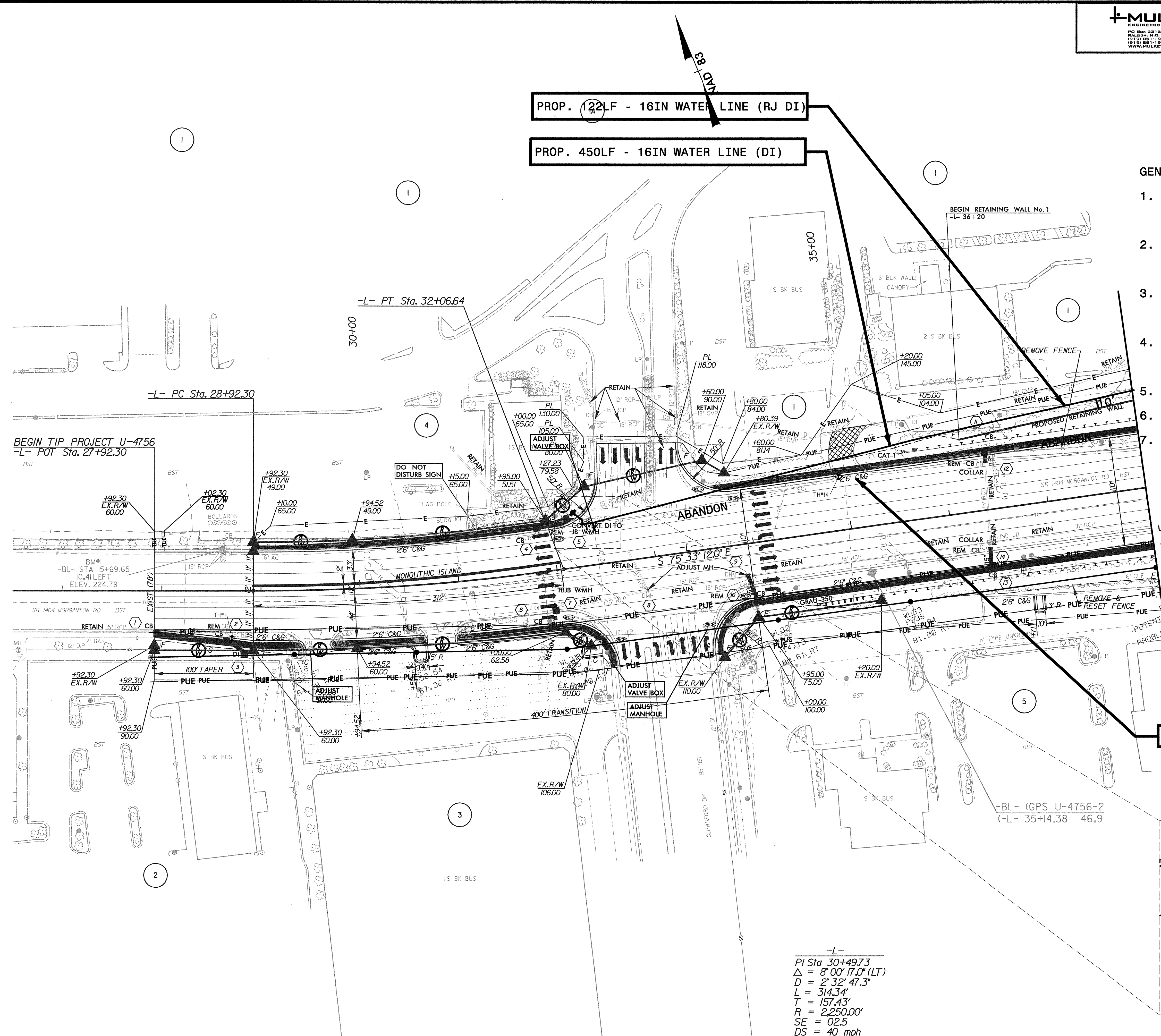


PROP. 122LF - 16IN WATER LINE (RJ DI)
PROP. 450LF - 16IN WATER LINE (DI)

GENERAL NOTES:

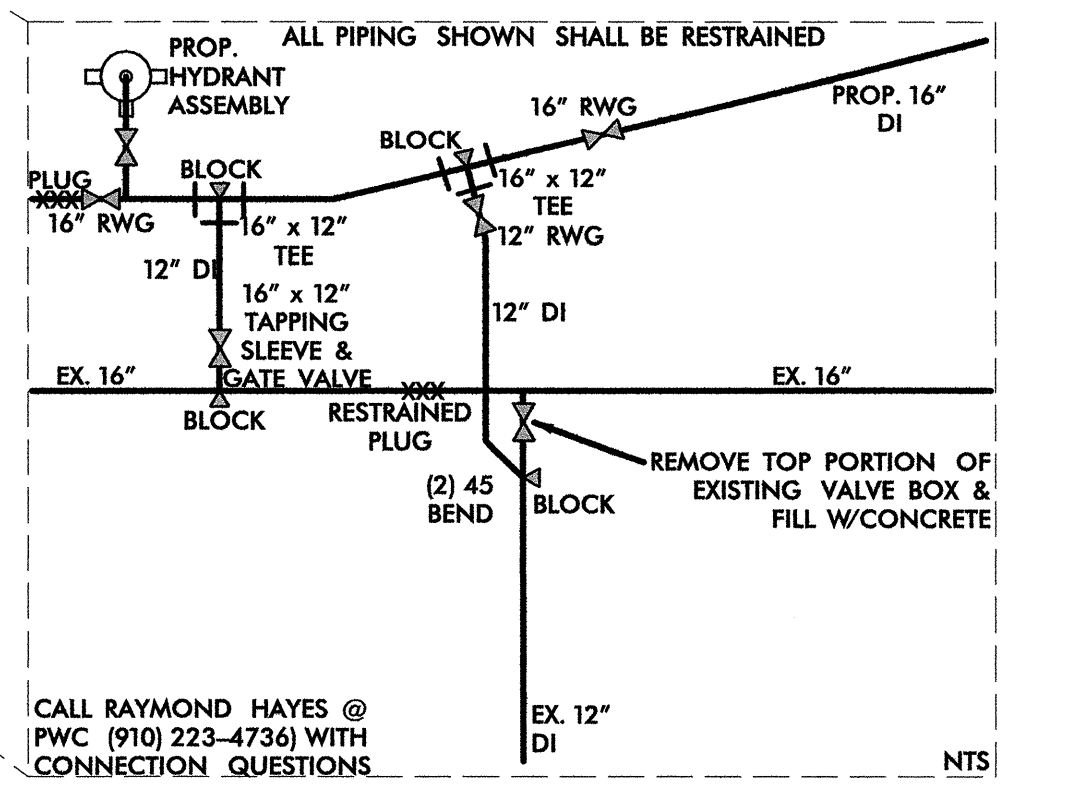
1. THE SHUTDOWN OF WATER LINES FOR RELOCATION SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY OWNER.
2. THE CONTRACTOR SHALL ROTATE PROPOSED BENDS AS NECESSARY TO PROVIDE FOR VERTICAL ALIGNMENT.
3. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LENGTH TO BE RESTRAINED FOR ALL TIE-IN SECTIONS.
4. ALL FITTINGS ARE INCIDENTAL TO THE WATER LINE REFER TO NCDOT STD SPEC 1036 & 1510.
5. TRENCHLESS METHOD TO BE BORE & JACK
6. ALL RESTRAINED JOINT TO BE FLEXIBLE
7. AC TO DI TRANSITIONS ARE INCIDENTAL TO THE WATER LINE.



MATCH TO SHEET 5
-L- STA. 38+00.00

PROP. 541LF - ABANDONED 16IN PIPE

-L-
PI Sta 30+49.73
Δ = 8° 00' 17.0" (LT)
D = 2' 32' 47.3"
L = 314.34'
T = 157.43'
R = 2,250.00'
SE = 02.5
DS = 40 mph



CALL RAYMOND HAYES @ PWC (910) 223-4736 WITH CONNECTION QUESTIONS

8/17/09
5/9/2008
U:\Projects\U-4756_PDW_UC1.dgn

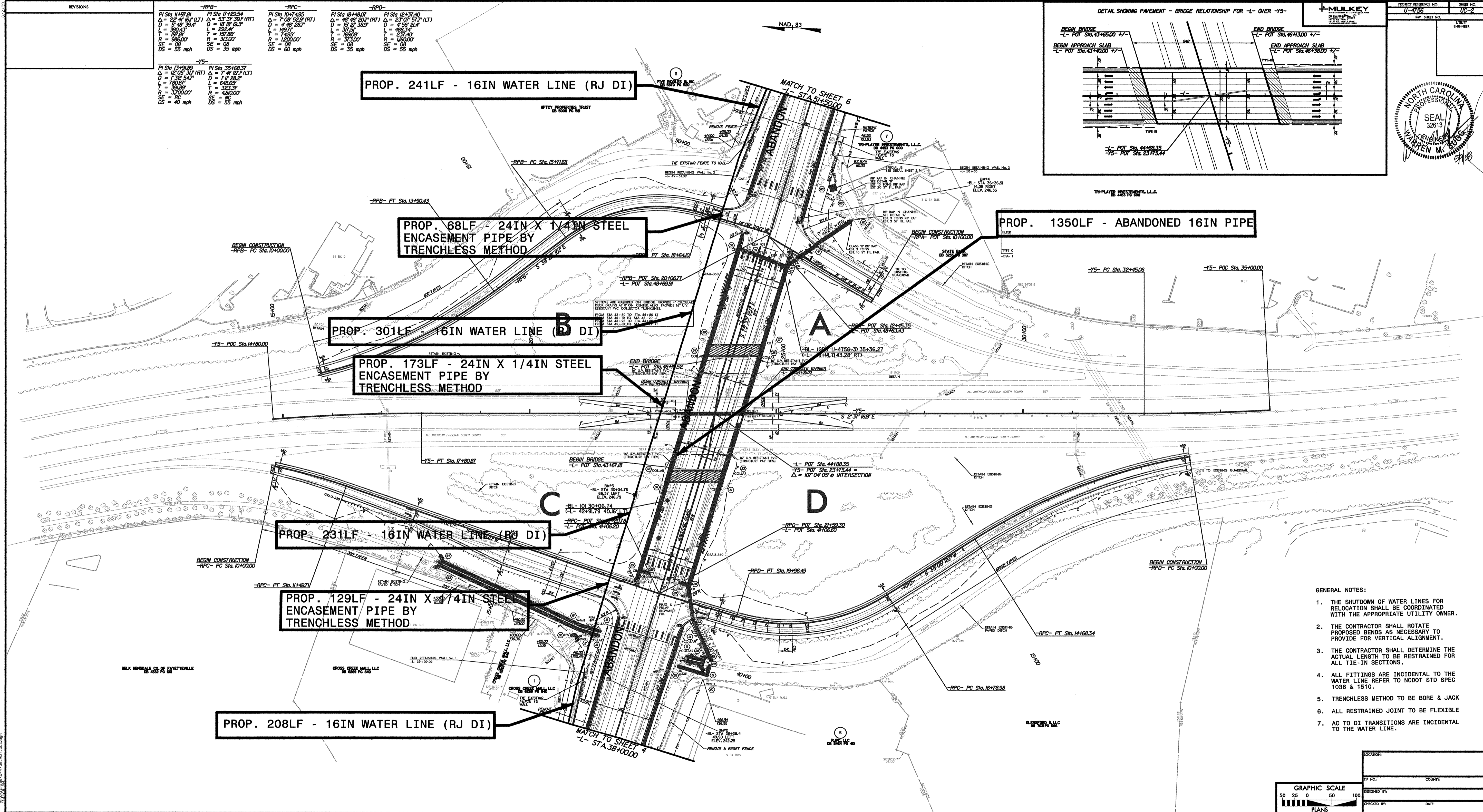
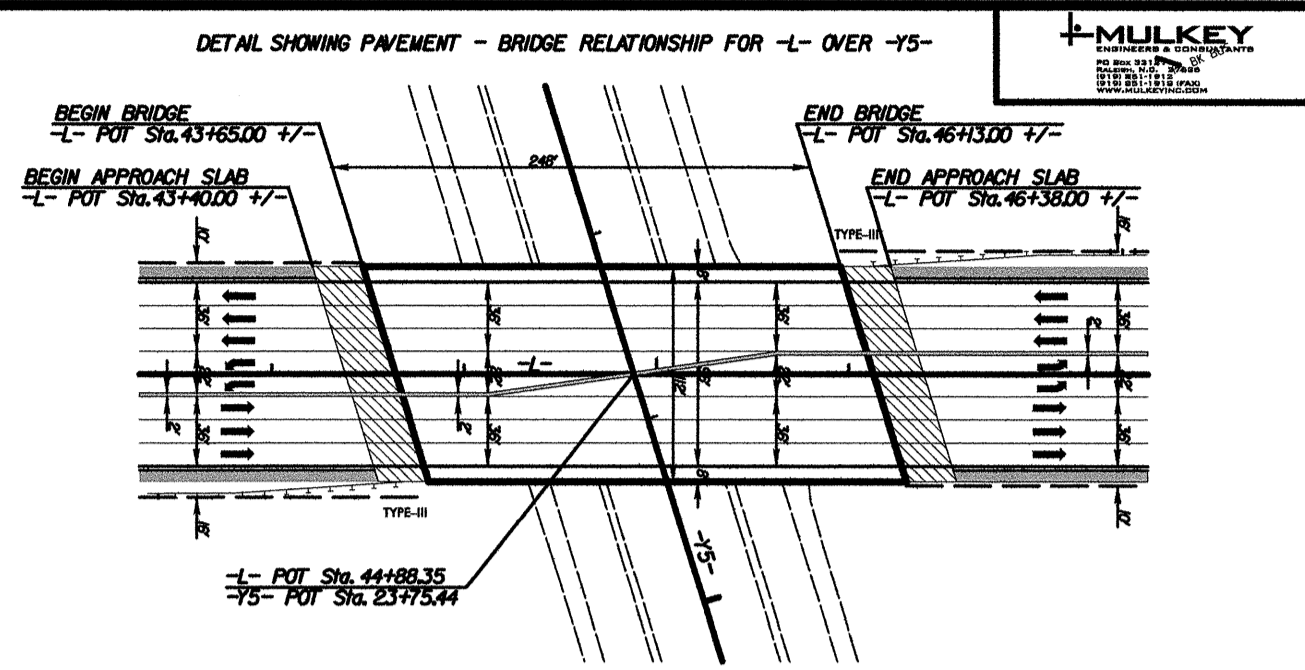
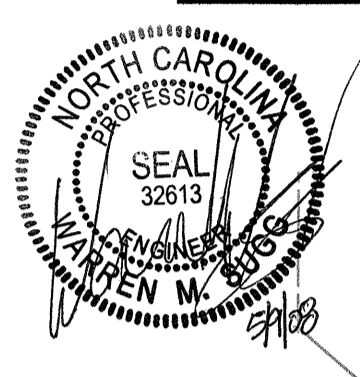
REVISIONS

-RPB-		-RPC-		-RPD-	
PI Sta 11+97.81	PI Sta 17+29.54	PI Sta 10+74.95	PI Sta 10+46.07	PI Sta 12+37.40	PI Sta 12+37.40
$\Delta = 22^{\circ} 41' 52.14" (LT)$	$\Delta = 53^{\circ} 31' 33.14" (RT)$	$\Delta = 71^{\circ} 09' 32.59" (RT)$	$\Delta = 48^{\circ} 48' 20.07" (RT)$	$\Delta = 23^{\circ} 07' 52.21" (LT)$	$\Delta = 23^{\circ} 07' 52.21" (LT)$
D = 5' 46' 39.4"	D = 18' 18' 13.3"	D = 4' 46' 28.7"	D = 15' 27' 58.5"	D = 4' 46' 28.7"	D = 4' 46' 28.7"
L = 390.43'	L = 187.26'	L = 149.71'	L = 317.55'	L = 465.34'	L = 465.34'
T = 187.07'	T = 107.26'	T = 143.57'	T = 165.09'	T = 231.60'	T = 231.60'
R = 985.00'	R = 313.00'	R = 1200.00'	R = 373.00'	R = 1160.00'	R = 1160.00'
SE = 08	SE = 08	SE = 08	SE = 08	SE = 08	SE = 08
DS = 55 mph	DS = 35 mph	DS = 60 mph	DS = 35 mph	DS = 55 mph	DS = 55 mph

-Y5-	
PI Sta 13+49.89	PI Sta 35+66.37
$\Delta = 12^{\circ} 05' 31.14" (RT)$	$\Delta = 7^{\circ} 41' 27.14" (LT)$
D = 1' 32' 54.4"	D = 11' 38.25"
L = 780.87'	L = 645.85'
T = 390.89'	T = 323.31'
R = 3700.00'	R = 4800.00'
SE = 08	SE = 08
DS = 40 mph	DS = 35 mph

PROJECT REFERENCE NO. U-125
SHEET NO. UC-2

MULKEY
REGISTERED PROFESSIONAL ENGINEER
NO. 32613



PROP. 241LF - 16IN WATER LINE (RJ DI)

PROP. 68LF - 24IN X 1/4IN STEEL ENCASEMENT PIPE BY TRENCHLESS METHOD

PROP. 1350LF - ABANDONED 16IN PIPE

PROP. 301LF - 16IN WATER LINE (RJ DI)

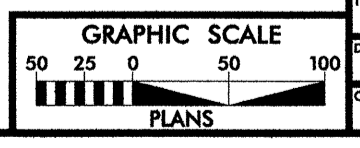
PROP. 173LF - 24IN X 1/4IN STEEL ENCASEMENT PIPE BY TRENCHLESS METHOD

PROP. 231LF - 16IN WATER LINE (RJ DI)

PROP. 129LF - 24IN X 1/4IN STEEL ENCASEMENT PIPE BY TRENCHLESS METHOD

PROP. 208LF - 16IN WATER LINE (RJ DI)

- GENERAL NOTES:
1. THE SHUTDOWN OF WATER LINES FOR RELOCATION SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY OWNER.
 2. THE CONTRACTOR SHALL ROTATE PROPOSED BENDS AS NECESSARY TO PROVIDE FOR VERTICAL ALIGNMENT.
 3. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LENGTH TO BE RESTRAINED FOR ALL TIE-IN SECTIONS.
 4. ALL FITTINGS ARE INCIDENTAL TO THE WATER LINE REFER TO NCDOT STD SPEC 1036 & 1510.
 5. TRENCHLESS METHOD TO BE BORE & JACK
 6. ALL RESTRAINED JOINT TO BE FLEXIBLE
 7. AC TO DI TRANSITIONS ARE INCIDENTAL TO THE WATER LINE.

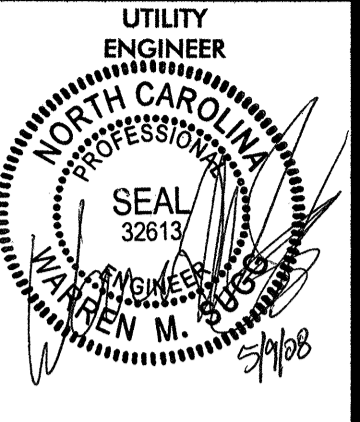


LOCATION: _____
 COUNTY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 DATE: _____

8/17/99



PROJECT REFERENCE NO.	SHEET NO.
U-4756	UC-3
RW SHEET NO.	



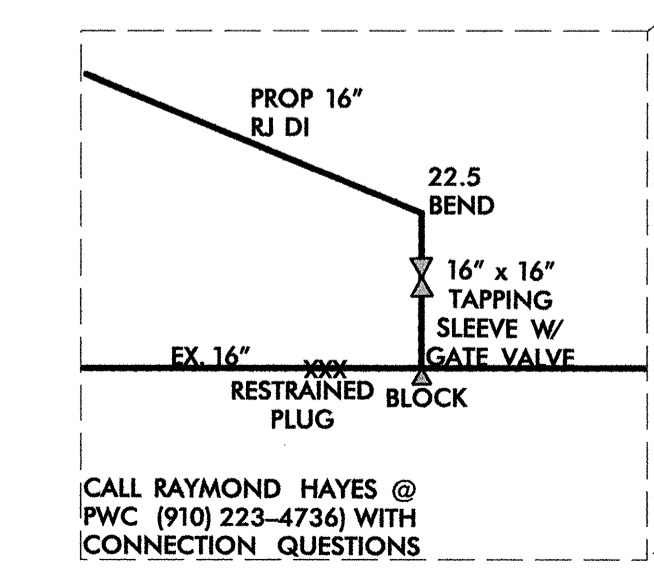
-Y3-
 PI Sta 11+40.87
 $\Delta = 29^{\circ}05'46.0'' (RT)$
 $D = 10^{\circ}33'19.6''$
 $L = 275.65'$
 $T = 140.87'$
 $R = 542.81'$
 $SE = 04$
 $DS = 40 \text{ mph}$

PROP. 363LF - 16IN WATER LINE (RJ DI)

GENERAL NOTES:

1. THE SHUTDOWN OF WATER LINES FOR RELOCATION SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY OWNER.
2. THE CONTRACTOR SHALL ROTATE PROPOSED BENDS AS NECESSARY TO PROVIDE FOR VERTICAL ALIGNMENT.
3. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LENGTH TO BE RESTRAINED FOR ALL TIE-IN SECTIONS.
4. ALL FITTINGS ARE INCIDENTAL TO THE WATER LINE REFER TO NCDOT STD SPEC 1036 & 1510.
5. TRENCHLESS METHOD TO BE BORE & JACK
6. ALL RESTRAINED JOINT TO BE FLEXIBLE
7. AC TO DI TRANSITIONS ARE INCIDENTAL TO THE WATER LINE.

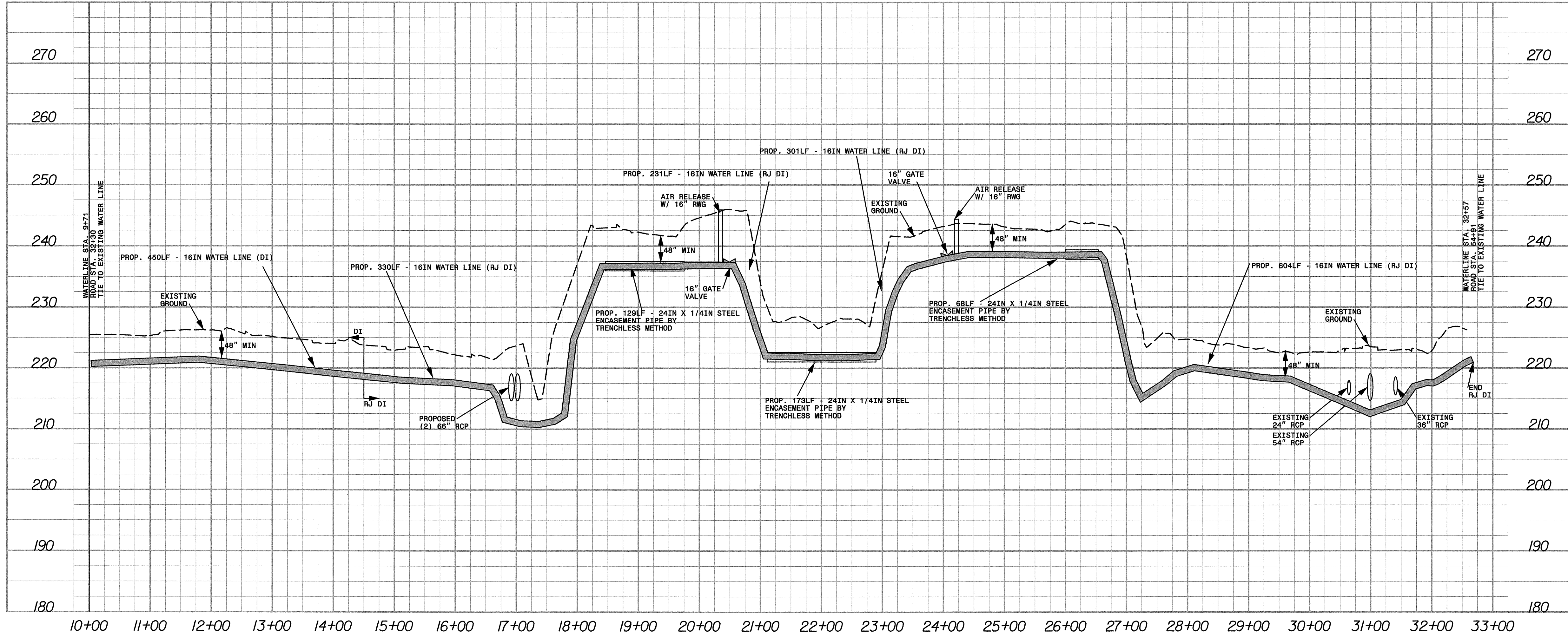
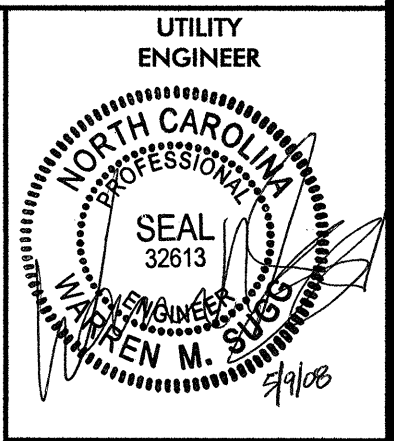
PROP. 333LF - ABANDONED 16IN PIPE



MATCH TO SHEET 5
-L- STA. 51+50.00

END TIP PROJECT
-L- POT Sta. 59+50.00

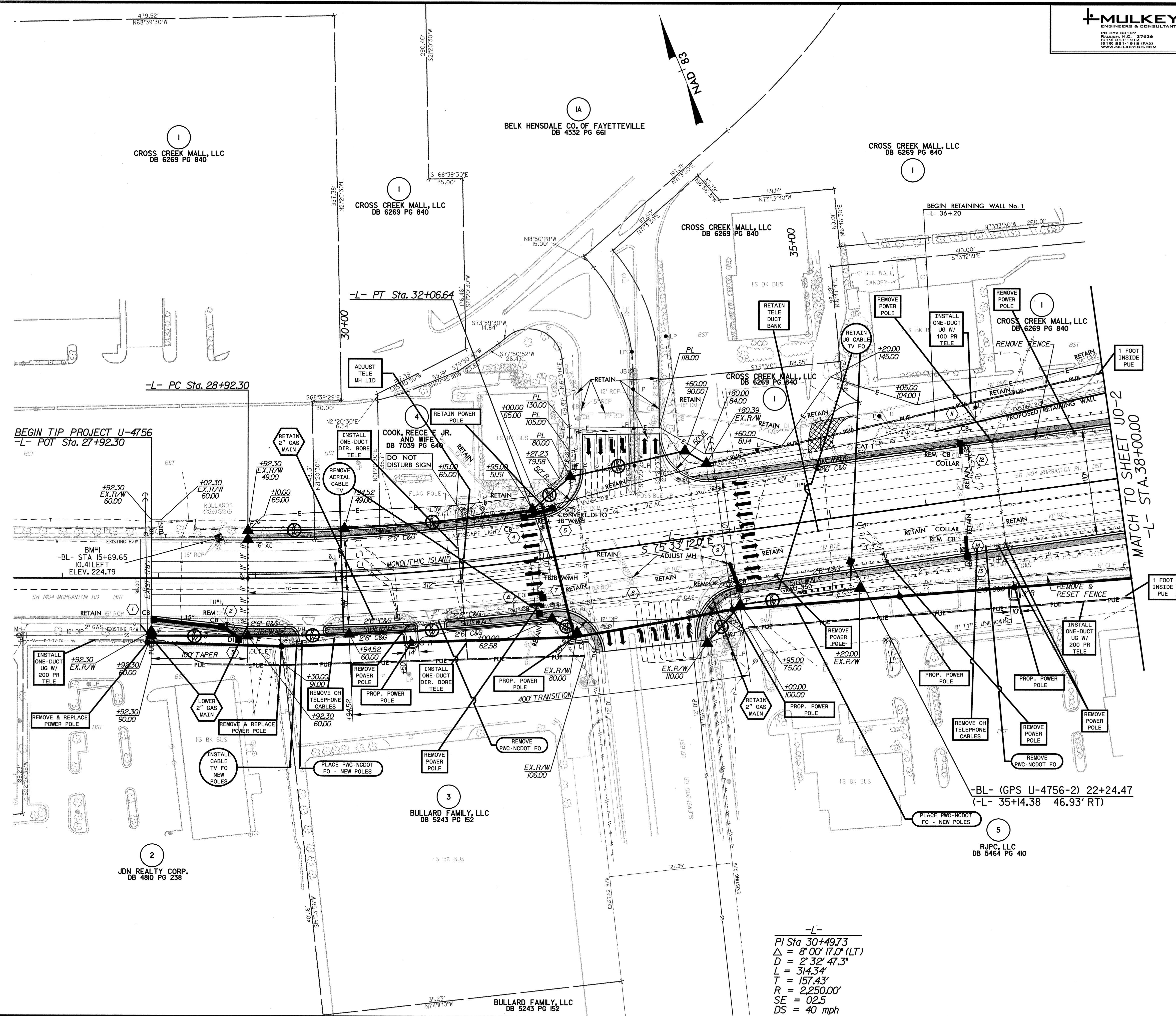
5/9/2008
R:\Projects\U-4756-FDY_UC3.dgn
11:56:04 AM



8/17/99

REVISIONS

8/5/2008
S:\Projects\U-4756-RDY_U01.dgn



-L-
PI Sta 30+49.73
Δ = 8'00" 17.0' (LT)
D = 2'32' 47.3"
L = 314.34'
T = 157.43'
R = 2,250.00'
SE = 02.5
DS = 40 mph

BEGIN TIP PROJECT U-4756
-L- POT Sta. 27+92.30

-L- PC Sta. 28+92.30

-L- PT Sta. 32+06.64

-BL- (GPS U-4756-2) 22+24.47
(-L- 35+14.38 46.93' RT)

MATCH TO SHEET U0-2
-L- STA. 38+00.00

CROSS CREEK MALL, LLC
DB 6269 PG 840

CROSS CREEK MALL, LLC
DB 6269 PG 840

IA
BELK HENSDALE CO. OF FAYETTEVILLE
DB 4332 PG 661

CROSS CREEK MALL, LLC
DB 6269 PG 840

CROSS CREEK MALL, LLC
DB 6269 PG 840

CROSS CREEK MALL, LLC
DB 6269 PG 840

COOK, REECE JR.
AND WIFE
DB 7039 PG 649

3
BULLARD FAMILY, LLC
DB 5243 PG 152

2
JDN REALTY CORP.
DB 4810 PG 236

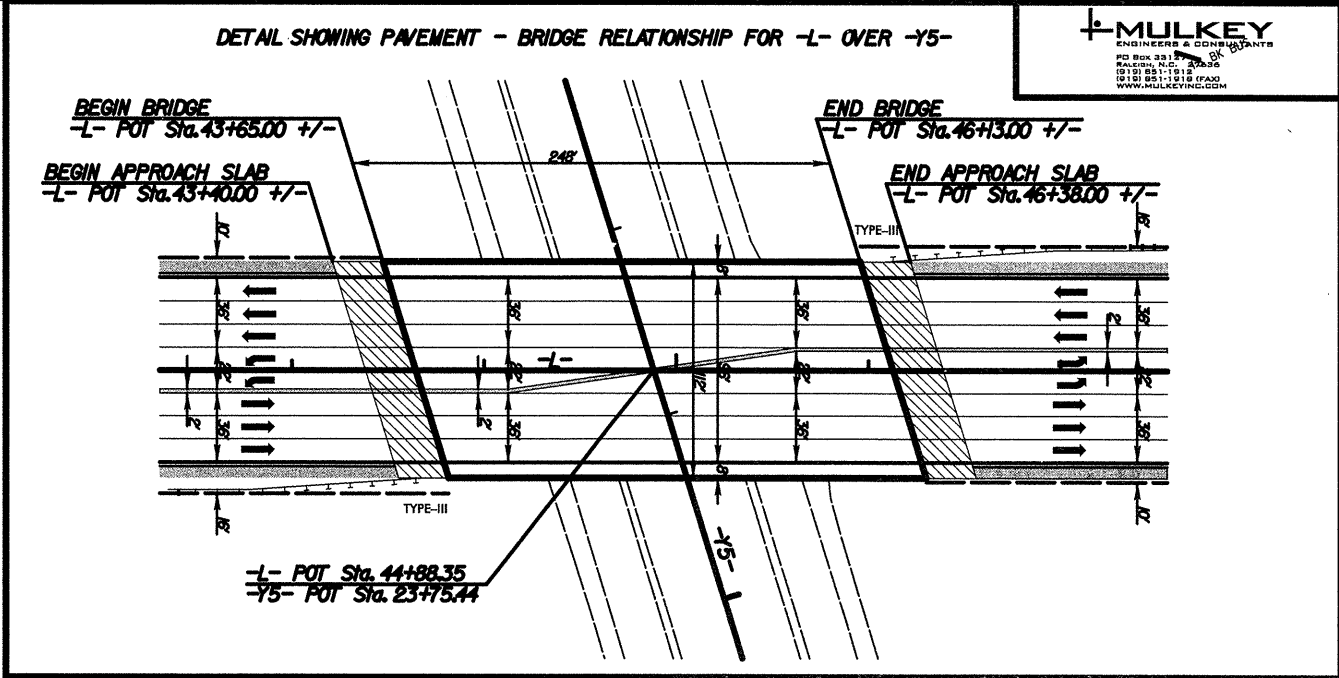
5
RJPC, LLC
DB 5464 PG 410

BULLARD FAMILY, LLC
DB 5243 PG 152

REVISIONS

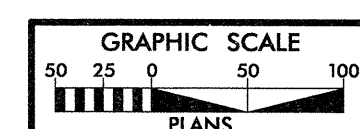
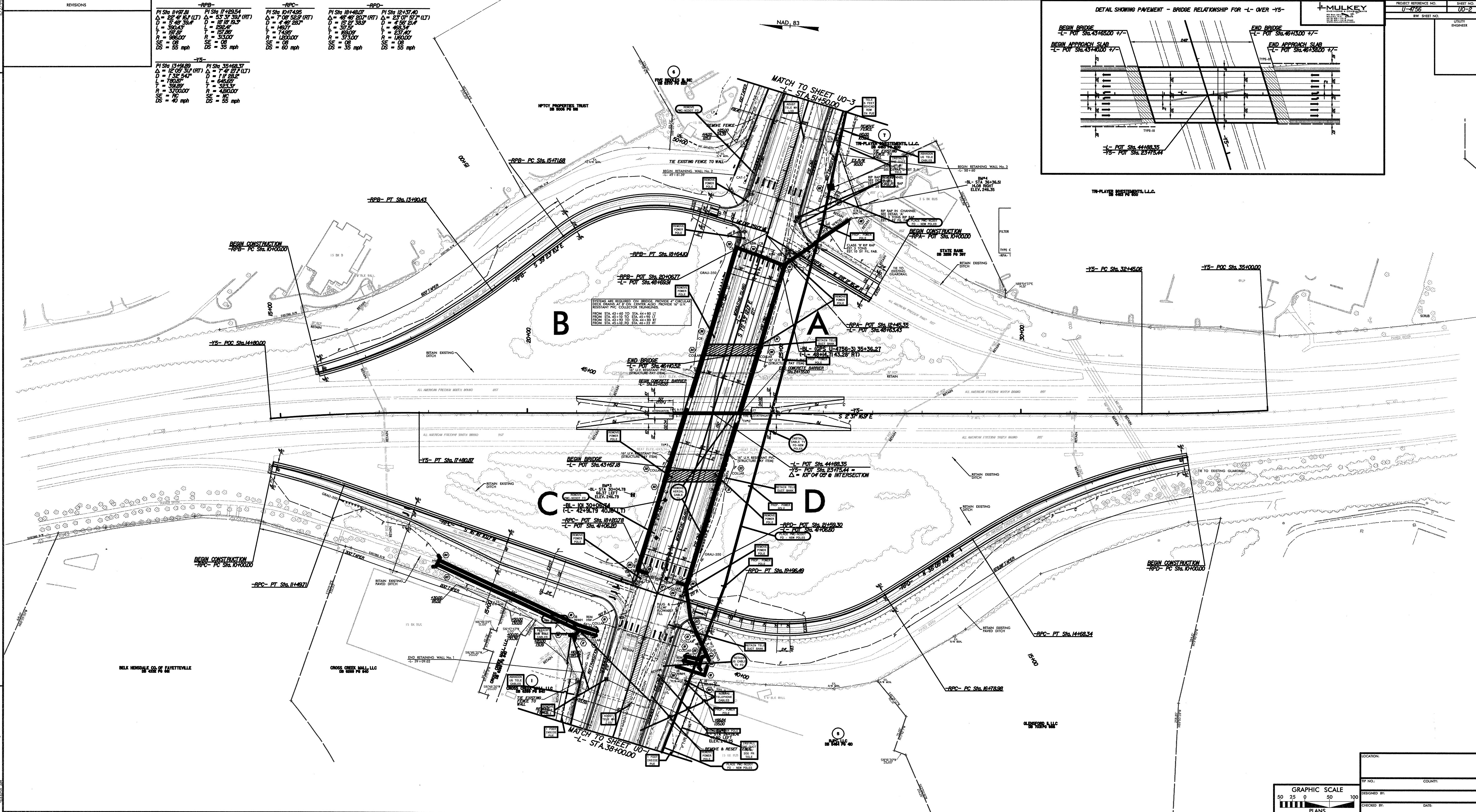
-RPB-		-RPC-		-RPD-	
PI Sta 11+97.81	PI Sta 11+29.54	PI Sta 10+74.95	PI Sta 10+48.07	PI Sta 12+37.40	PI Sta 12+37.40
$\Delta = 52^\circ 41' 56" (LT)$	$\Delta = 53^\circ 37' 39" (RT)$	$\Delta = 7^\circ 08' 52" (RT)$	$\Delta = 48^\circ 43' 50" (RT)$	$\Delta = 23^\circ 07' 57" (LT)$	$\Delta = 23^\circ 07' 57" (LT)$
D = 548.38'	D = 1818.53'	D = 448.92'	D = 1515.32'	D = 452.54'	D = 452.54'
L = 300.43'	L = 828.4'	L = 140.7'	L = 37.5'	L = 463.4'	L = 463.4'
T = 191.6'	T = 137.5'	T = 140.5'	T = 160.8'	T = 237.4'	T = 237.4'
R = 986.00'	R = 315.00'	R = 140.00'	R = 573.00'	R = 140.00'	R = 140.00'
SE = 08	SE = 08	SE = 08	SE = 08	SE = 08	SE = 08
DS = 55 mph	DS = 55 mph	DS = 55 mph	DS = 35 mph	DS = 55 mph	DS = 55 mph

-Y5-	
PI Sta 13+91.89	PI Sta 35+69.37
$\Delta = 12^\circ 02' 31" (RT)$	$\Delta = 7^\circ 47' 27" (LT)$
D = 1325.54'	D = 1118.52'
L = 180.57'	L = 118.25'
T = 392.59'	T = 323.33'
R = 3703.00'	R = 4300.00'
SE = 08	SE = 08
DS = 40 mph	DS = 55 mph



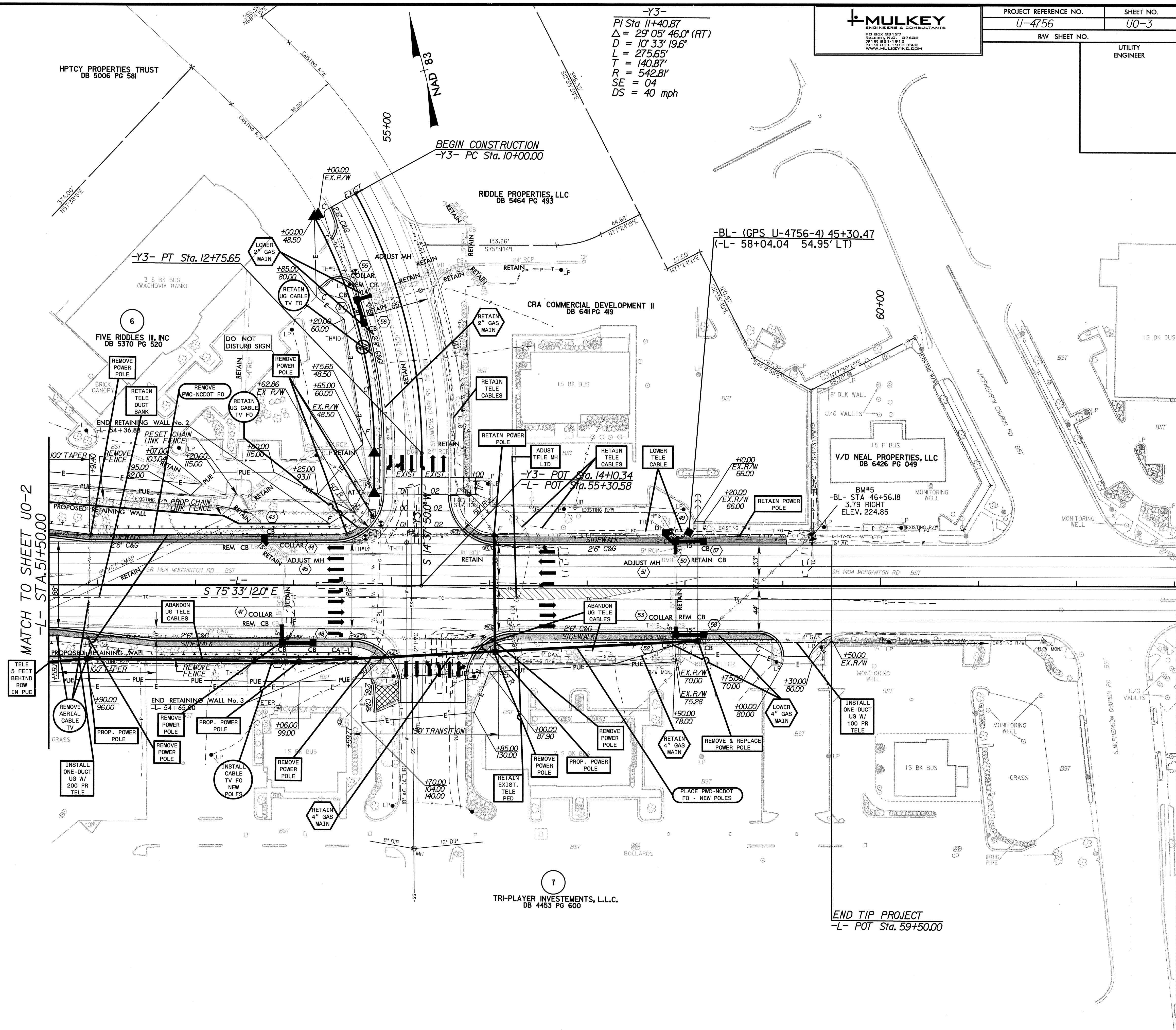
PROJECT REFERENCE NO. U-4756
SHEET NO. UO-2
REV. SHEET NO.
UTILITY ENGINEER

6-04-08 CHANGED LOCATION OF EMBARCO'S DUCT FROM 1' INSIDE PILE TO 5' BEHIND ROW LINE.



LOCATION: _____
 COUNTY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 DATE: _____

-Y3-
PI Sta 11+40.87
 $\Delta = 29^{\circ} 05' 46.0''$ (RT)
D = 10' 33' 19.6"
L = 275.65'
T = 140.87'
R = 542.81'
SE = 04
DS = 40 mph



6-04-08 CHANGED LOCATION OF EMBARCO'S DUCT FROM 1' INSIDE PUE TO 5' BEHIND ROW LINE.

REVISIONS

MATCH TO SHEET U0-2
-L- STA. 51+50.00

END TIP PROJECT
-L- POT Sta. 59+50.00