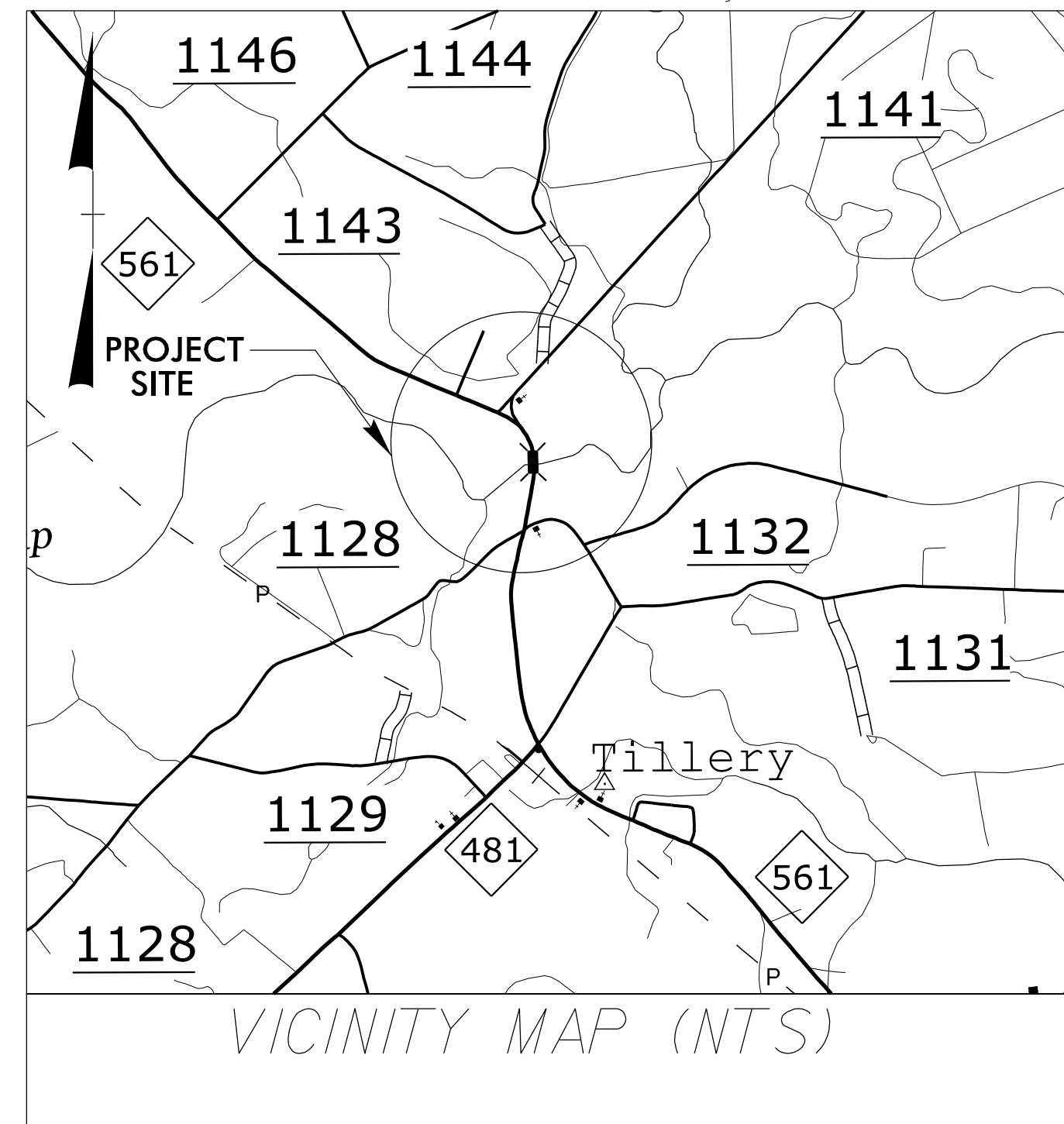


09/08/19

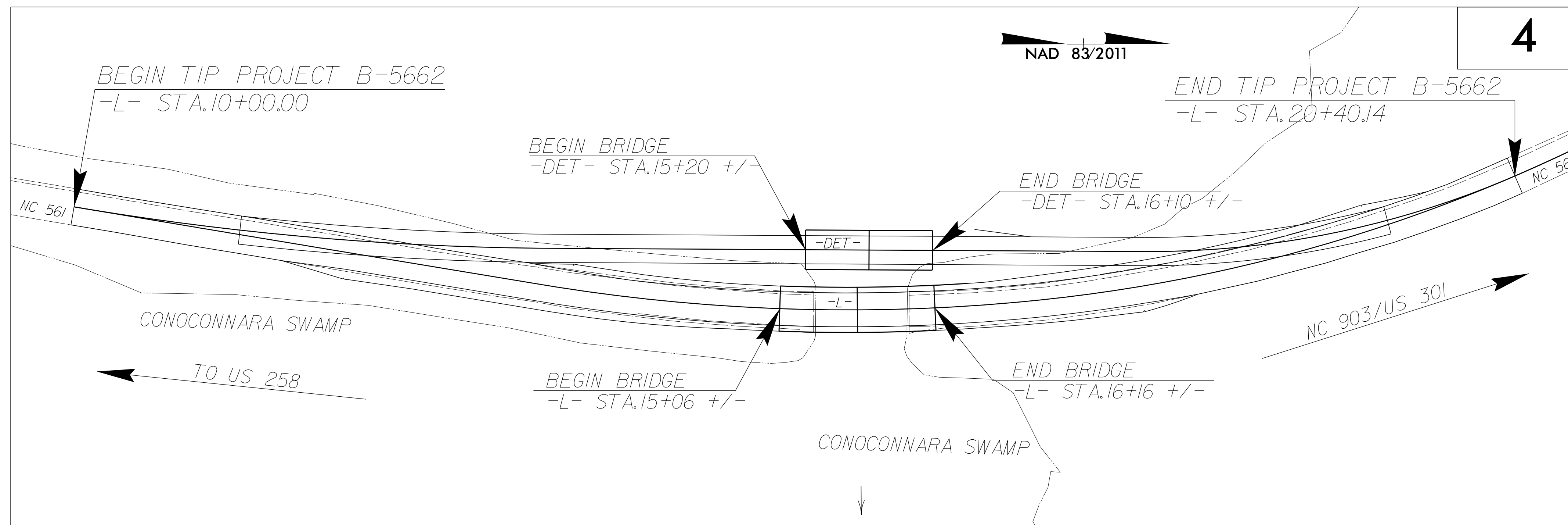
See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



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

**LOCATION: REPLACE BRIDGE NO. 93 OVER
CONOCONNARA SWAMP ON NC 561**

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5662	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45617.1.1		P.E.	
45617.2.1		ROWUTIL	
45917.3.1		CONSTR.	

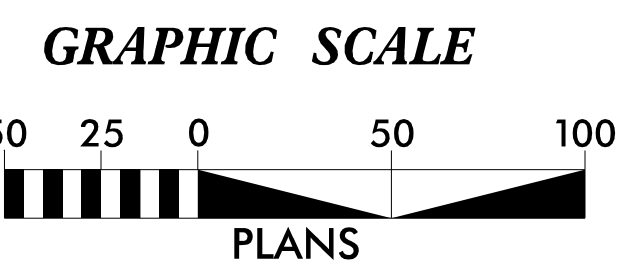
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	—▲—
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▩
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▩
1633.02	Temporary Rock Silt Check Type-B	▩
	Wattle/Coir Fiber Wattle	—▲—
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	—▲—
1654.01	Temporary Rock Sediment Dam Type-A	▩
1654.02	Temporary Rock Sediment Dam Type-B	▩
1635.01	Rock Pipe Inlet Sediment Trap Type-A	⊓
1635.02	Rock Pipe Inlet Sediment Trap Type-B	⊓
1630.04	Stilling Basin	▭
1630.06	Special Stilling Basin	▭
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.05	Type C	C
	Skimmer Basin	▭
	Tiered Skimmer Basin	▭
	Infiltration Basin	▭

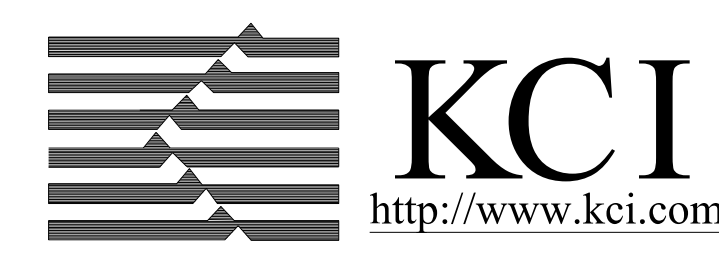
**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**

TIP PROJECT: B-5662

CONTRACT:



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:
KCI ASSOCIATES OF NORTH CAROLINA, PA
4505 FALLS OF NEUSE ROAD
RALEIGH, NC 27609

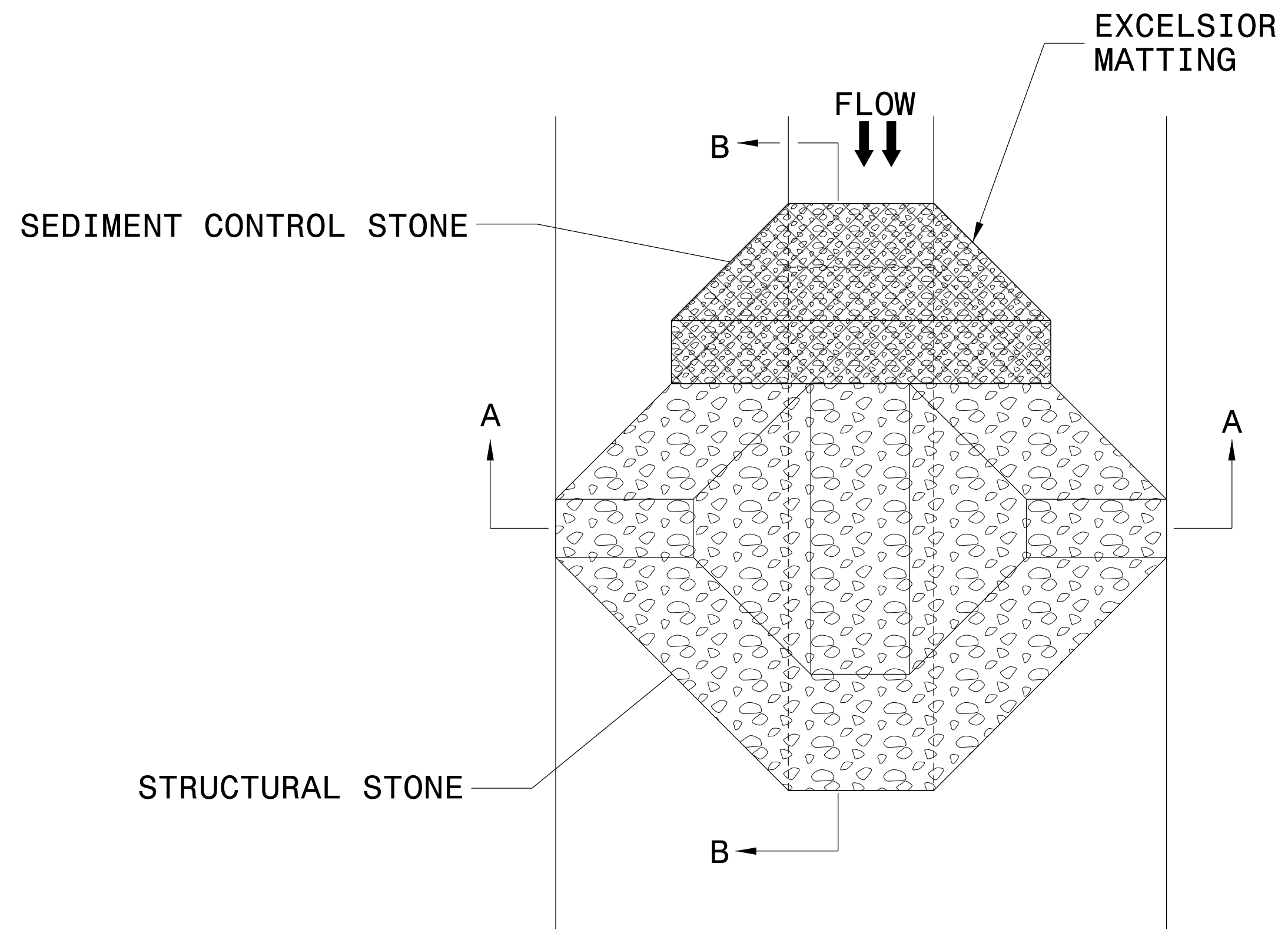
Designed by:
ELIZABETH SHELDON, EI #4275
NAME LEVEL III CERTIFICATION NO.

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.

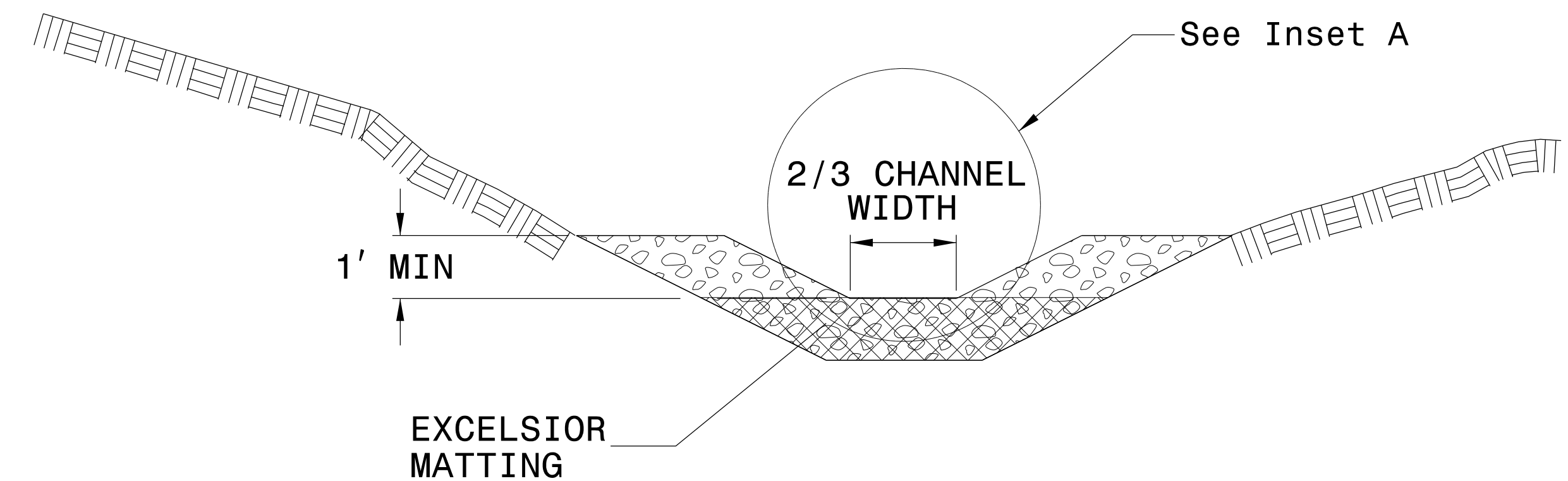
1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type 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	

9/6/2019
M:\2018\25801945.21 B-5662\Roadside\B-5662_reu_EC-.l.dgn
Elizabeth Sheldon

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



PLAN



SECTION A-A

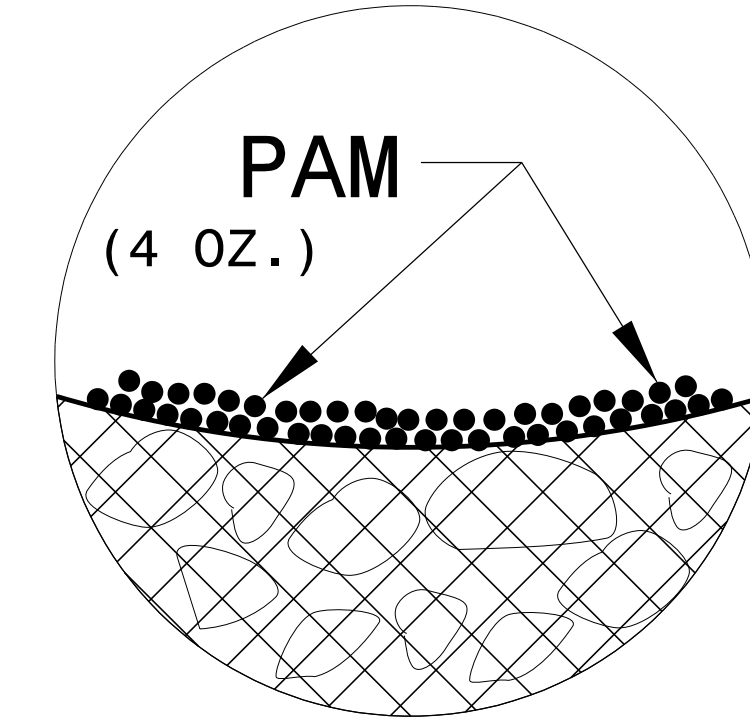
NOTES:

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

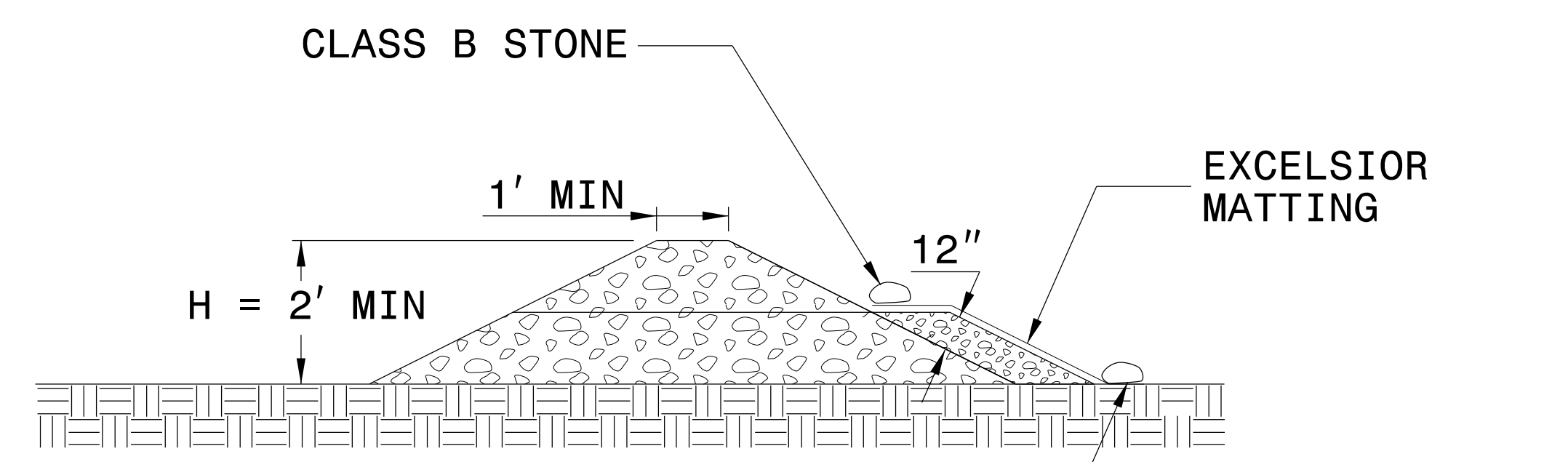
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.



INSET A

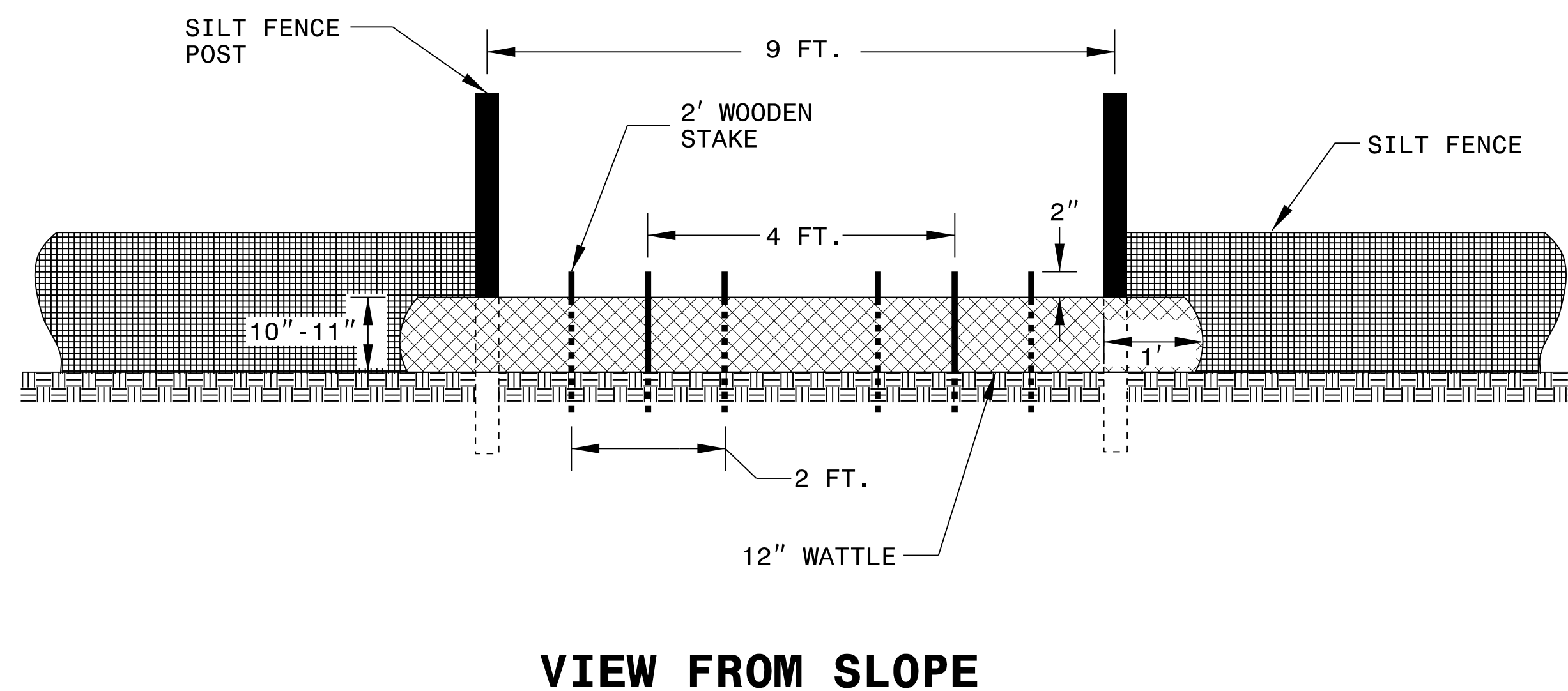
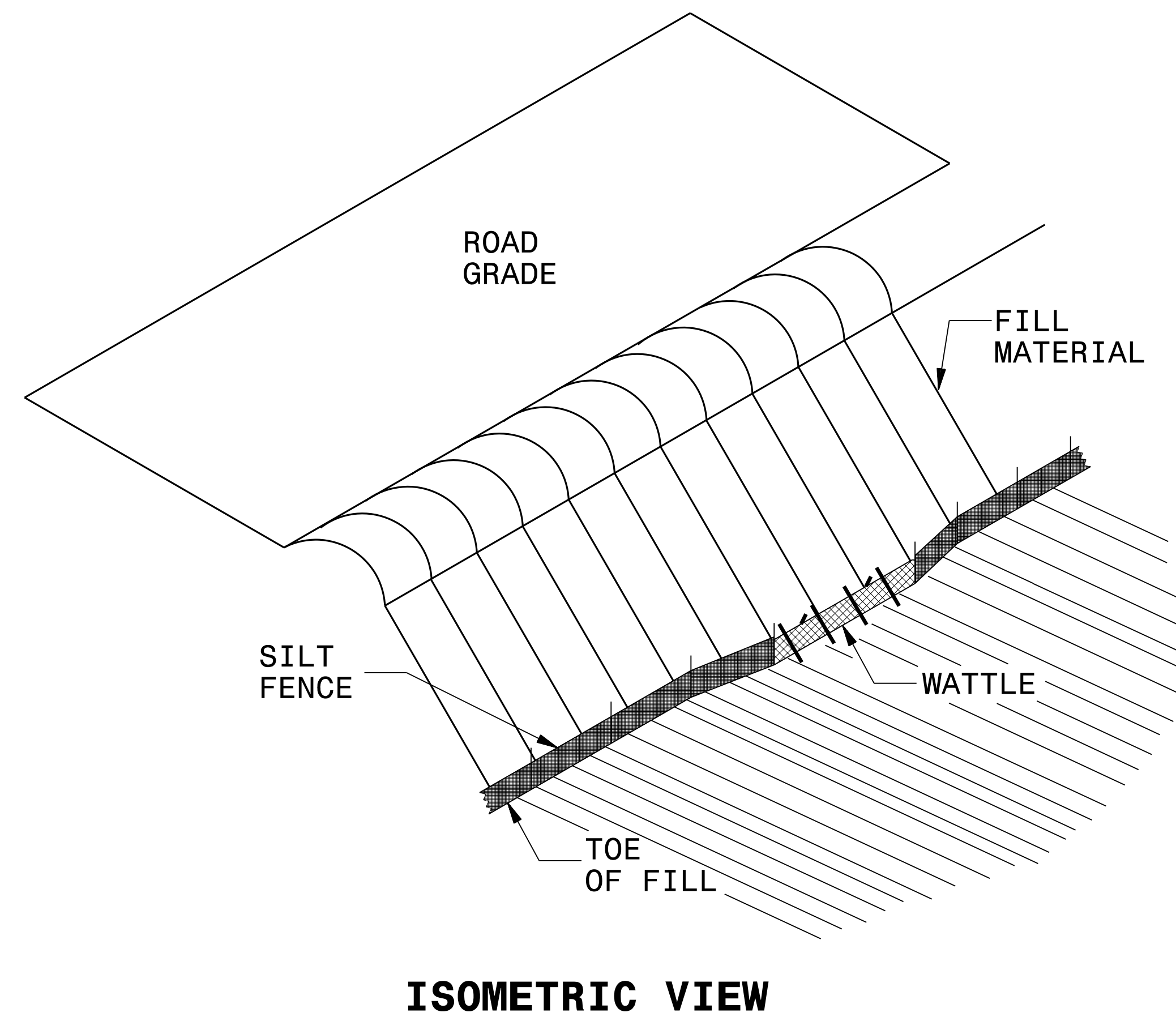


SECTION B-B

NOT TO SCALE

8/17/99
8/22/2019
5/18/0194F.21 B-5662 \Roadside\B-5662
Elizabeth Sheldon

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

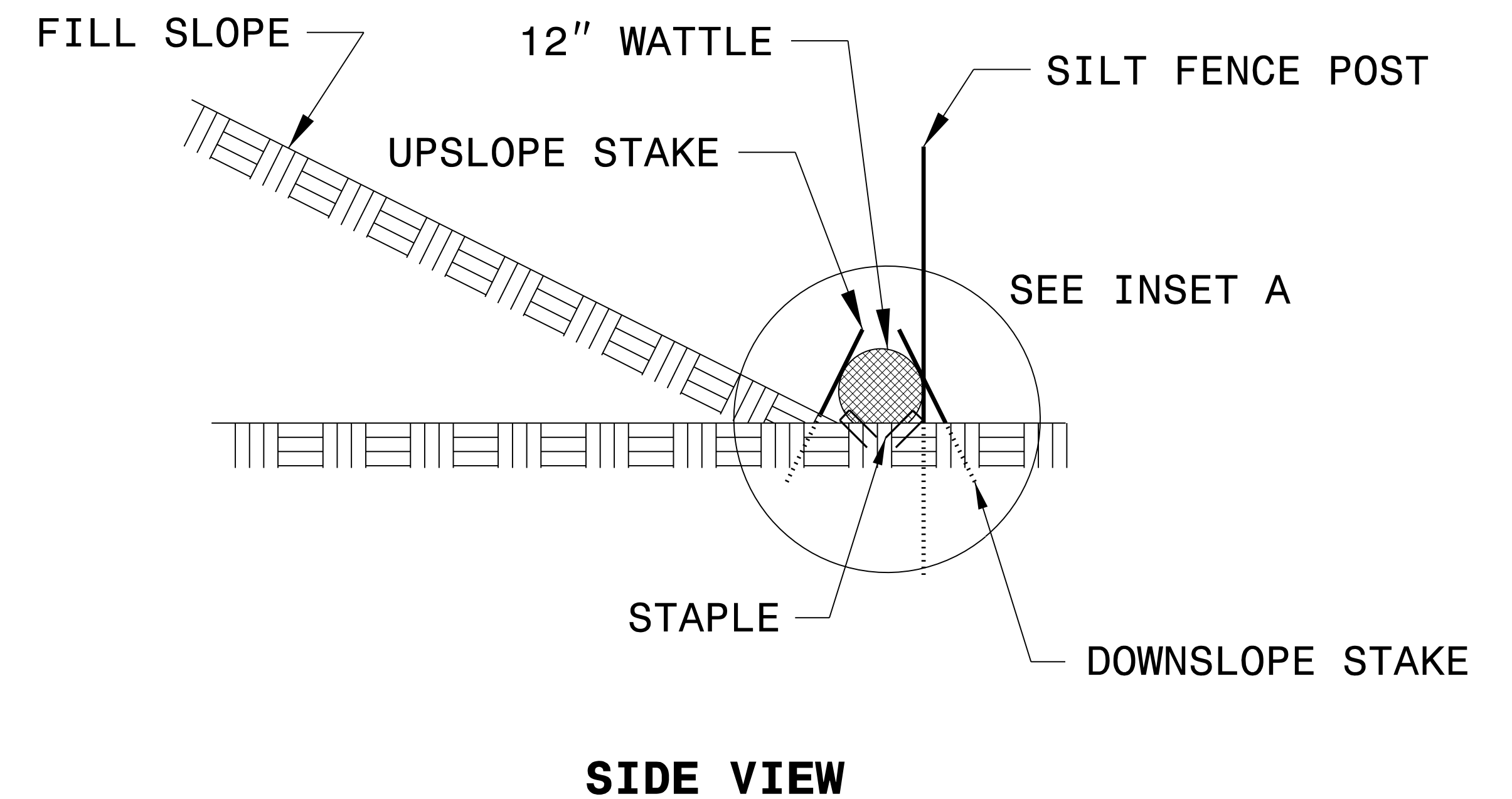
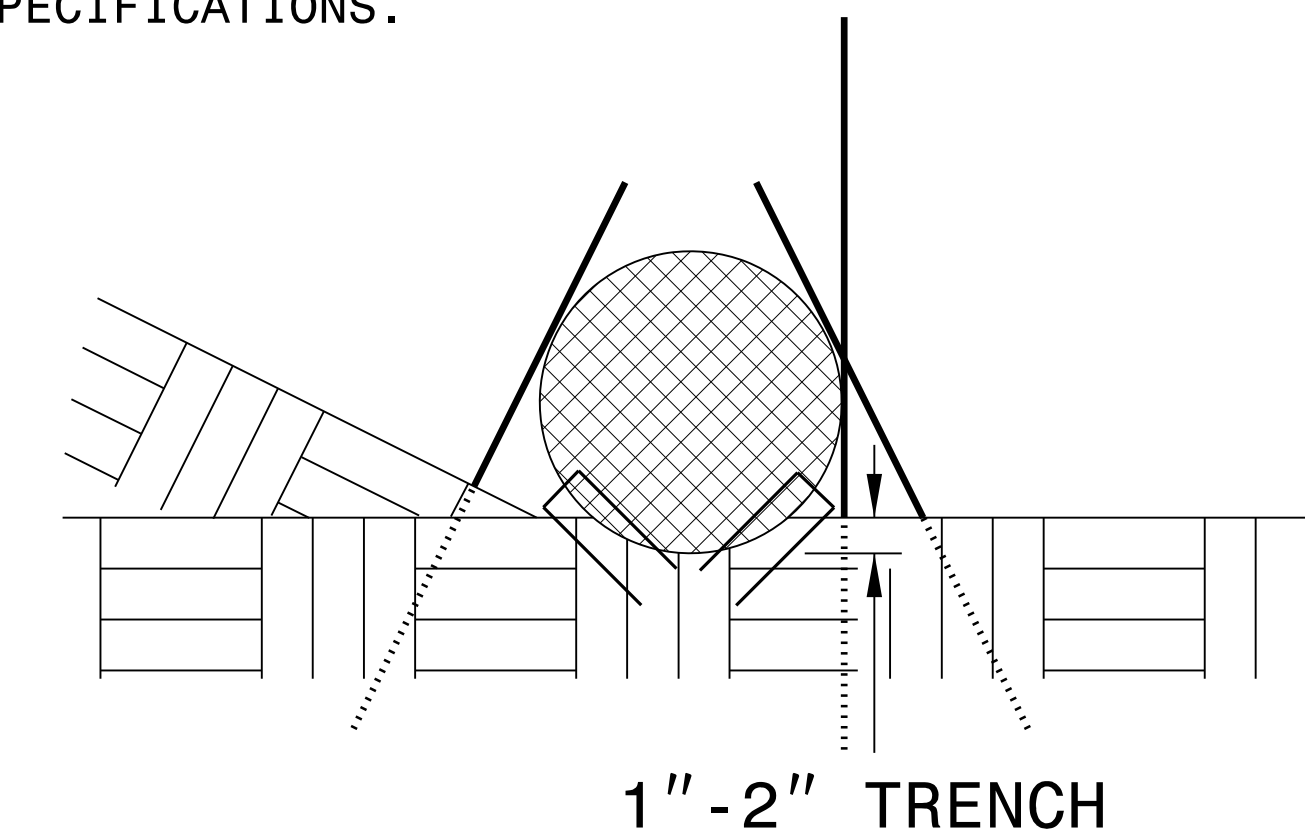
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.


INSET A



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

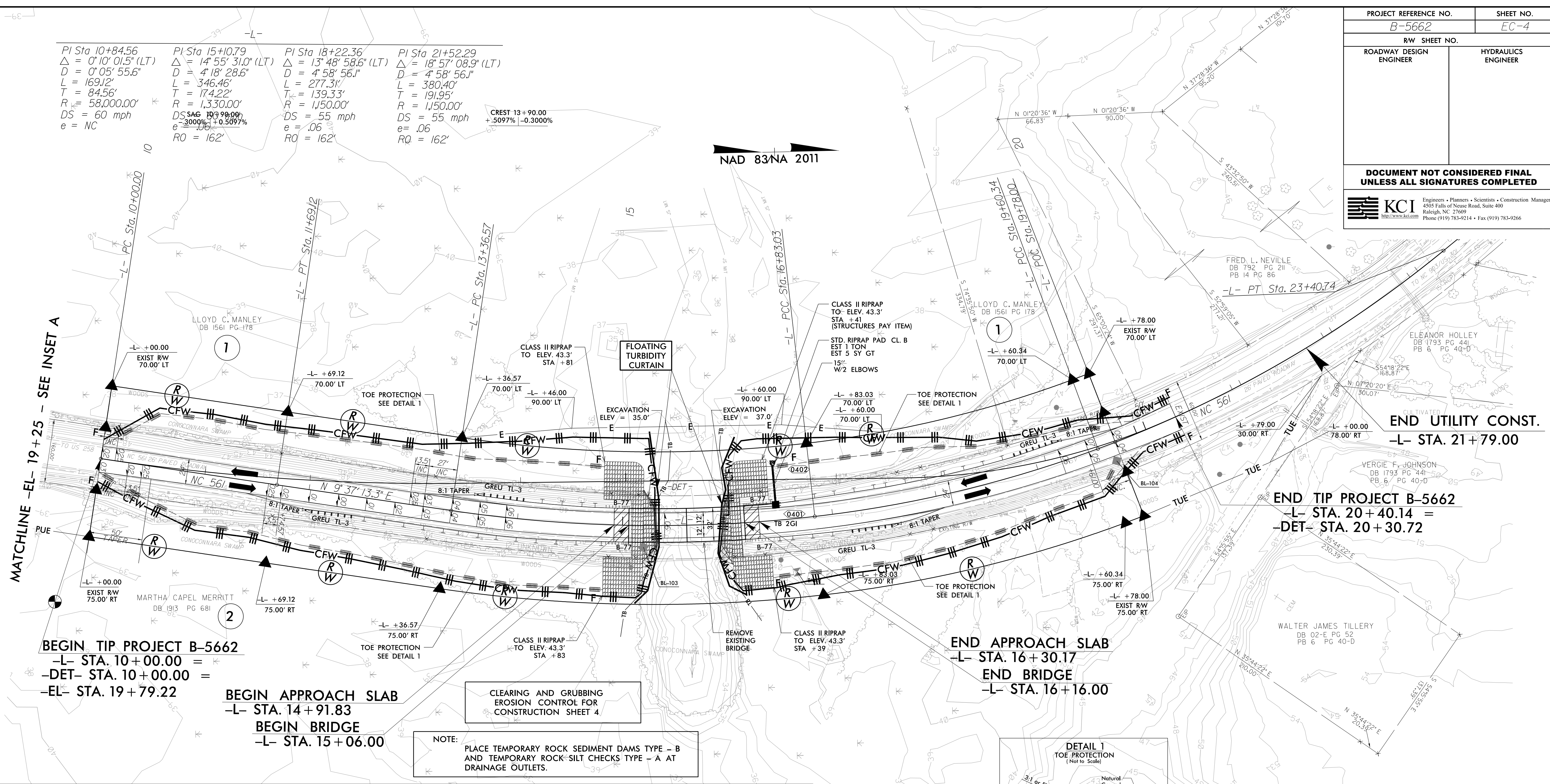
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 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. B-5662		SHEET NO. EC-4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
 KCI <small>Engineers • Planners • Scientists • Construction Managers</small> <small>4505 Falls of Neuse Road, Suite 400</small> <small>Raleigh, NC 27609</small> <small>Phone (919) 783-9214 • Fax (919) 783-9266</small>			

PI Sta 10+84.56 $\Delta = 0^{\circ} 10' 01.5" (LT)$ $D = 0^{\circ} 05' 55.6"$ $L = 169.12'$ $T = 84.56'$ $R = 58,000.00'$ $DS = 60 \text{ mph}$ $e = NC$	PI Sta 15+10.79 $\Delta = 14^{\circ} 55' 31.0" (LT)$ $D = 4^{\circ} 18' 28.6"$ $L = 346.46'$ $T = 174.22'$ $R = 1,330.00'$ $DS = 60 \text{ mph}$ $e = 0.06$ $RO = 162'$	PI Sta 18+22.36 $\Delta = 13^{\circ} 48' 58.6" (LT)$ $D = 4^{\circ} 58' 56.1"$ $L = 277.31'$ $T = 139.33'$ $R = 1,150.00'$ $DS = 55 \text{ mph}$ $e = 0.06$ $RO = 162'$	PI Sta 21+52.29 $\Delta = 18^{\circ} 57' 08.9" (LT)$ $D = 4^{\circ} 58' 56.1"$ $L = 380.40'$ $T = 191.95'$ $R = 1,150.00'$ $DS = 55 \text{ mph}$ $e = 0.06$ $RO = 162'$
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CREST 13+90.00
+5.097% -0.3000%

NAD 83/NA 2011



BEGIN TIP PROJECT B-5662
 -L- STA. 10+00.00 =
 -DET- STA. 10+00.00 =
 -EL- STA. 19+79.22

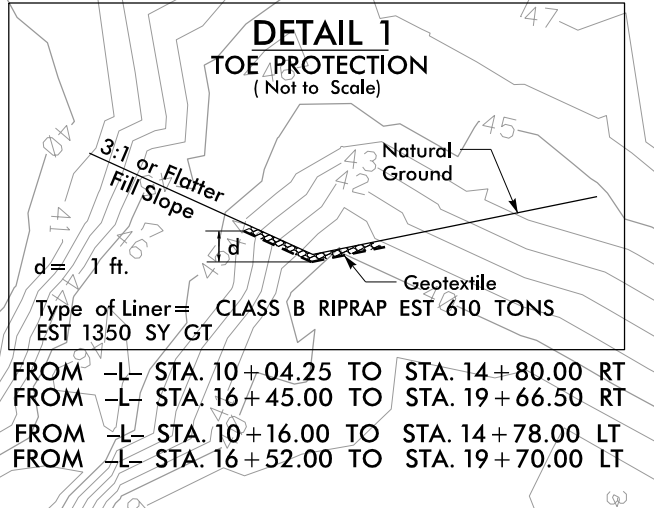
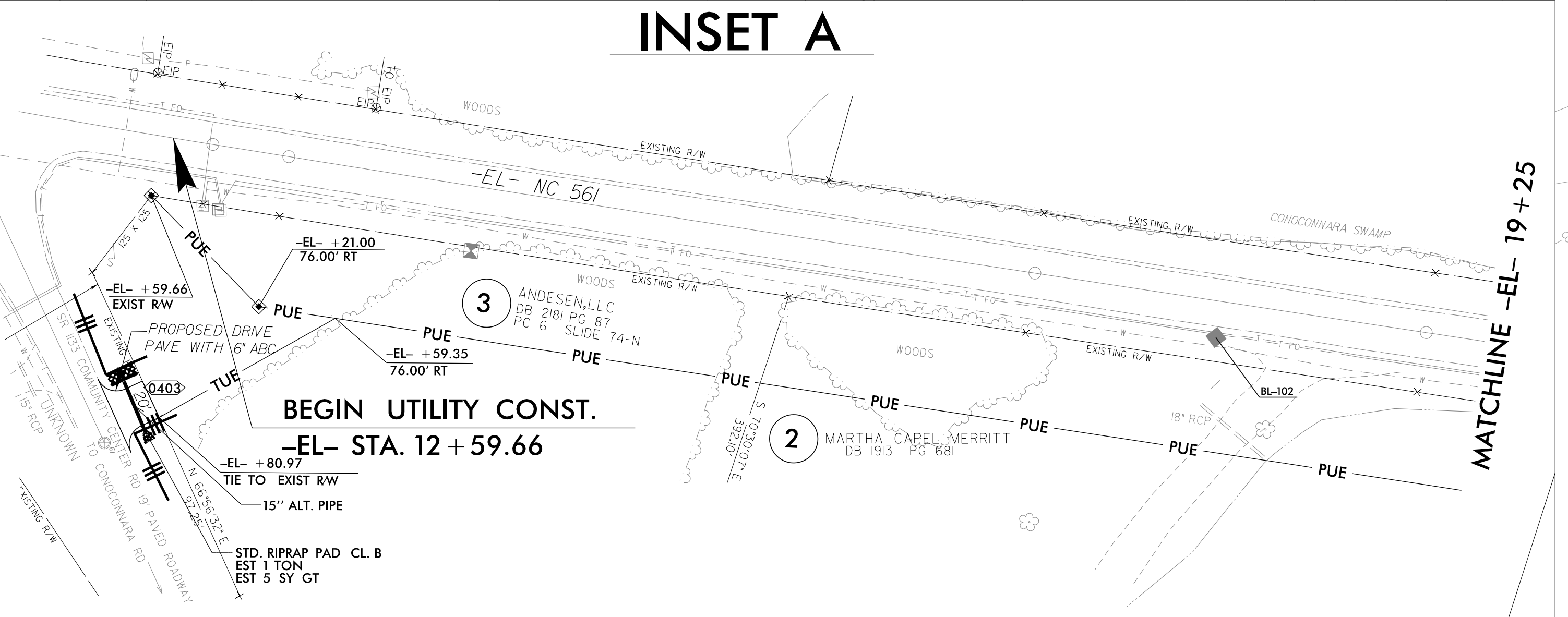
BEGIN APPROACH SLAB
 -L- STA. 14+91.83
BEGIN BRIDGE
 -L- STA. 15+06.00

END APPROACH SLAB
 -L- STA. 16+30.17
END BRIDGE
 -L- STA. 16+16.00

END TIP PROJECT B-5662
 -L- STA. 20+40.14 =
 -DET- STA. 20+30.72

END UTILITY CONST.
 -L- STA. 21+79.00


INSET A



 BRIDGE APPROACH SLAB
 STRUCTURE EXCAVATION

FOR -L PROFILE SEE SHEET 5
 FOR -DET- SEE SHEET 4A
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-7

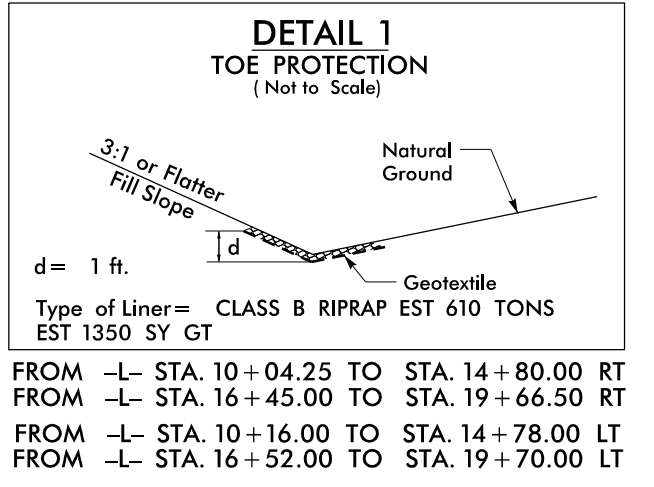
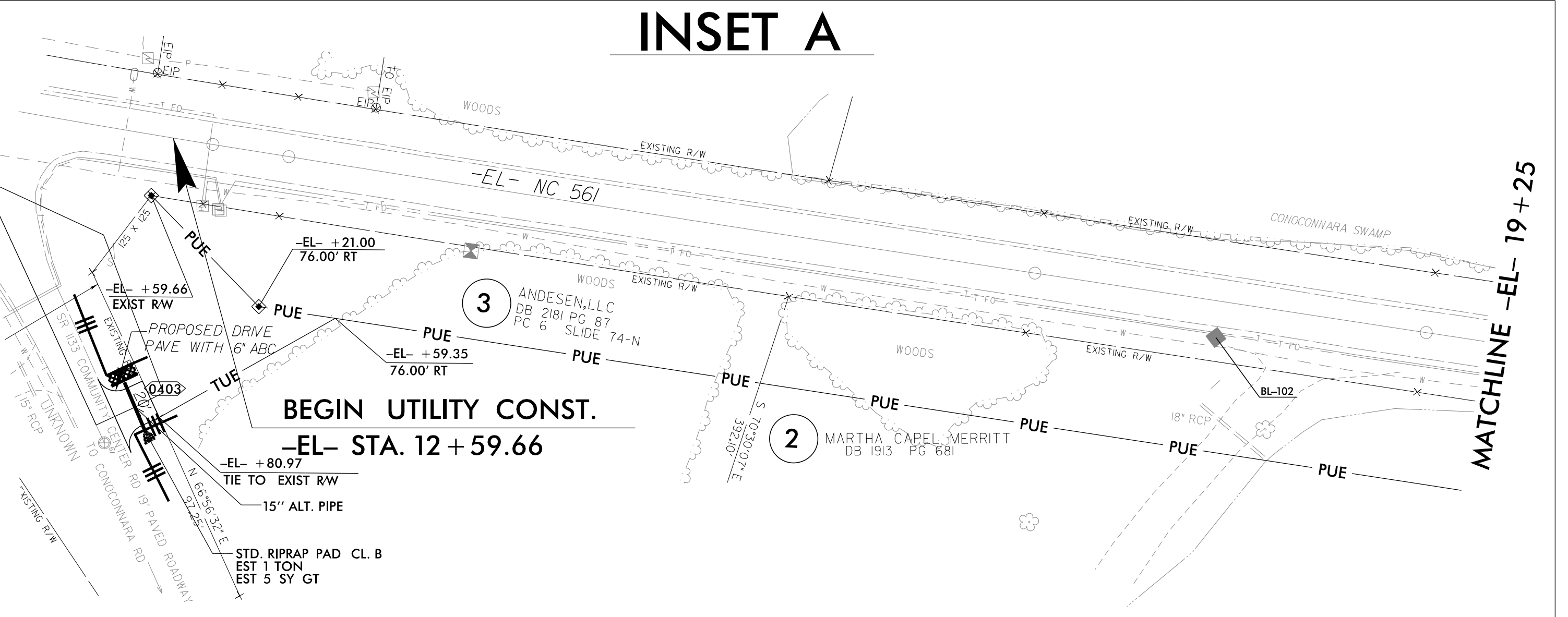
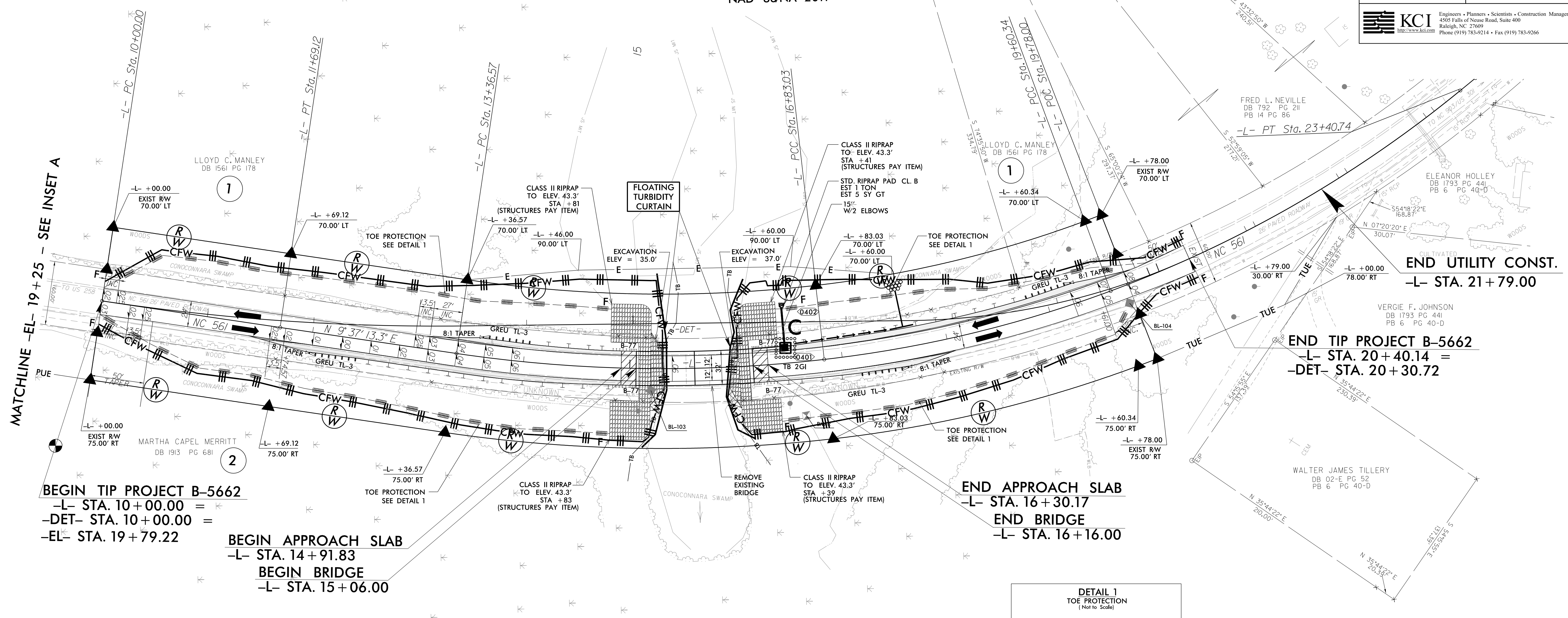
8/17/99
 5/4/2020
 Elizabeth Sheldon

PROJECT REFERENCE NO. B-5662		SHEET NO. EC-5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
 Engineers • Planners • Scientists • Construction Managers 4505 Falls of Neuse Road, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 • Fax (919) 783-9266			

PI Sta 10+84.56 $\Delta = 0^{\circ} 10' 01.5''$ (LT) $D = 0^{\circ} 05' 55.6''$ $L = 169.12'$ $T = 84.56'$ $R = 58,000.00'$ $DS = 60$ mph $e = NC$	PI Sta 15+10.79 $\Delta = 14^{\circ} 55' 31.0''$ (LT) $D = 4^{\circ} 18' 28.6''$ $L = 346.46'$ $T = 174.22'$ $R = 1,330.00'$ $DS = 60$ mph $e = NC$	PI Sta 18+22.36 $\Delta = 13^{\circ} 48' 58.6''$ (LT) $D = 4^{\circ} 58' 56.1''$ $L = 277.31'$ $T = 139.33'$ $R = 1,150.00'$ $DS = 55$ mph $e = NC$	PI Sta 21+52.29 $\Delta = 18^{\circ} 57' 08.9''$ (LT) $D = 4^{\circ} 58' 56.1''$ $L = 380.40'$ $T = 191.95'$ $R = 1,150.00'$ $DS = 55$ mph $e = NC$
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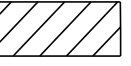
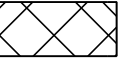
CREST 13+90.00
+5.097% -0.3000%

NAD 83/NA 2011



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

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

-  BRIDGE APPROACH SLAB
-  STRUCTURE EXCAVATION

FOR -L- PROFILE SEE SHEET 5
 FOR -DET- SEE SHEET 4A
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-7

REVISIONS

8/17/99
 5/4/2020
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 Elizabeth Sheldon