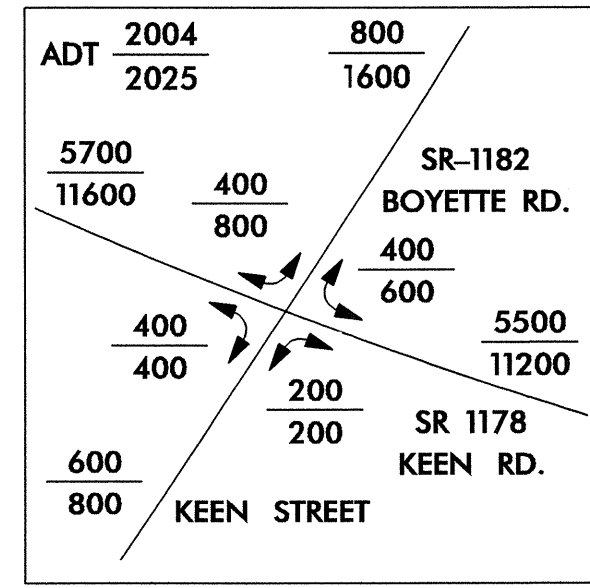
-Y- POT 17+40.00
 END CONST

MCLAMB, ANTHONY W.
 & DONNA RENEE
 DB 1519 PG 854

MATCHLINE -L- 12+50.00 SEE SHEET U0-3

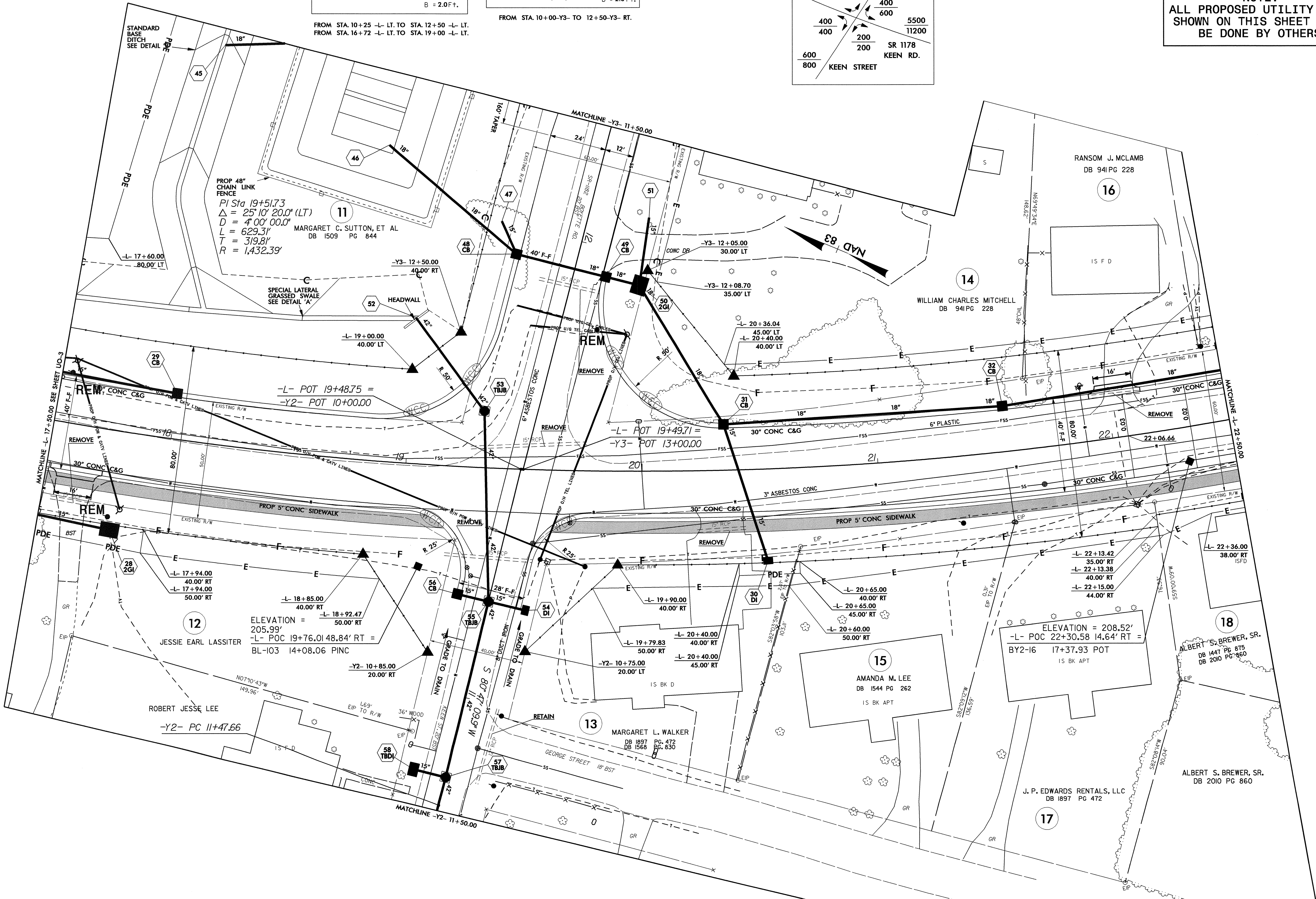
UTILITIES BY OTHERS

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



FROM STA. 10+25 -L- LT. TO STA. 12+50 -L- LT.
FROM STA. 16+72 -L- LT. TO STA. 19+00 -L- LT.

FROM STA. 10+00-Y3- TO 12+50-Y3- RT.



PROP 48" CHAIN LINK FENCE
PI Sta 19+51.73
 $\Delta = 25' 10" 20.0' (LT)$
D = 4' 00' 00.0"
L = 629.31' MARGARET C. SUTTON, ET AL
T = 319.81' DB 1509 PG 844
R = 1,432.39'

JESSIE EARL LASSITER
BL-103 14+08.06 PINC
ELEVATION = 205.99'
-L- POC 19+76.01 48.84' RT =

ELEVATION = 208.52'
-L- POC 22+30.58 14.64' RT =

5/14/99
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