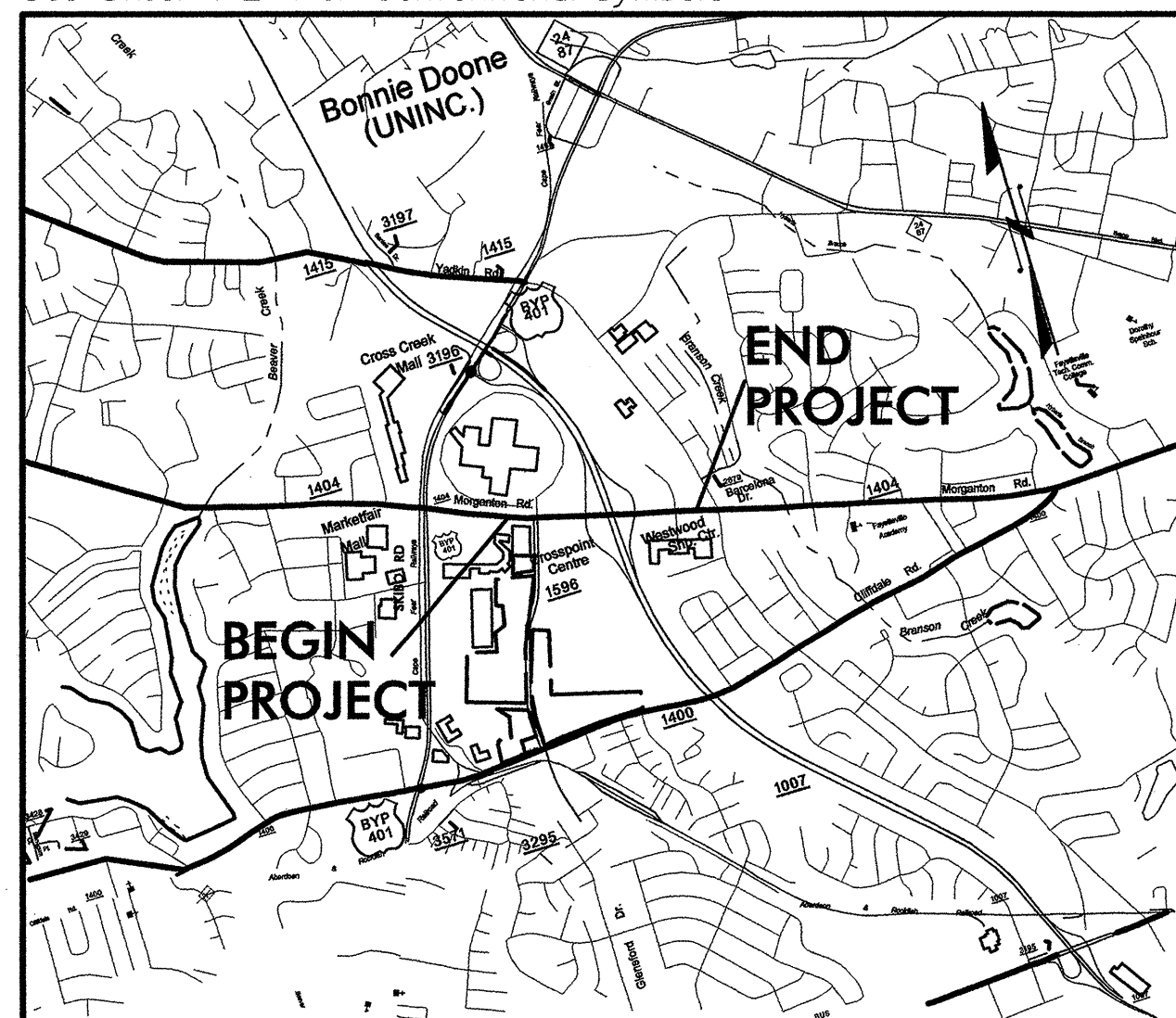


See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols



VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**CUMBERLAND COUNTY**  
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

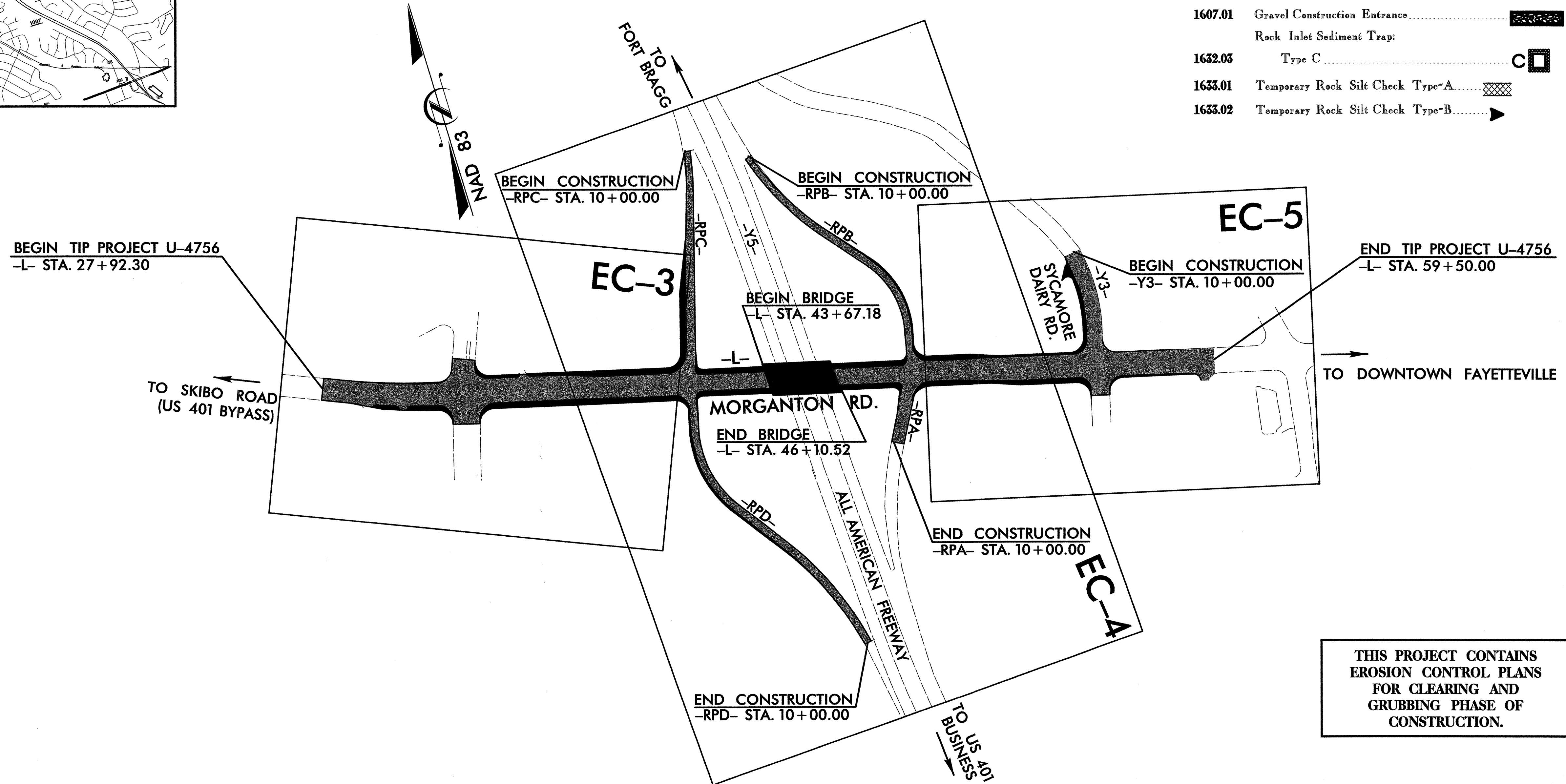
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4756	EC-1	
WBS NO.	F.A. PROJ. NO.	DESCRIPTION	
39750.1.1	STP-1404(9)	P.E.	
39750.2.1	STP-1404(9)	RW, UTL	
39750.3.1	STP-1404(9)	CONST	

EROSION AND SEDIMENT CONTROL MEASURES

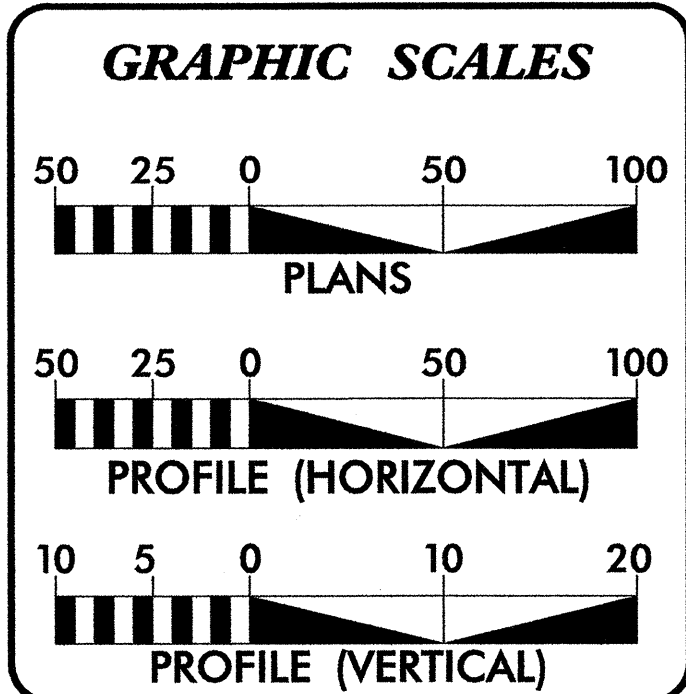
Sed. #	Description	Symbol
1605.01	Temporary Silt Fence	
1607.01	Gravel Construction Entrance Rock Inlet Sediment Trap:	
1632.03	Type C	
1633.01	Temporary Rock Silt Check Type-A	
1633.02	Temporary Rock Silt Check Type-B	

TIP PROJECT: U-4756

CONTRACT: C201461



THIS PROJECT CONTAINS  
EROSION CONTROL PLANS  
FOR CLEARING AND  
GRUBBING PHASE OF  
CONSTRUCTION.



**DESIGN DATA**

ADT 2008 =  
ADT 2030 = 59,700  
DHV = 9 %  
D = 60 %  
T = 3 % \*  
V = 40 MPH  
(\* TTST 2 % + DUAL 1 %)  
FUNC. CLASS:  
URBAN ARTERIAL

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence  
1607.01 Gravel Construction Entrance  
1632.03 Rock Inlet Sediment Trap Type C  
1633.01 Temporary Rock Silt Check Type A  
1633.02 Temporary Rock Silt Check Type B

Prepared In the Office of:

**MULKEY**  
ENGINEERS & CONSULTANTS  
FOR  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
FEBRUARY 16, 2007

LETTING DATE:  
OCTOBER 16, 2007

NCDOT CONTACTS: TRACEY PITTMAN, PE  
MIKE SUMMERS, PE

TIM JORDAN, PE  
PROJECT ENGINEER

DAVID BOCKER, PE  
HYDRAULICS ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

8/29/2007  
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PROJECT REFERENCE NO. <b>U-4756</b>	SHEET NO. <b>EC-2</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-02

ENGLISH STANDARD DRAWING FOR

**TEMPORARY SILT FENCE**

SHEET 1 OF 1  
**1605.01**

NOTES:  
USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.  
USE FILTER FABRIC A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.  
PROVIDE 5' STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.  
USE 6' WOOD POST WITH 3" DIAMETER.

ENGLISH STANDARD DRAWING FOR

**TEMPORARY SILT FENCE**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-02

SHEET 1 OF 1  
**1605.01**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

7-06

ENGLISH STANDARD DRAWING FOR

**GRAVEL CONSTRUCTION ENTRANCE**

SHEET 1 OF 1  
**1607.01**

NOTES:  
1. PROVIDE TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS.  
2. LOCATE ENTRANCE(S) TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.  
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.  
4. ANY MATERIAL TRACKED ON THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.  
5. LOCATE GRAVEL CONSTRUCTION ENTRANCE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. PROVIDE FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE.  
6. NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER.  
7. USE CLASS 'A' STONE OR OTHER COARSE AGGREGATE APPROVED BY THE ENGINEER.

NOTE: PLACE FILTER FABRIC BENEATH STONE

ENGLISH STANDARD DRAWING FOR

**GRAVEL CONSTRUCTION ENTRANCE**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

7-06

SHEET 1 OF 1  
**1607.01**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-02

ENGLISH STANDARD DRAWING FOR

**ROCK INLET SEDIMENT TRAP TYPE 'C'**

SHEET 1 OF 1  
**1632.03**

NOTE:  
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL AND PAY FOR AT THE CONTRACT UNIT PRICE PER TON SEDIMENT CONTROL STONE.  
USE HARDWARE CLOTH 24 GAUGE WIRE MESH WITH 1/4 INCH MESH OPENINGS.  
PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.  
INSTALL 6 FT. SELF FASTENER ANGLE STEEL POSTS 1.5 FT. DEEP MINIMUM.  
INSTALL 6 FT. TALL, 3 IN. DIA. WOOD POST 1.5 FT. DEEP MINIMUM.  
SPACE POSTS A MAXIMUM OF 4 FT.

ENGLISH STANDARD DRAWING FOR

**ROCK INLET SEDIMENT TRAP TYPE 'C'**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-02

SHEET 1 OF 1  
**1632.03**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-02

ENGLISH STANDARD DRAWING FOR

**TEMPORARY ROCK SILT CHECK TYPE 'A'**

SHEET 1 OF 1  
**1633.01**

NOTE:  
USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE AND PAY FOR AT THE CONTRACT UNIT PRICE PER TON STONE FOR EROSION CONTROL, CLASS B.  
USE NO. 5 OR NO 57 STONE FOR SEDIMENT CONTROL AND PAY FOR AT THE CONTRACT UNIT PRICE PER TON SEDIMENT CONTROL STONE.

ENGLISH STANDARD DRAWING FOR

**TEMPORARY ROCK SILT CHECK TYPE 'A'**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

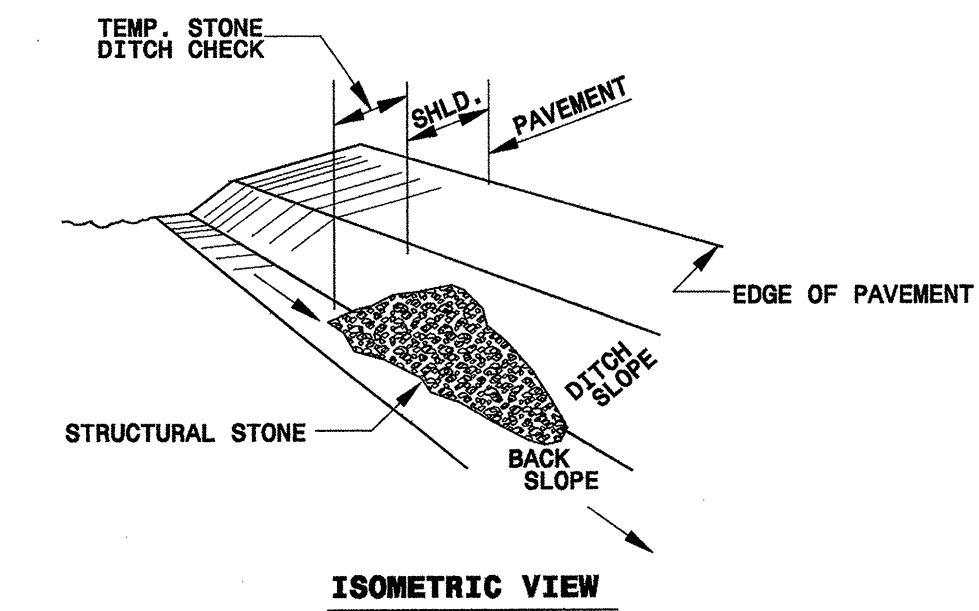
1-02

SHEET 1 OF 1  
**1633.01**

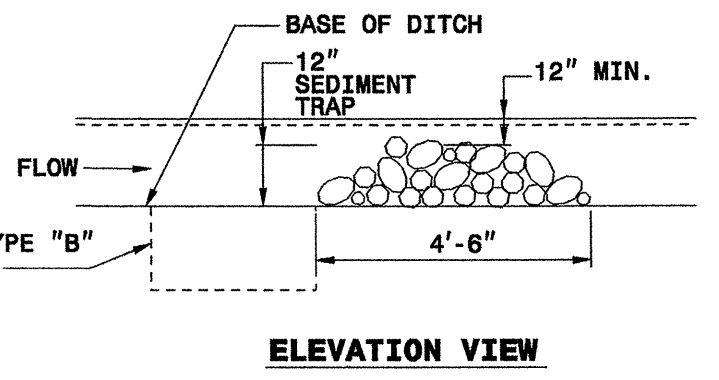
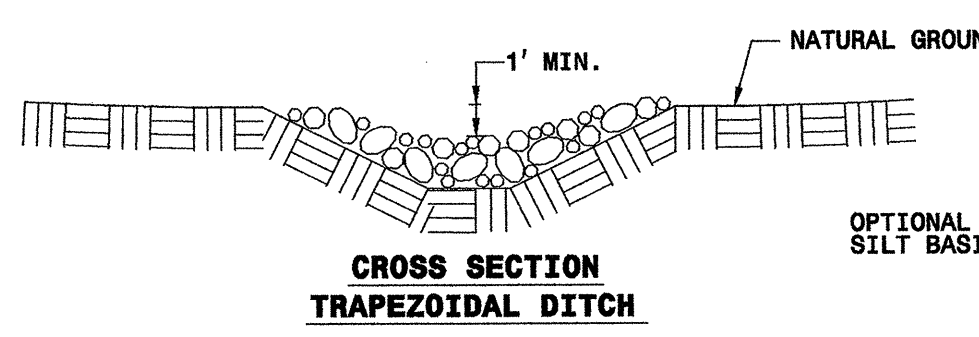
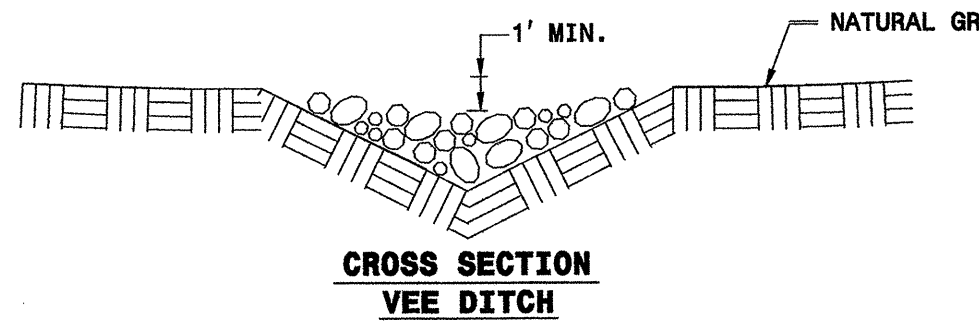
PROJECT REFERENCE NO. U-4756	SHEET NO. EC-3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-02  
ENGLISH STANDARD DRAWING FOR  
TEMPORARY ROCK SILT CHECK TYPE 'B'  
SHEET 1 OF 1  
1633.02



NOTES:  
USE CLASS "B" STONE FOR STRUCTURAL STONE FOR EROSION CONTROL AND PAY FOR AT THE CONTRACT UNIT PRICE PER TON 'STONE FOR EROSION CONTROL CLASS "B"'.  
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%. PAY FOR AT UNIT PRICE PER TON 'STONE FOR EROSION CONTROL CLASS "A"'.  
SHEET 1 OF 1  
1633.02



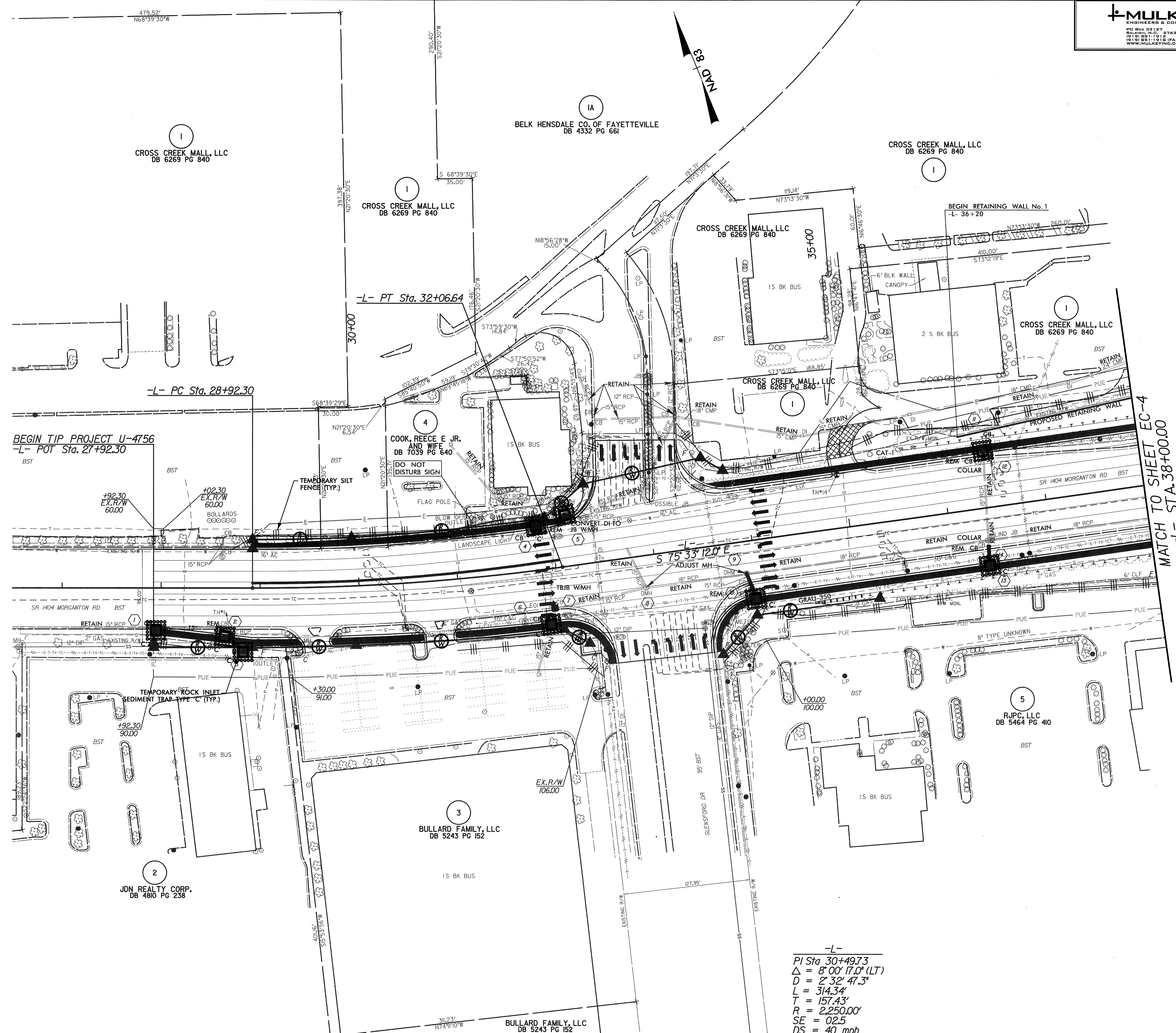
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-02  
ENGLISH STANDARD DRAWING FOR  
TEMPORARY ROCK SILT CHECK TYPE 'B'  
SHEET 1 OF 1  
1633.02

8/17/99



PROJECT REFERENCE NO. U-4756		SHEET NO. EC-4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



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

-L- PC Sta. 28+92.30

-L- PT Sta. 32+06.64

MATCH TO SHEET EC-4  
-L- STA 38+00.00

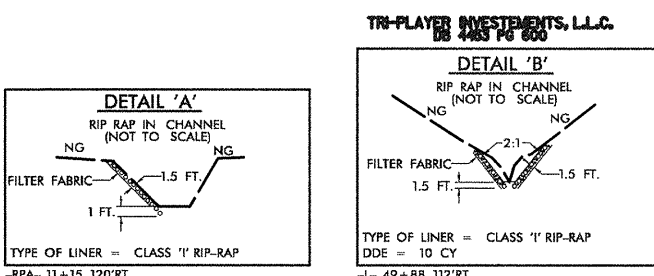
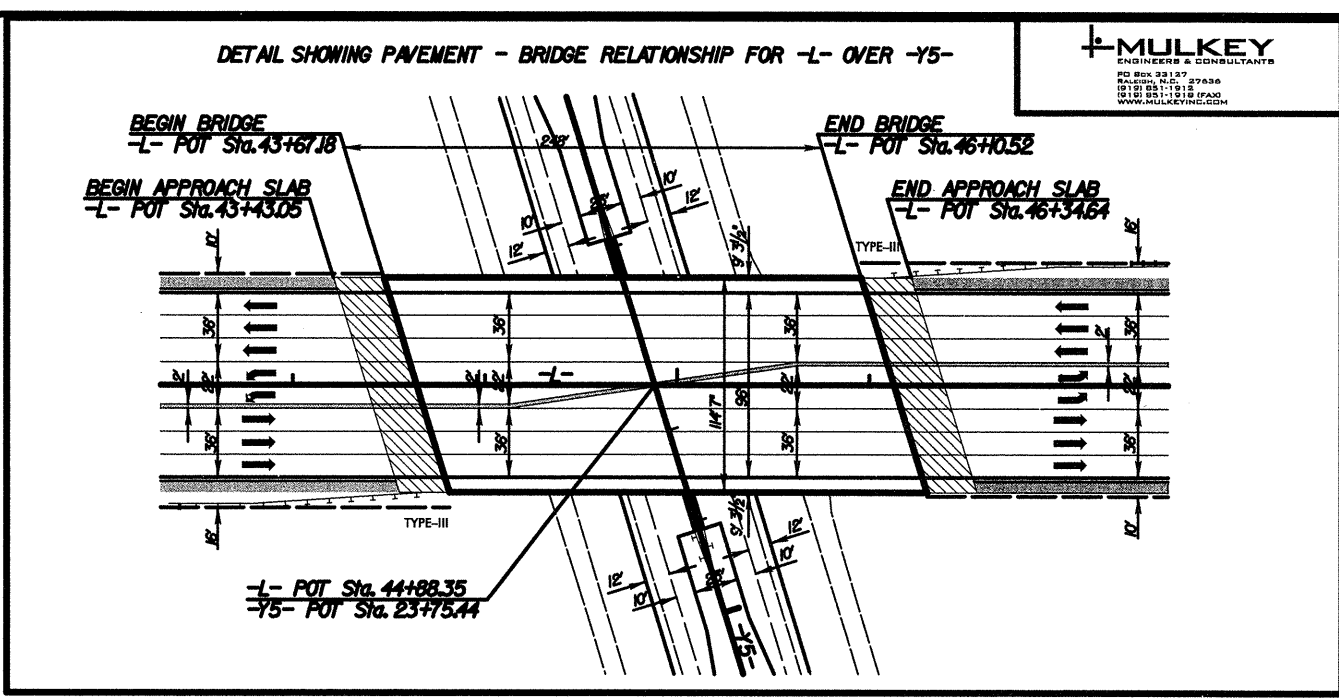
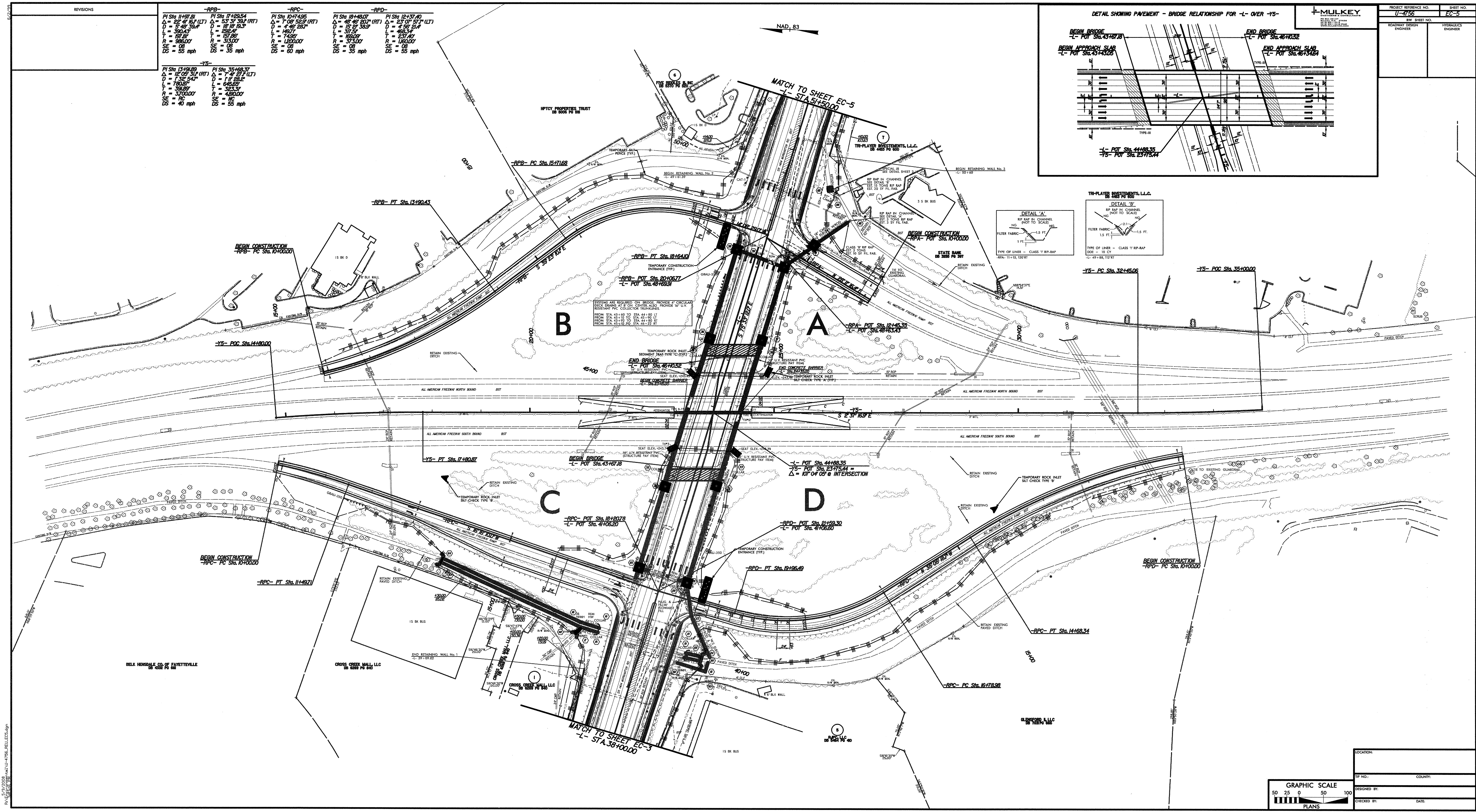
-L-  
PI Sta 30+49.73  
Δ = 8' 00" 17.0" (LT)  
D = 2' 32" 47.3"  
L = 314.34'  
T = 157.43'  
R = 2,250.00'  
SE = 02.5  
DS = 40 mph

5/9/2008  
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C:\Users\jmulkey\Documents\U-4756-REU-EC4.dgn

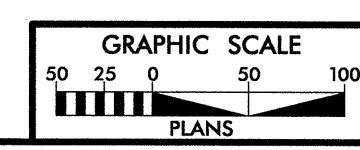
REVISIONS	
1	ISSUED FOR PERMIT

-RPB-		-RPC-		-RPD-	
PI Sta 11+97.81	PI Sta 11+29.54	PI Sta 10+74.85	PI Sta 10+74.85	PI Sta 10+48.07	PI Sta 12+37.40
$\Delta = 22^\circ 41' 36" (LT)$	$\Delta = 53^\circ 17' 36" (RT)$	$\Delta = 7^\circ 08' 32" (RT)$	$\Delta = 7^\circ 08' 32" (RT)$	$\Delta = 48^\circ 48' 00" (RT)$	$\Delta = 23^\circ 01' 57" (LT)$
D = 348.34'	D = 181.83'	D = 448.28'	D = 448.28'	D = 43.24'	D = 47.83'
L = 393.43'	L = 228.41'	L = 149.71'	L = 149.71'	L = 51.50'	L = 88.54'
T = 87.61'	T = 151.26'	T = 74.95'	T = 74.95'	T = 100.00'	T = 237.40'
R = 988.00'	R = 313.00'	R = 1200.00'	R = 1200.00'	R = 373.00'	R = 180.00'
DS = 05 mph	DS = 35 mph	DS = 05 mph	DS = 05 mph	DS = 05 mph	DS = 05 mph

-Y5-	
PI Sta 13+91.80	PI Sta 35+68.37
$\Delta = 12^\circ 09' 31" (RT)$	$\Delta = 7^\circ 47' 27" (LT)$
D = 132.94'	D = 111.82'
L = 180.27'	L = 64.65'
T = 54.89'	T = 31.31'
R = 370.00'	R = 300.00'
SE = NC	SE = NC
DS = 40 mph	DS = 05 mph



PROJECT REFERENCE NO.	U-4785
SHEET NO.	EC-5
ROADWAY DESIGN ENGINEER	
HYDRAULICS ENGINEER	



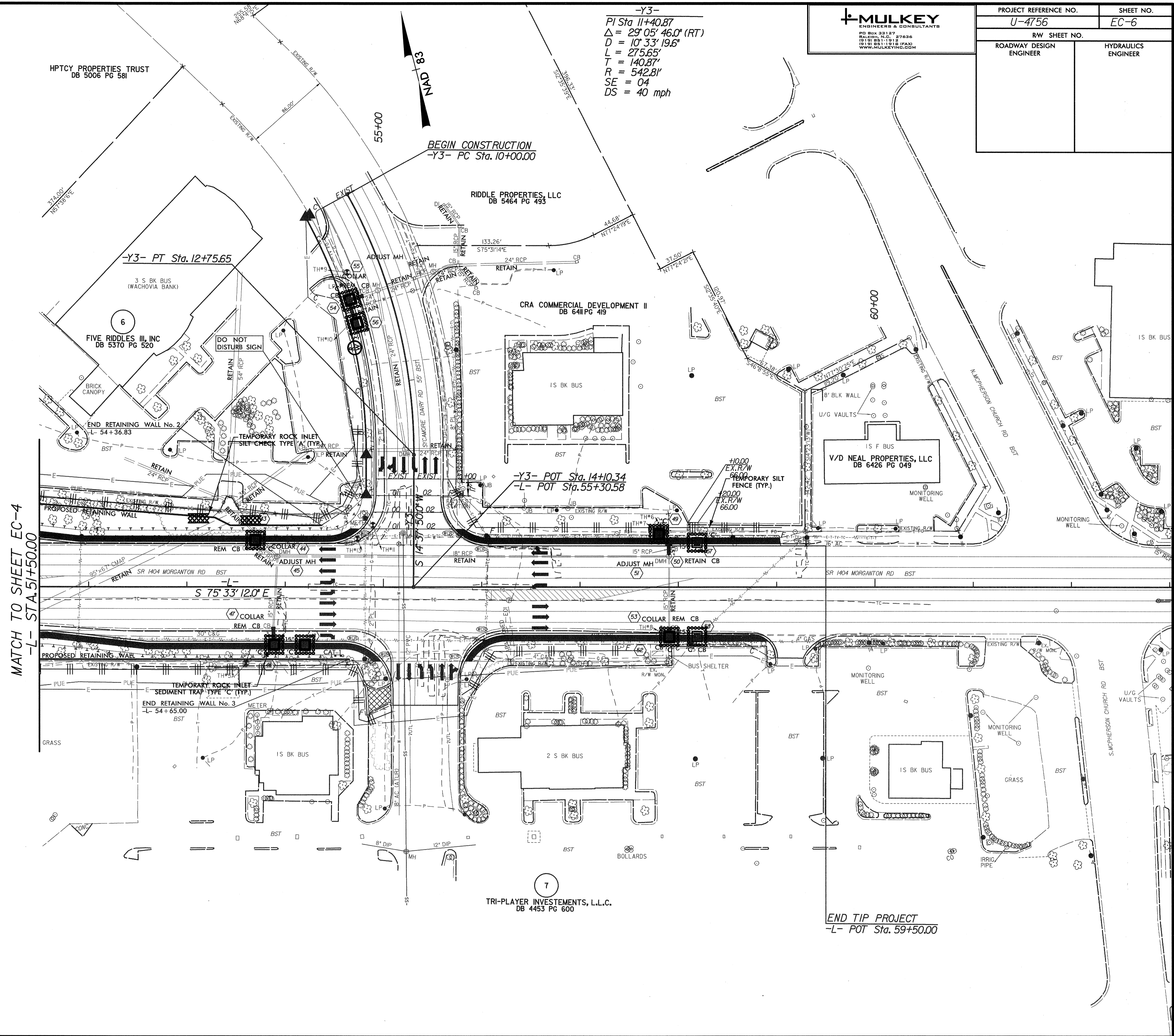
LOCATION	
RP NO.	
COUNTY	
DESIGNED BY	
CHECKED BY	
DATE	

01/15/2008 11:11:11 AM C:\P\104785\104785.dwg



PROJECT REFERENCE NO. <b>U-4756</b>	SHEET NO. <b>EC-6</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



MATCH TO SHEET EC-4  
-L- STA. 51+50.00