

VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

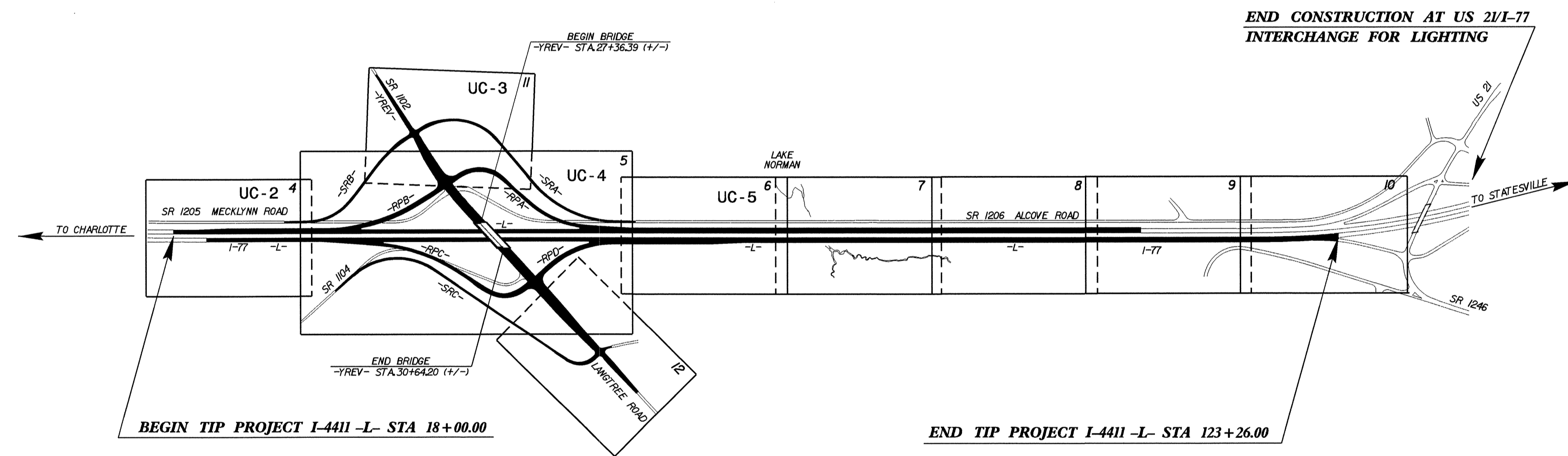
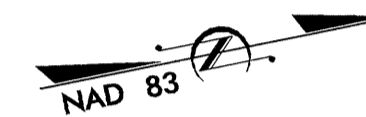
T.I.P. NO.	SHEET NO.
I-4411	UC-1

UTILITY CONSTRUCTION PLANS
IREDELL COUNTY

LOCATION: PROPOSED INTERCHANGE AT EXISTING I-77 AND SR 1102 GRADE SEPARATION

TYPE OF WORK: RELOCATING WATER AND SEWER LINES

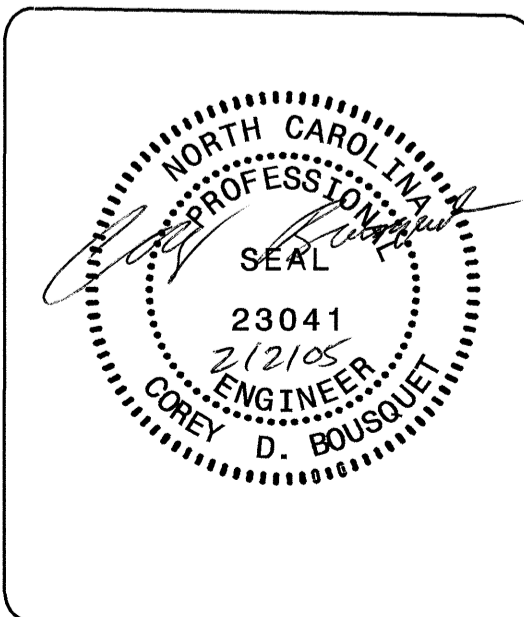
TIP PROJECT: I- 4411



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

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

UTILITY CONSTRUCTION ON PROJECT
(1) WATER LINES, HEATER UTILITIES COMPANY
(2)
(3)
(4)



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
COREY BOUSQUET, P.E. UTILITIES SQUAD LEADER/PROJECT ENGINEER
JAMSHID HAFSHEJANI UTILITIES PROJECT DESIGNER

8/17/99

02-FEB-2005 14:59 U:\Projects\14411\UTIL_UC2.dgn
R:\Utilities\Road\AT\150222288

1 = 251.02'
R = 510.00'

PROJECT REFERENCE NO.	SHEET NO.
I-4411	UC-2
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DESIGN SERVICES UNIT PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

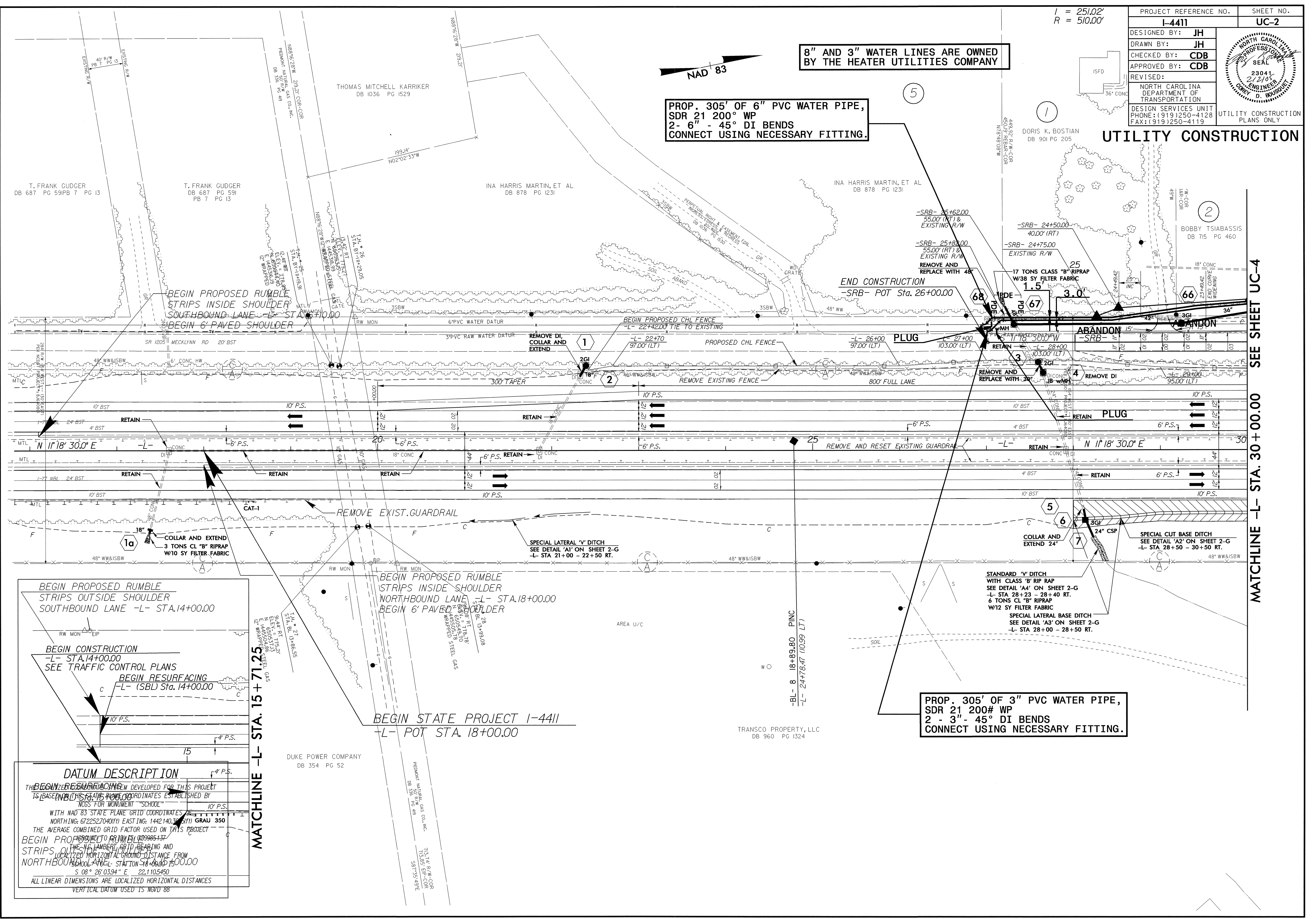
8" AND 3" WATER LINES ARE OWNED BY THE HEATER UTILITIES COMPANY

PROP. 305' OF 6" PVC WATER PIPE, SDR 21 200# WP
2- 6" - 45° DI BENDS
CONNECT USING NECESSARY FITTING.

PROP. 305' OF 3" PVC WATER PIPE, SDR 21 200# WP
2- 3" - 45° DI BENDS
CONNECT USING NECESSARY FITTING.

UTILITY CONSTRUCTION

SEE SHEET UC-4
MATCHLINE -L- STA. 30+00.00



DATUM DESCRIPTION

THE BEGINNING POINT OF THE CENTERLINE DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY THE 1983 STATE PLANE GRID FOR MONUMENT "SCHOOL" WITH NAD 83 STATE PLANE GRID COORDINATES NORTHING: 6722527040(1) EASTING: 144214030(1) GRAU 350 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT IS 0.99995437

BEGIN PROPOSED RUMBLE STRIPS INSIDE SHOULDER SOUTHBOUND LANE -L- STA. 14+00.00

BEGIN PROPOSED RUMBLE STRIPS INSIDE SHOULDER NORTHBOUND LANE -L- STA. 18+00.00

BEGIN STATE PROJECT I-4411 -L- POT STA. 18+00.00

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NGVD 88

MATCHLINE -L- STA. 15+71.25

DUKE POWER COMPANY
DB 354 PG 52

TRANSCO PROPERTY, LLC
DB 960 PG 1324

BEGIN STATE PROJECT I-4411
-L- POT STA. 18+00.00

BEGIN PROPOSED RUMBLE STRIPS OUTSIDE SHOULDER SOUTHBOUND LANE -L- STA. 14+00.00

BEGIN PROPOSED RUMBLE STRIPS INSIDE SHOULDER NORTHBOUND LANE -L- STA. 18+00.00
BEGIN 6' PAVED SHOULDER

BEGIN CONSTRUCTION -L- STA. 14+00.00
SEE TRAFFIC CONTROL PLANS

BEGIN RESURFACING -L- (SBL) STA. 14+00.00

BEGIN PROPOSED RUMBLE STRIPS INSIDE SHOULDER SOUTHBOUND LANE -L- STA. 14+00.00

BEGIN PROPOSED RUMBLE STRIPS INSIDE SHOULDER SOUTHBOUND LANE -L- STA. 14+00.00

BEGIN PROPOSED RUMBLE STRIPS INSIDE SHOULDER SOUTHBOUND LANE -L- STA. 14+00.00

PROJECT REFERENCE NO.	SHEET NO.
U-4411	UC-3
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
DESIGN SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

12", 6" AND 3" WATER LINES ARE OWNED BY THE HEATER UTILITIES COMPANY

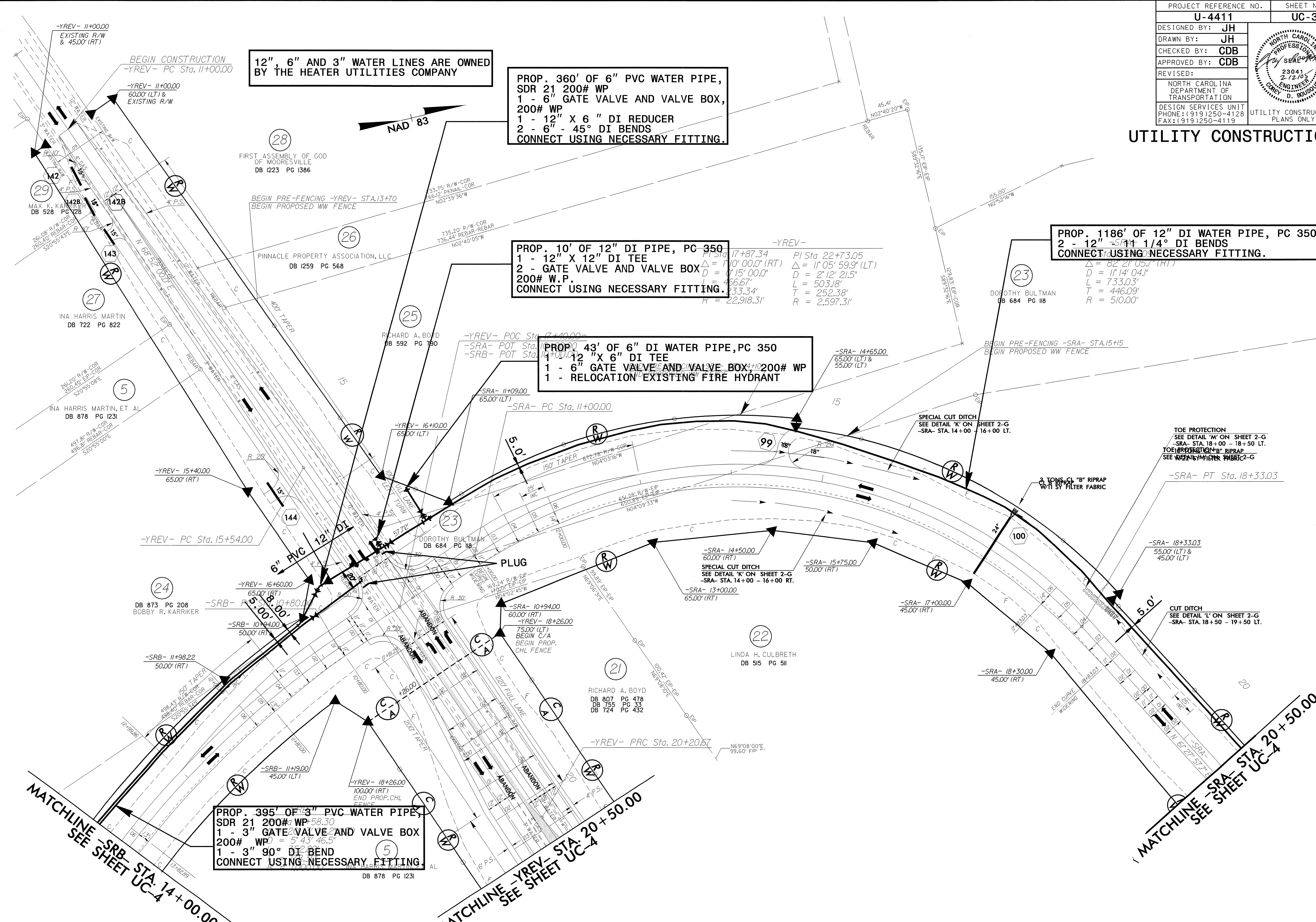
**PROP. 360' OF 6" PVC WATER PIPE, SDR 21 200# WP
1 - 6" GATE VALVE AND VALVE BOX, 200# WP
1 - 12" X 6" DI REDUCER
2 - 6" - 45° DI BENDS
CONNECT USING NECESSARY FITTING.**

**PROP. 10' OF 12" DI PIPE, PC 350
1 - 12" X 12" DI TEE
2 - GATE VALVE AND VALVE BOX, 200# W.P.
CONNECT USING NECESSARY FITTING.**

**PROP. 43' OF 6" DI WATER PIPE, PC 350
1 - 12" X 6" DI TEE
1 - 6" GATE VALVE AND VALVE BOX, 200# WP
1 - RELOCATION EXISTING FIRE HYDRANT**

**PROP. 1186' OF 12" DI WATER PIPE, PC 350
2 - 12" - 1/4° DI BENDS
CONNECT USING NECESSARY FITTING.**

**PROP. 395' OF 3" PVC WATER PIPE, SDR 21 200# WP
1 - 3" GATE VALVE AND VALVE BOX, 200# WP
1 - 3" 90° DI BEND
CONNECT USING NECESSARY FITTING.**



8/17/99
 REVISIONS
 02-FEB-2005 14:24
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 Matchline - UC-4

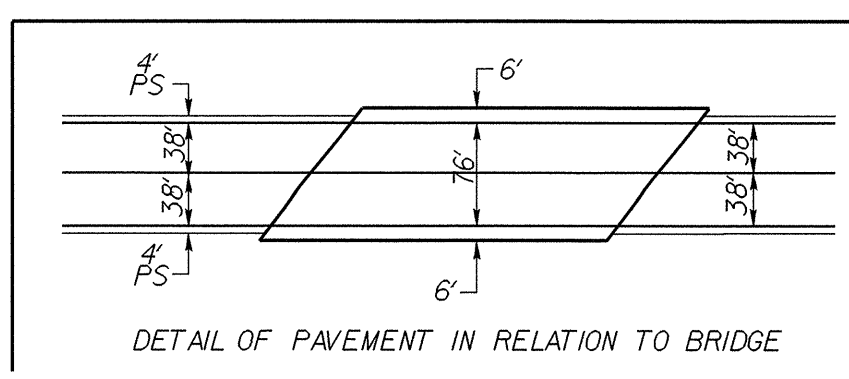
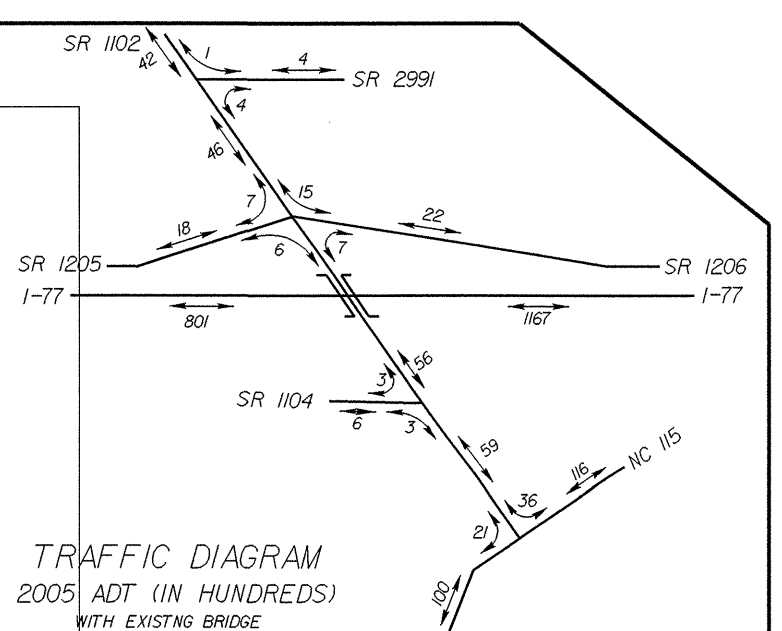
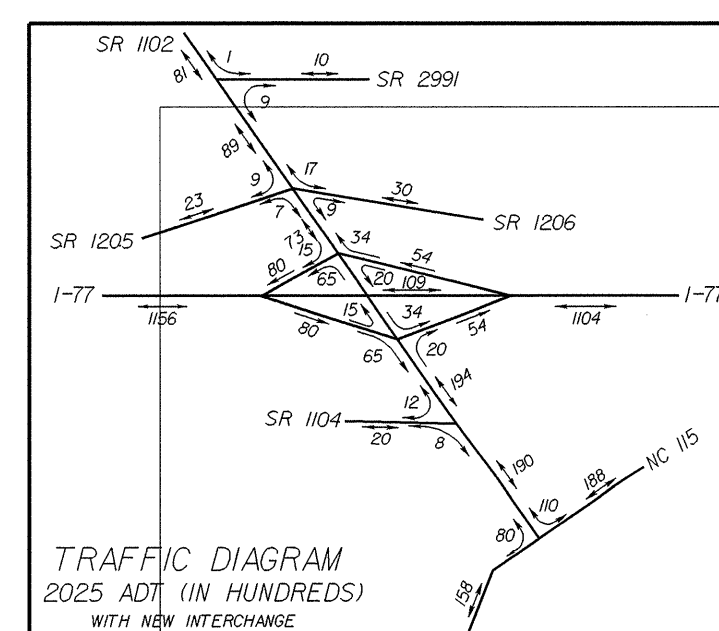
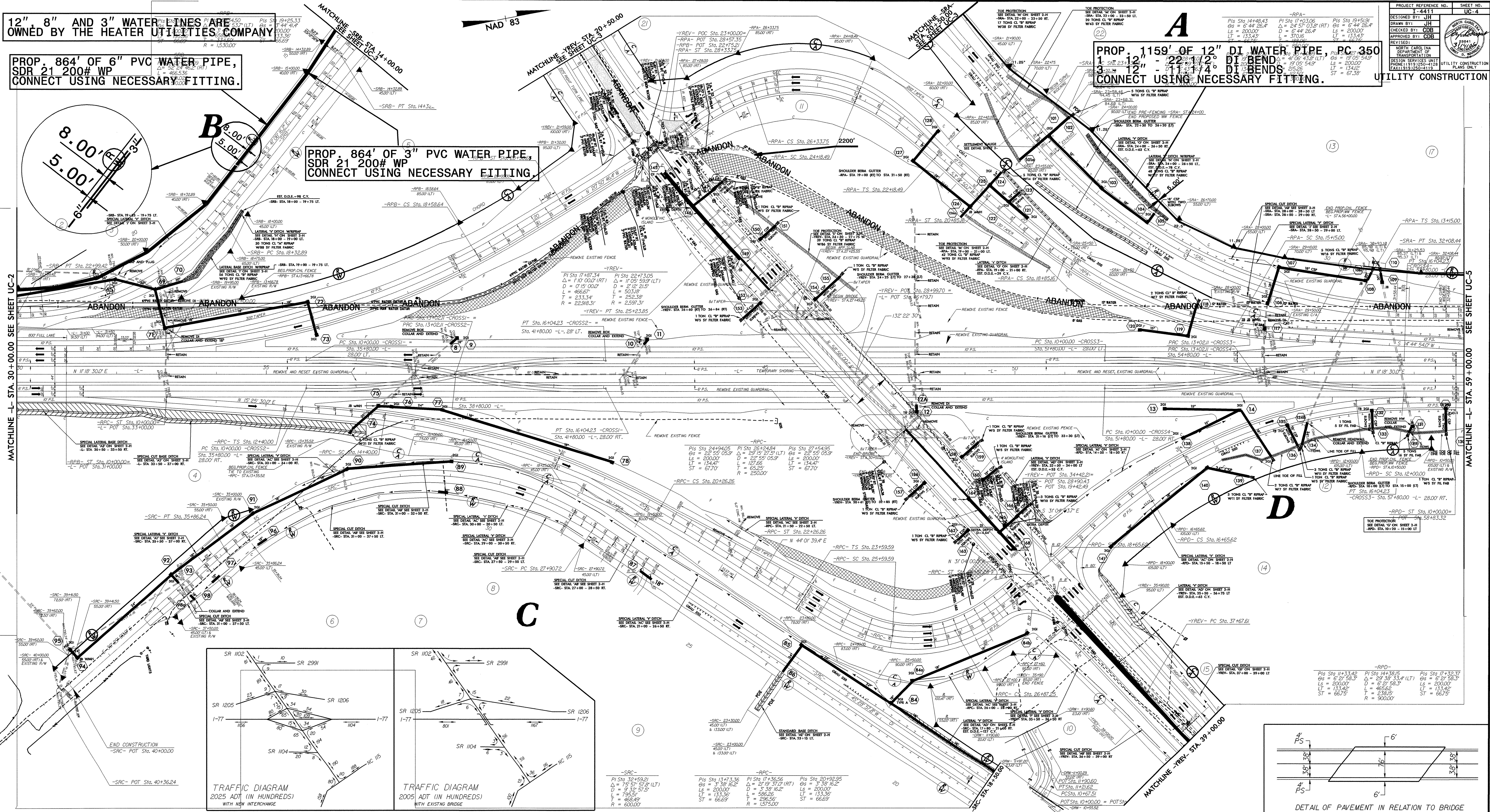
12" 8" AND 3" WATER LINES ARE OWNED BY THE HEATER UTILITIES COMPANY

PROP. 864' OF 6" PVC WATER PIPE, SDR 21 200# WP CONNECT USING NECESSARY FITTING.

PROP. 864' OF 3" PVC WATER PIPE, SDR 21 200# WP CONNECT USING NECESSARY FITTING.

PROP. 1159' OF 12" DI WATER PIPE, PC 350 1. SUT 23.4 - 22.172° DI BENDS 3.33' 12" - 11.1174° DI BENDS 25.26' 12" - 11.1174° DI BENDS 25.26' CONNECT USING NECESSARY FITTING.

PROJECT REFERENCE NO.	1-4411
SHEET NO.	UC-4
DESIGNED BY	JH
DRAWN BY	COB
CHECKED BY	COB
APPROVED BY	COB
REVISIONS	
DATE	
BY	
DESCRIPTION	
DESIGN SERVICES UNIT	UTILITY CONSTRUCTION PLANS ONLY
PHONE	(519) 252-1119
FAX	(519) 252-1119



MATCHLINE - L. STA. 30+00.00 SEE SHEET UC-2

MATCHLINE - L. STA. 99+00.00 SEE SHEET UC-5

8/27/06 8:37:09

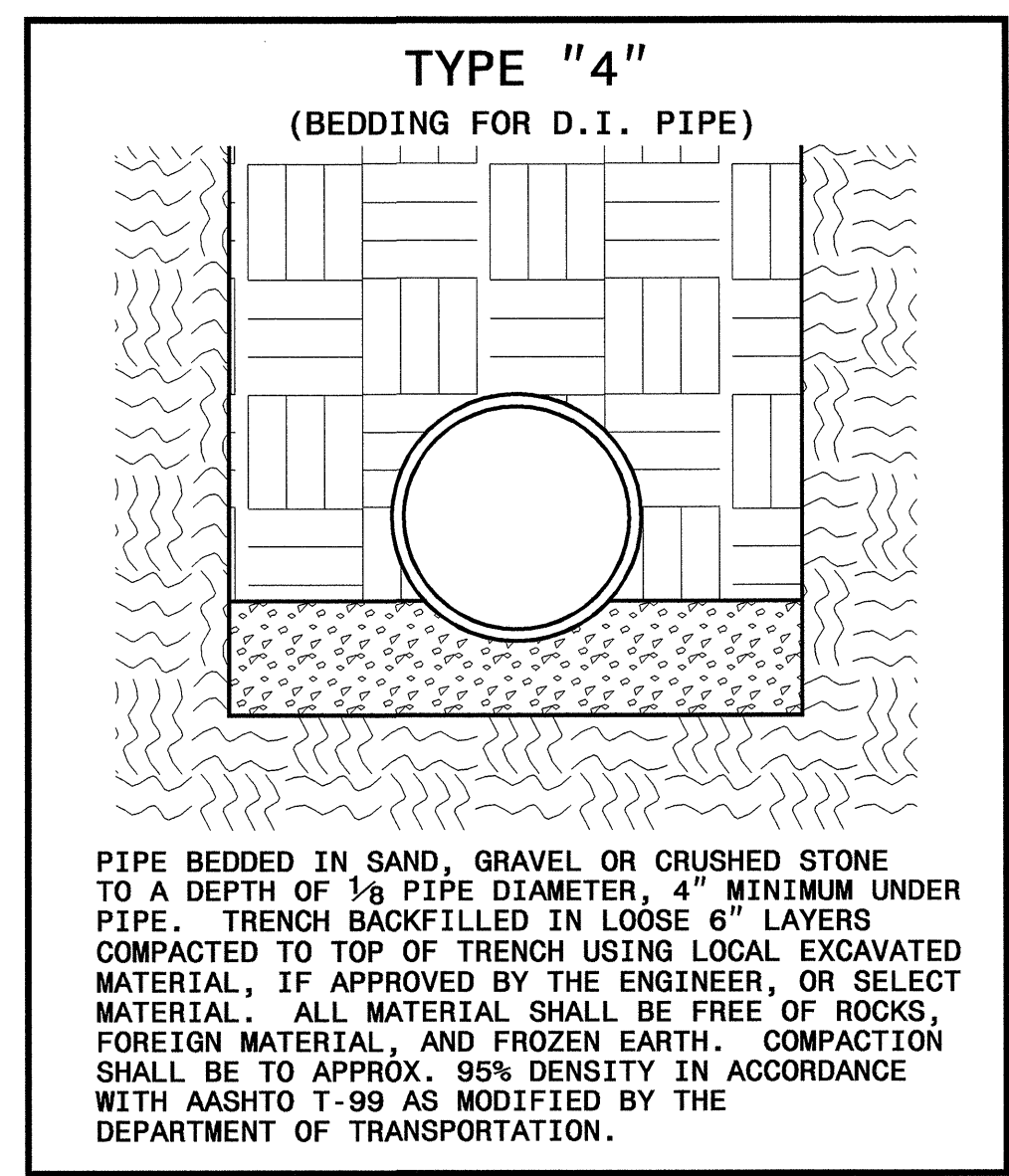
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8/17/99

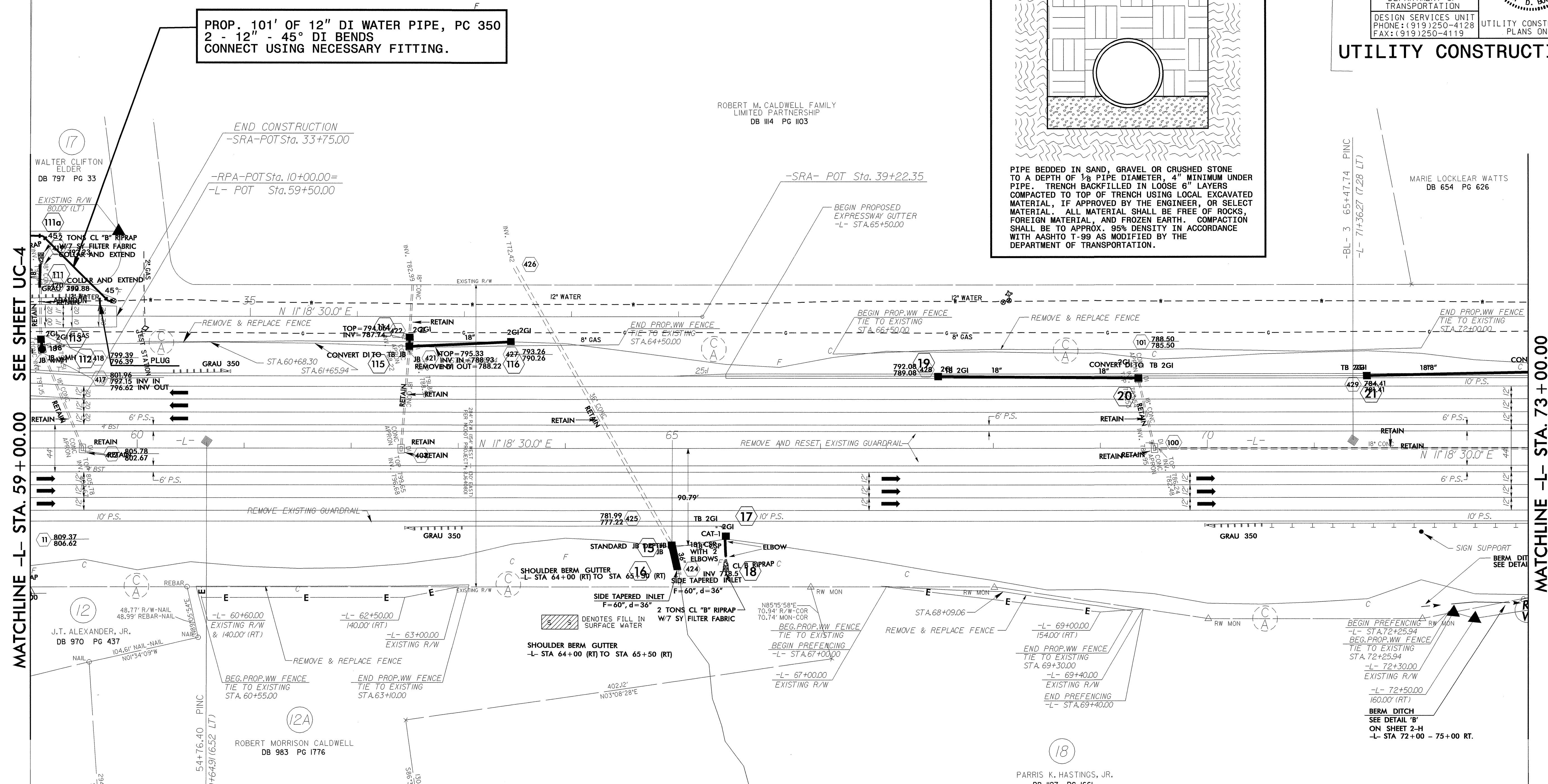
PROJECT REFERENCE NO.	SHEET NO.
I-4411	UC-5
DESIGNED BY: JH	
DRAWN BY: JH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
DESIGN SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

12" AND 3" WATER LINES ARE OWNED BY THE HEATER UTILITIES COMPANY

PROP. 101' OF 12" DI WATER PIPE, PC 350
2 - 12" - 45° DI BENDS
CONNECT USING NECESSARY FITTING.



UTILITY CONSTRUCTION



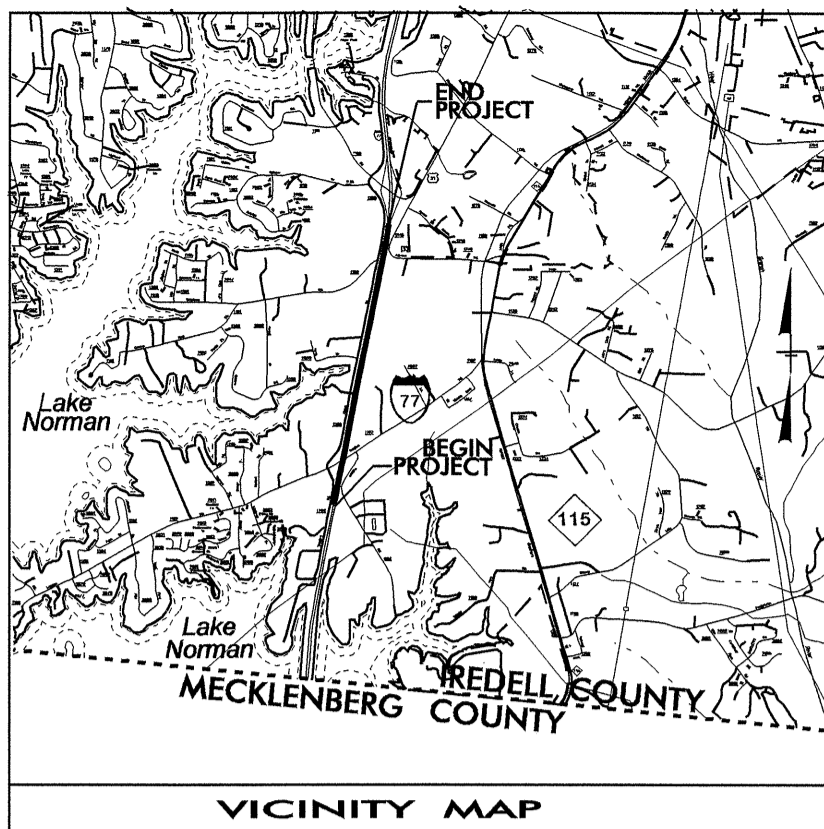
SEE SHEET UC-4
MATCHLINE -L- STA. 59 + 00.00

MATCHLINE -L- STA. 73 + 00.00

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		

REVISIONS

14-MAR-2006 14:40
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

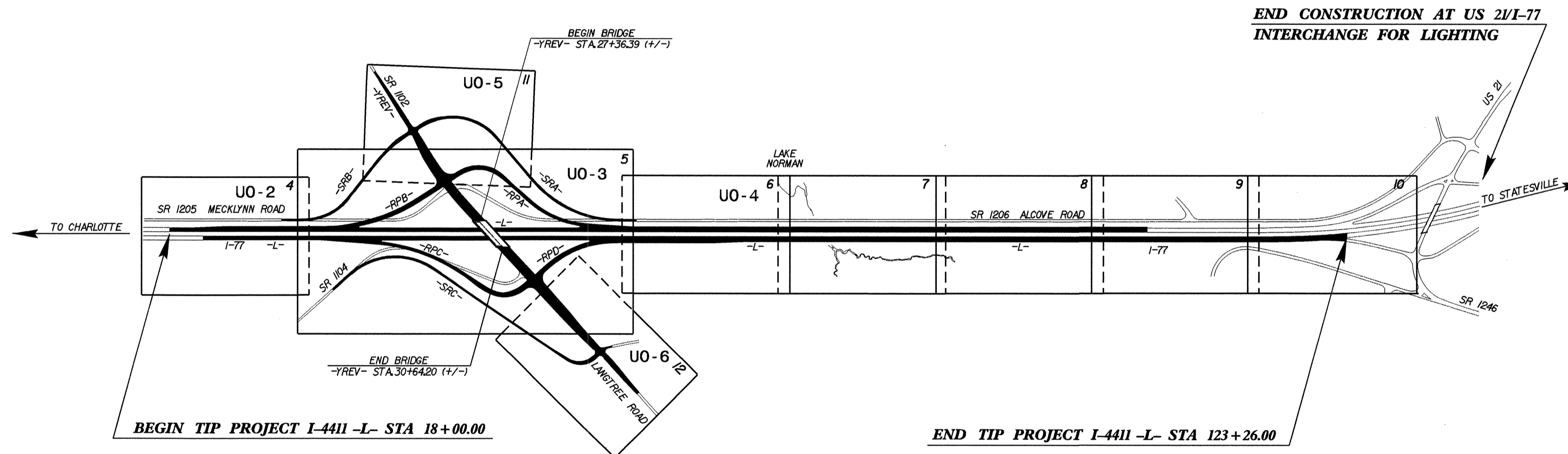
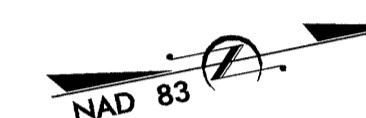
T.I.P. NO.	SHEET NO.
I-4411	UO-1

UTILITY CONSTRUCTION PLANS
IREDELL COUNTY

LOCATION: PROPOSED INTERCHANGE AT EXISTING I-77 AND SR 1102 GRADE SEPARATION

TYPE OF WORK: RELOCATING WATER AND SEWER LINES

TIP PROJECT: I- 4411



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

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2 THRU UO-6	UTILITY BY OTHERS PLAN SHEETS

UTILITY BY OTHERS ON PROJECT
(1) POWER: DUKE POWER COMPANY
(2) TELEPHONE: BELL SOUTH
(3) GAS: PSNC ENERGY COMPANY
(4) TV CABLE: ADELPHIA COMPANY

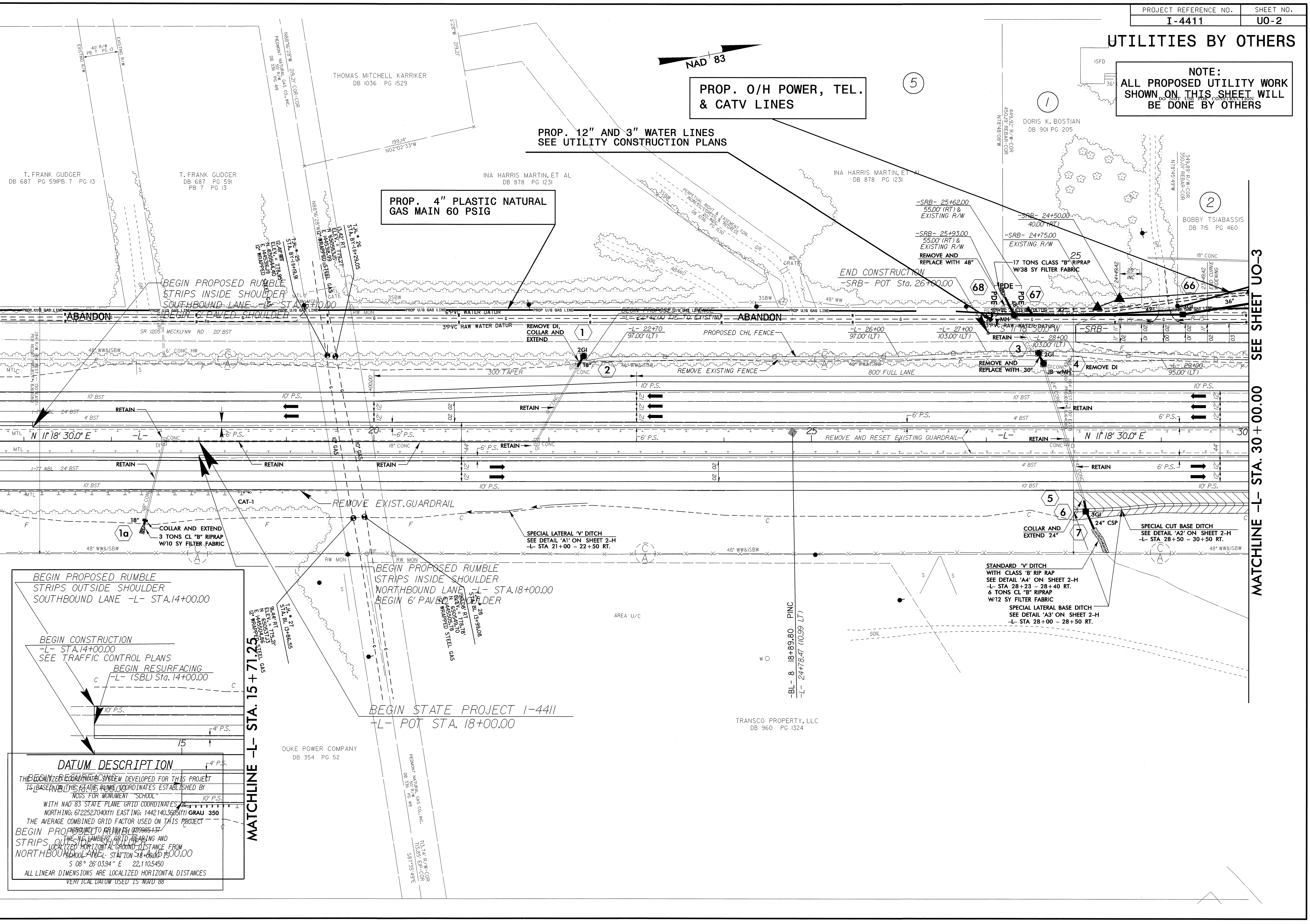
UTILITIES BY OTHERS

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

PROP. 0/H POWER, TEL. & CATV LINES

PROP. 12" AND 3" WATER LINES
SEE UTILITY CONSTRUCTION PLANS

PROP. 4" PLASTIC NATURAL GAS MAIN 60 PSIG



DATUM DESCRIPTION
 THE LOCALIZED GRID SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCSS FOR MONUMENT "SCHOOL"
 WITH NAD 83 STATE PLANE GRID COORDINATES DEPARTING FROM THE MONUMENT "SCHOOL" TO POINT 109985437
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT IS 1.0000000000
 THE NAD 83 STATE PLANE GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "SCHOOL" TO POINT 109985437 IS
 S 08° 26' 03.94" E 22,110.5450
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NGVD 88

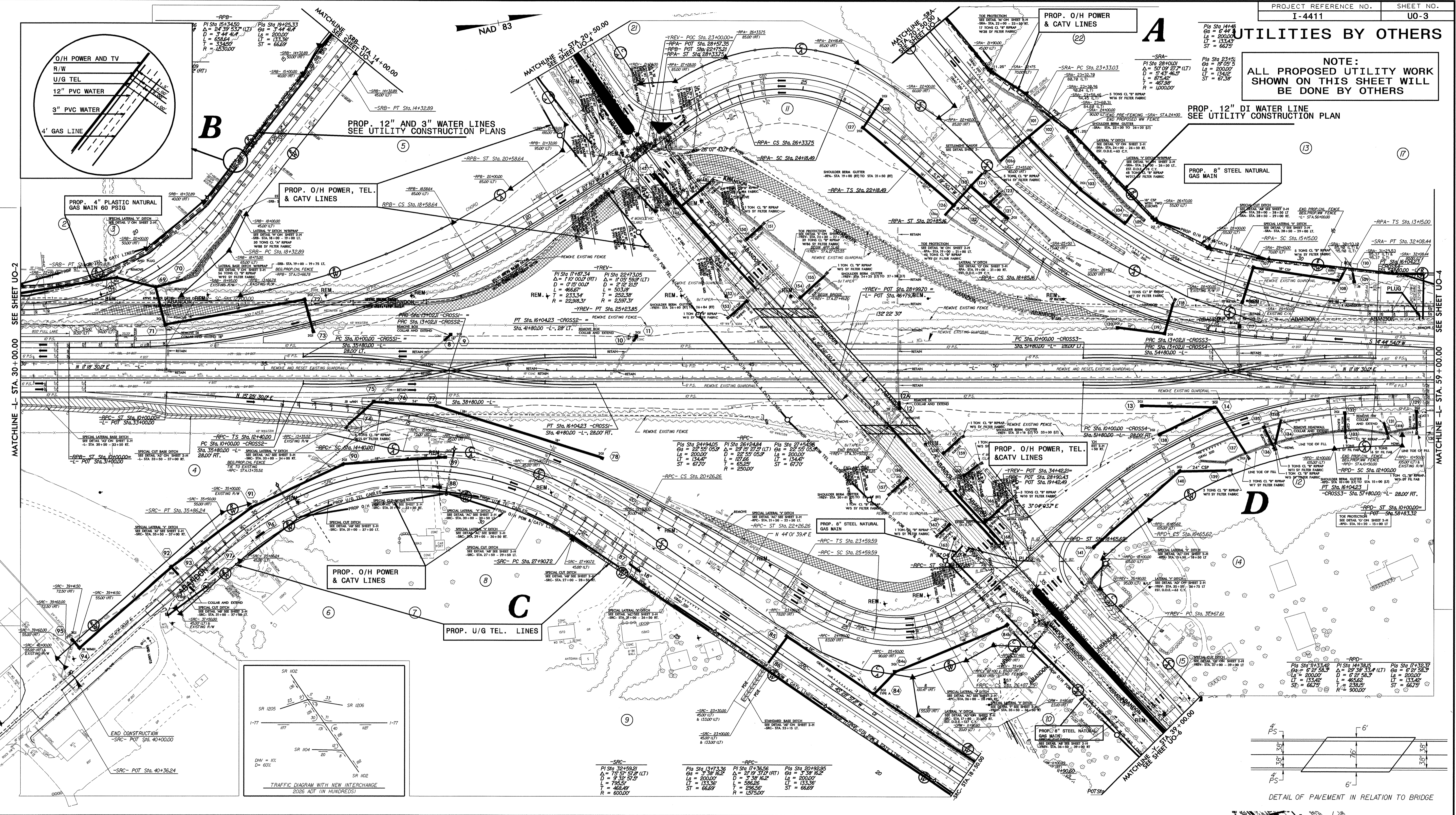
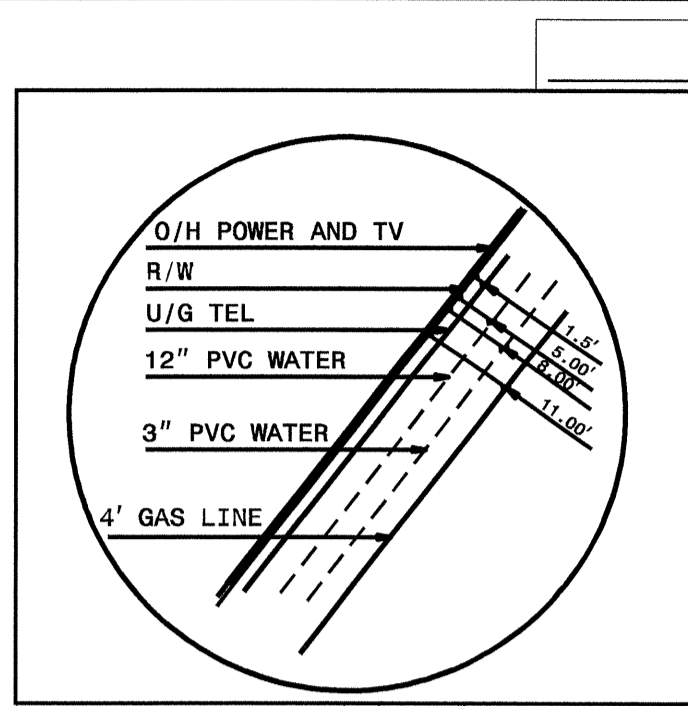
MATCHLINE -L- STA. 15 + 71.25

MATCHLINE -L- STA. 30 + 00.00 SEE SHEET UO-3

8/17/99
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UTILITIES BY OTHERS

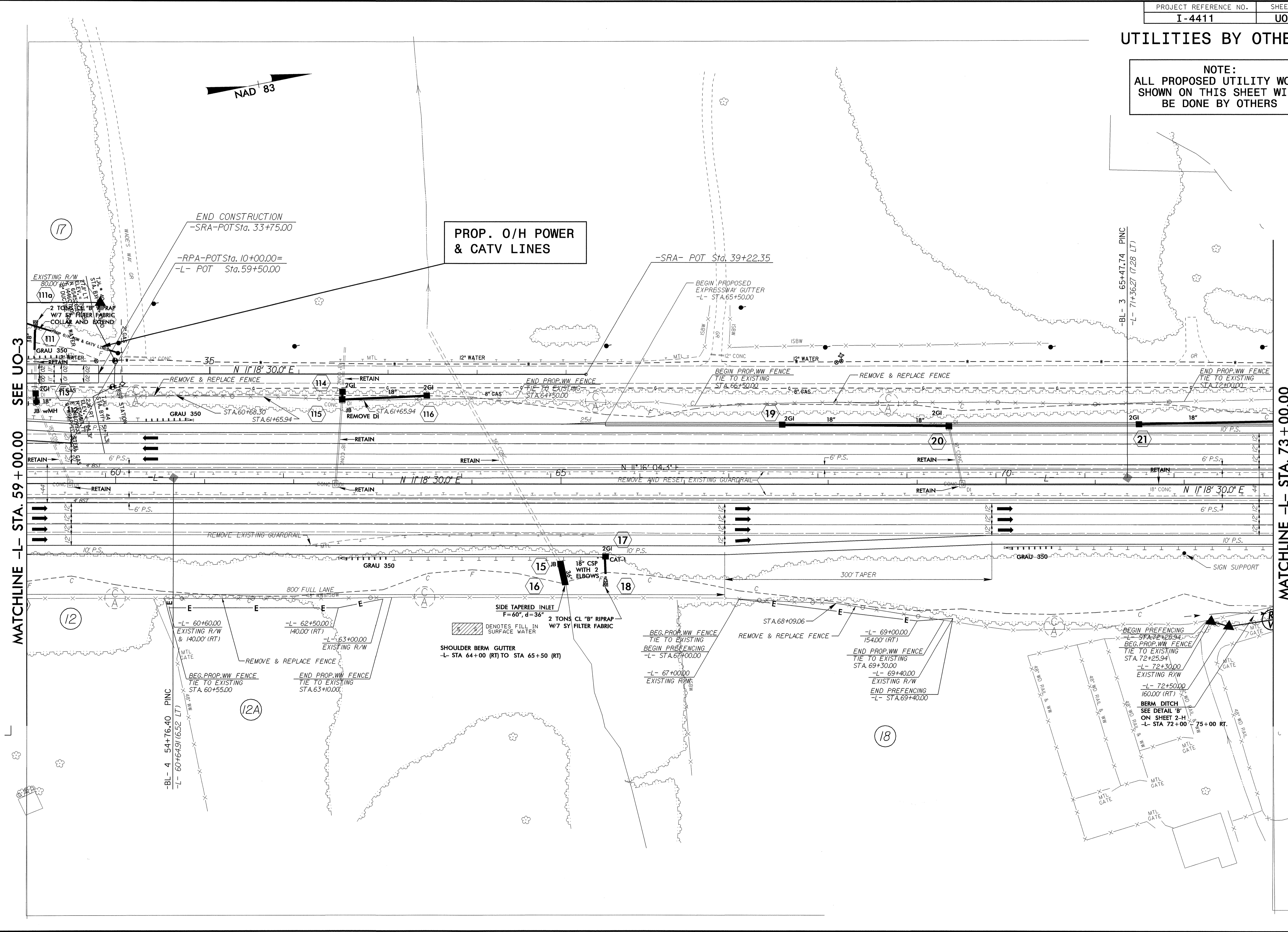
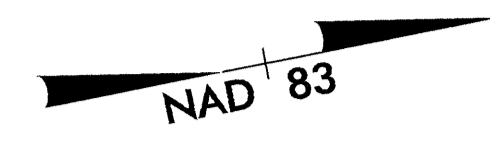
NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS



8/17/09
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14411-03.dwg

UTILITIES BY OTHERS

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



**PROP. O/H POWER
& CATV LINES**

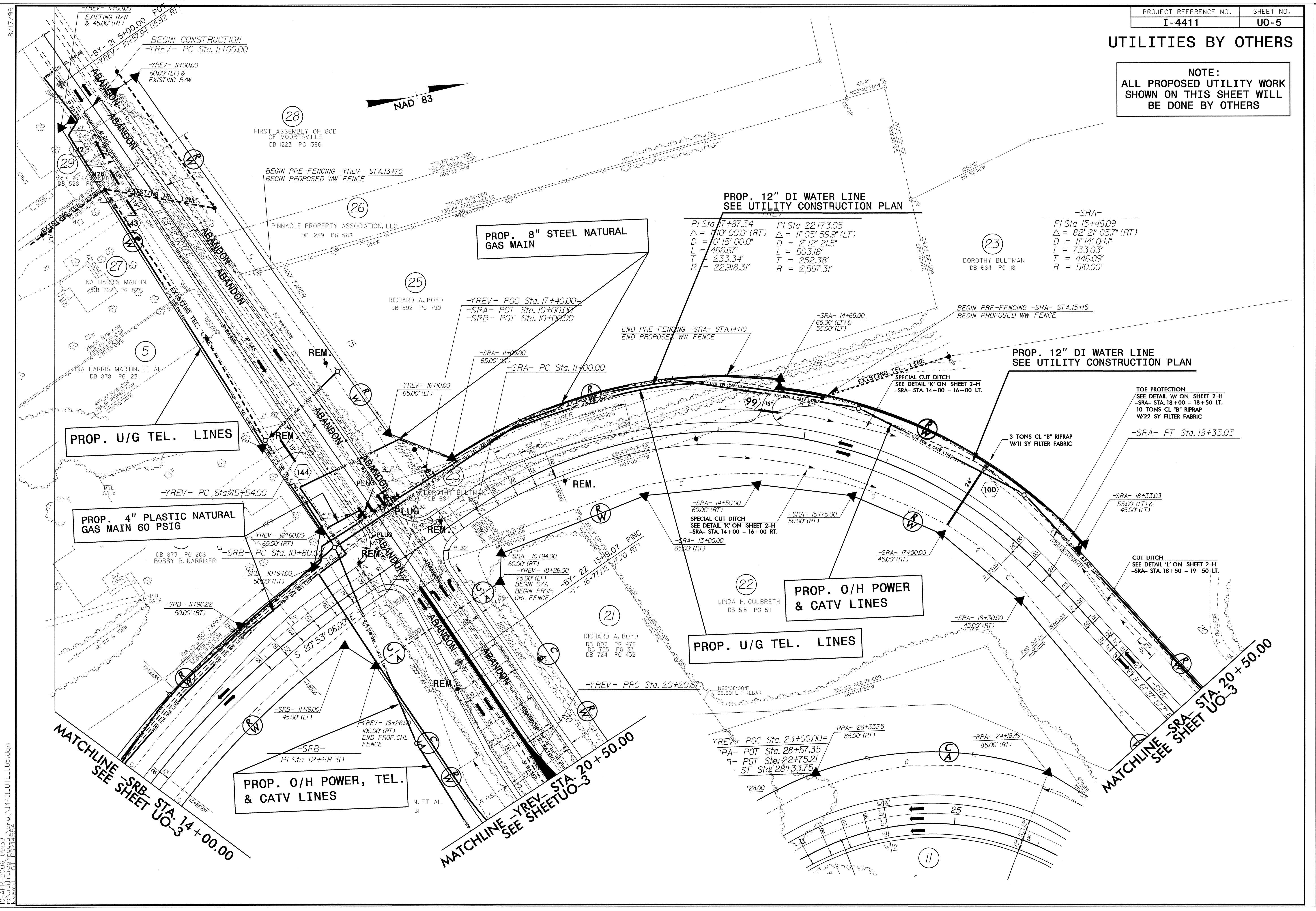
MATCHLINE -L- STA. 59 + 00.00 SEE UO-3

MATCHLINE -L- STA. 73 + 00.00

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kkamil AT 25214554

UTILITIES BY OTHERS

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

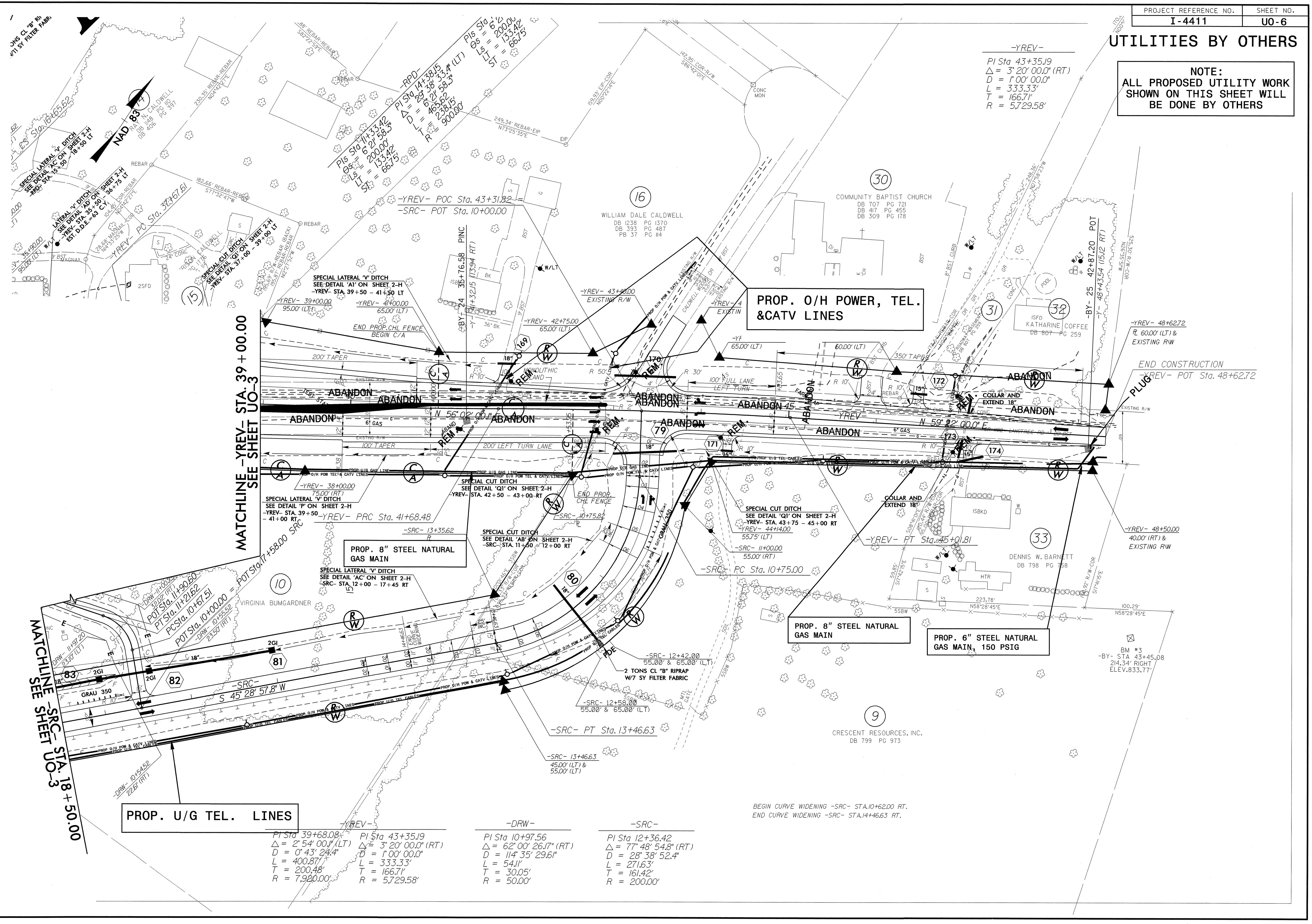


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 rickam1 AT PS214554

UTILITIES BY OTHERS

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

-YREV-
PI Sta. 43+35.19
Δ = 3° 20' 00.0" (RT)
D = 1° 00' 00.0"
L = 333.33'
T = 166.71'
R = 5,729.58'



MATCHLINE -YREV- STA. 39+00.00
SEE SHEET UO-3

MATCHLINE -SRC- STA. 18+50.00
SEE SHEET UO-3

PROP. U/G TEL. LINES

PROP. 0/H POWER, TEL. & CATV LINES

PROP. 8" STEEL NATURAL GAS MAIN

PROP. 8" STEEL NATURAL GAS MAIN

PROP. 6" STEEL NATURAL GAS MAIN, 150 PSIG

-DRW-	-YREV-	-SRC-	-SRC-
PI Sta 39+68.08	PI Sta 43+35.19	PI Sta 10+97.56	PI Sta 12+36.42
Δ = 2° 54' 00.0" (LT)	Δ = 3° 20' 00.0" (RT)	Δ = 62° 00' 26.1" (RT)	Δ = 77° 48' 54.8" (RT)
D = 0° 43' 24.4"	D = 1° 00' 00.0"	D = 114° 35' 29.6"	D = 28° 38' 52.4"
L = 400.87'	L = 333.33'	L = 54.1'	L = 271.63'
T = 200.48'	T = 166.71'	T = 30.05'	T = 161.42'
R = 7,920.00'	R = 5,729.58'	R = 50.00'	R = 200.00'

8/17/99
 10-APR-2006 09:50
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