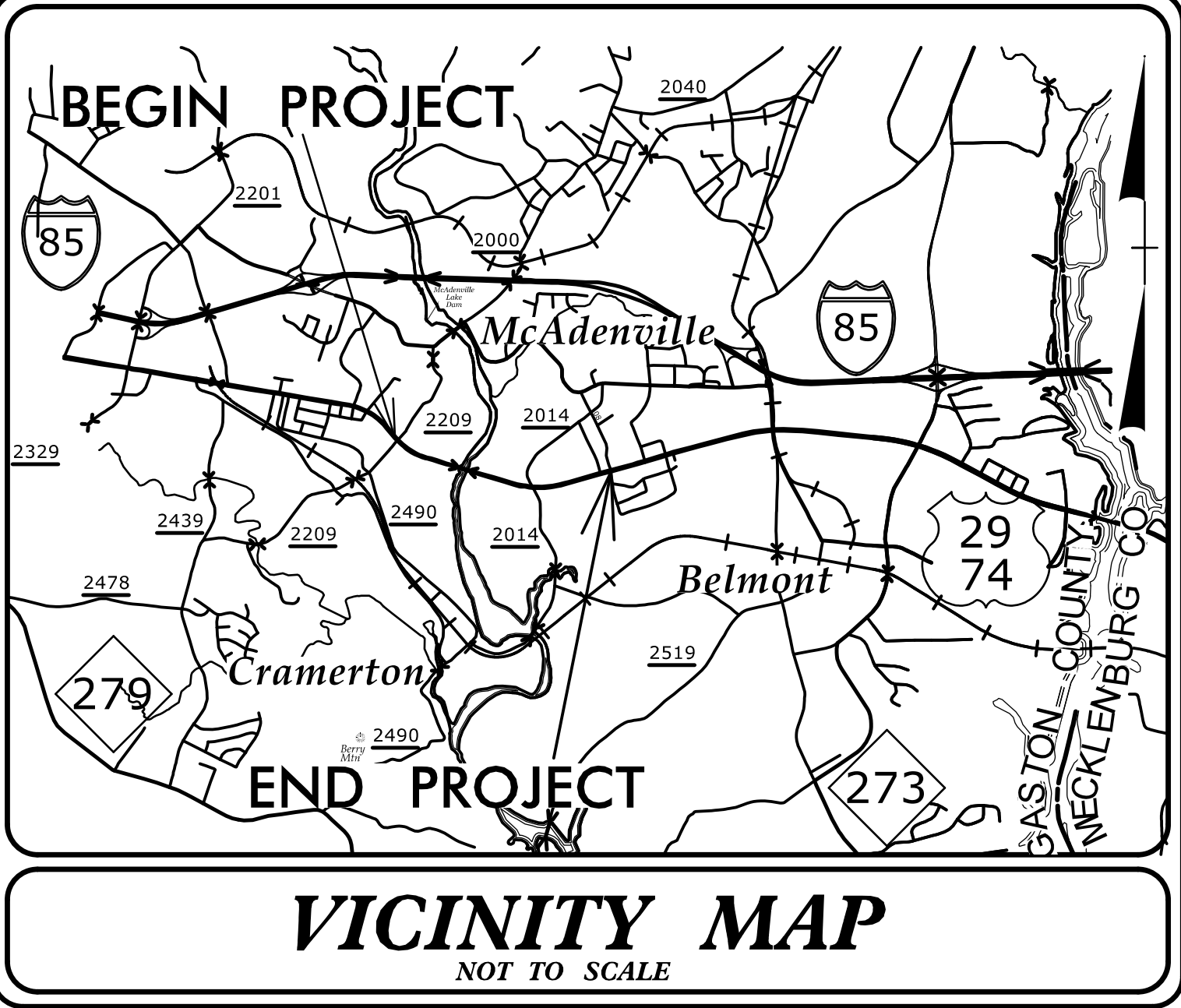


8/22/2026
C:\Engineering\Drawings\Erosion Control\U-6146-EC.dwg-TSH.dgn
5857

CONTRACT: C204481 TIP PROJECT: U-6146 / B-5857



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

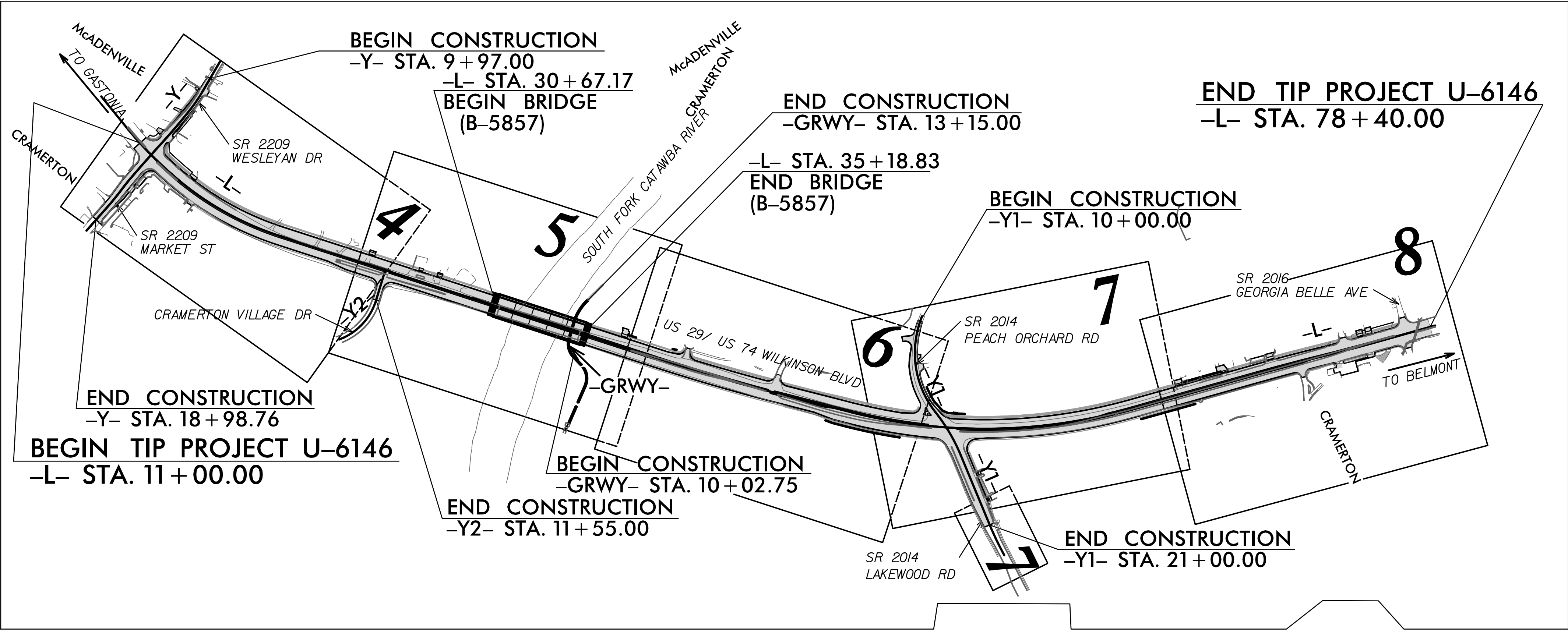
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

GASTON COUNTY

LOCATION: US 29/74 (WILKINSON BLVD) FROM SR 2209
(WESLEYAN DR/MARKET ST) TO SR 2016/SR 2017
(GEORGIA BELLE AVE/HUBBARD ST) COMBINED
WITH B-5857.

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS,
AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6146 / B-5857	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
48392.1.1 / 45810.1.1	N/A	PE	
48392.2.1 / 45810.2.1	N/A	ROW	
48392.2.2	N/A	UTIL.	



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

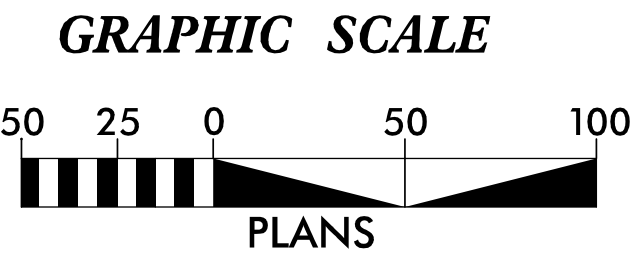
THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.

ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT

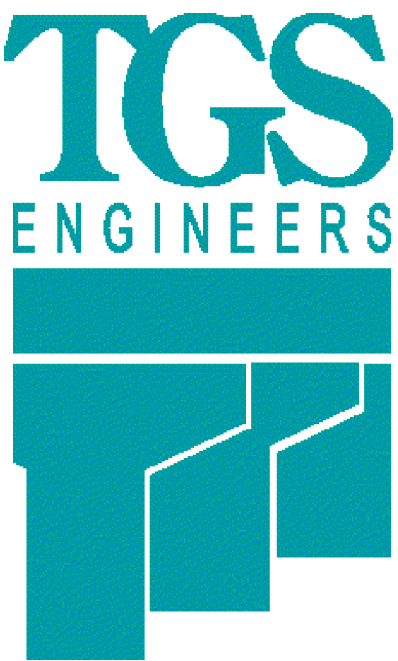
Refer To E. C. Special Provisions
for Special Considerations.

303(d) IMPAIRED WATER(S) EXIST
ON THIS PROJECT

303(d) Impaired Water Zone(s) Exist
From Sta. _____ Begin
to Sta. _____ End
Refer To E. C. Special Provisions
for Special Considerations.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000
GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019
AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.



Prepared In the Office of:
TGS ENGINEERS
201 W. MARION ST-STE 200
SHELBY, NC 28150

Designed by:
Andrew H. Cochran, PE 3015
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C.
Department of Transportation - Raleigh, N. C., dated January 2024
and the latest revision thereto are applicable to this project and by
reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
U-6146/B-5857	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

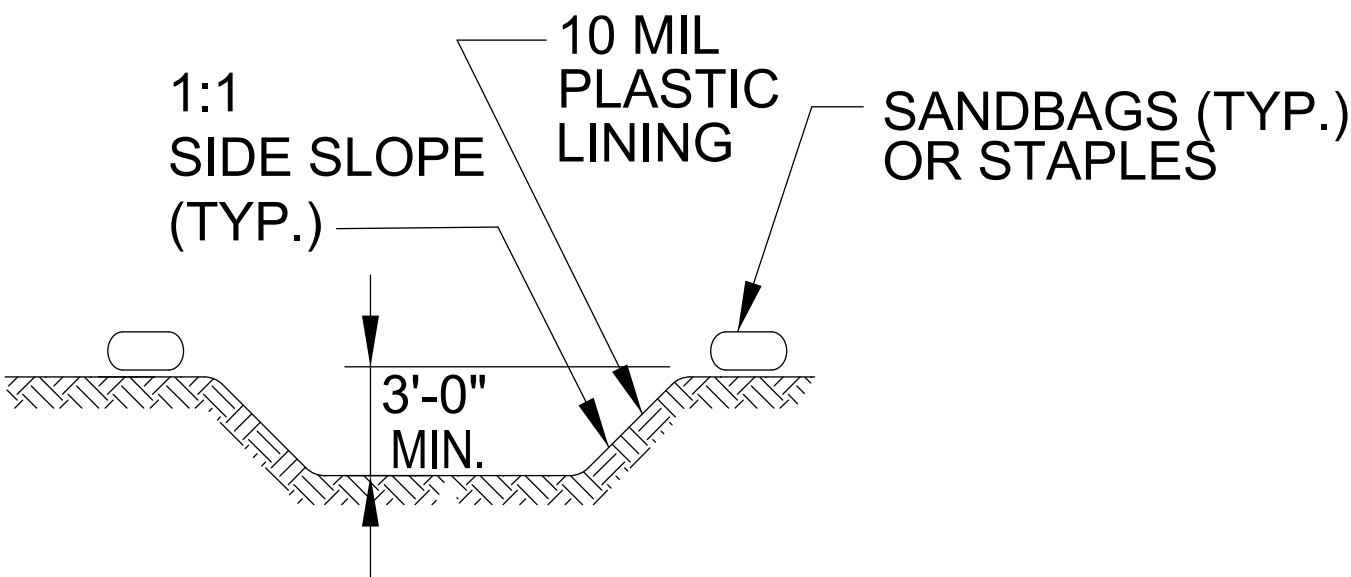
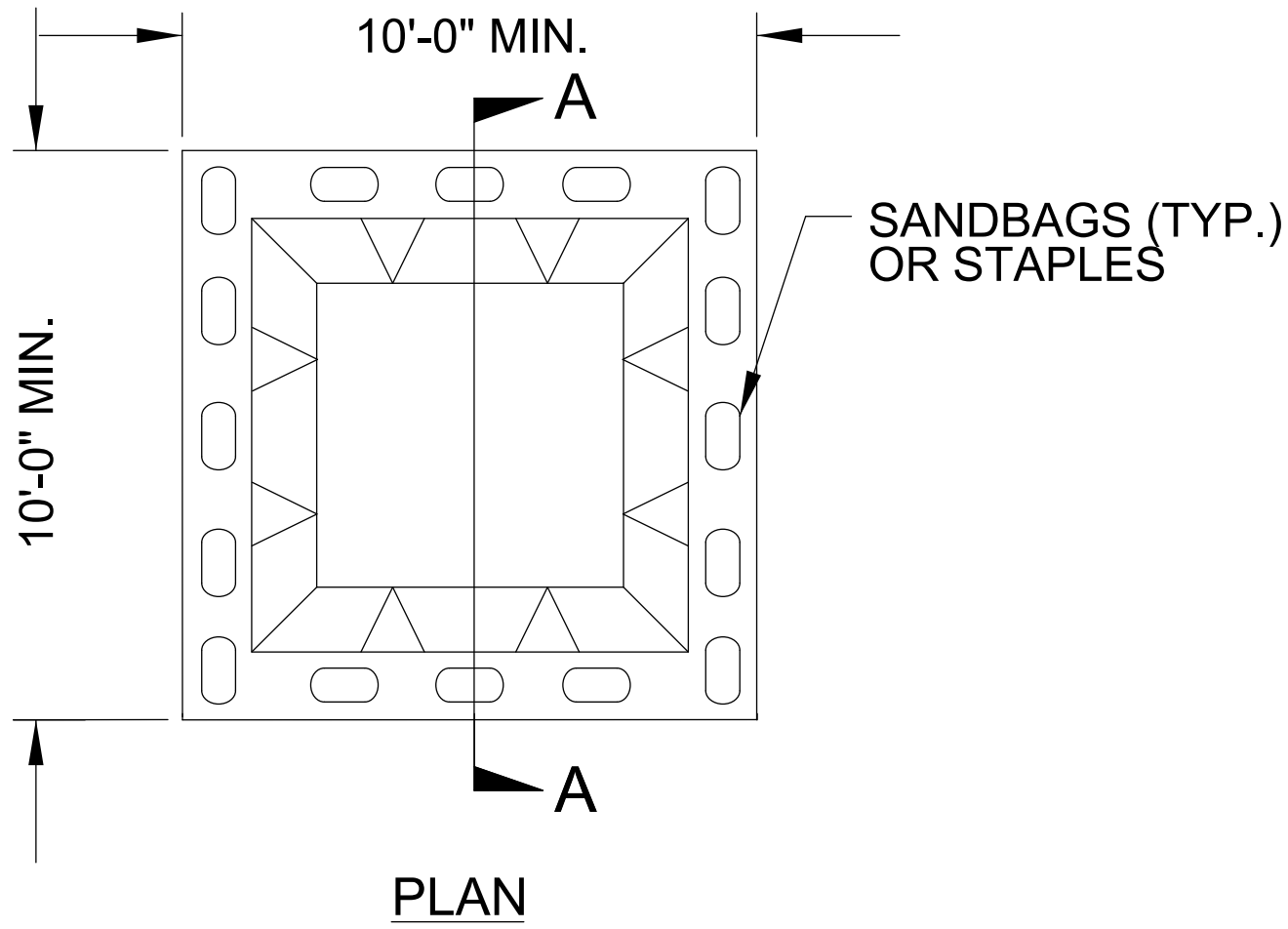
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	
1630.04	Stilling Basin	
1630.05	Temporary Diversion	
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

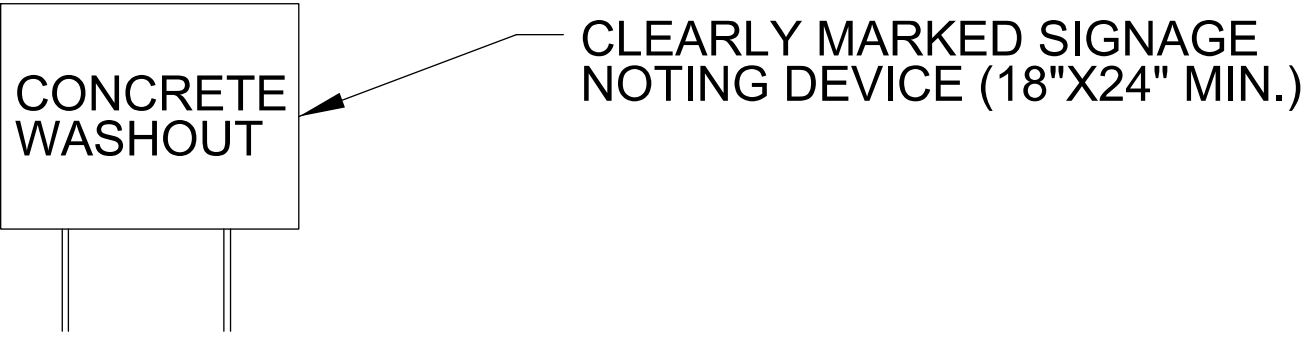
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	
	Silt Fence Coir Fiber Wattle Break	
1636.03	Excelsior Wattle Barrier	
1636.03	Coir Fiber Wattle Barrier	

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

PROJECT REFERENCE NO.	SHEET NO.
<i>U-6146/B-5857</i>	<i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

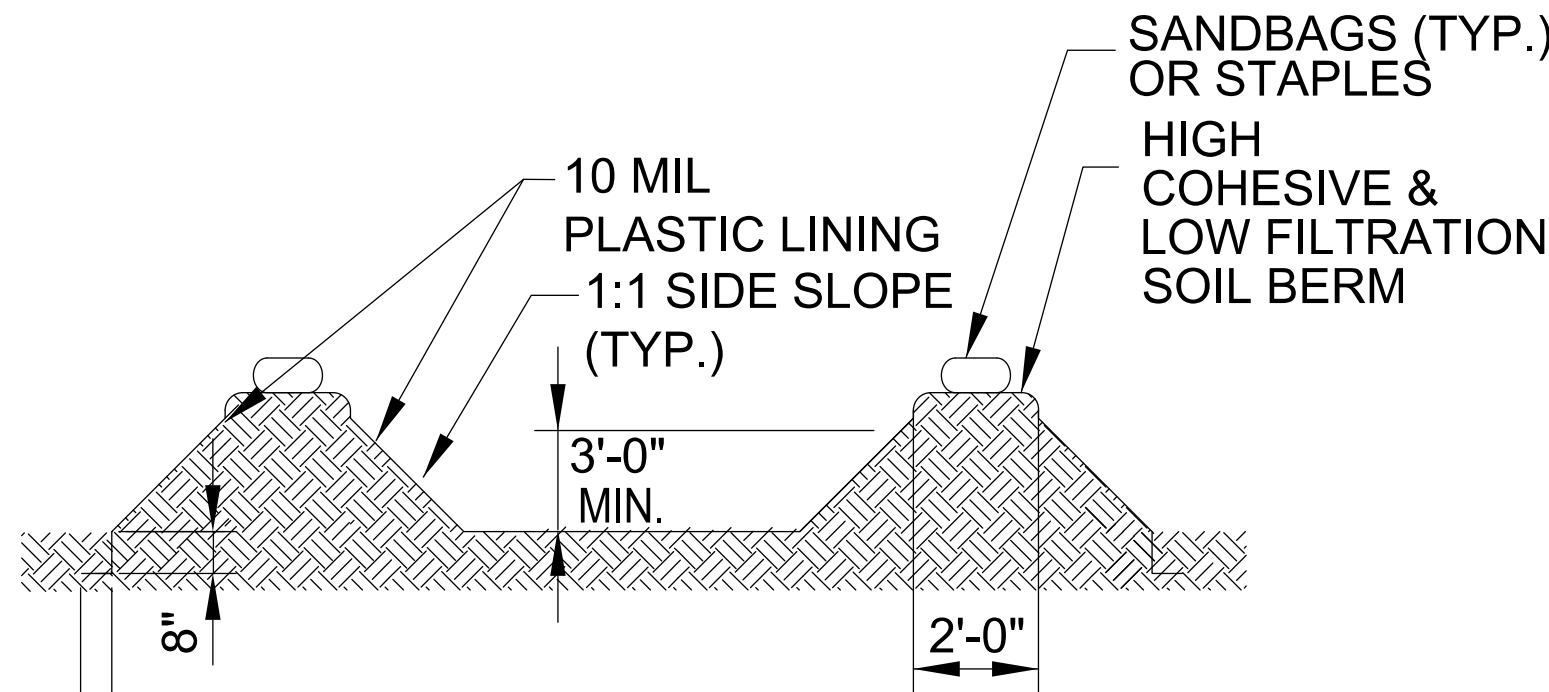
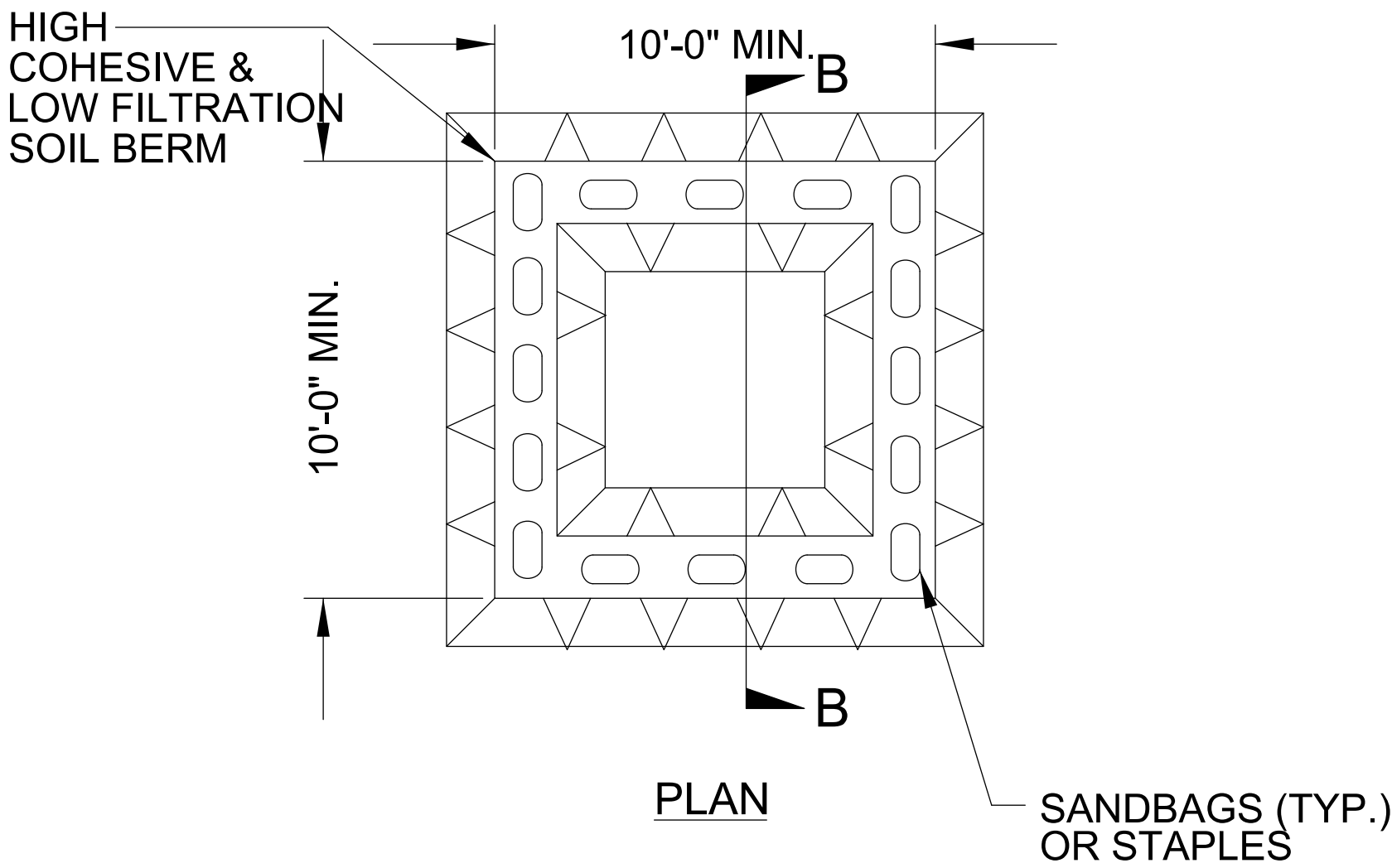


SECTION A-A

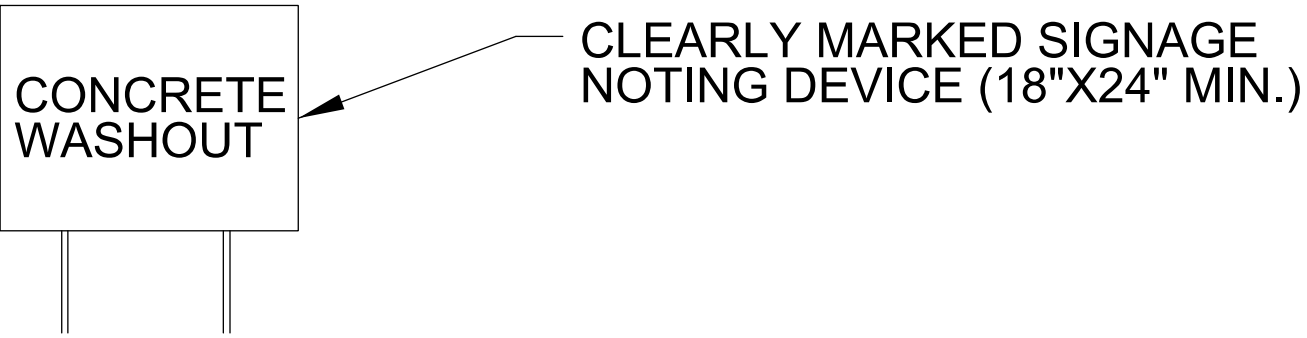


BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.



SECTION B-B



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

PROJECT REFERENCE NO.	SHEET NO.
<i>U-6146/B-5857</i>	<i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

SLOPE MATTING FOR EROSION CONTROL

[illegible]

DITCHLINE STRAW MATTING FOR EROSION CONTROL

[illegible]

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-6146/B-5857</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10’ OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50’ IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

TGS ENGINEERS
201 W. MARION ST-STE 200
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

MATCH LINE STA. -L- 38+00.00
MATCH TO SHEET NO. 6

DETAIL 4
VAR. WIDTH LATERAL BASE DITCH
 (Not to Scale)

Natural Ground

2:1

d

D

2:1

B

1' Ft.

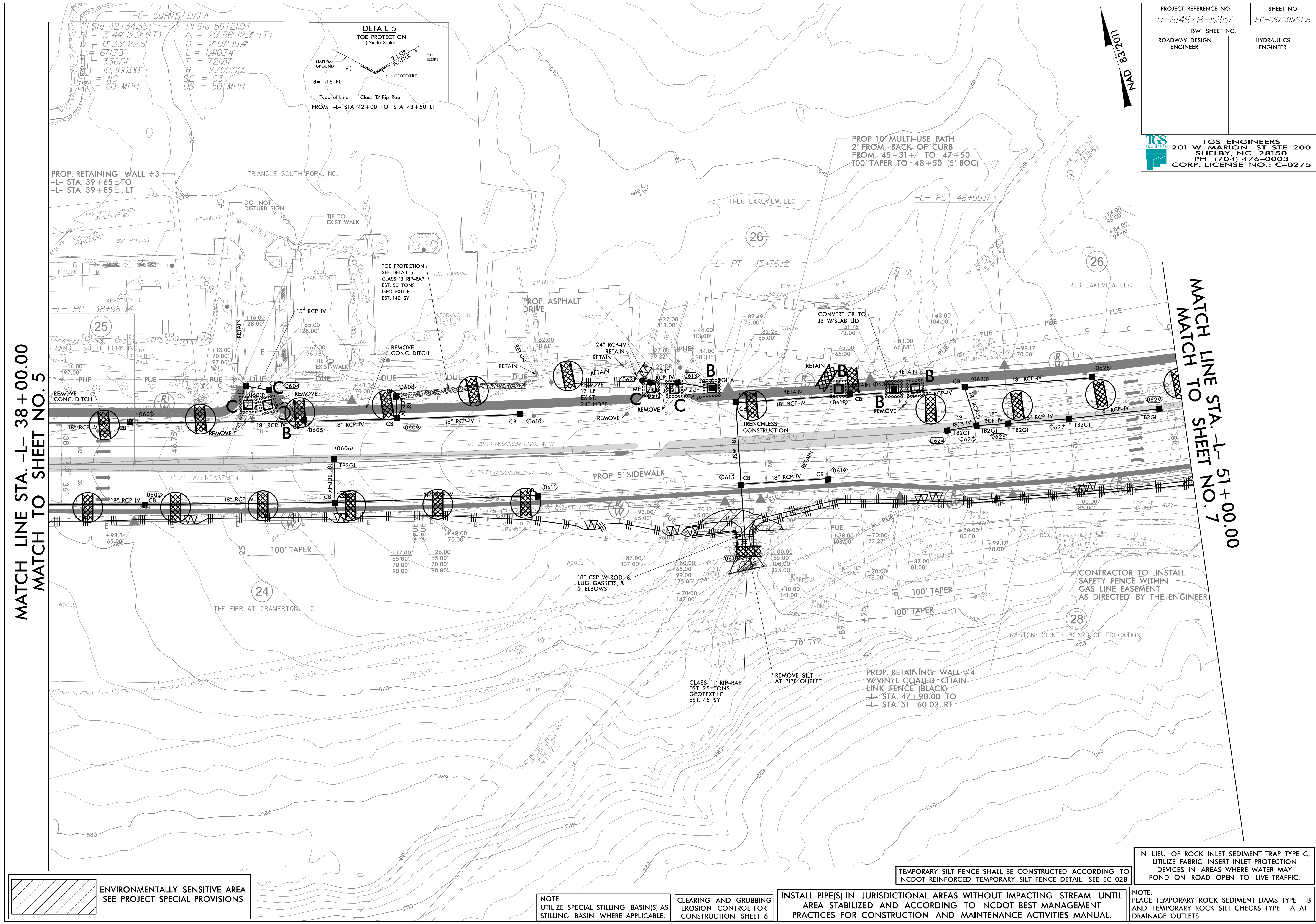
Fill Slope

GEOTEXTILE

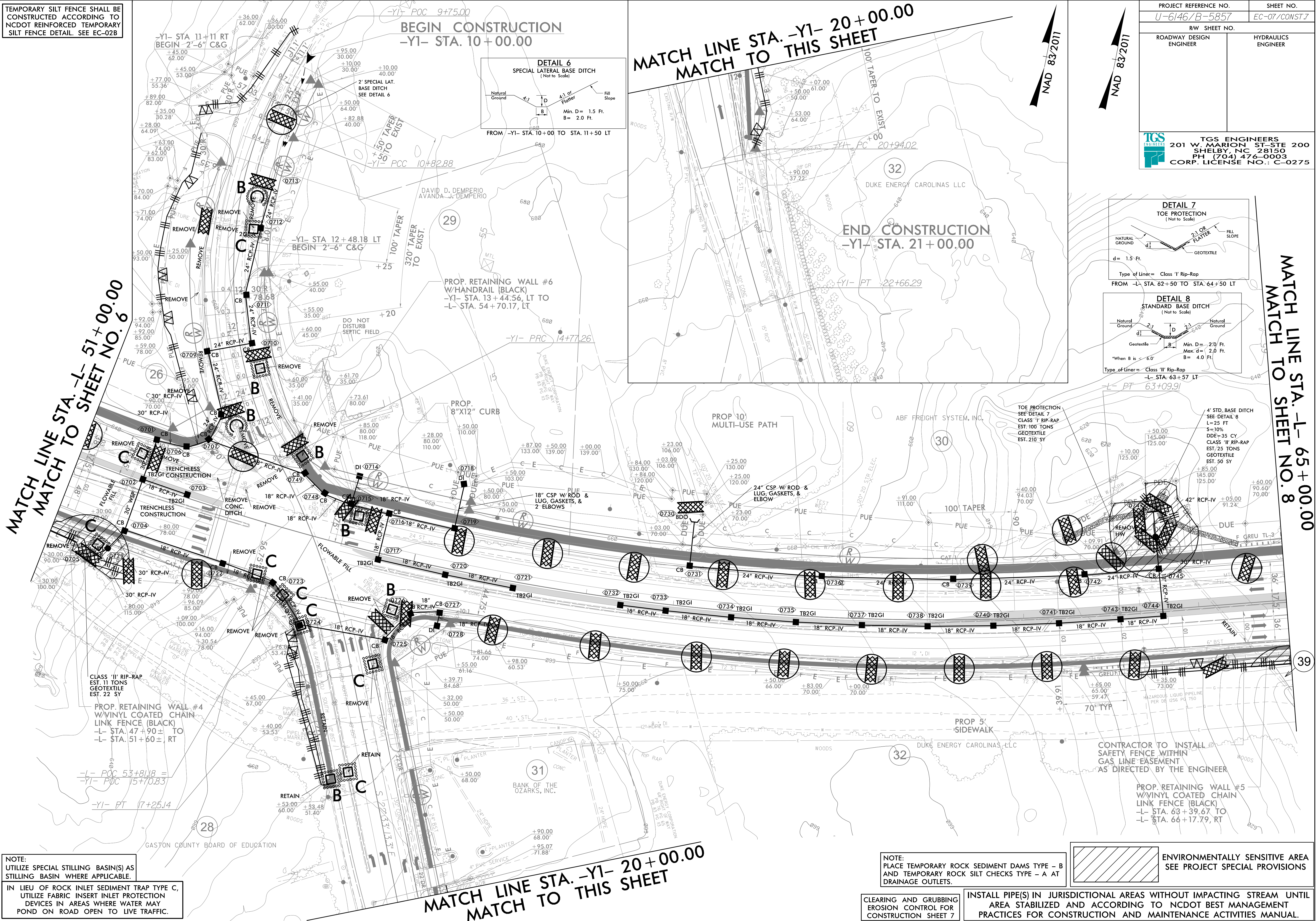
Min. D = 4.0 to 0.0 Ft.
 Max. d = 2.0 Ft.
 B = 3.0 Ft. to 12.0 Ft.
 b = 5.0 Ft.

Type of Liner = Class 11' Rip-Rap

FROM -L- STA. 28+09 TO STA. 28+72 RT N



TEMPORARY SILT FENCE SHALL BE
CONSTRUCTED ACCORDING TO
NCDOT REINFORCED TEMPORARY
SILT FENCE DETAIL. SEE EC-028



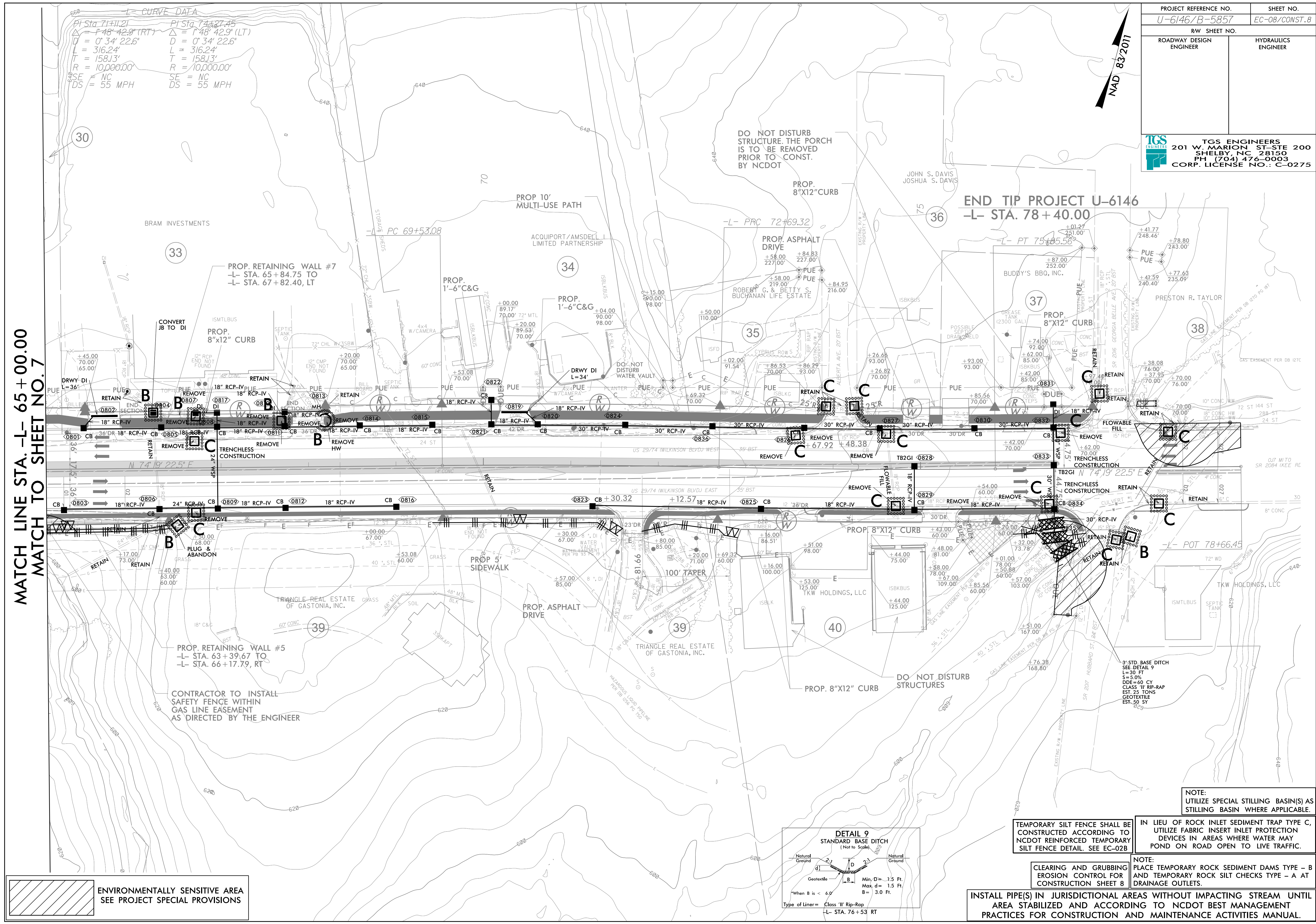
PROJECT REFERENCE NO. U-6146/B-5857		SHEET NO. EC-07/CONST.7	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
TGS ENGINEERS 201 W. MARION ST. STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275			

NOTE:
UTILIZE SPECIAL STILLING BASIN(S) AS
STILLING BASIN WHERE APPLICABLE.
IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C,
UTILIZE FABRIC INSERT INLET PROTECTION
DEVICES IN AREAS WHERE WATER MAY
POND ON ROAD OPEN TO LIVE TRAFFIC.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL
AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT
PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



CURVE DATA

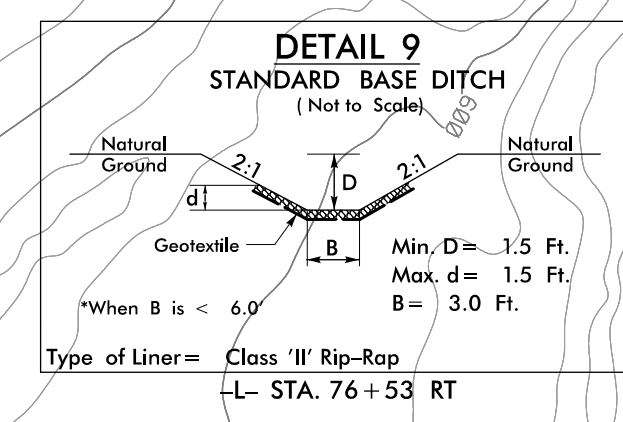
PI Sta 71+11.21	PI Sta 74+17.45
$\Delta = 148^{\circ} 42.9' (RT)$	$\Delta = 148^{\circ} 42.9' (LT)$
$D = 0^{\circ} 34' 22.6''$	$D = 0^{\circ} 34' 22.6''$
$L = 316.24'$	$L = 316.24'$
$T = 158.13'$	$T = 158.13'$
$R = 10,000.00'$	$R = 10,000.00'$
SE = NC	SE = NC
DS = 55 MPH	DS = 55 MPH

PROJECT REFERENCE NO. U-6146/B-5857		SHEET NO. EC-08/CONST.8	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

TGS ENGINEERS
201 W. MARION ST. STE 200
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

MATCH LINE STA. -L- 65+00.00
MATCH TO SHEET NO. 7

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



TEMPORARY SILT FENCE SHALL BE CONSTRUCTED ACCORDING TO NCDOT REINFORCED TEMPORARY SILT FENCE DETAIL. SEE EC-02B

IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C, UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN AREAS WHERE WATER MAY POND ON ROAD OPEN TO LIVE TRAFFIC.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

For Slopes Excavated Greater Than 10 feet
Install Matting for Erosion Control on
Entire Slope as Work Allows.

Place Matting for Erosion Control
on Slopes Adjacent to Permitted
Wetlands as Work Allows.

IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C,
UTILIZE FABRIC INSERT INLET PROTECTION
DEVICES IN AREAS WHERE WATER MAY
POND ON ROAD OPEN TO LIVE TRAFFIC.

TEMPORARY SILT FENCE SHALL BE CONSTRUCTED
ACCORDING TO NCDOT REINFORCED
TEMPORARY SILT FENCE DETAIL. SEE EC-02B

NOTE:
UTILIZE SPECIAL STILLING BASIN(S) AS
STILLING BASIN WHERE APPLICABLE.

-GRWY- CURVE DATA
PI Sta 10+55.37 PI Sta 12+48.92
 $\Delta = 60^\circ 21' 39.7''$ (RT) $\Delta = 30^\circ 33' 56.8''$ (RT)
 $D = 60^\circ 10' 26.3''$ $D = 22^\circ 16' 13.7''$
 $L = 100.31'$ $L = 137.25'$
 $T = 55.37'$ $T = 70.30'$
 $R = 95.22'$ $R = 257.27'$

- ①-GRWY- PC 10+00.00
- ②-GRWY- PT 11+00.31
- ③-GRWY- PC 11+78.62
- ④-GRWY- PT 13+15.87

PLACE COIR FIBER MATTING ON
EXPOSED SOIL WHICH
WILL NOT BE PLATED WITH STONE.

END CONSTRUCTION
-GRWY- STA. 13+15.00

-L- STA. 35+18.83
END BRIDGE
(B-5857)

WOOD RUB RAIL
-L- STA 30+10± TO 30+43±
SEE DETAIL SHT 2C-3

IMPERVIOUS DIKE

-L- STA. 30+67.17
BEGIN BRIDGE
(B-5857)

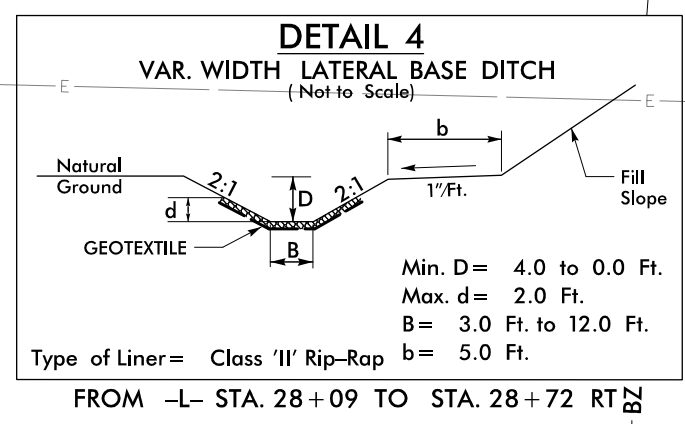
PLACE COIR FIBER MATTING ON
EXPOSED SOIL WHICH
WILL NOT BE PLATED WITH STONE.

BEGIN CONSTRUCTION
-GRWY- STA. 10+02.75
= TIP PROJECT EB-5535
STA. 45+22±

END CONSTRUCTION
-Y2- STA. 11+55.00

ROCK PLATING
-L- STA 28+80 TO 30+50, RT
SEE DETAIL SHT 2G-1
EST. 600 SY

50 x 60 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
15 ft. weir
ID 5.1



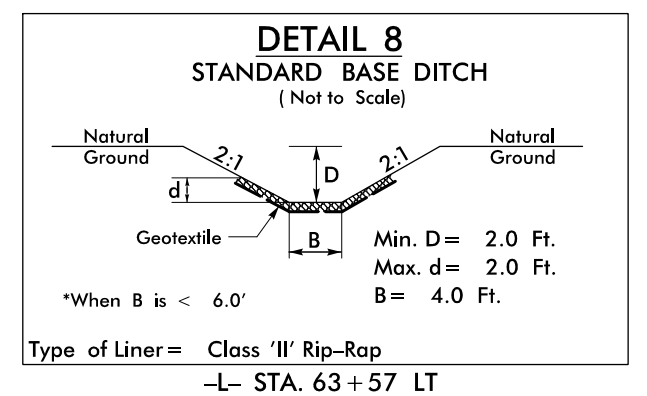
PROJECT REFERENCE NO.	SHEET NO.
U-6146/B-5857	EC-10/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 TGS ENGINEERS 201 W. MARION ST. STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	

MATCH LINE STA. -L- 24+00.00
MATCH TO SHEET NO. 4

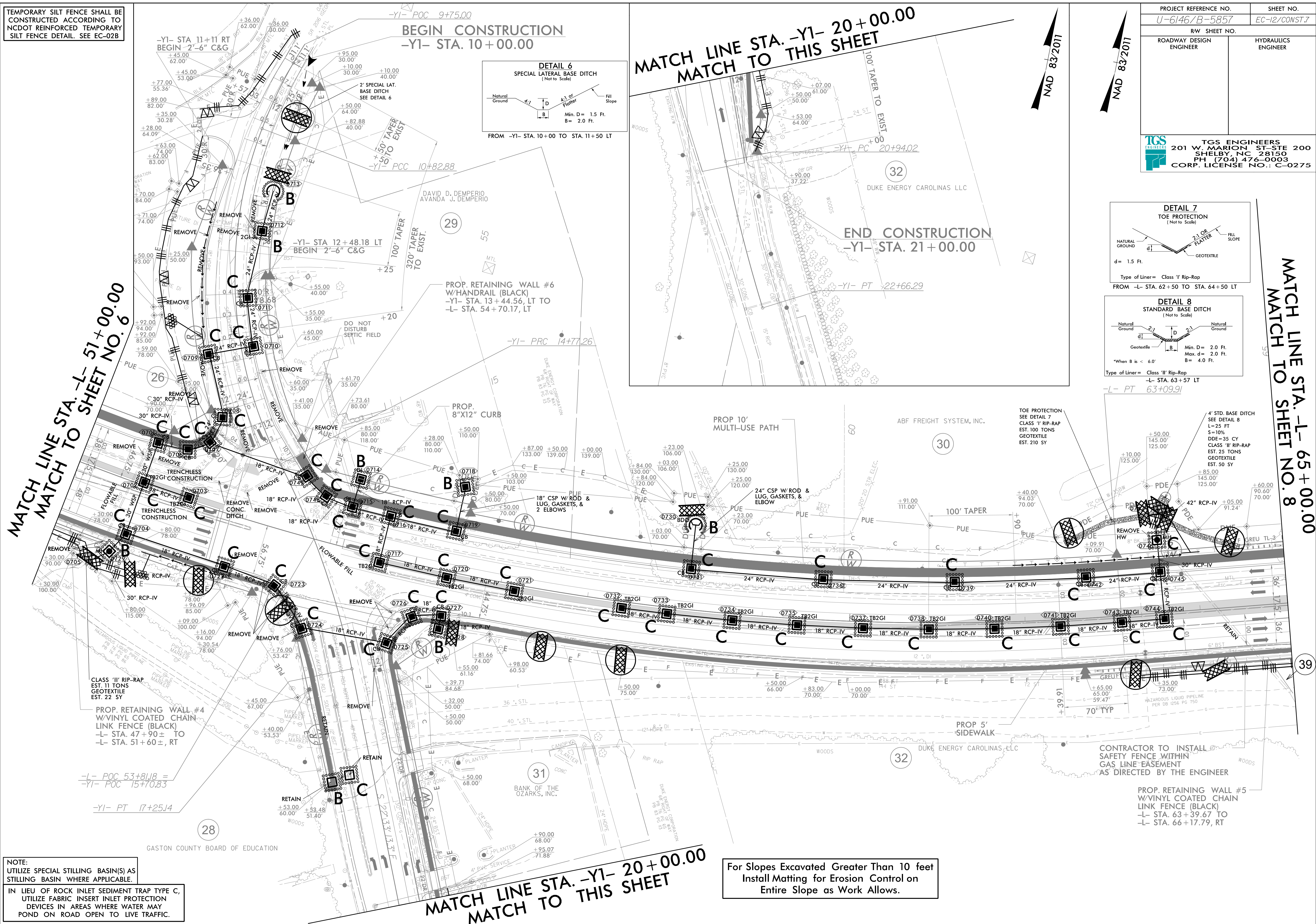
MATCH LINE STA. -L- 38+00.00
MATCH TO SHEET NO. 6

PROJECT REFERENCE NO.	SHEET NO.
U-6146/B-5857	EC-II/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 TGS ENGINEERS 201 W. MARION ST-SITE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	

TGS ENGINEERS
201 W. MARION ST-STE 200
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275



MATCH LINE STA. -L- 65 + 00.00
MATCH TO SHEET NO. 8



For Slopes Excavated Greater Than 10 feet
Install Matting for Erosion Control on
Entire Slope as Work Allows.

