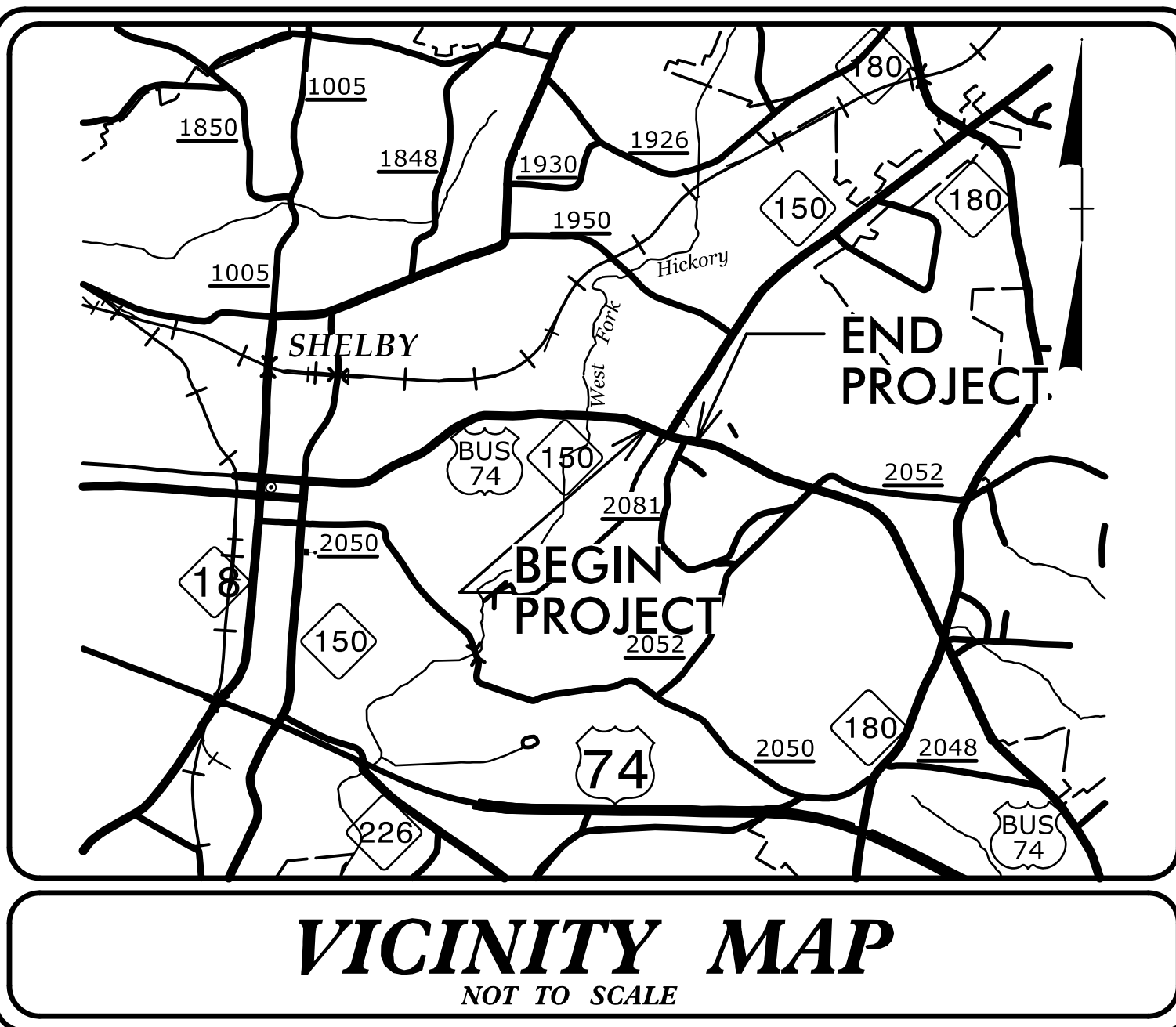


**TIP PROJECT: U-5775**

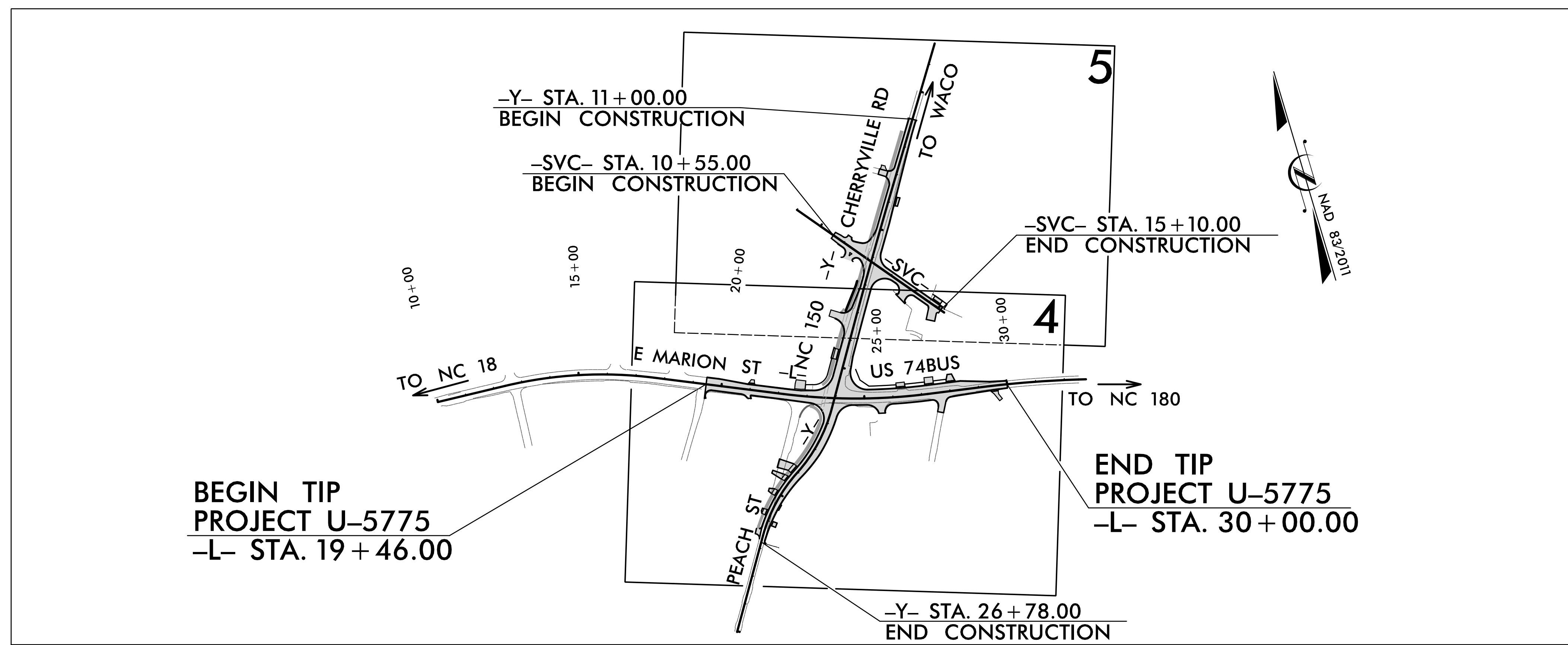


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

**CLEVELAND COUNTY**

**LOCATION: REALIGN INTERSECTION OF US 74 BUS (MARION ST) AT  
NC 150 (CHERRYVILLE RD) AND PEACH ST**

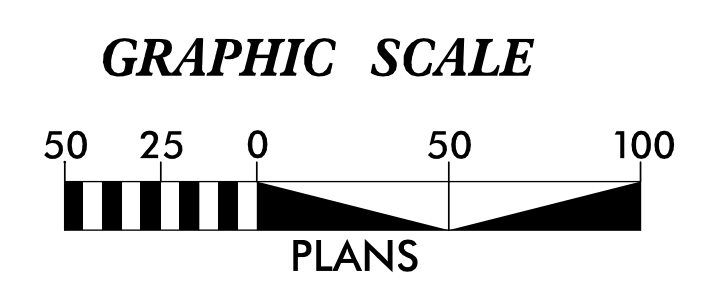
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNAL**



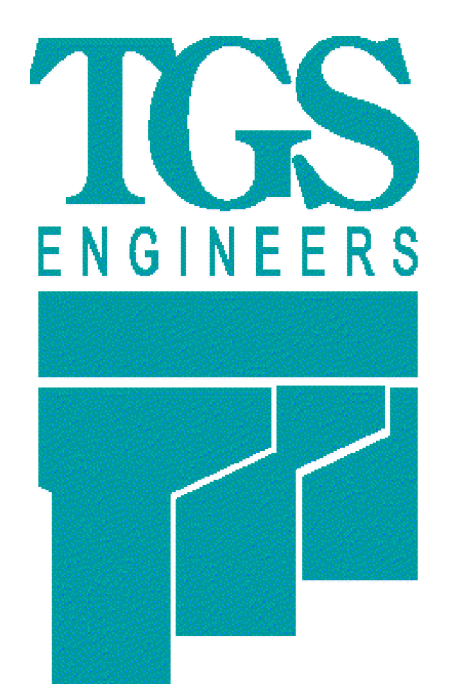
**EROSION AND SEDIMENT CONTROL MEASURES**

Sid. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle / Coir Fiber Wattle	WCFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	WCFW-PAM
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SKB
	Tiered Skimmer Basin	TSKB
	Infiltration Basin	IB

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



**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.

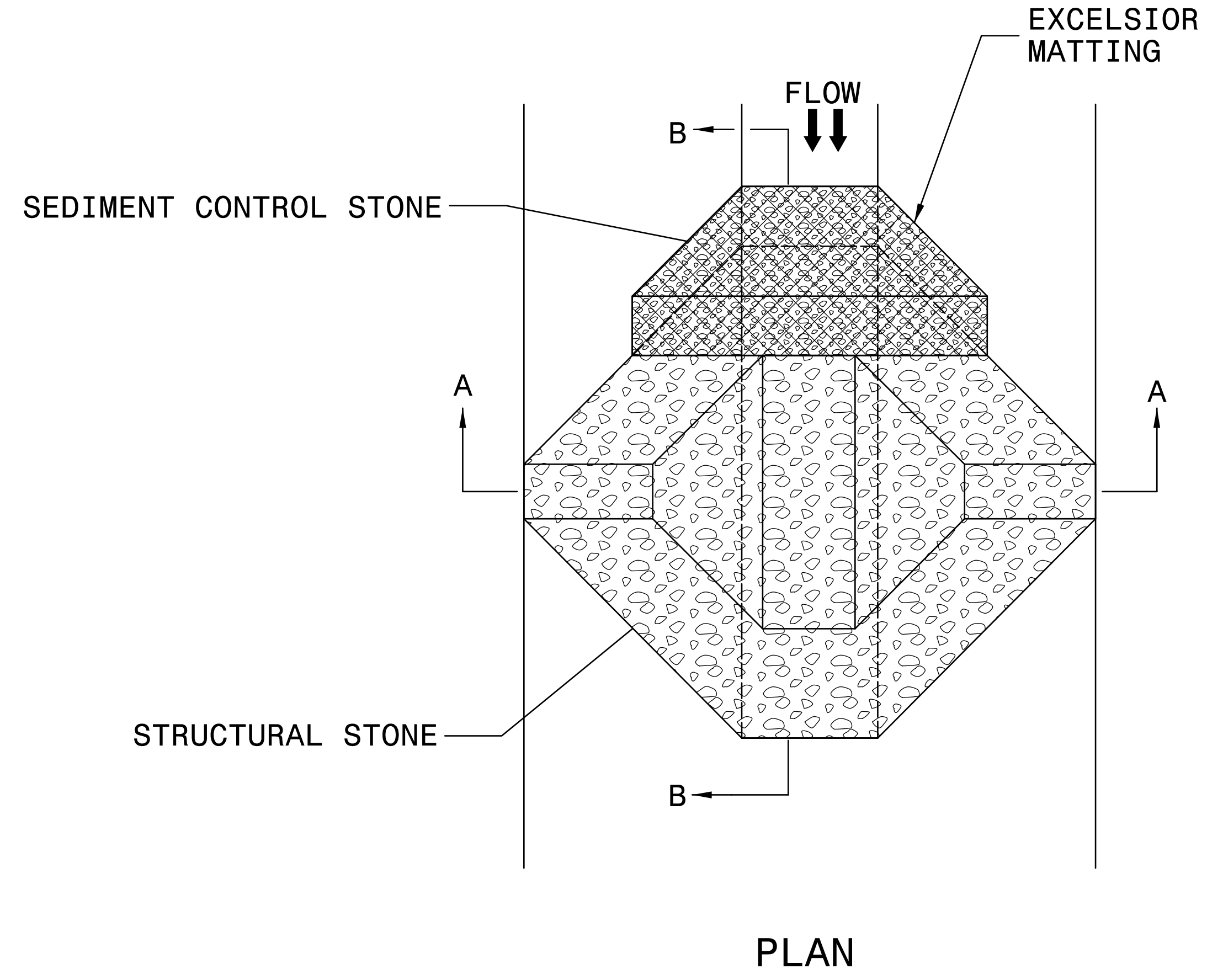
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

PROJECT REFERENCE NO. U-5775	SHEET NO. EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



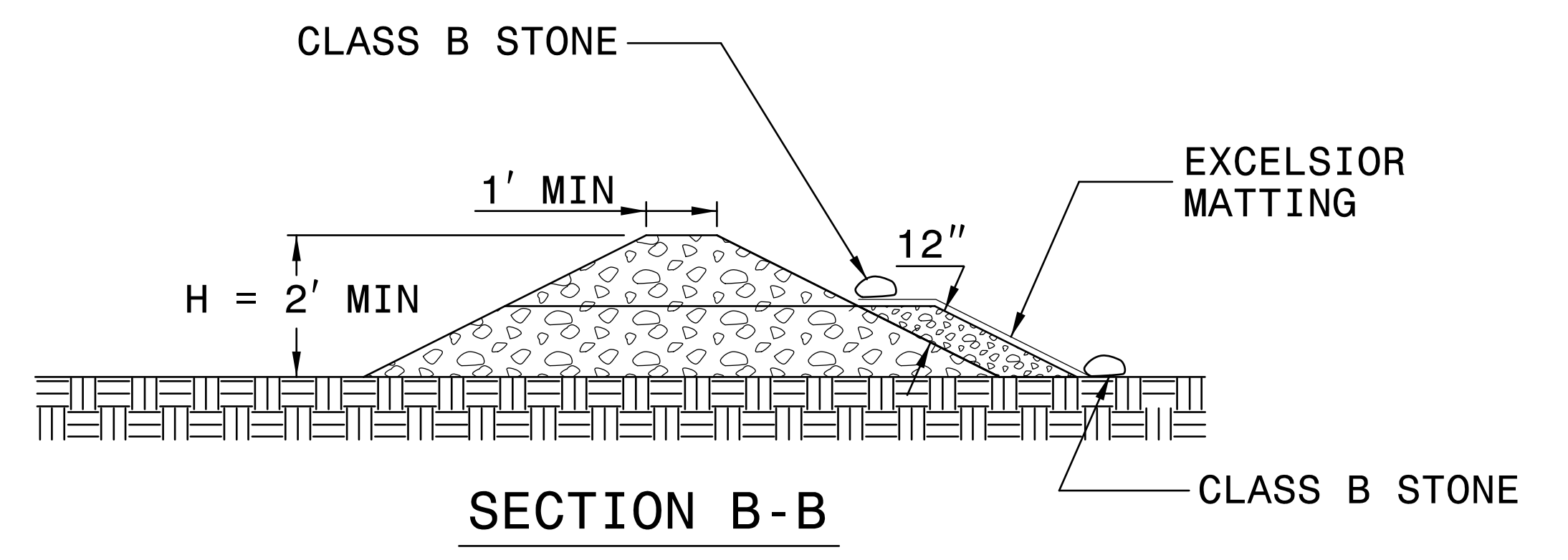
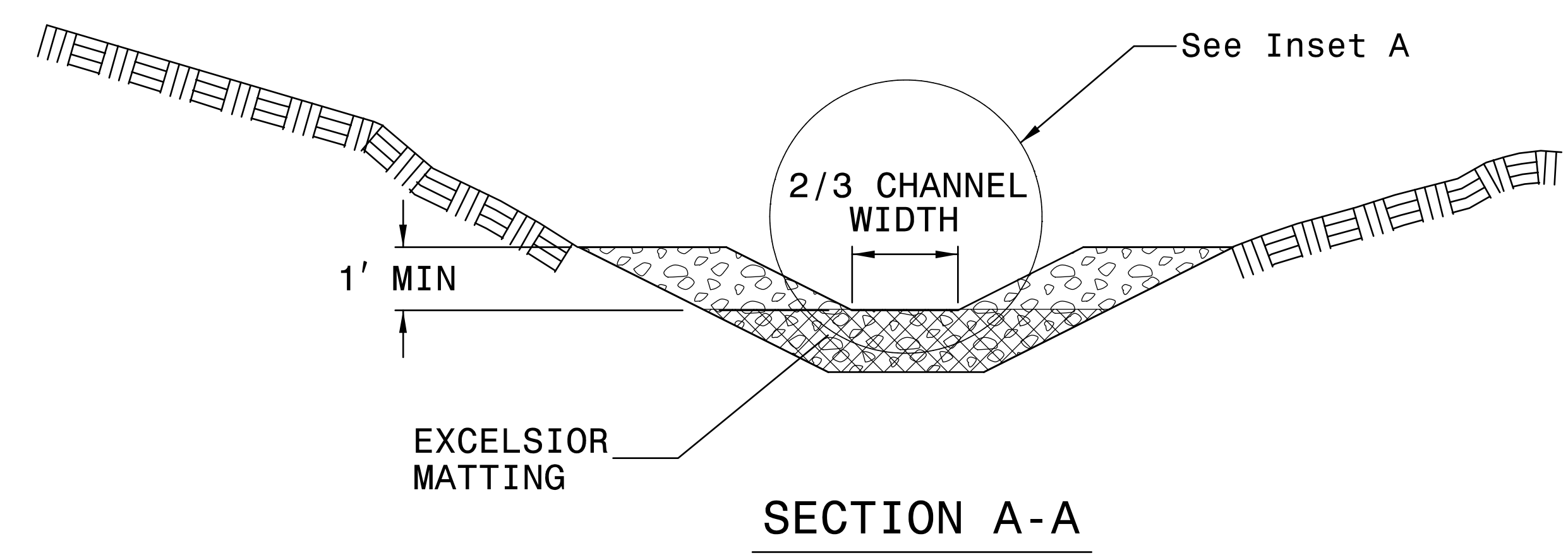
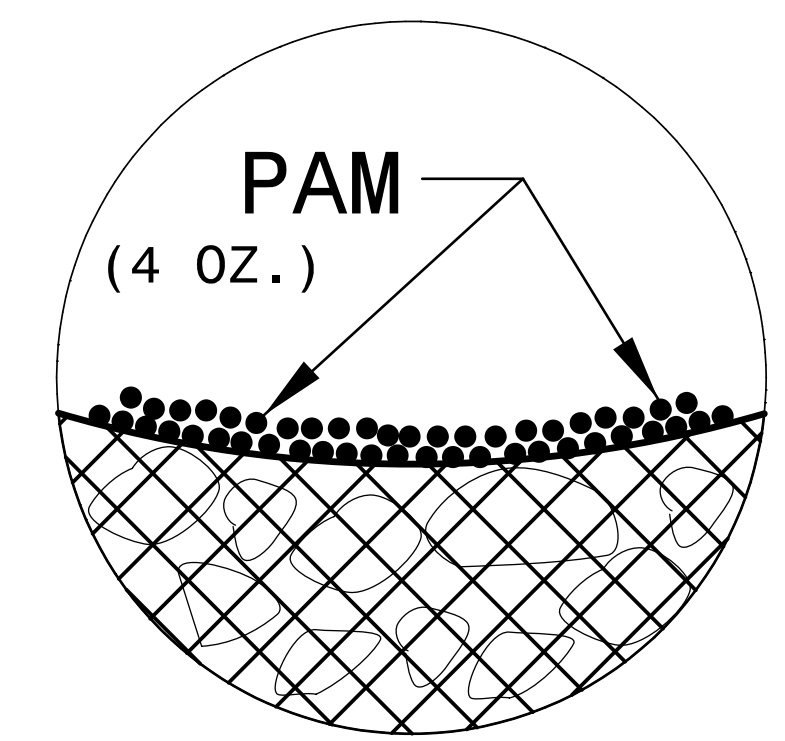
**NOTES:**

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



NOT TO SCALE

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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PROJECT REFERENCE NO. <i>U-5775</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

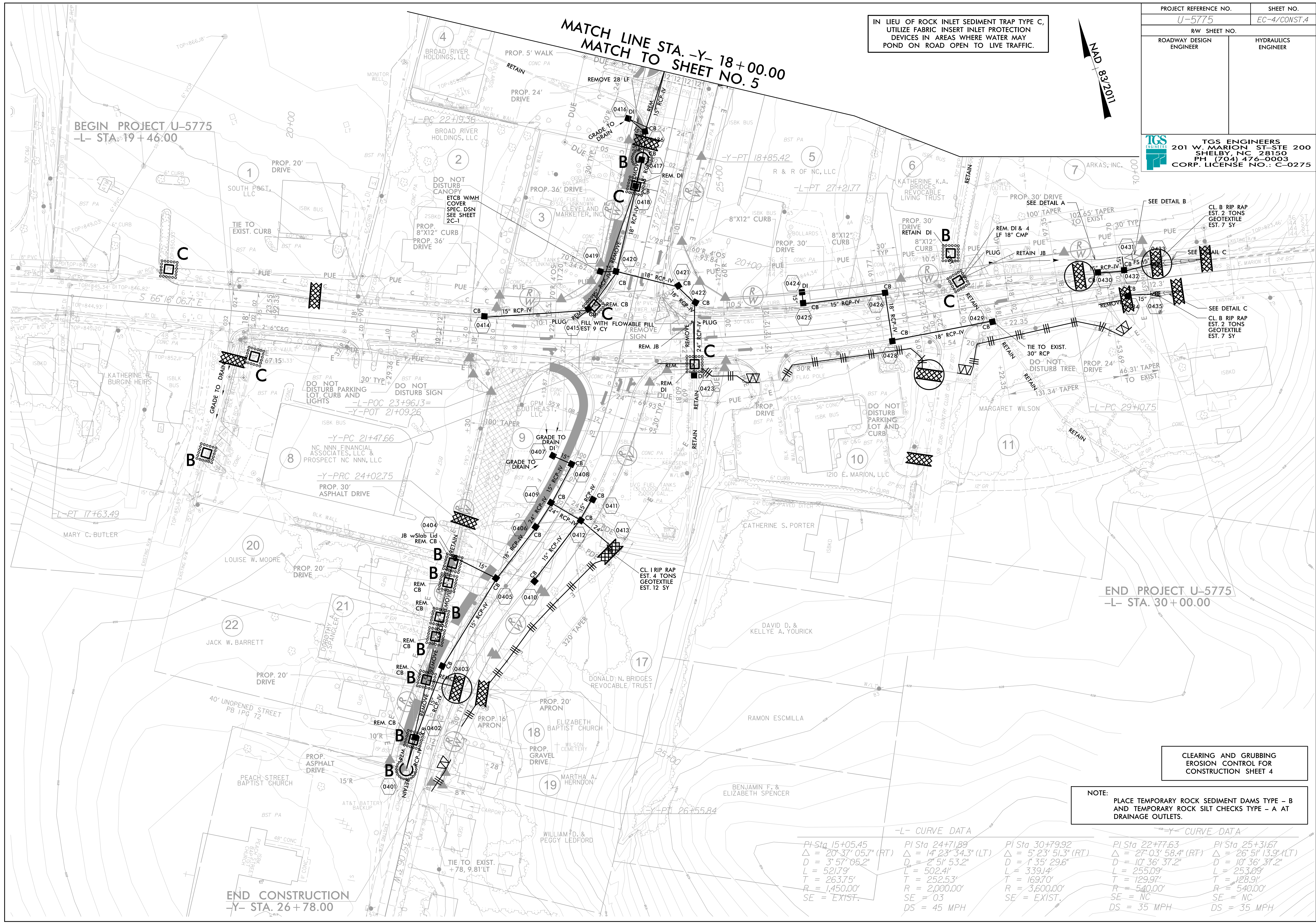
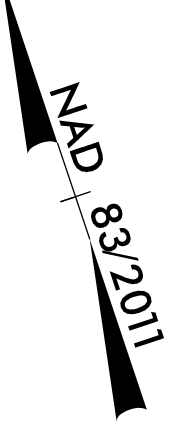
# ***SOIL STABILIZATION TIMEFRAMES***

<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 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.



PROJECT REFERENCE NO.	SHEET NO.
U-5775	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 <b>TGS ENGINEERS</b> 201 W. MARION ST. STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	

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.



BEGIN PROJECT U-5775  
-L- STA. 19+46.00

MATCH LINE STA. -Y- 18+00.00  
MATCH TO SHEET NO. 5

END PROJECT U-5775  
-L- STA. 30+00.00

END CONSTRUCTION  
-Y- STA. 26+78.00

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 4


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

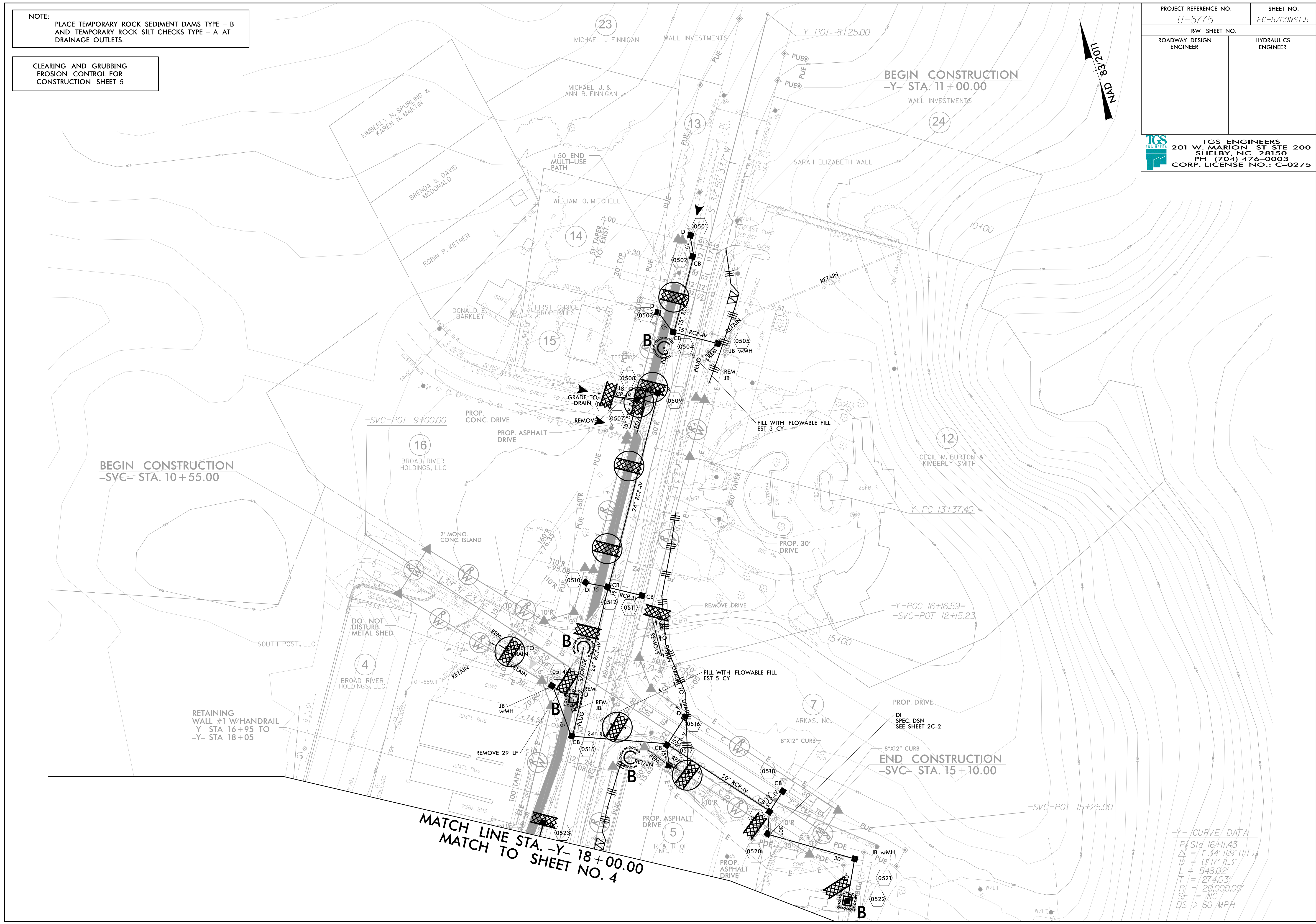
-L- CURVE DATA			-Y- CURVE DATA		
PI Sta 15+05.45	PI Sta 24+71.89	PI Sta 30+79.92	PI Sta 22+77.63	PI Sta 25+31.67	
$\Delta = 20^{\circ}37'05.7"$ (RT)	$\Delta = 14^{\circ}23'34.3"$ (LT)	$\Delta = 5^{\circ}23'51.3"$ (RT)	$\Delta = 27^{\circ}03'58.4"$ (RT)	$\Delta = 26^{\circ}51'13.9"$ (LT)	
$D = 3^{\circ}57'05.2"$	$D = 2^{\circ}51'53.2"$	$D = 1^{\circ}35'29.6"$	$D = 10^{\circ}36'37.2"$	$D = 10^{\circ}36'37.2"$	
$L = 521.79'$	$L = 502.41'$	$L = 339.14'$	$L = 255.09'$	$L = 253.09'$	
$T = 263.75'$	$T = 252.53'$	$T = 169.70'$	$T = 129.97'$	$T = 128.91'$	
$R = 1,450.00'$	$R = 2,000.00'$	$R = 3,600.00'$	$R = 540.00'$	$R = 540.00'$	
$SE = EXIST.$	$SE = 03$	$SE = EXIST.$	$SE = NC$	$SE = NC$	
	$DS = 45$ MPH		$DS = 35$ MPH	$DS = 35$ MPH	



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 5


PROJECT REFERENCE NO. U-5775		SHEET NO. EC-5/CONST.5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
 <b>TGS ENGINEERS</b> 201 W. MARION ST. STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275			

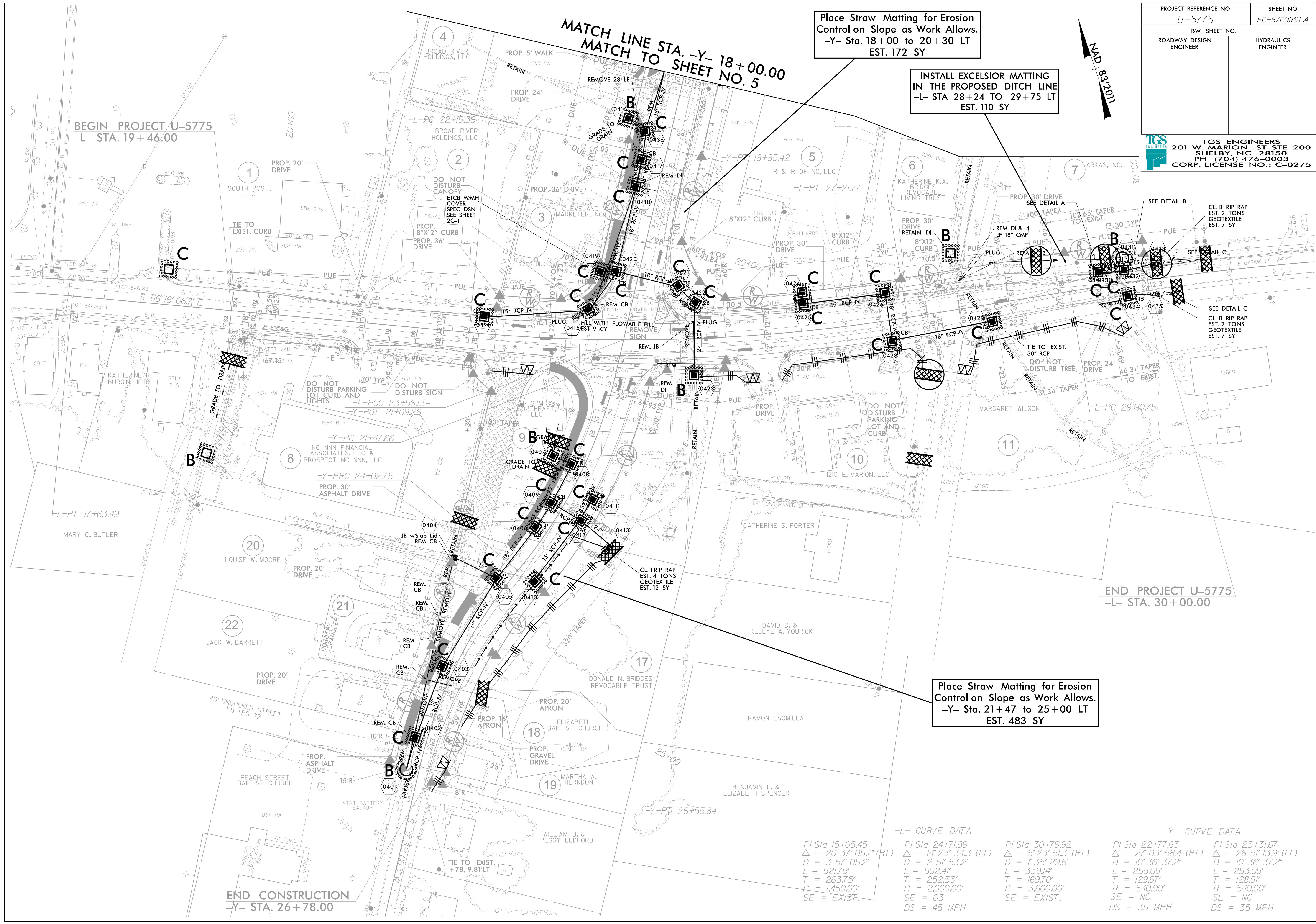


MATCH LINE STA. -Y- 18+00.00  
MATCH TO SHEET NO. 4

-Y- CURVE DATA  
 $P = Sta 16+11.43$   
 $\Delta = 1^\circ 34' 11.9\" (LT)$   
 $D = 0' 17' 11.3\"$   
 $L = 548.02'$   
 $T = 274.03'$   
 $R = 20,000.00'$   
 $SE = NC$   
 $DS > 60 MPH$



PROJECT REFERENCE NO.	SHEET NO.
U-5775	EC-6/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 <b>TGS ENGINEERS</b> 201 W. MARION ST-STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	



Place Straw Matting for Erosion Control on Slope as Work Allows.  
 -Y- Sta. 18+00 to 20+30 LT  
 EST. 172 SY

INSTALL EXCELSIOR MATTING IN THE PROPOSED DITCH LINE  
 -L- STA 28+24 TO 29+75 LT  
 EST. 110 SY

Place Straw Matting for Erosion Control on Slope as Work Allows.  
 -Y- Sta. 21+47 to 25+00 LT  
 EST. 483 SY


BEGIN PROJECT U-5775  
 -L- STA. 19+46.00

END PROJECT U-5775  
 -L- STA. 30+00.00

END CONSTRUCTION  
 -Y- STA. 26+78.00

-L- CURVE DATA			-Y- CURVE DATA		
PI Sta 15+05.45	PI Sta 24+71.89	PI Sta 30+79.92	PI Sta 22+77.63	PI Sta 25+31.67	
$\Delta = 20' 37" 05.7" (RT)$	$\Delta = 14' 23' 34.3" (LT)$	$\Delta = 5' 23' 51.3" (RT)$	$\Delta = 27' 03' 58.4" (RT)$	$\Delta = 26' 51' 13.9" (LT)$	
$D = 3' 57' 05.2"$	$D = 2' 51' 53.2"$	$D = 1' 35' 29.6"$	$D = 10' 36' 37.2"$	$D = 10' 36' 37.2"$	
$L = 521.79'$	$L = 502.41'$	$L = 339.14'$	$L = 255.09'$	$L = 253.09'$	
$T = 263.75'$	$T = 252.53'$	$T = 169.70'$	$T = 129.97'$	$T = 128.91'$	
$R = 1,450.00'$	$R = 2,000.00'$	$R = 3,600.00'$	$R = 540.00'$	$R = 540.00'$	
$SE = EXIST.$	$SE = 03$	$SE = EXIST.$	$SE = NC$	$SE = NC$	
	$DS = 45 MPH$		$DS = 35 MPH$	$DS = 35 MPH$	



PROJECT REFERENCE NO.		SHEET NO.	
U-5775		EC-7/CONST.5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
 <b>TGS ENGINEERS</b> 201 W. MARION ST. STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275			



Place Straw Matting for Erosion Control on Slope as Work Allows.  
 -Y- Sta. 11+50 to 12+50 LT  
 EST. 125 SY

BEGIN CONSTRUCTION  
 -SVC- STA. 10+55.00

BEGIN CONSTRUCTION  
 -Y- STA. 11+00.00  
 WALL INVESTMENTS

END CONSTRUCTION  
 -SVC- STA. 15+10.00

MATCH LINE STA. -Y- 18+00.00  
 MATCH TO SHEET NO. 4

-Y- CURVE DATA  
 PI Sta 16+11.43  
 $\Delta = 1^{\circ} 34' 11.9\"$  (LT)  
 $D = 0^{\circ} 17' 11.3\"$   
 $L = 548.02'$   
 $T = 274.03'$   
 $R = 20,000.00'$   
 $SE = NC$   
 $DS > 60$  MPH