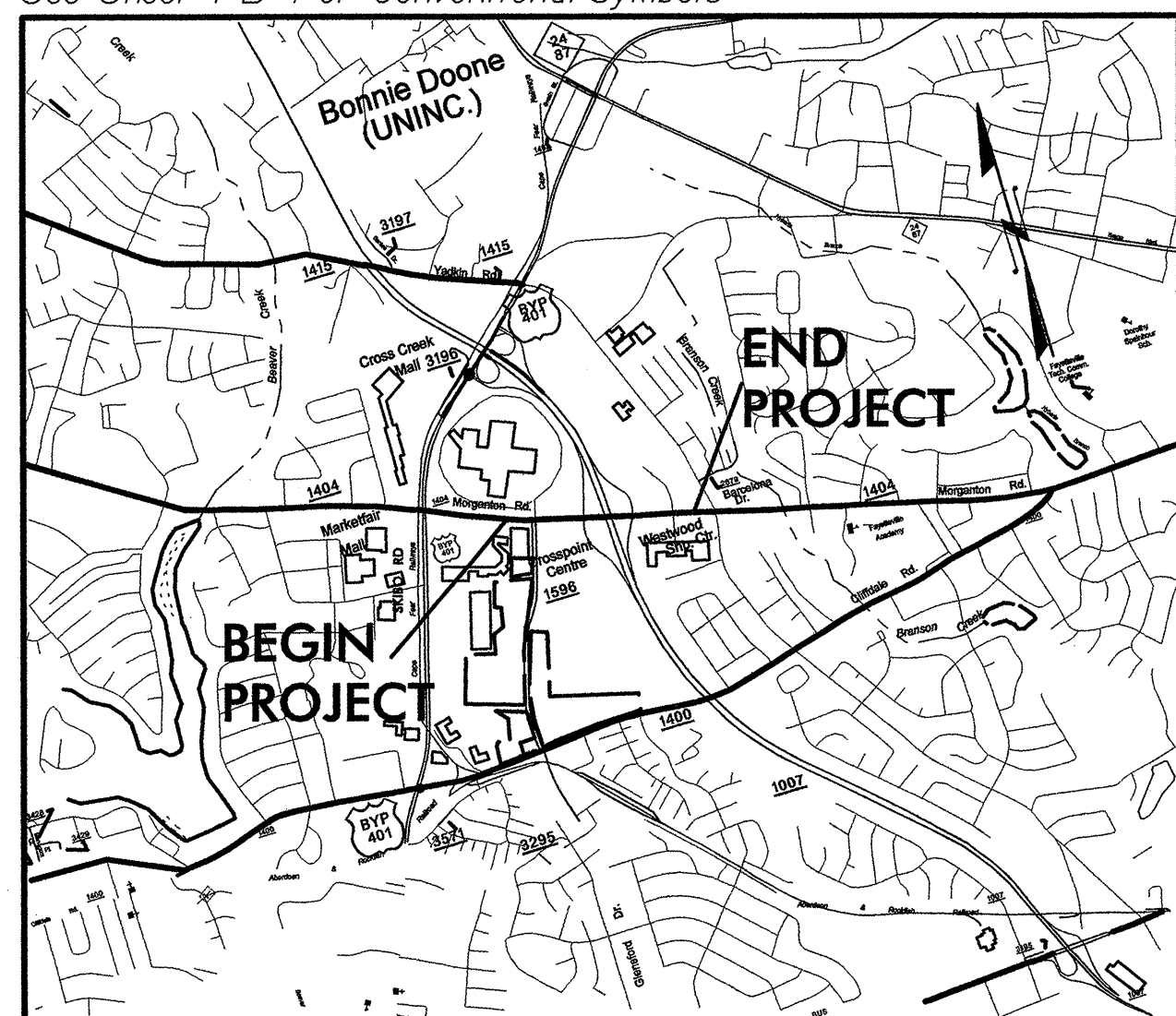


See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CUMBERLAND COUNTY

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

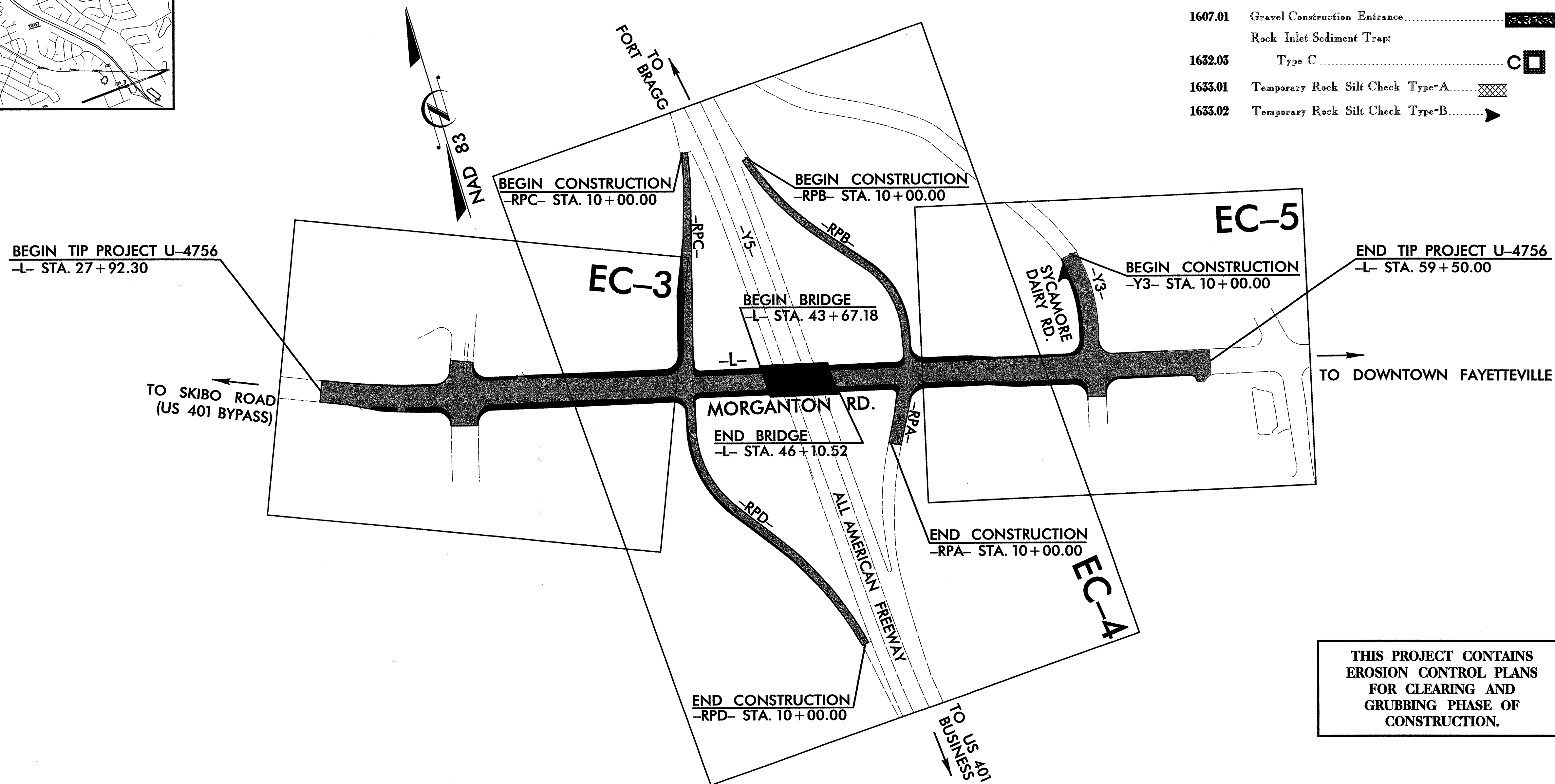
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4756	EC-1	
WBS NO.	F.A. PROJ. NO.	DESCRIPTION	
39750.1.1	STP-1404(9)	P.E.	
39750.2.1	STP-1404(9)	RW, UTL	
39750.3.1	STP-1404(9)	CONST	

EROSION AND SEDIMENT CONTROL MEASURES

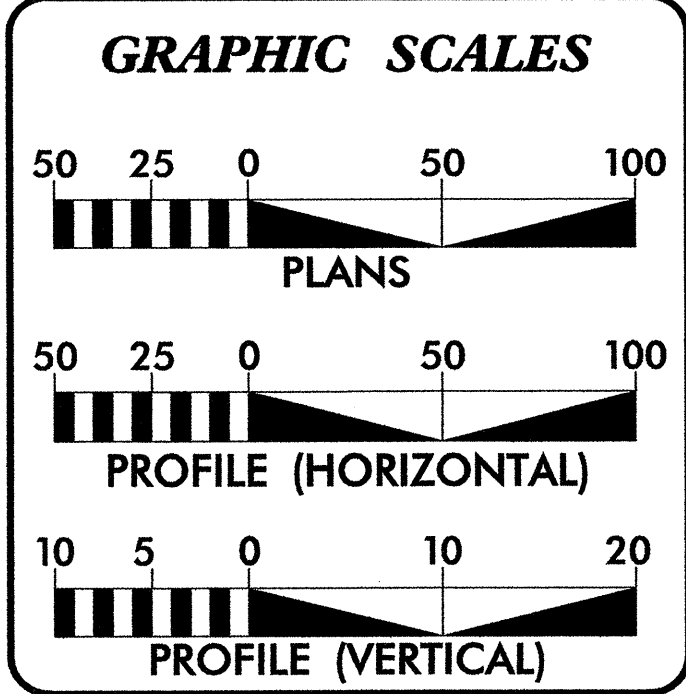
Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1607.01	Gravel Construction Entrance	▬▬▬▬▬▬▬▬▬▬
	Rock Inlet Sediment Trap:	
1632.03	Type C	C
1633.01	Temporary Rock Silt Check Type-A	▩▩▩▩▩▩▩▩▩▩
1633.02	Temporary Rock Silt Check Type-B	▶

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 7:00:26 PM R:\Environment\U-4756_REU_ECI.dgn

PROJECT REFERENCE NO.	SHEET NO.
U-4756	EC-2
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

10' MAX. WITH WIRE
(6' MAX. WITHOUT WIRE)

12 1/2 GAUGE MIN.
MIDDLE AND VERTICAL WIRES

10 GAUGE MIN.
TOP AND BOTTOM STRAND

WIRE

FILTER FABRIC

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.

FILTER FABRIC

COMPACTED FILL

STEEL POST - 2'-0" DEPTH
WOOD POST - 3'-0" DEPTH

EXTENSION OF FABRIC AND WIRE INTO TRENCH

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

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

PUBLIC ROAD

50 FT.

12 FT.

CLASS "A" STONE
8 IN. MIN. DEPTH

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 ONTO 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

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

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

1/4" WIRE MESH

MAXIMUM POST SPACING 4 FT.

VARIABLE DIMENSION

SEDIMENT CONTROL STONE

12"

6"

2"

1'-6"

FILTERED WATER

AVERAGE BOX DIMENSION VARIABLE

SECTION A-A

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.

SECTION Y-Y

SEE NOTE FOR POST DESCRIPTION

1/4" WIRE MESH

VARIABLE DIMENSION

FLOW

SEDIMENT CONTROL STONE

1'-6"

6"

2"

FILTERED WATER

AVERAGE BOX DIMENSION VARIABLE

SECTION Y-Y

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

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

SEDIMENT CONTROL STONE

STRUCTURAL STONE

PLAN

FLOW

L=3xH

SECTION A-A

2/3 CHANNEL WIDTH

2' MIN.

12"

SECTION B-B

*T = 12" MIN., 18" MAX.

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.

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

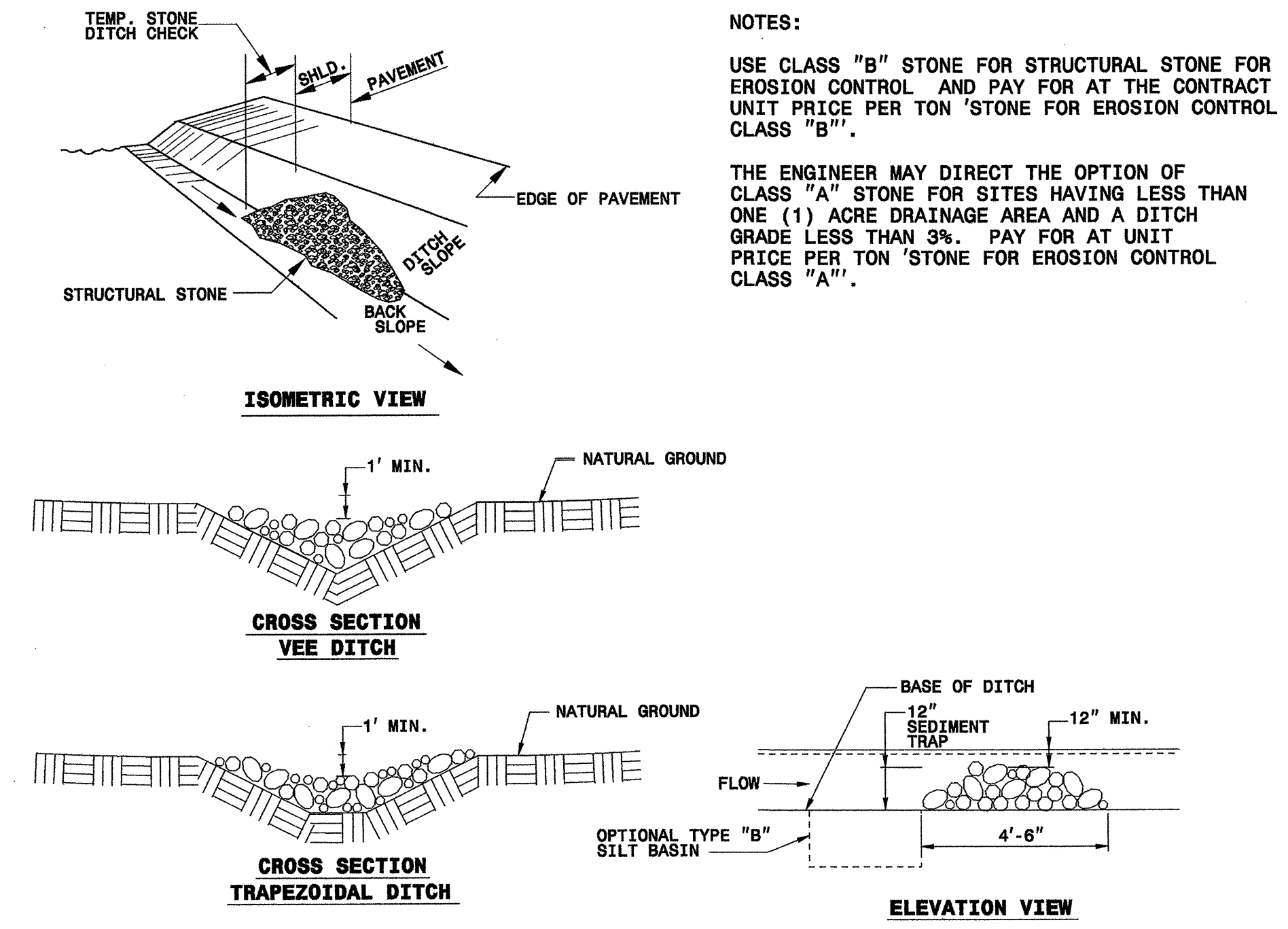
PROJECT REFERENCE NO. <i>U-4756</i>	SHEET NO. <i>EC-3</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

1-02

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

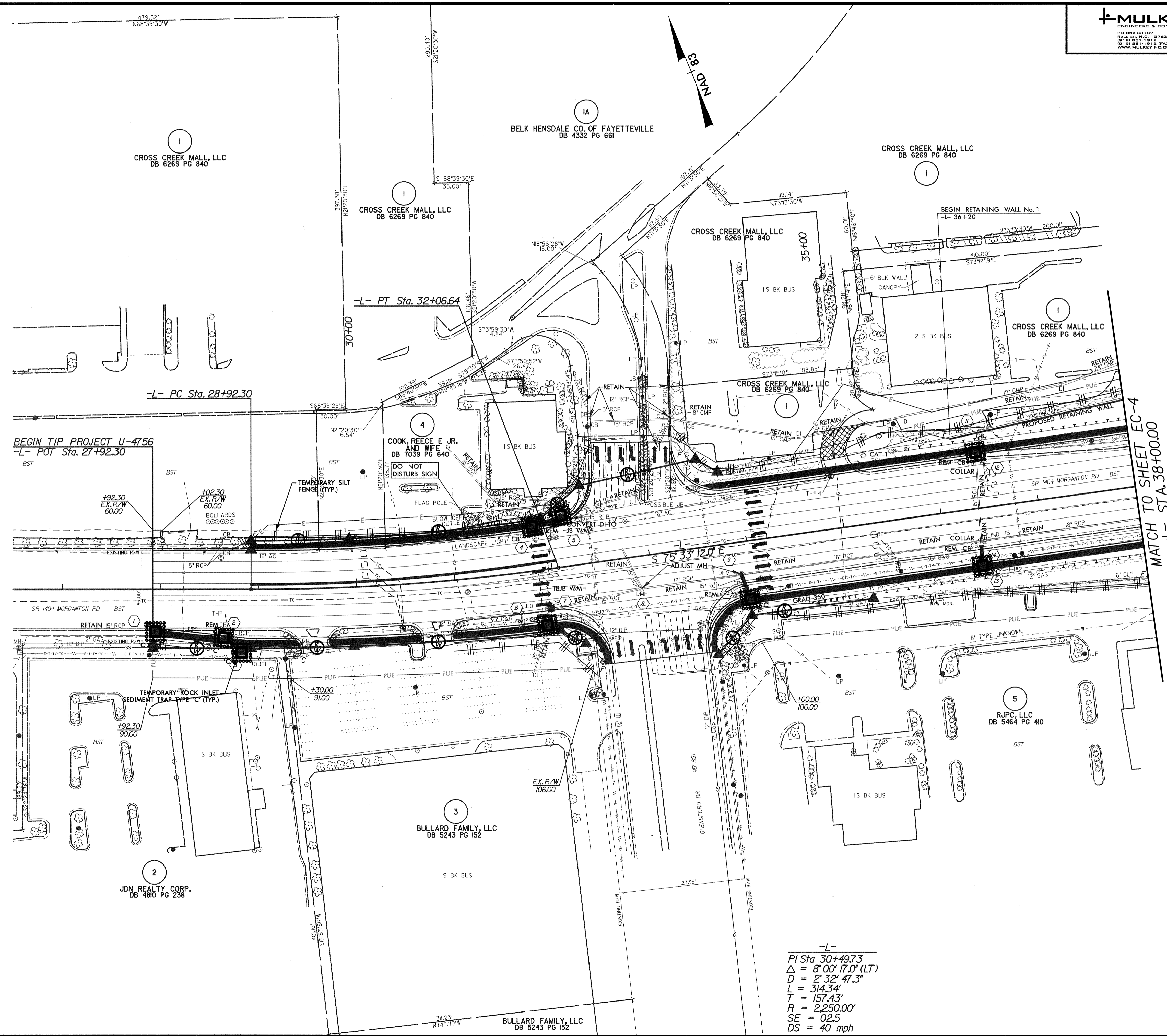
ENGLISH STANDARD DRAWING FOR
TEMPORARY ROCK SILT CHECK TYPE 'B'

SHEET 1 OF 1
1633.02

8/17/99

MULKEY
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Raleigh, N.C. 27636
(919) 851-1912
(919) 851-1918 (FAX)
WWW.MULKEYINC.COM

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



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

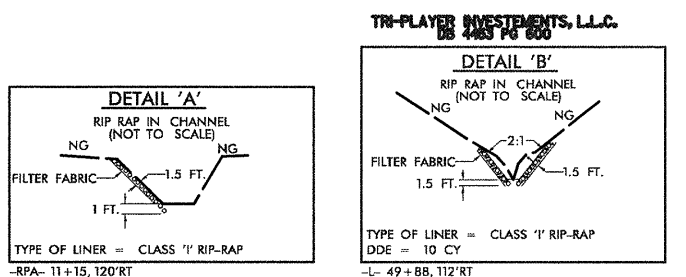
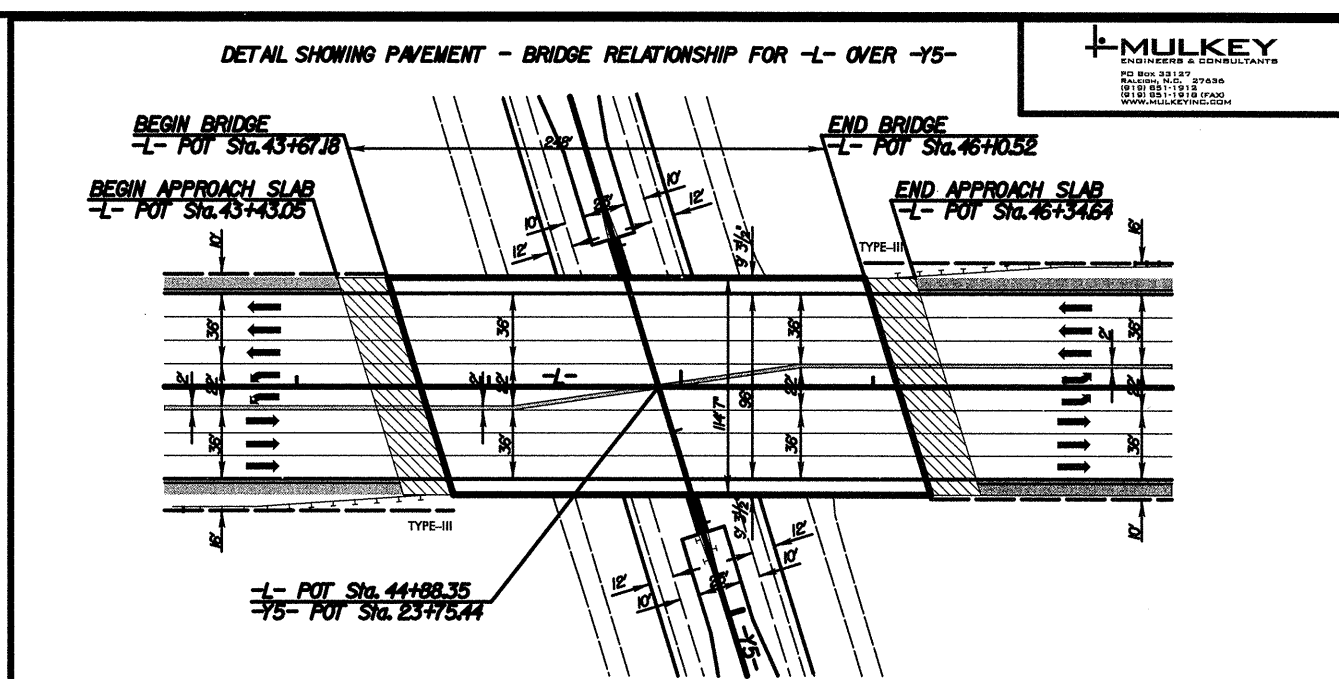
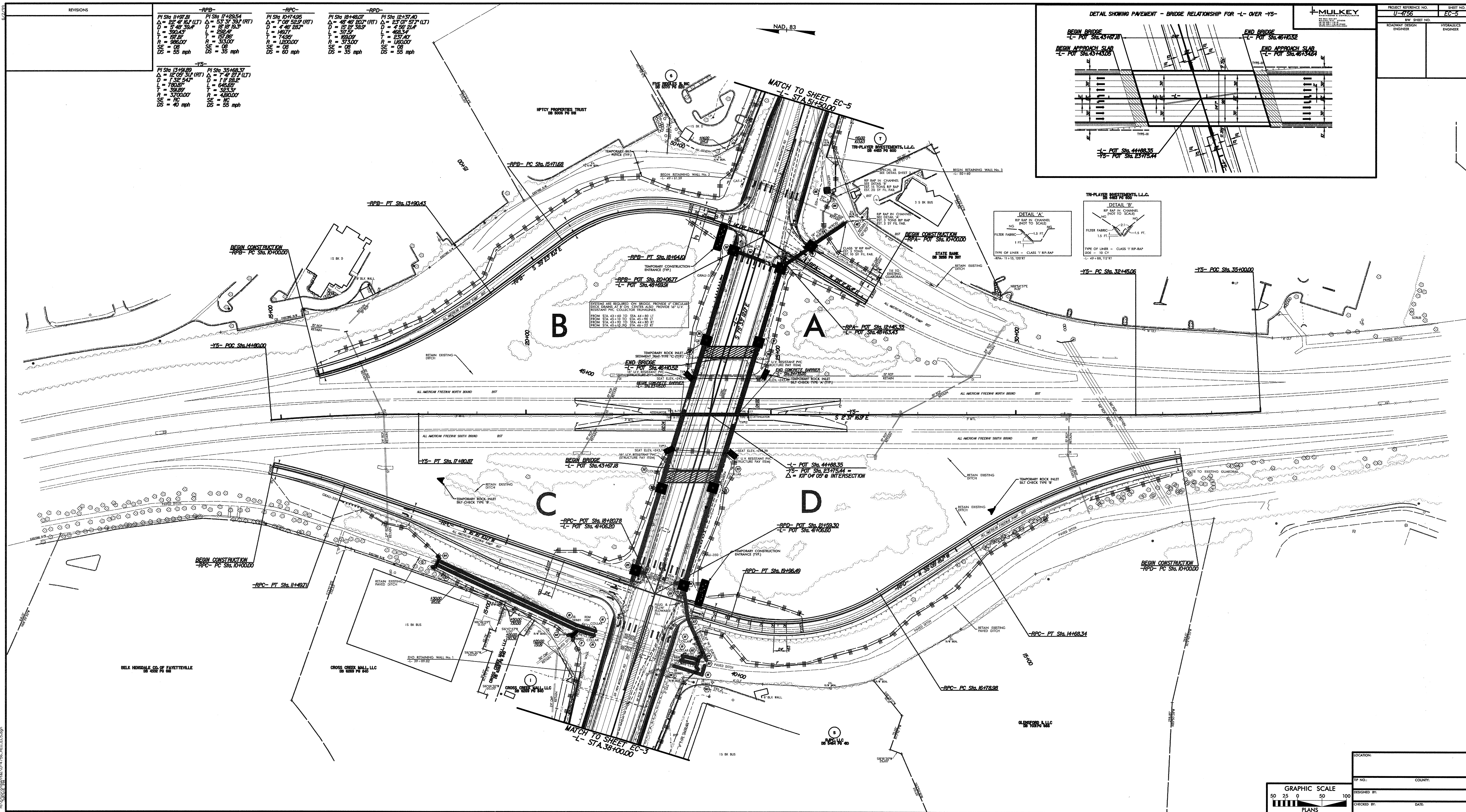
-L-
PI Sta 30+49.73
Δ = 8' 00" 17.0' (LT)
D = 2' 32" 47.3"
L = 314.34'
T = 157.43'
R = 2,250.00'
SE = 02.5
DS = 40 mph

5/9/2008
Environmental U-4756.REU.EC4.dgn

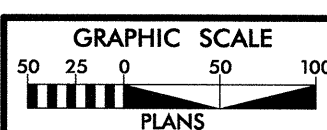
REVISIONS	
1	ISSUED FOR PERMIT

-RFB-		-RPC-		-RPD-	
PI Sta 11+97.01	PI Sta 17+295.54	PI Sta 10+749.5	PI Sta 10+749.5	PI Sta 18+46.07	PI Sta 12+37.40
$\Delta = 52' 41" 6.4 (LT)$	$\Delta = 53' 37" 36.1 (RT)$	$\Delta = 7' 06" 52.9 (RT)$	$\Delta = 7' 06" 52.9 (RT)$	$\Delta = 48' 46" 50.7 (RT)$	$\Delta = 23' 07" 57.7 (LT)$
D = 130' 35.4'	D = 121' 19.35'	D = 4' 49' 28.2"	D = 4' 49' 28.2"	D = 13' 51' 33.9"	D = 4' 59' 24.4"
L = 390.43'	L = 298.4'	L = 149.7'	L = 149.7'	L = 317.5'	L = 463.4'
T = 191.81'	T = 151.75'	T = 74.85'	T = 74.85'	T = 160.37'	T = 231.41'
R = 3862.00'	R = 3132.00'	R = 1820.00'	R = 1820.00'	R = 373.00'	R = 1820.00'
SE = 08	SE = 06	SE = 08	SE = 08	SE = 08	SE = 08
DS = 55 mph	DS = 35 mph	DS = 60 mph	DS = 60 mph	DS = 35 mph	DS = 55 mph

-Y5-	
PI Sta 13+191.89	PI Sta 35+168.37
$\Delta = 12' 02" 31.1 (RT)$	$\Delta = 7' 47" 27.1 (LT)$
D = 130' 35.4'	D = 111' 35.2'
L = 780.27'	L = 645.22'
T = 390.14'	T = 322.61'
R = 3703.00'	R = 3243.00'
SE = 08	SE = 06
DS = 40 mph	DS = 55 mph



PROJECT REFERENCE NO.	U-4756
SHEET NO.	EC-5
ROADWAY DESIGN ENGINEER	
HYDRAULICS ENGINEER	



LOCATION:	
RIP NO.:	
COUNTY:	
DESIGNED BY:	
CHECKED BY:	
DATE:	

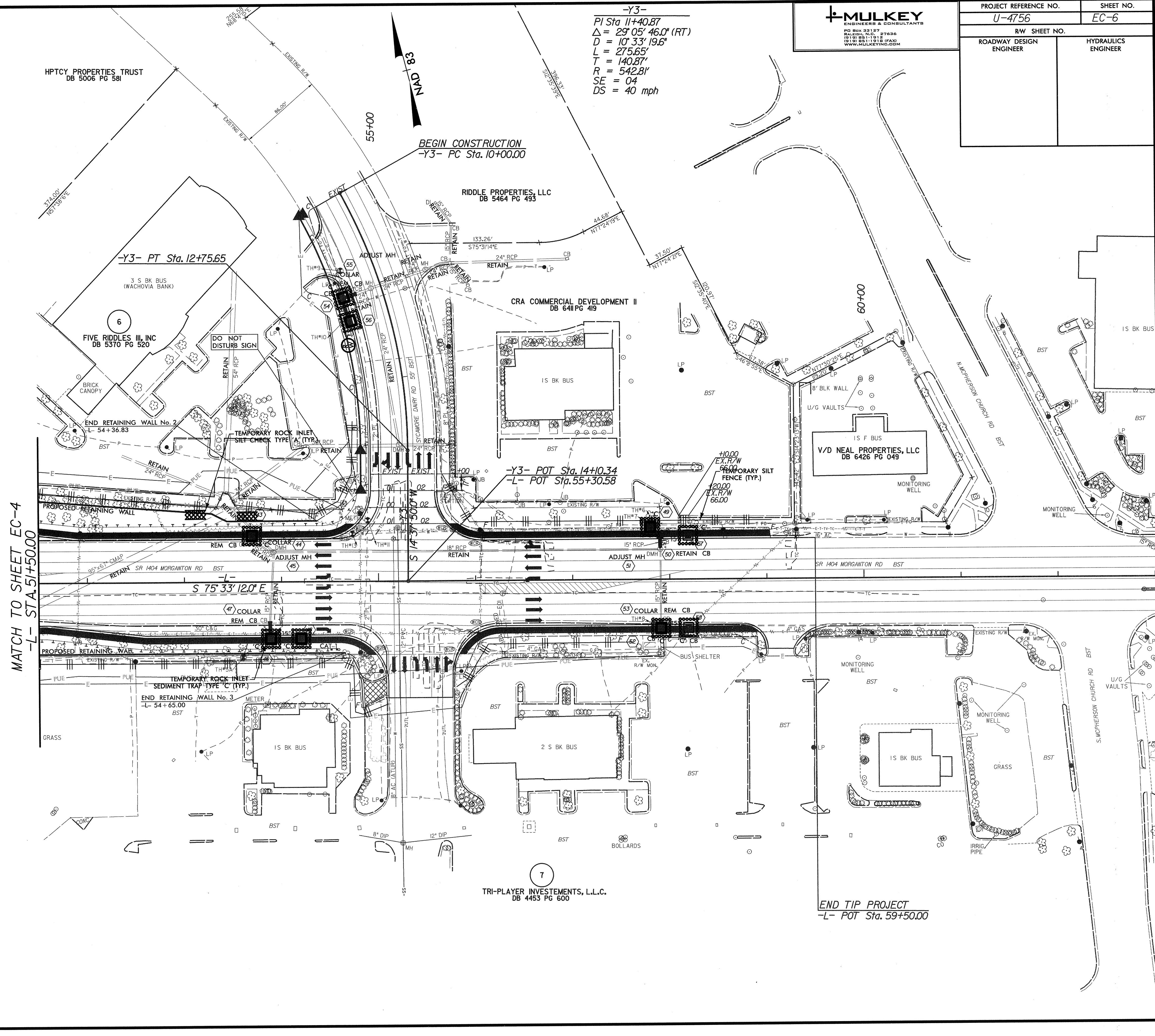
8/17/99

5/9/2008
R:\env\p\9\m\1\U-4756_REU_EC6.dgn

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(919) 851-1915 (FAX)
WWW.MULKEYINC.COM

PROJECT REFERENCE NO.	SHEET NO.
U-4756	EC-6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-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



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

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

7
TRI-PLAYER INVESTMENTS, L.L.C.
DB 4453 PG 600

HPTCY PROPERTIES TRUST
DB 5006 PG 581

RIDDLE PROPERTIES, LLC
DB 5464 PG 493

CRA COMMERCIAL DEVELOPMENT II
DB 6411 PG 419

V/D NEAL PROPERTIES, LLC
DB 6426 PG 049

-Y3- PT Sta. 12+75.65

-Y3- POT Sta. 14+10.34
-L- POT Sta. 55+30.58

FIVE RIDDLES III, INC
DB 5370 PG 520

S 75° 33' 12.0" E

END RETAINING WALL No. 3
-L- 54+65.00

END RETAINING WALL No. 2
-L- 54+36.83

TEMPORARY ROCK INLET
SEDIMENT TRAP TYPE 'C' (TYP.)
-L- 54+65.00

TEMPORARY ROCK INLET
SIET CHECK TYPE 'A' (TYP.)

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

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PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL