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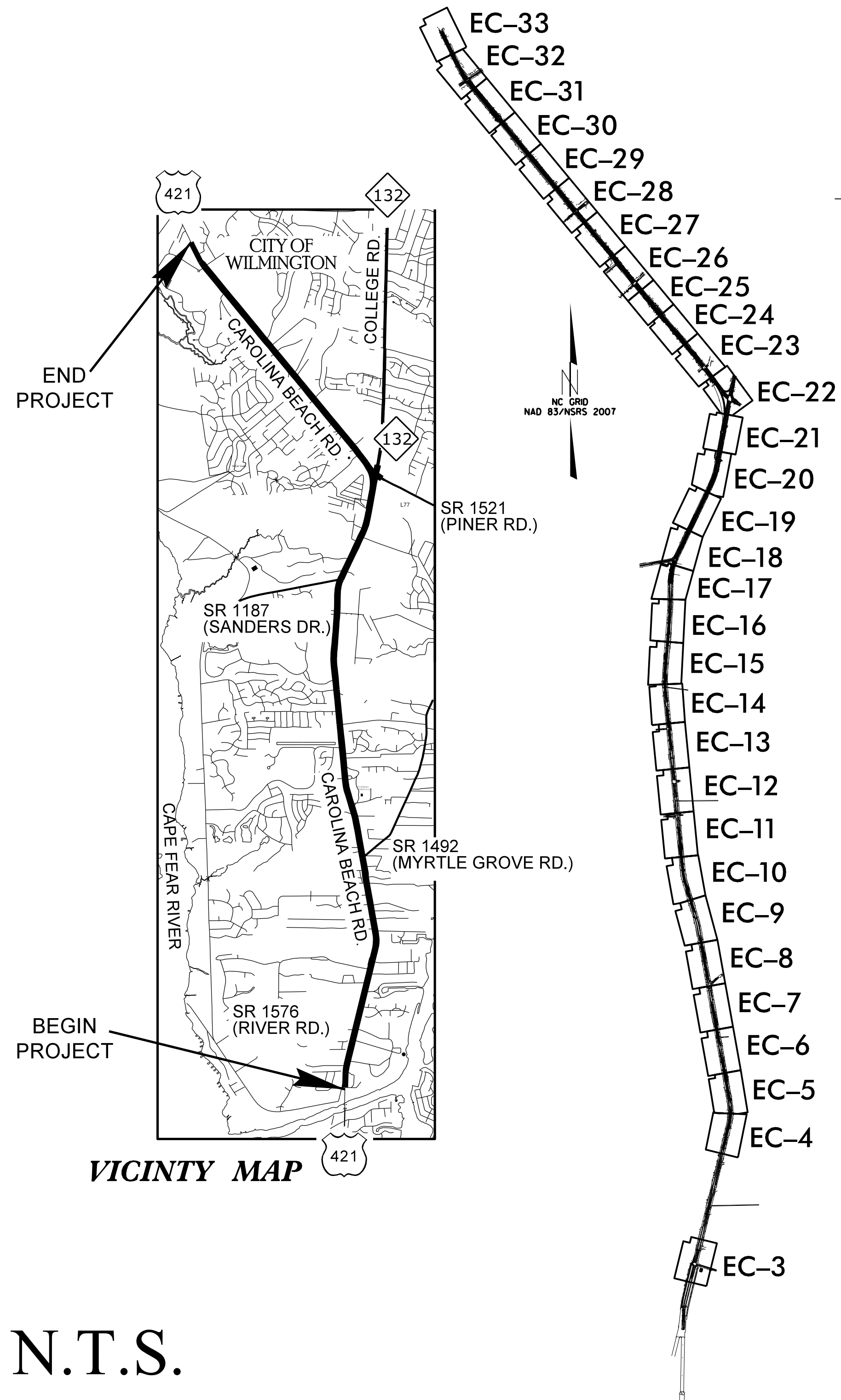
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PROJECT: W-5103A

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5103A	EC-1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
41867.3.2	STPNHS-0421(46)	CONST.	
2016CPT.03.03.10651		RESURF.	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR EXISTING & PROPOSED CONDITIONS.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Stormwater Discharge Outfall (SDO)

SDO Number	Station	Distance From	Description
SDO-1	-L- 89+50	6' LT.	Rock Inlet Sediment Trap, Type B
SDO-2	-L- 133+03	8' LT.	Rock Inlet Sediment Trap, Type B
SDO-3	-L- 133+22	48' RT.	Temporary Silt Fence
SDO-4	-L- 201+96	73' RT.	Wattle
SDO-5	-L- 251+91	4' LT.	Rock Inlet Sediment Trap, Type C
SDO-6	-L- 266+30	6' RT.	Rock Inlet Sediment Trap, Type B
SDO-7	-LI- 27+35	49' RT.	Temporary Silt Fence
SDO-8	-LI- 27+94	50' LT.	Temporary Silt Fence
SDO-9	-LI- 50+95	54' LT.	Temporary Silt Fence
SDO-10	-LI- 60+87	1' LT.	Rock Inlet Sediment Trap, Type B
SDO-11	-LI- 76+16	50' LT.	Temporary Silt Fence
SDO-12	-LI- 98+34	50' RT.	Temporary Silt Fence
SDO-13	-LI- 98+97	47' LT.	Temporary Silt Fence
SDO-14	-LI- 100+23	1' LT.	Rock Inlet Sediment Trap, Type B
SDO-15	-LI- 128+97	77' LT.	Temporary Silt Fence
SDO-16	-LI- 158+27	38' LT.	Temporary Silt Fence
SDO-17	-LI- 158+24	48' RT.	Temporary Silt Fence

****EVERETT CREEK IS A HIGH QUALITY WATER STREAM THAT RECEIVES RUNOFF FROM THIS PROJECT FROM -L- STA. 195+00 TO -L- 213+00.**

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	---
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)	---
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	---
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
1632.03	Type C	C
	Earthen Dam with Skimmer	---
	Skimmer Basin	---
	Tiered Skimmer Basin	---
	Infiltration Basin	---
	Safety Fence	---

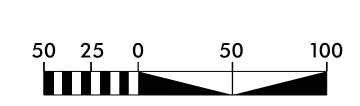
NEW HANOVER COUNTY

LOCATION: US 421 (CAROLINA BEACH RD.) FROM BRIDGE NO. 30 (SNOW'S CUT BRIDGE) TO 0.31 MI. NORTH OF GEORGE ANDERSON DR. (NON-SYSTEM).

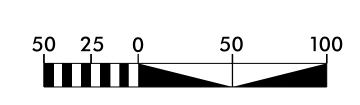
TYPE OF WORK: GRADING, DRAINAGE, WIDENING, CONC. ISLANDS, MILLING, RESURFACING, PAVEMENT MARKINGS, PAVMENT MARKERS, AND SIGNALS

N.T.S.

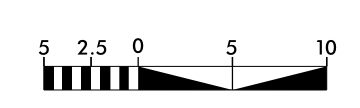
GRAPHIC SCALE



PLANS



PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

For Reference Please Visit Roadside Environmental:
http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/fieldops/downloads/

Prepared in the Office of: DIVISION 3 DDC UNIT

5501 Barbados Blvd.
Castle Hayne, NC 28429
By: Carla Schoonmaker, No. 3591
2012 STANDARD SPECIFICATIONS

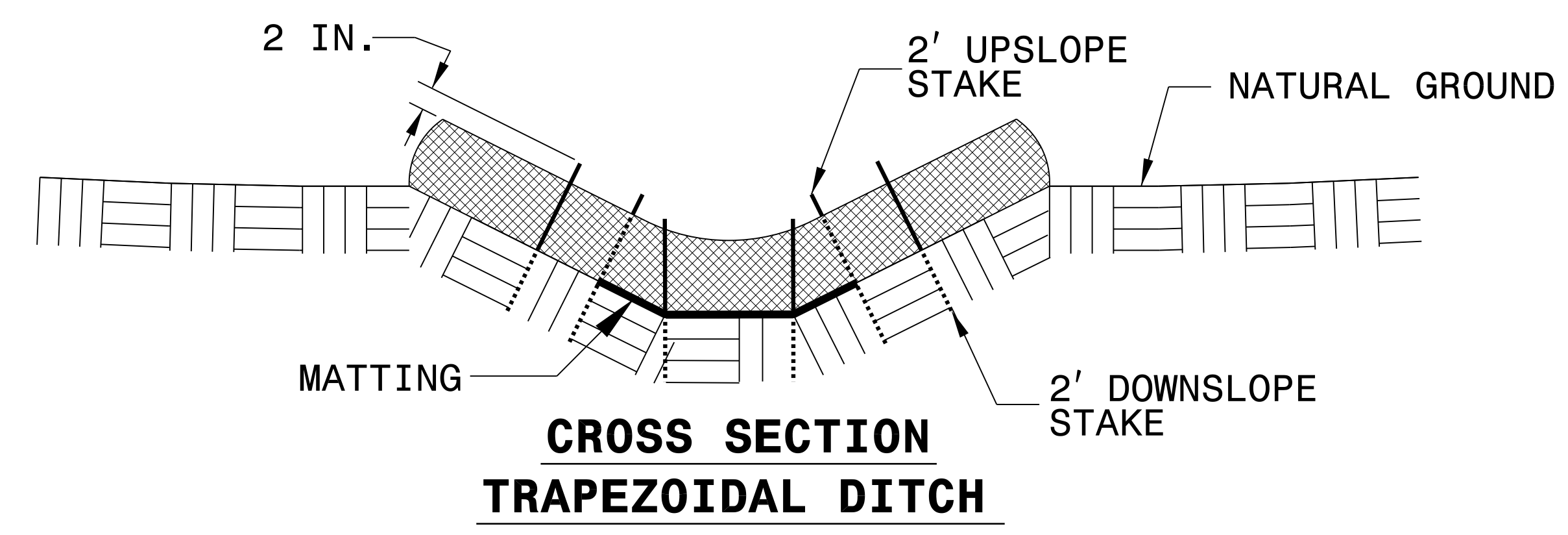
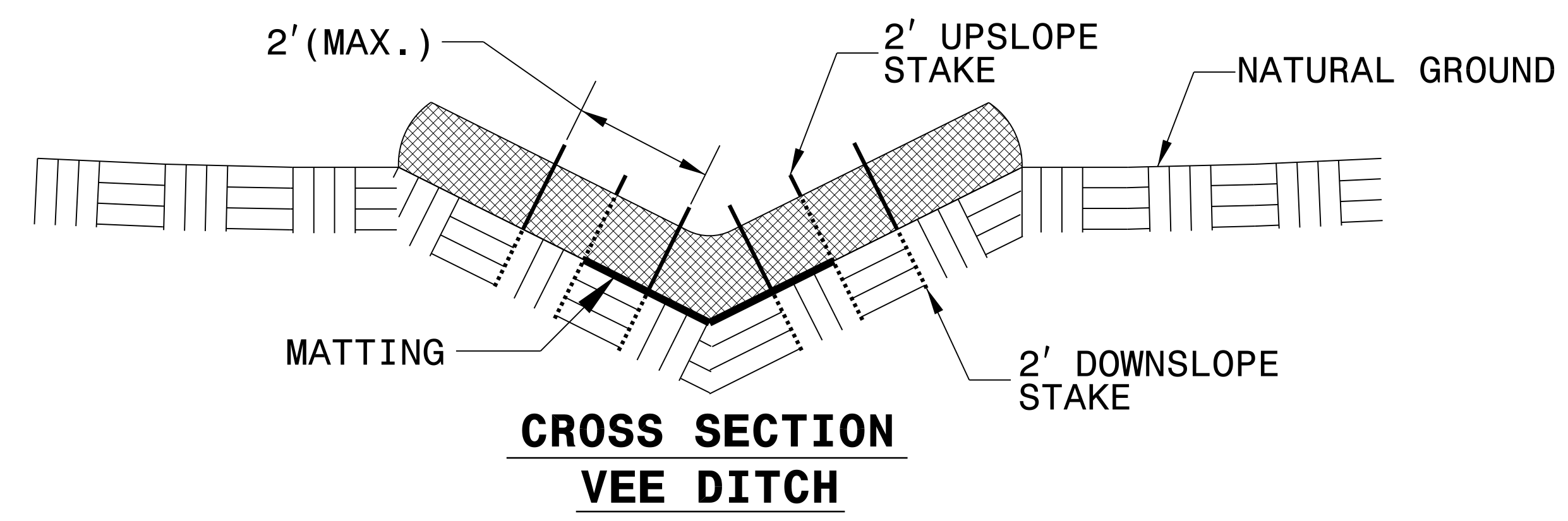
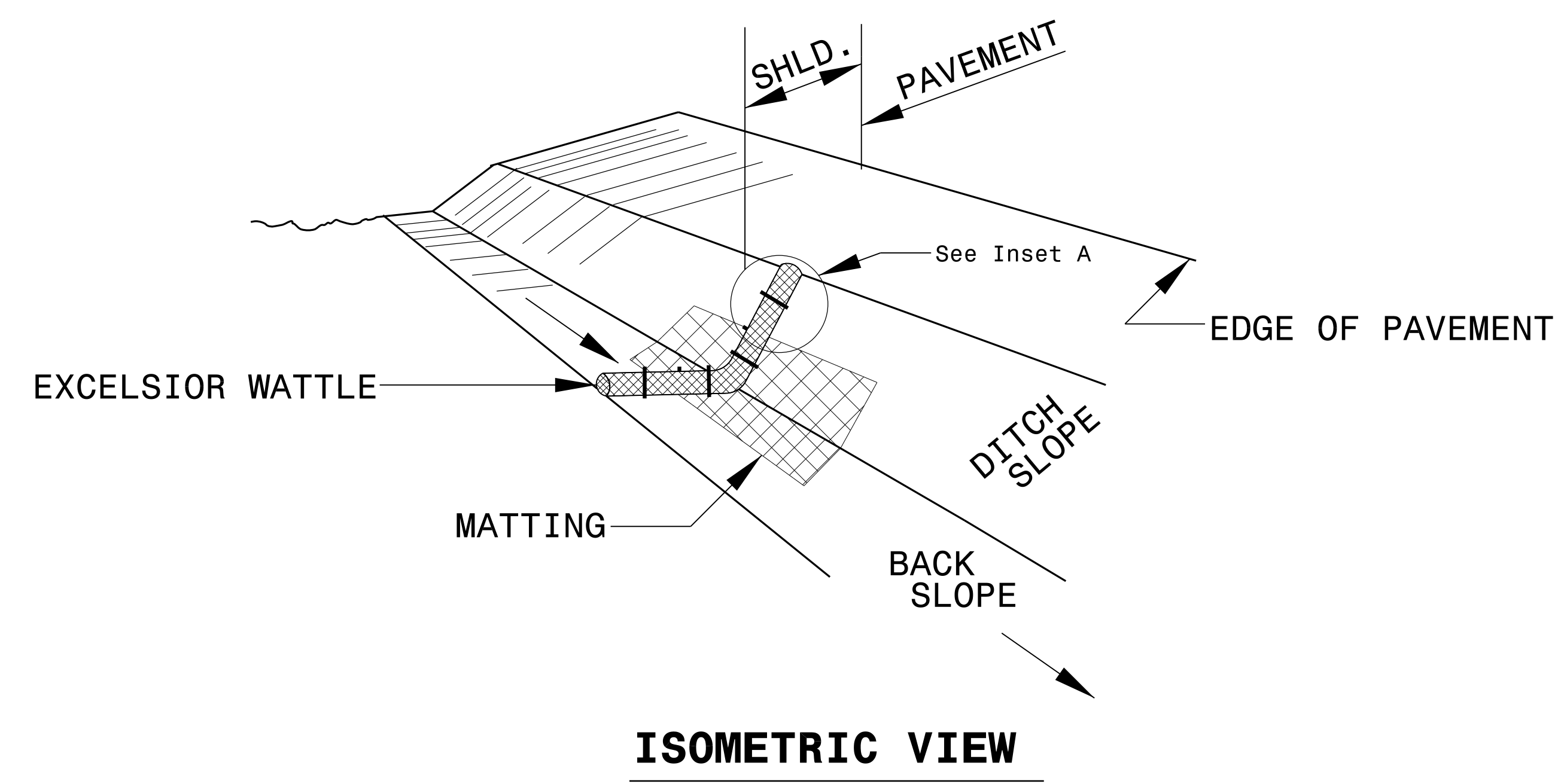
EROSION CONTROL PLANS REVIEWED BY WES CHANDLER OF THE ROADSIDE ENVIRONMENTAL UNIT

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 2012 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		

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WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

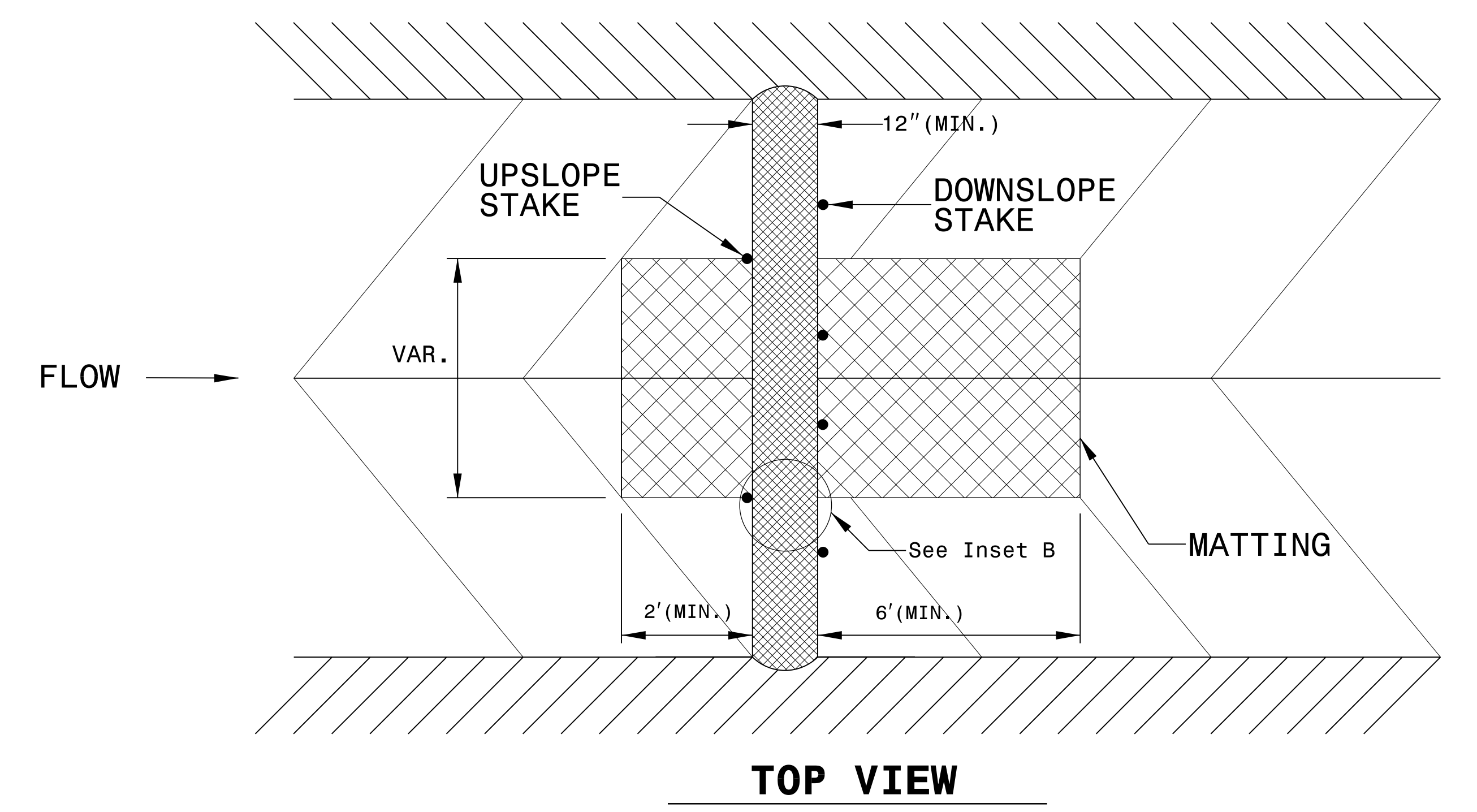
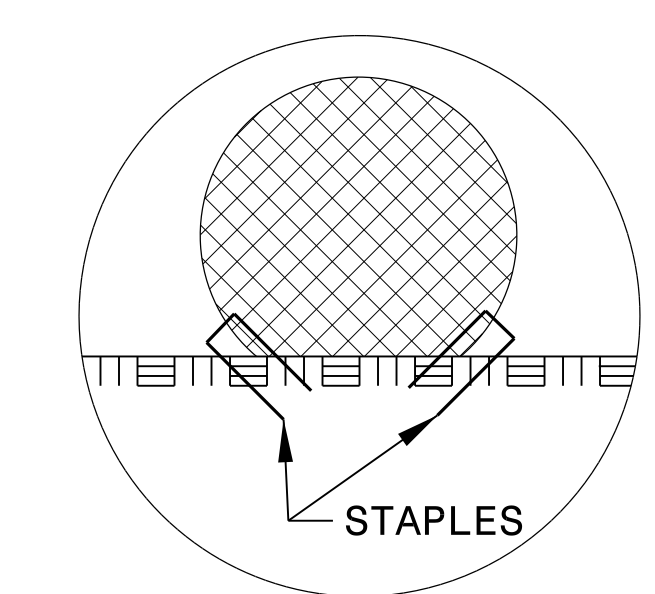
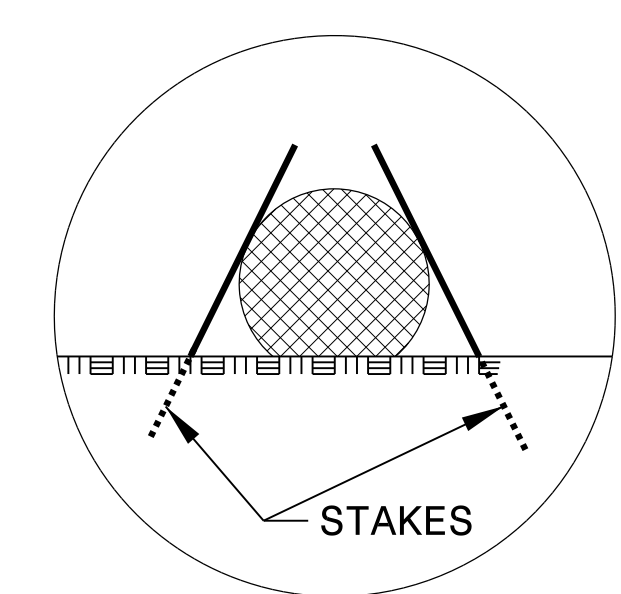
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

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

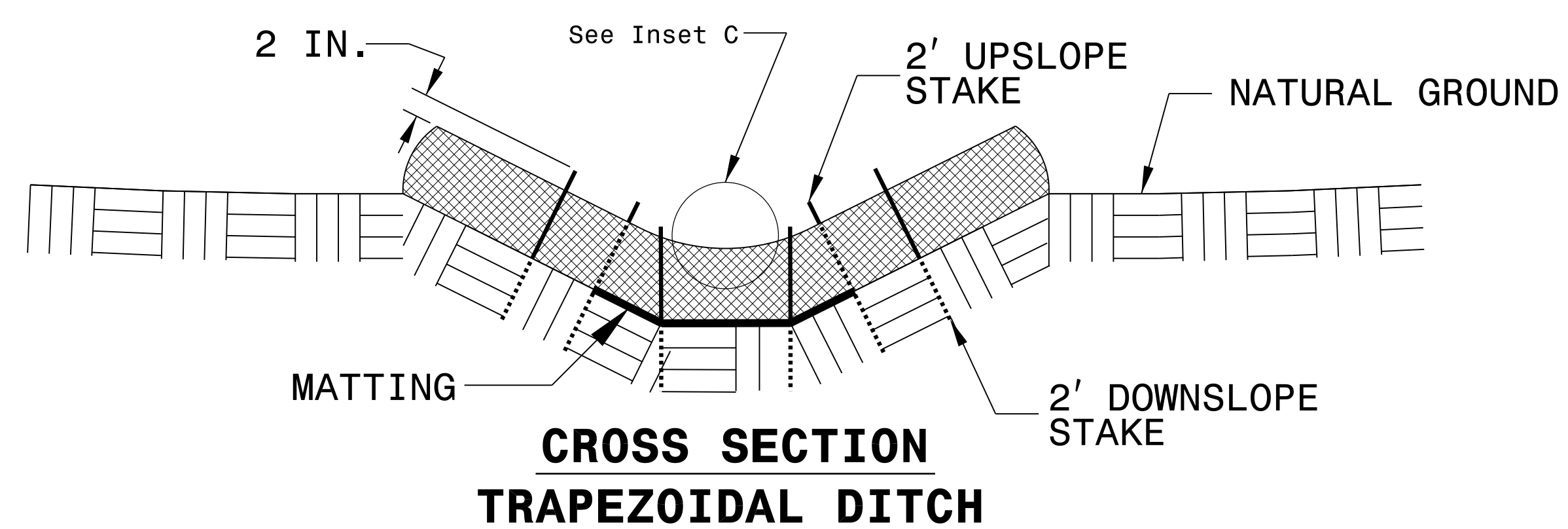
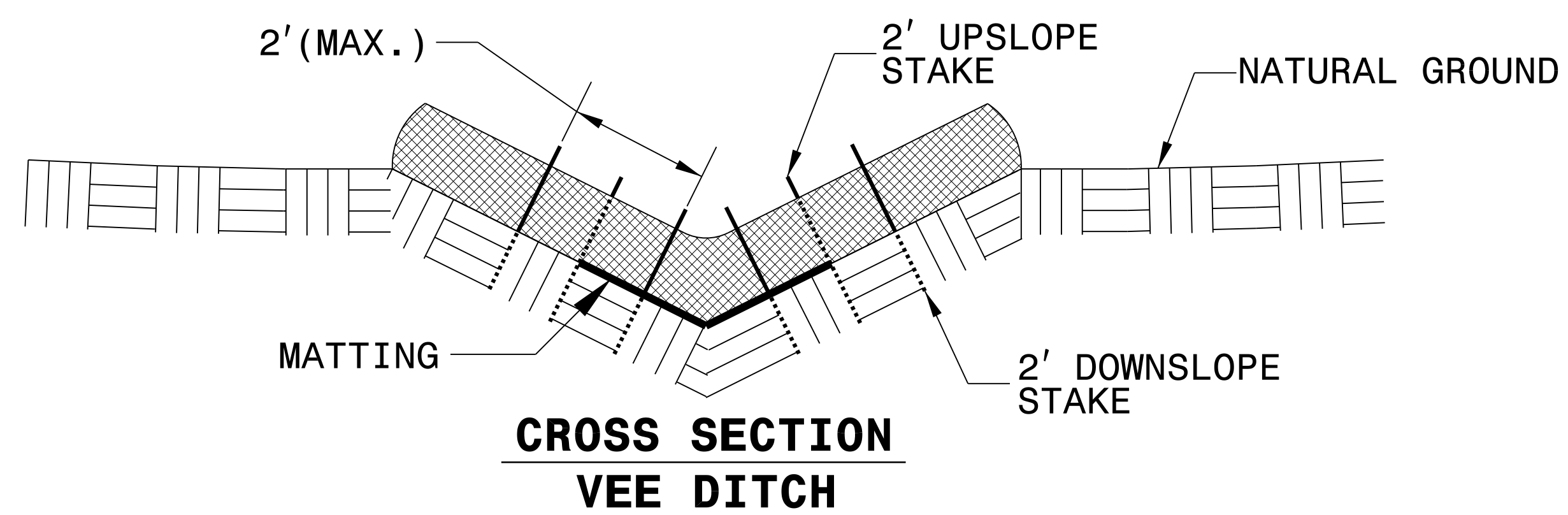
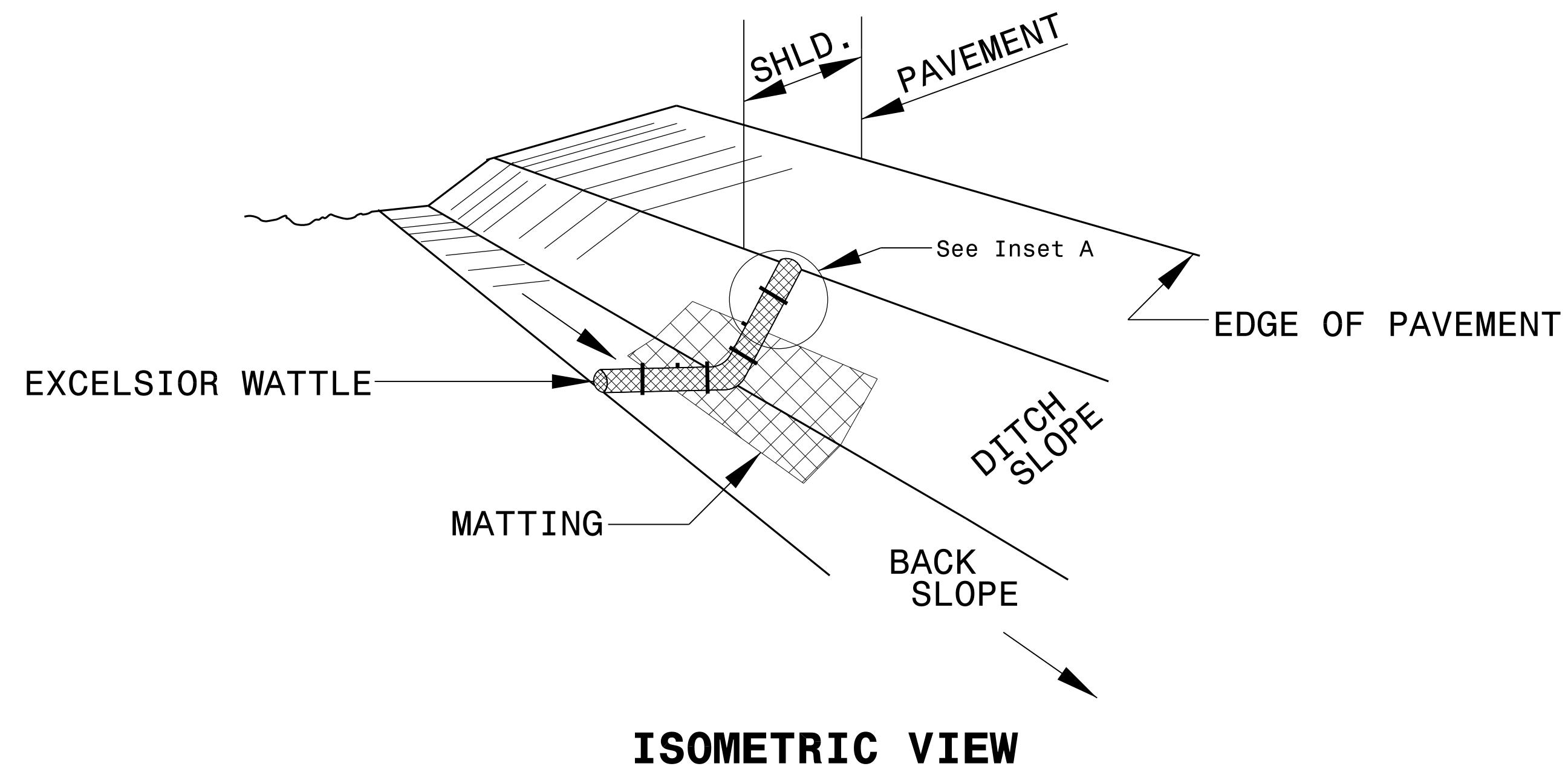
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



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 \$\$\$\$\$\$SUSTAINABLE\$\$\$\$\$\$

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

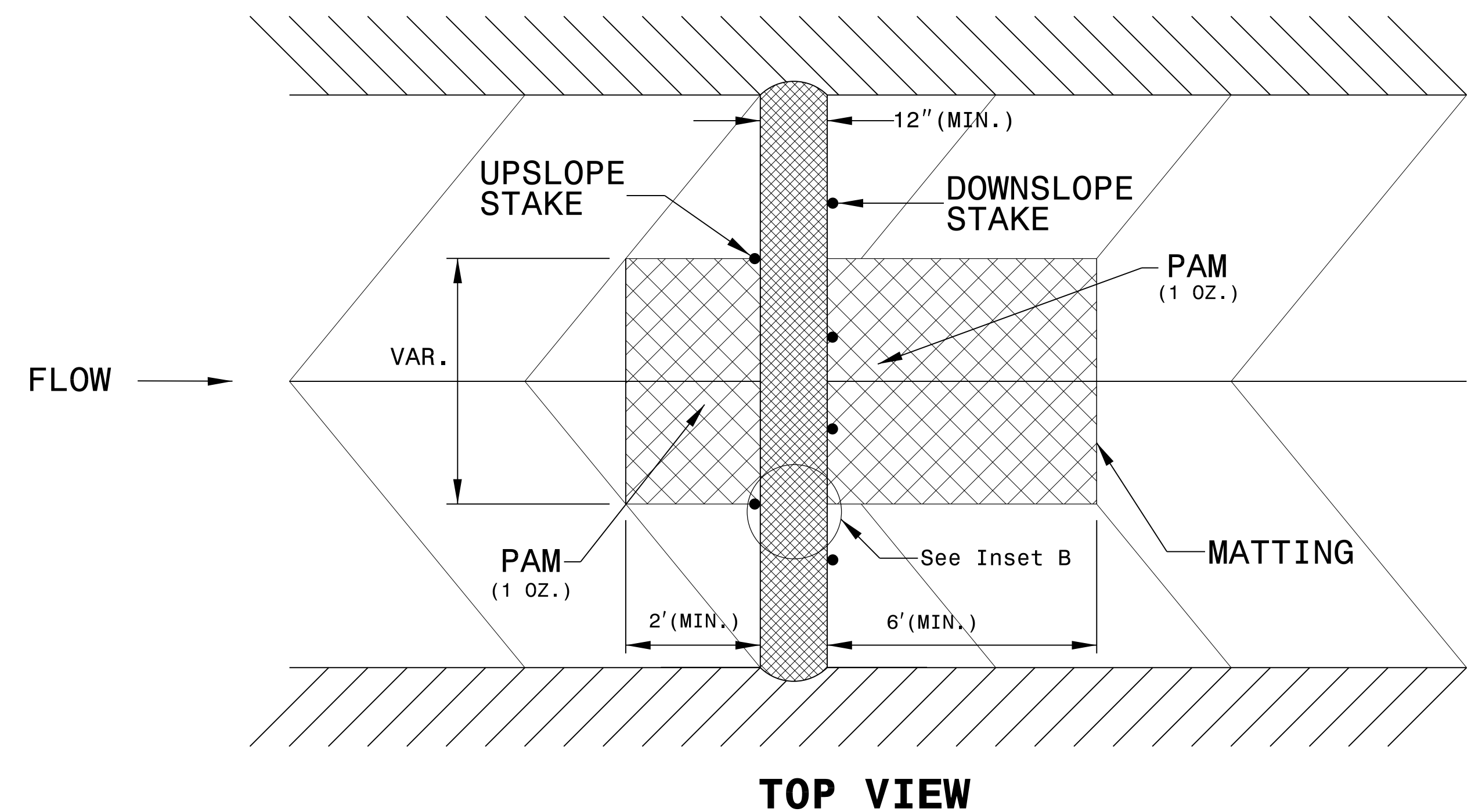
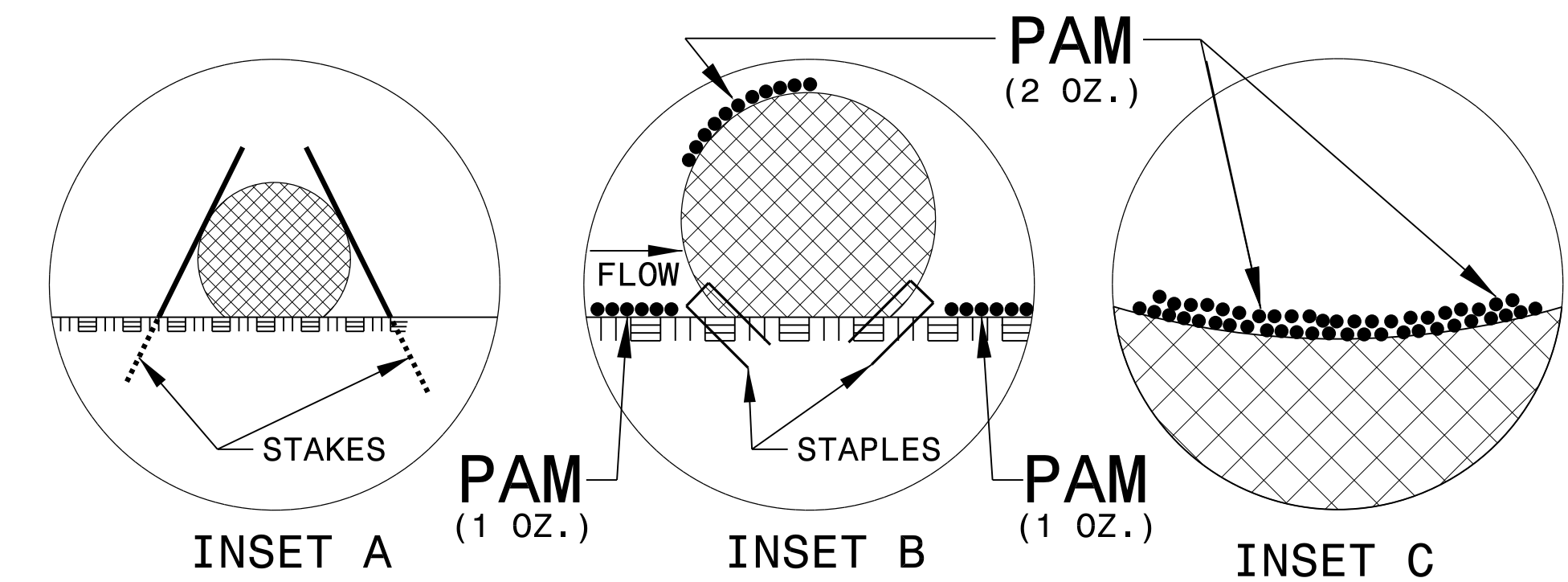
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

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 WATTLE.

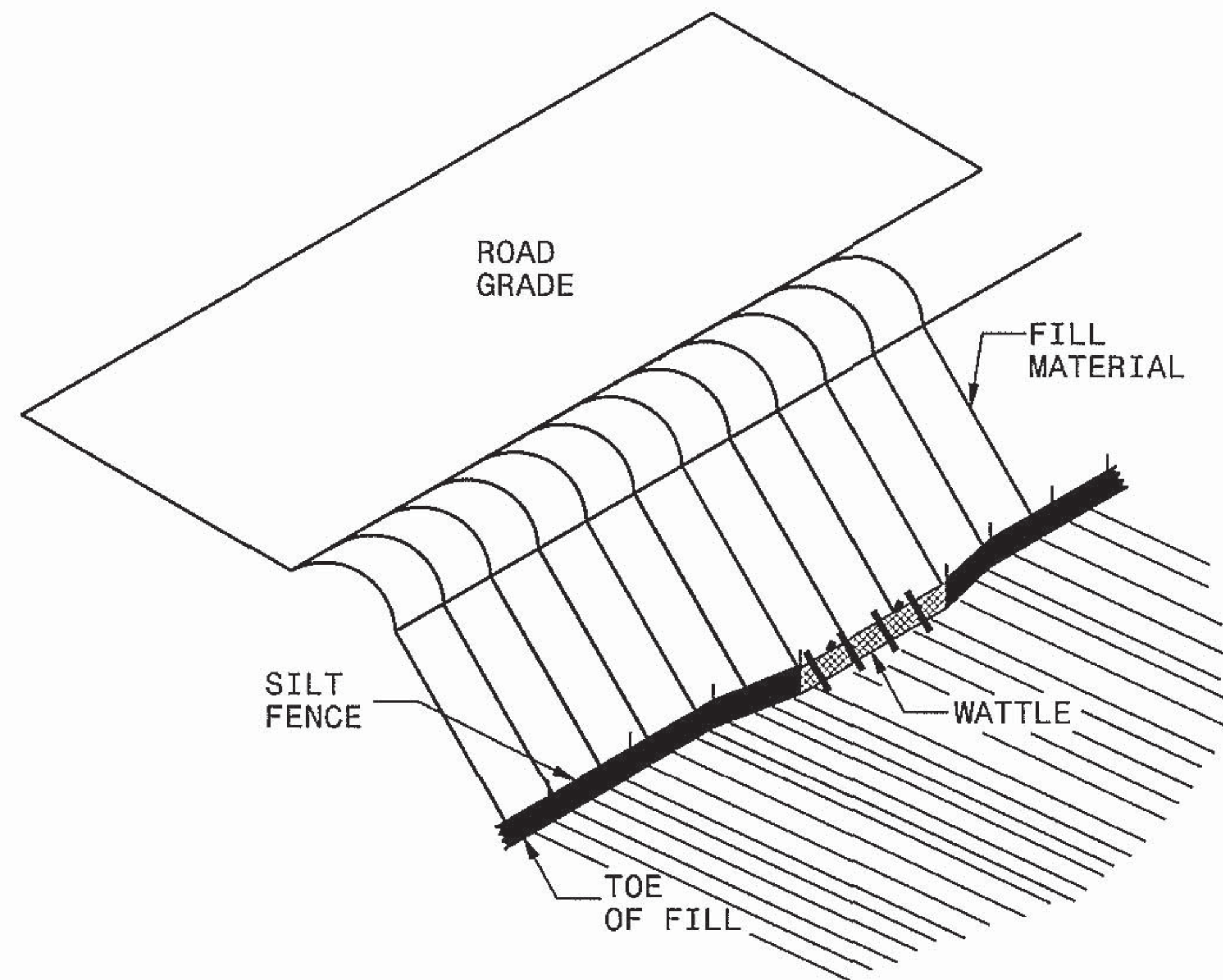
INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



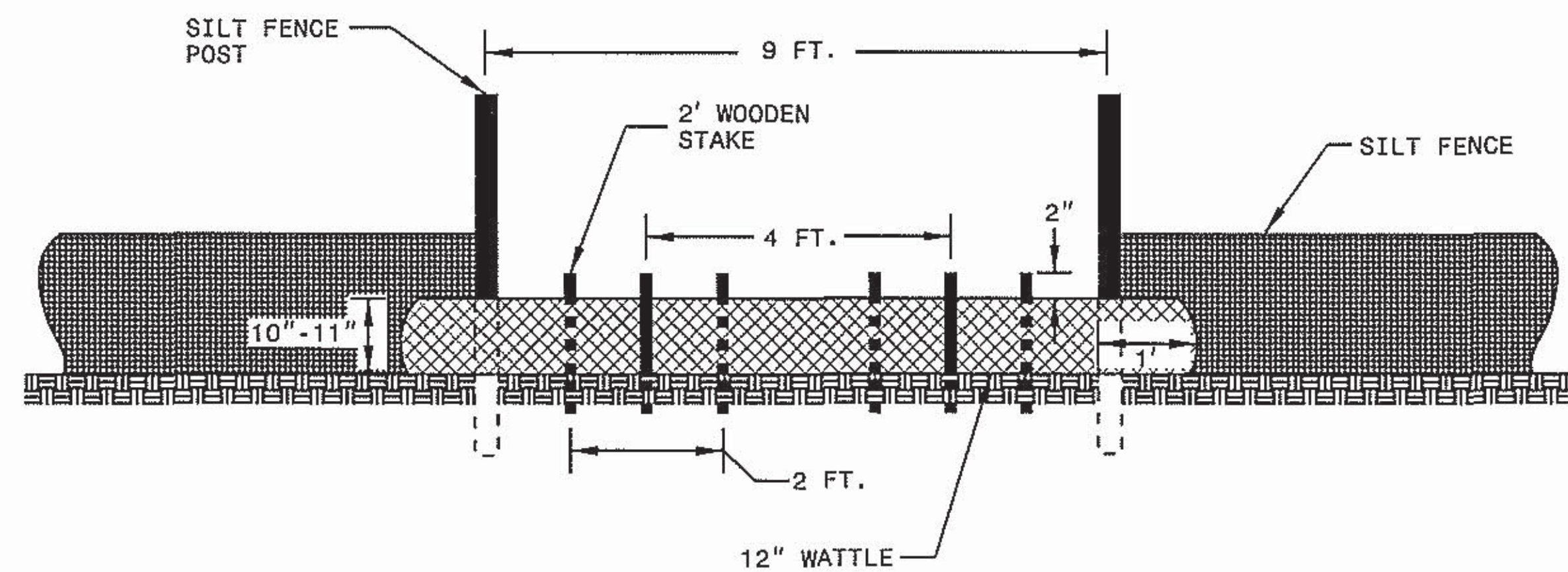
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 \$\$\$\$SUSTAINABLE\$\$\$

SILT FENCE WATTLE BREAK DETAIL

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



ISOMETRIC VIEW



VIEW FROM SLOPE

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR 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.

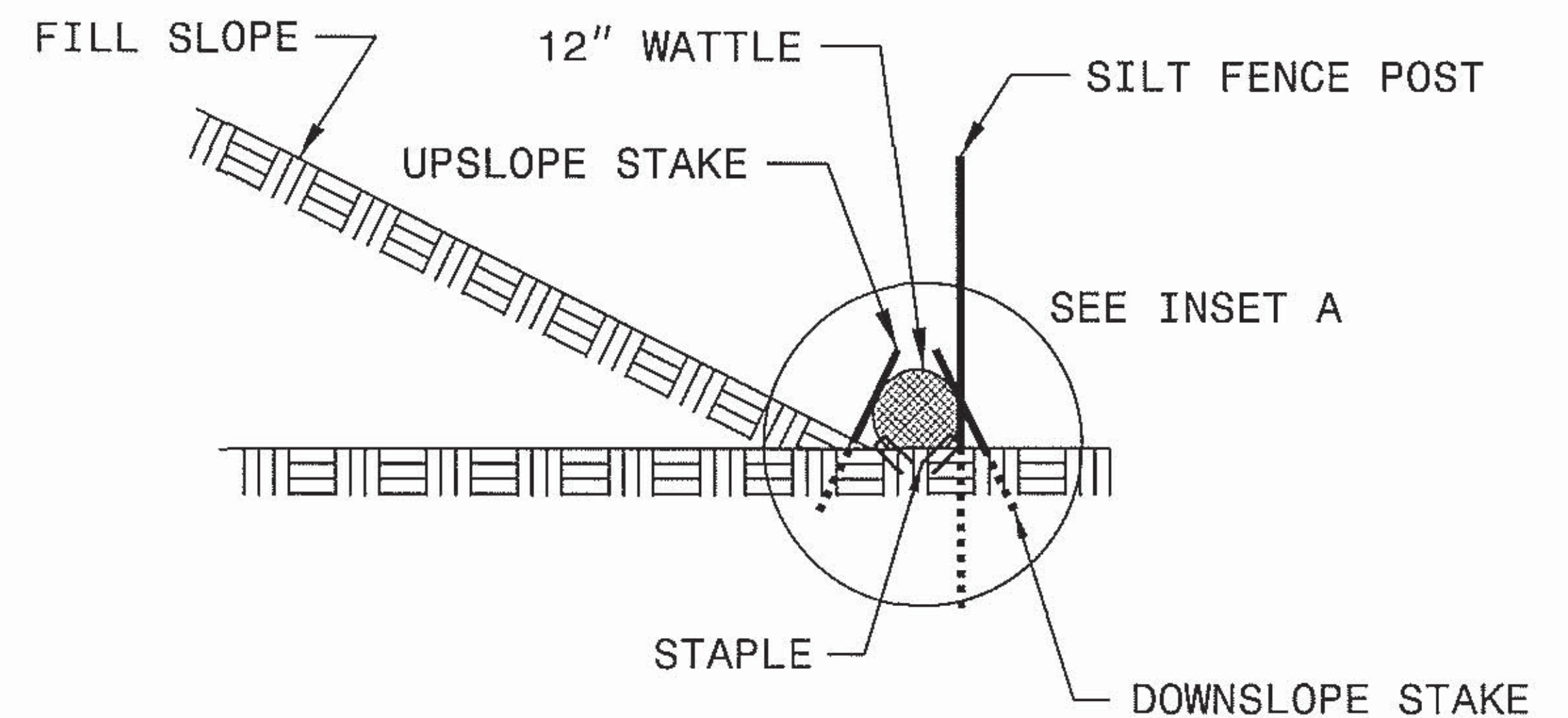
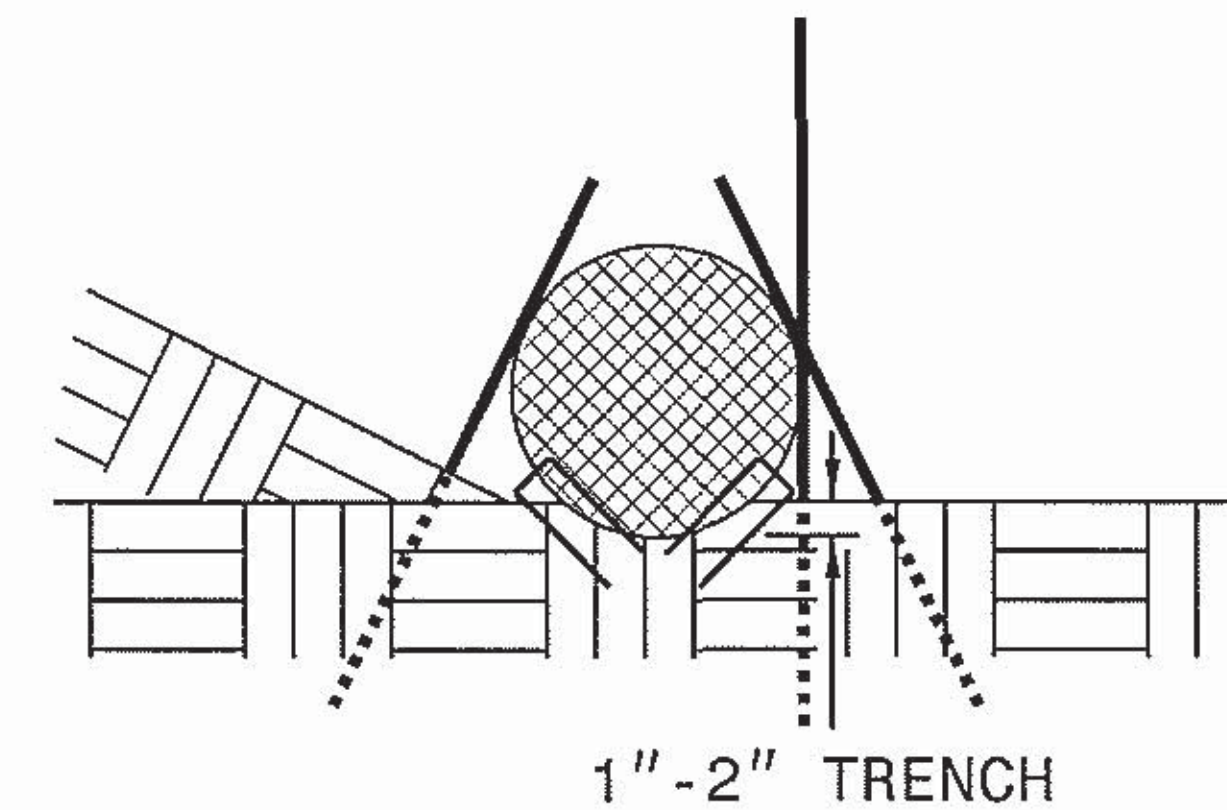
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

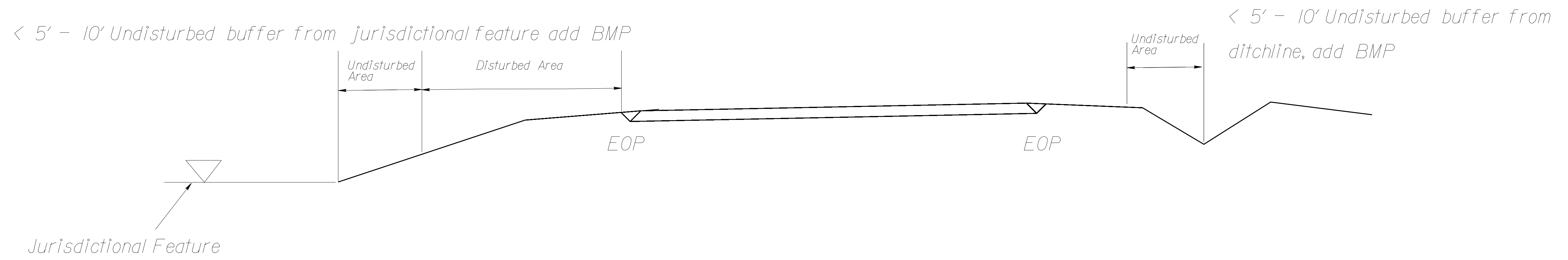
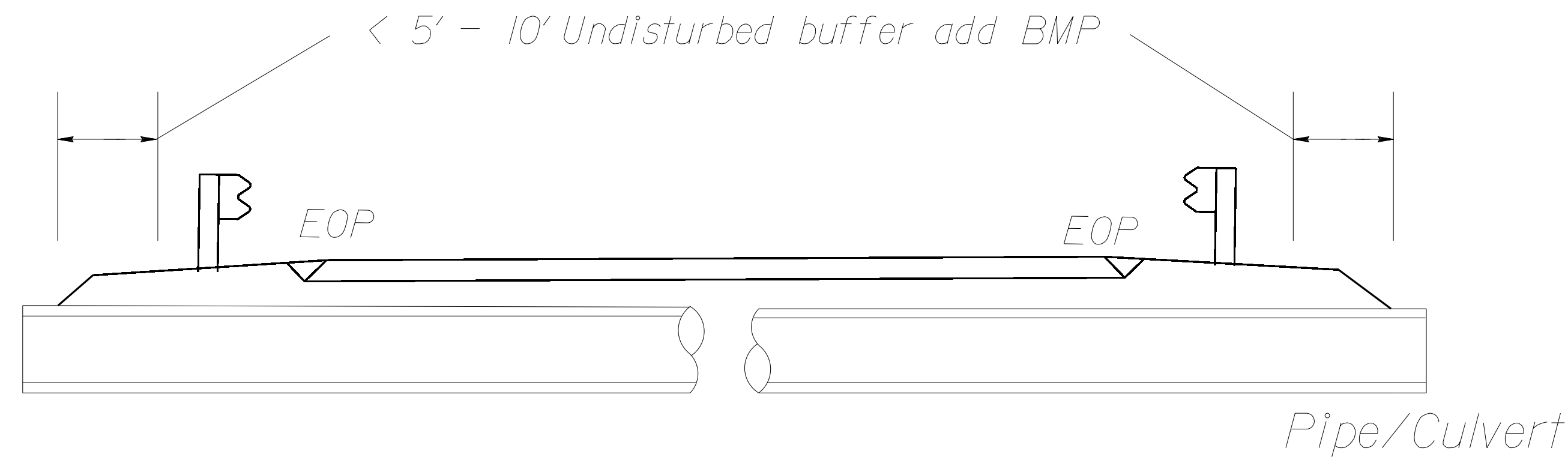


SIDE VIEW

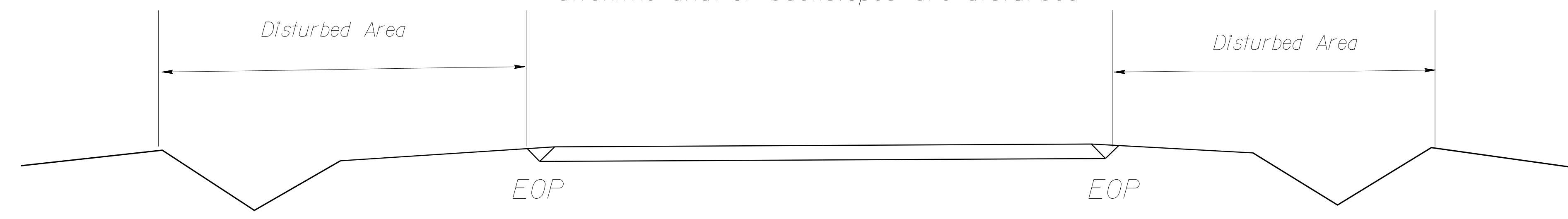
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

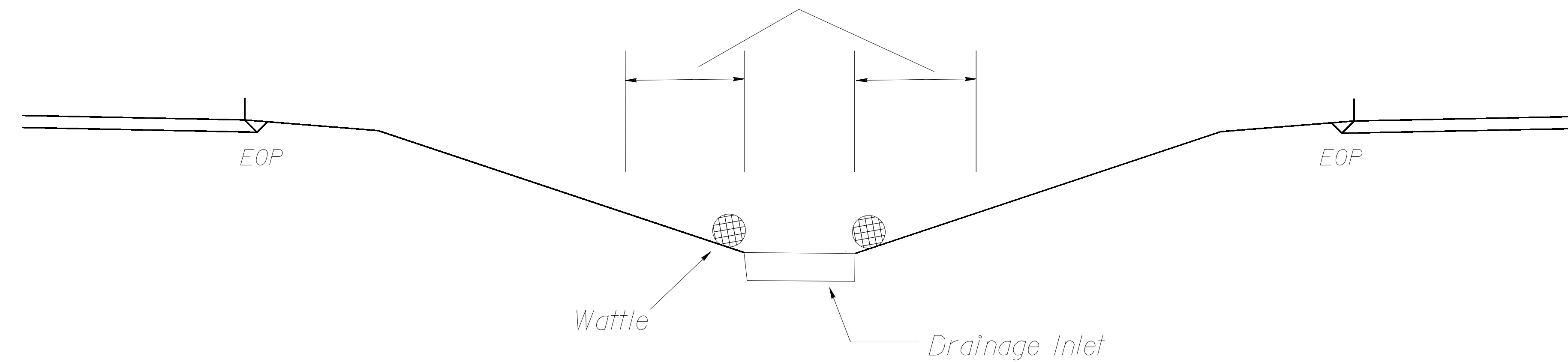
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed



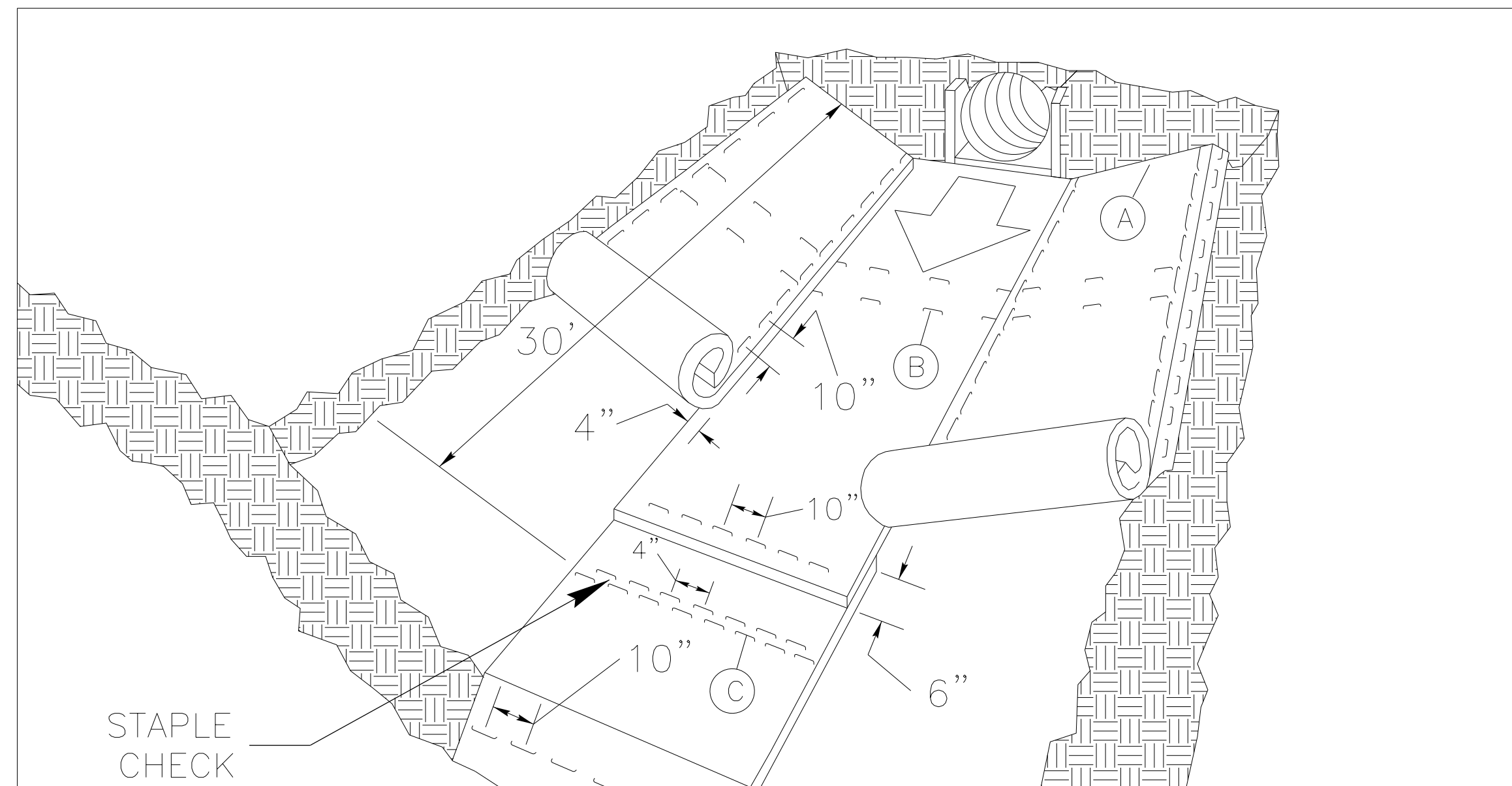
< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

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 \$\$\$SUSANMAYERS\$\$\$

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

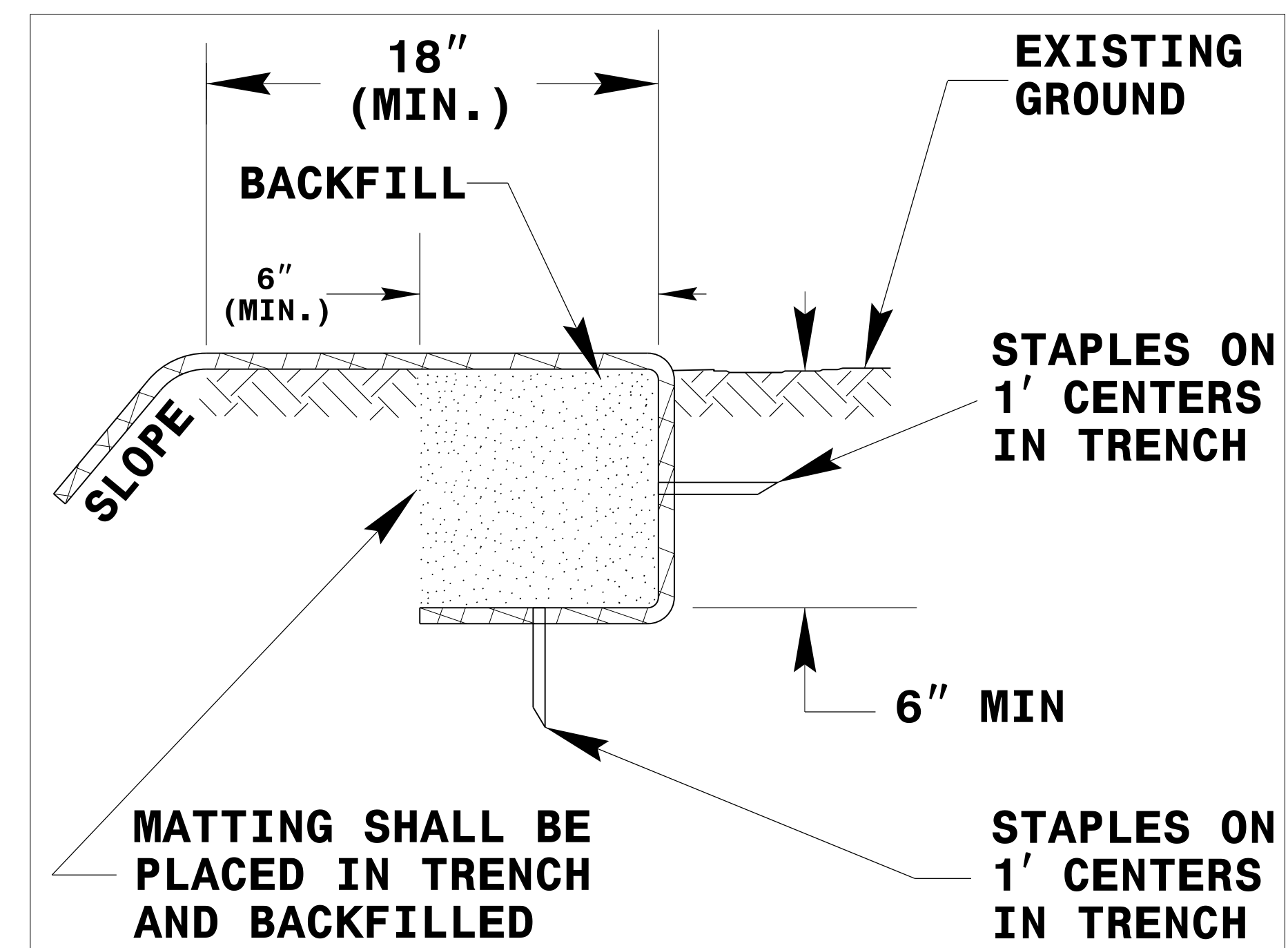
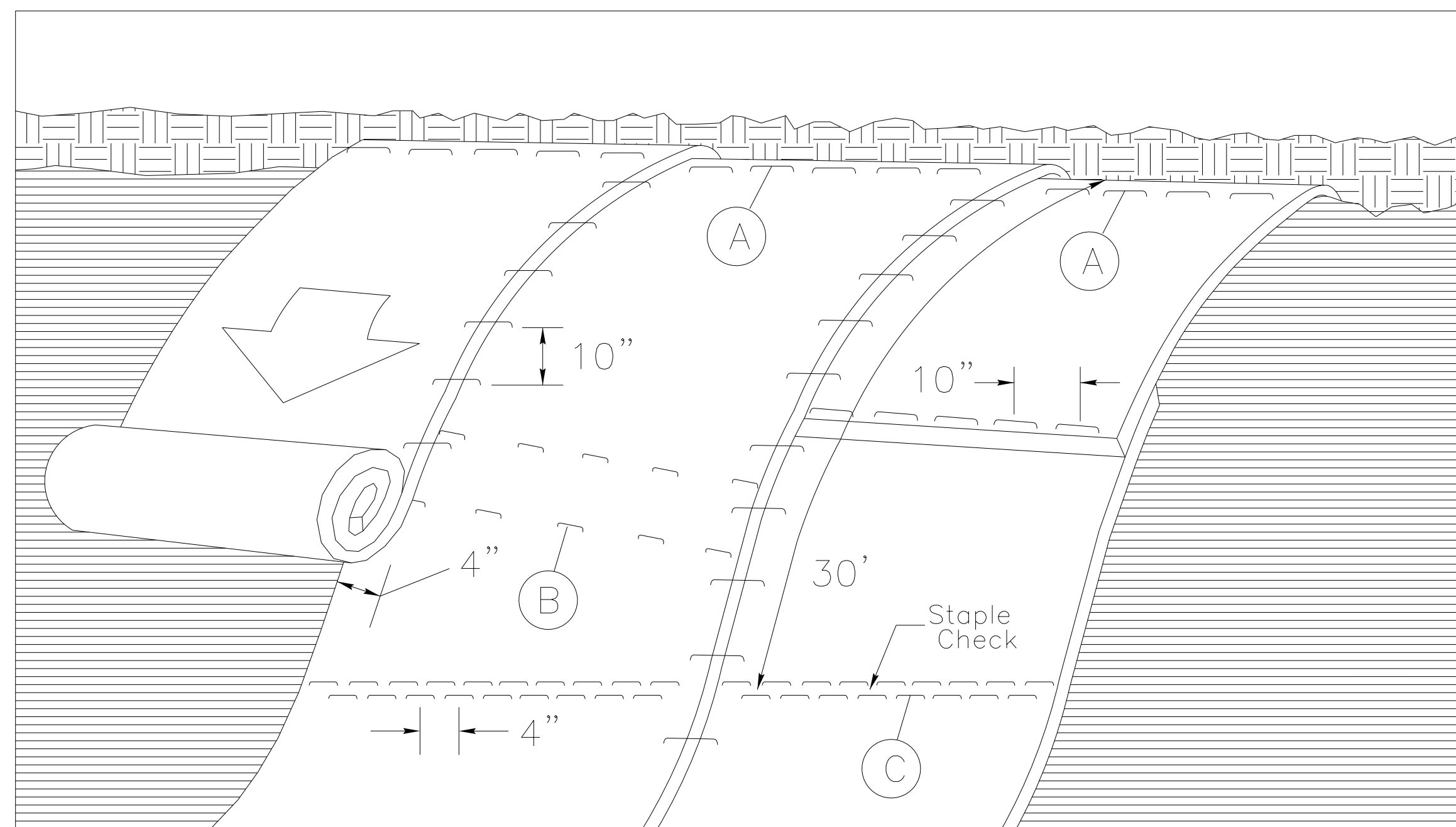


DIAGRAM (A)



MATTING ON SLOPES

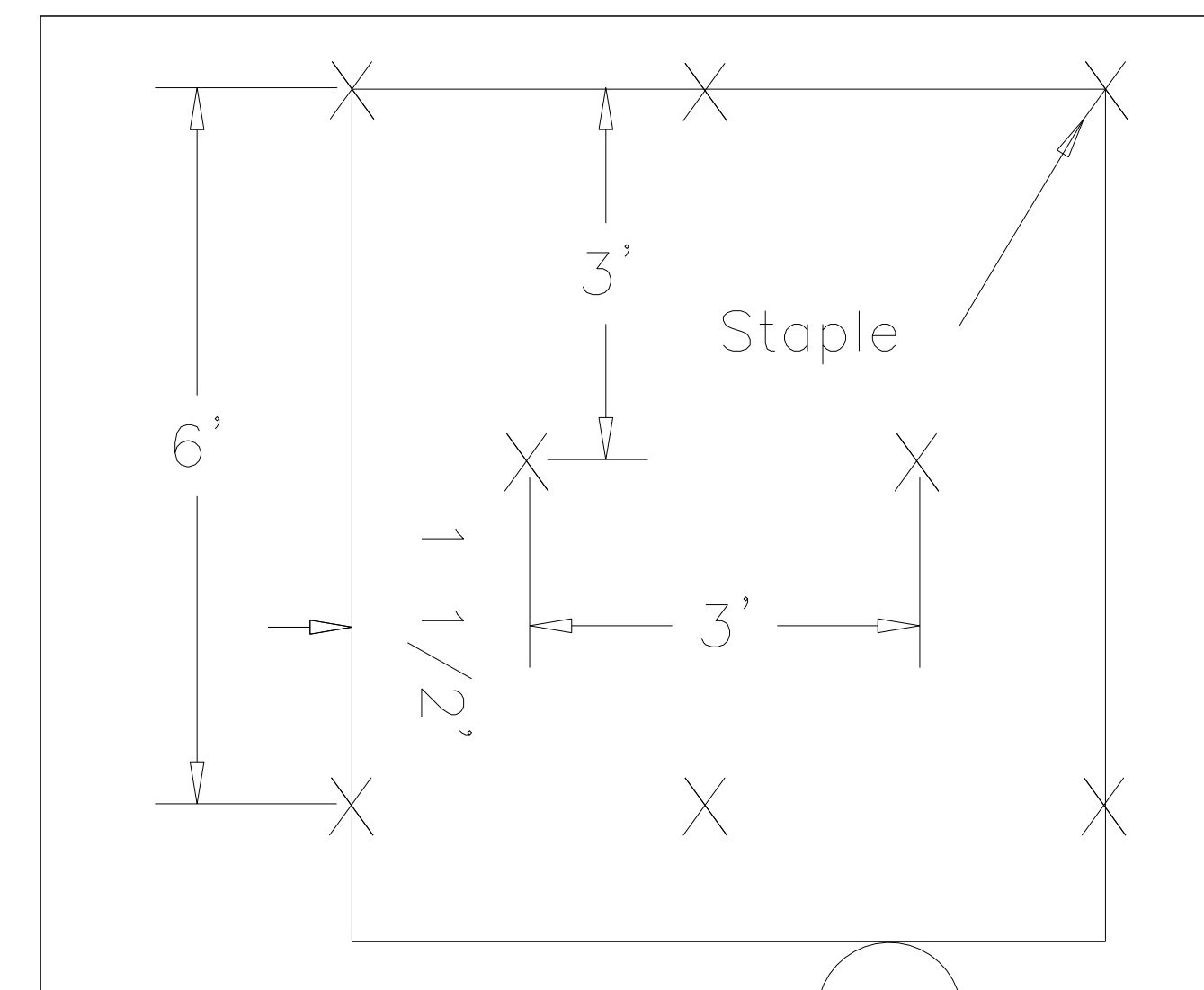


DIAGRAM (B)

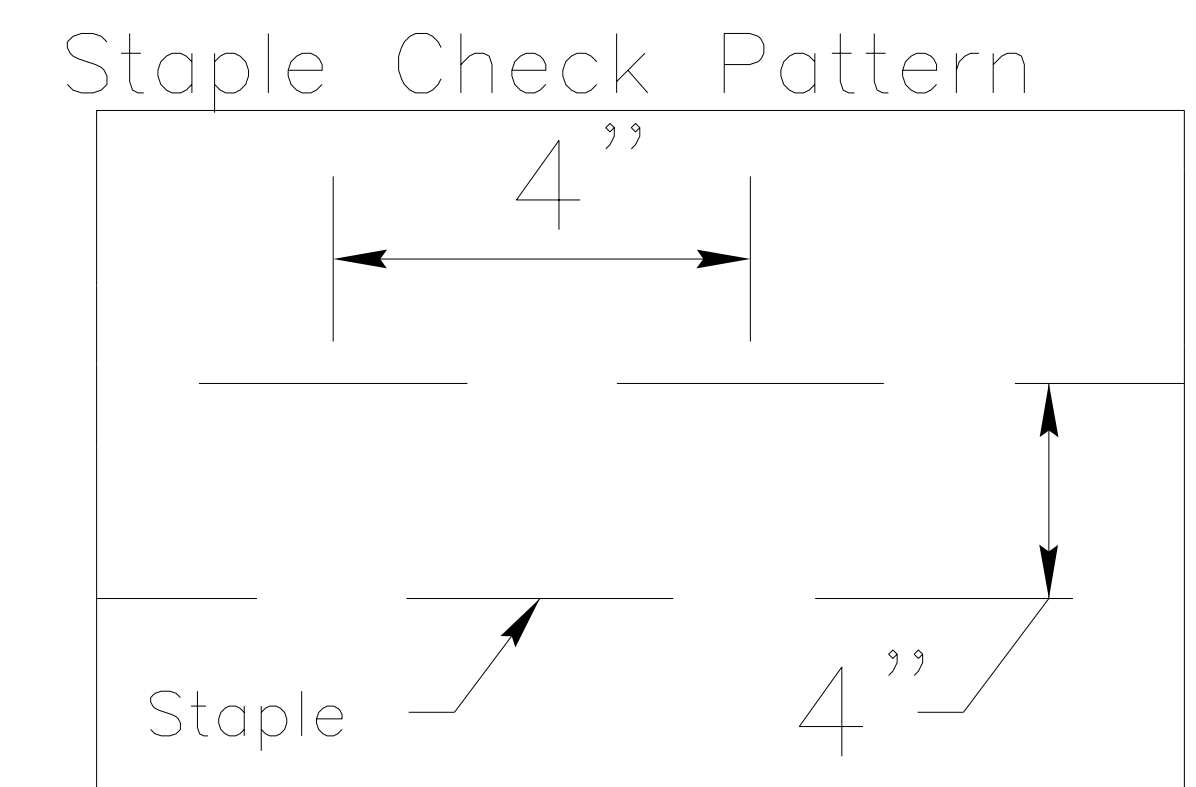


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.
 STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

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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.

8/17/99

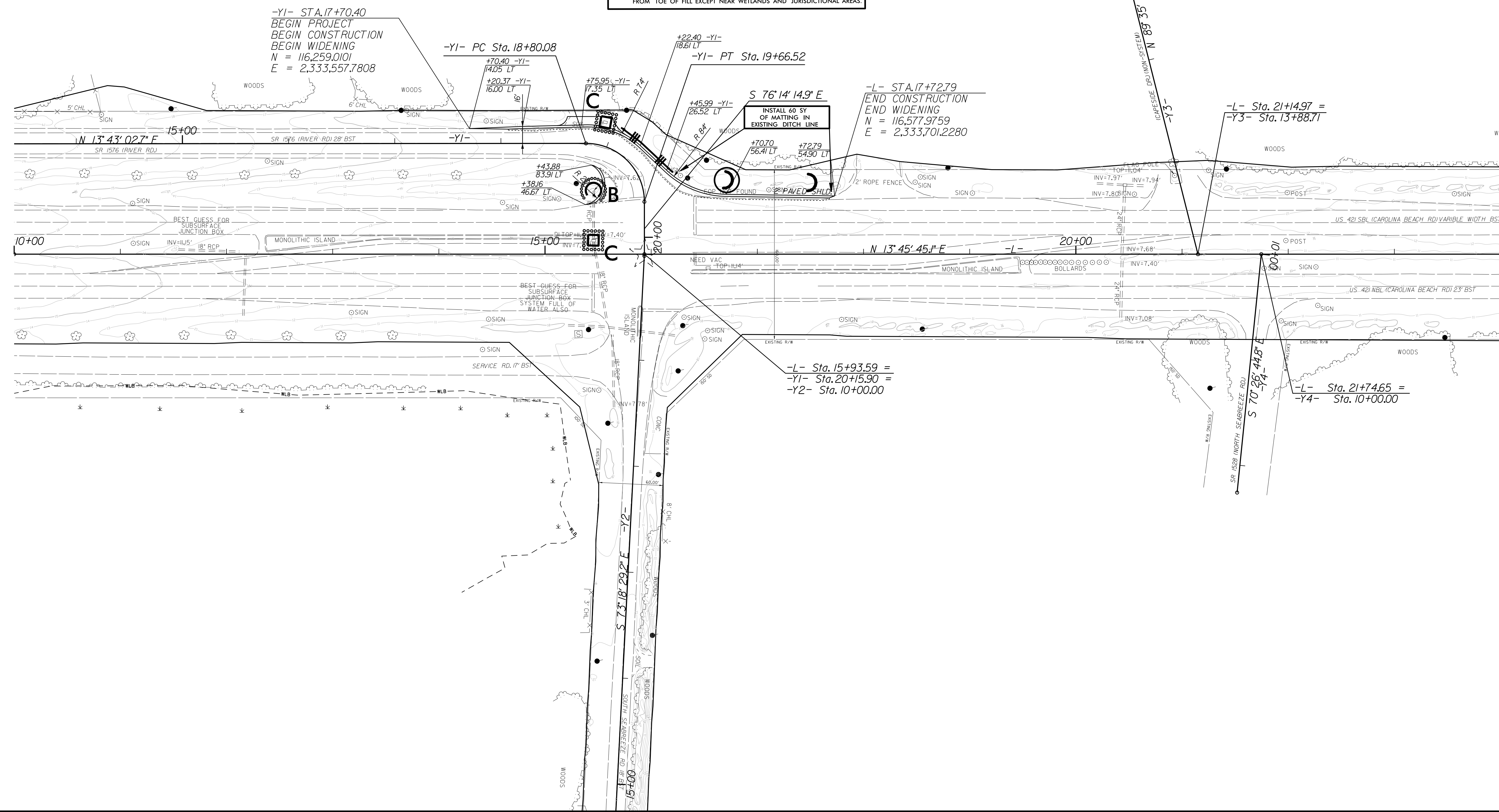
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 \$\$\$SUSPENSE\$\$\$

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

-Y1- CURVE 1
 PI Sta 19+35.13
 $\Delta = 90^{\circ} 02' 42.4''$ (RT)
 $D = 104' 10'' 26.9''$
 $L = 86.44'$
 $T = 55.04'$
 $R = 55.00'$

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

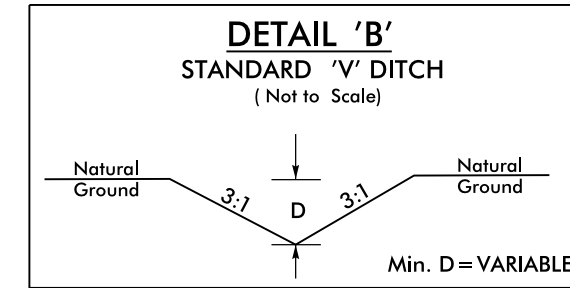
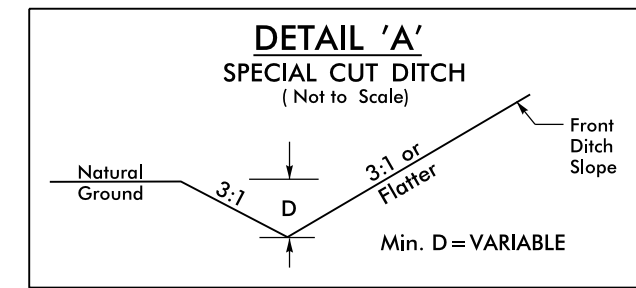


REVISIONS

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 02 JUL 2016 13:17 NEW HANDOVER W-5103-41867-1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Proj\PLAN SHEETS_EROSION CONTROL\W5103.D03_EC_03_PSH_4.dgn
 \$\$\$\$\$\$SUSTAINABLE\$\$\$\$\$\$

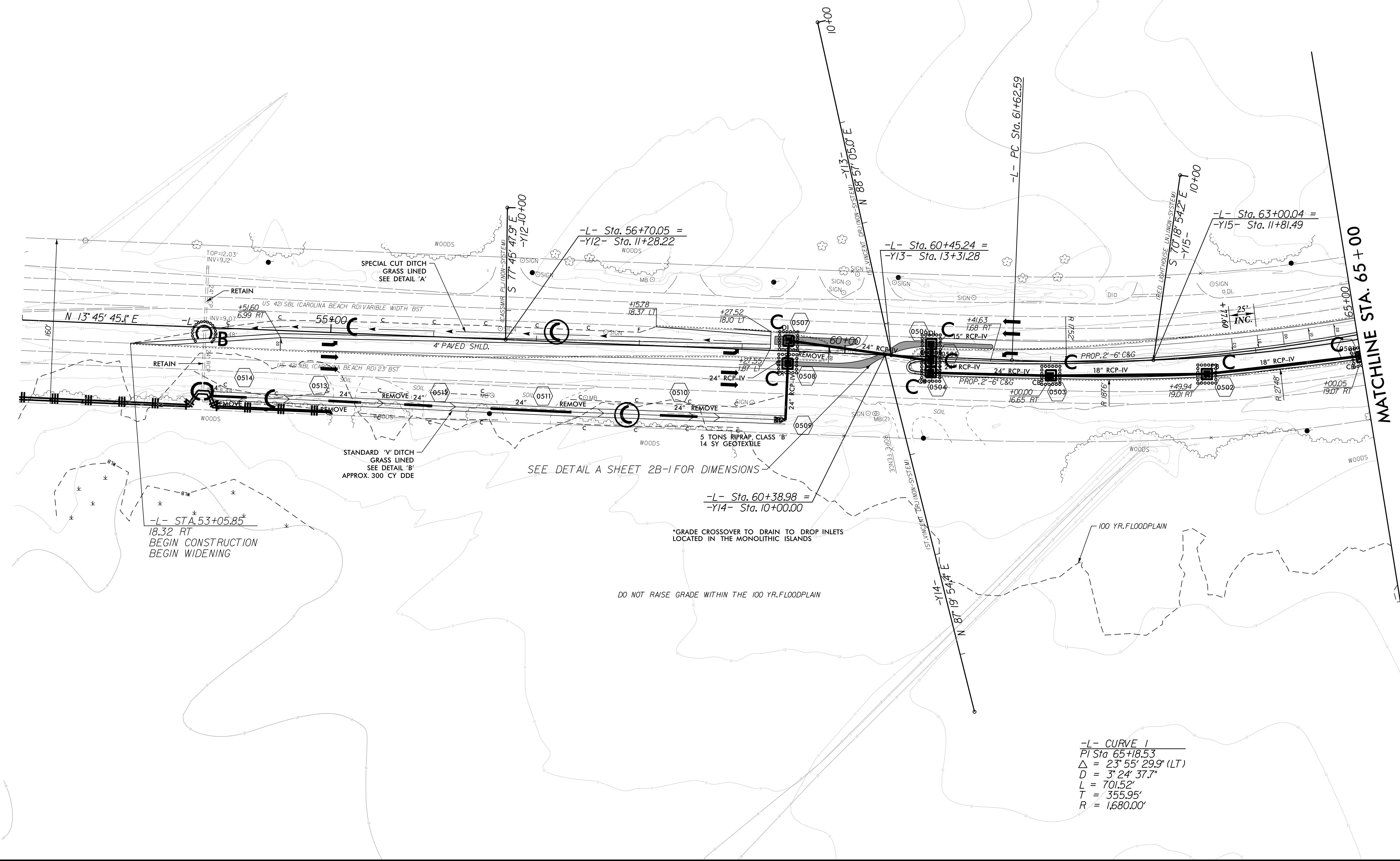
PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007



FROM STA. 53+80 CL TO STA. 59+00 CL -L-

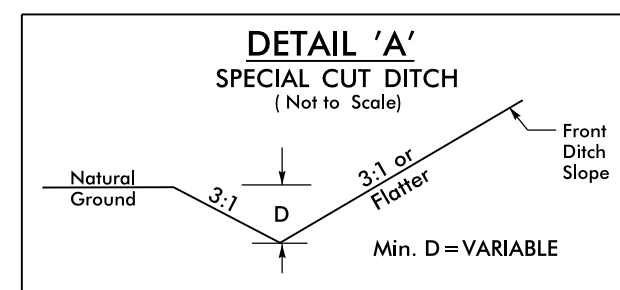
REVISIONS
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 \$\$\$SUSTAINABLE\$\$\$



-L- CURVE 1
 PI Sta 65+18.53
 $\Delta = 23^\circ 55' 29.9" (LT)$
 $D = 3' 24' 37.7"$
 $L = 701.52'$
 $T = 355.95'$
 $R = 1680.00'$

MATCHLINE STA. 65+00

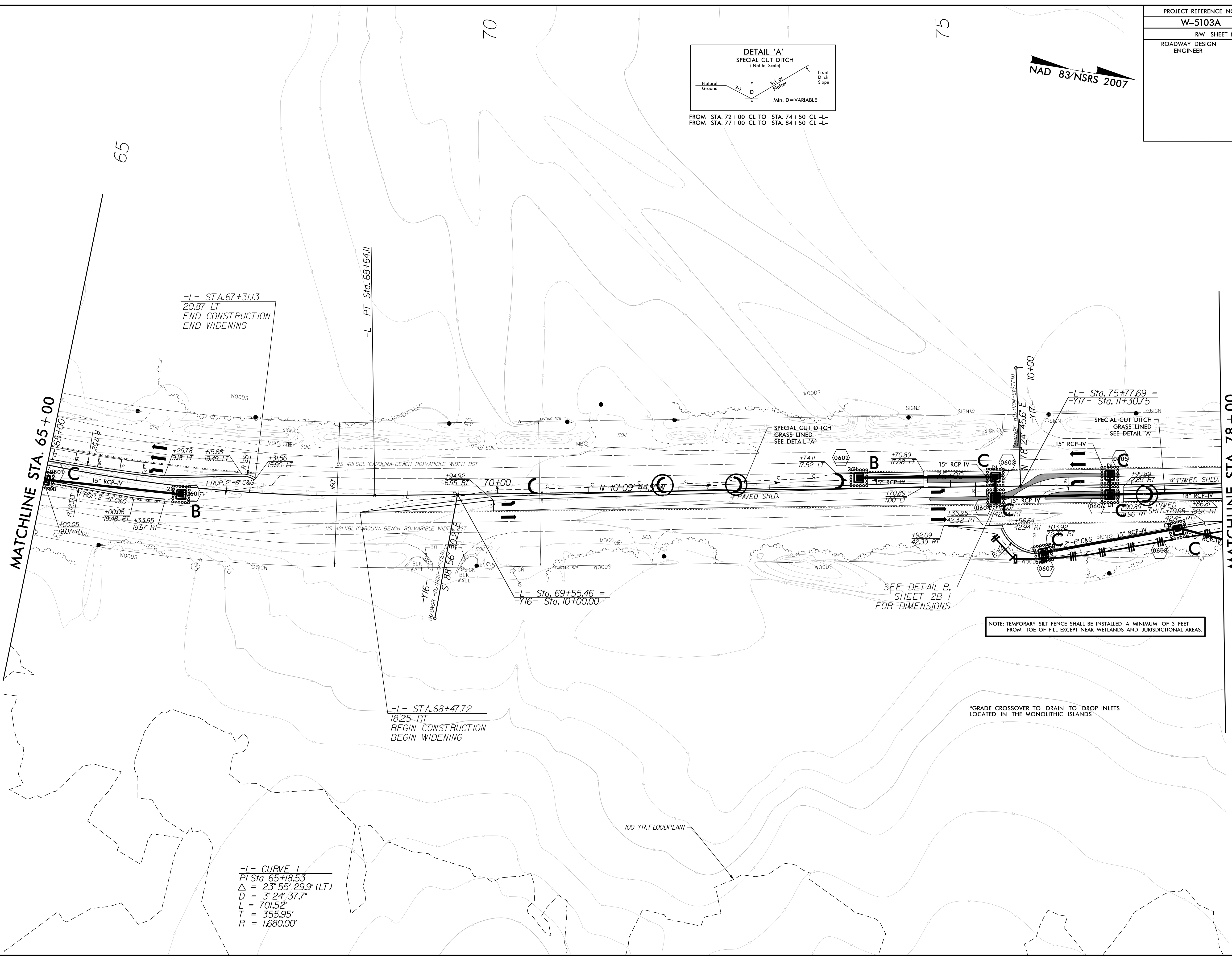
PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



FROM STA. 72+00 CL TO STA. 74+50 CL -L-
FROM STA. 77+00 CL TO STA. 84+50 CL -L-

NAD 83/NSRS 2007

8/17/99
 REVISIONS
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 \$\$\$\$\$\$



-L- STA. 67+31.13
20.87 LT
END CONSTRUCTION
END WIDENING

-L- PT Sta. 68+64.11

-L- Sta. 69+55.46 =
-Y16- Sta. 10+00.00

-L- STA. 68+47.72
18.25 RT
BEGIN CONSTRUCTION
BEGIN WIDENING

-L- Sta. 75+77.69 =
-Y17- Sta. 11+30.75

-L- CURVE 1
PI Sta 65+18.53
Δ = 23° 55' 29.9" (LT)
D = 3' 24' 37.7"
L = 701.52'
T = 355.95'
R = 1,680.00'

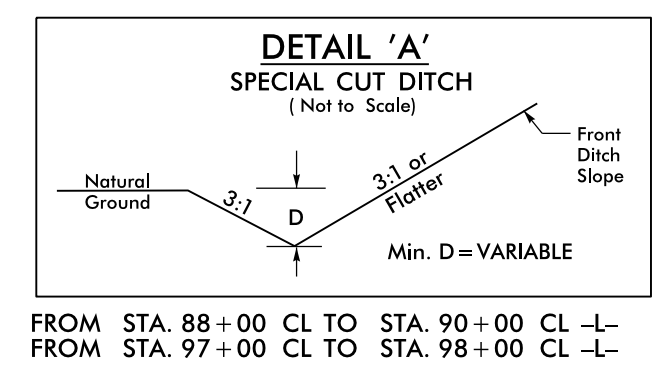
SEE DETAIL B,
SHEET 2B-1
FOR DIMENSIONS

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

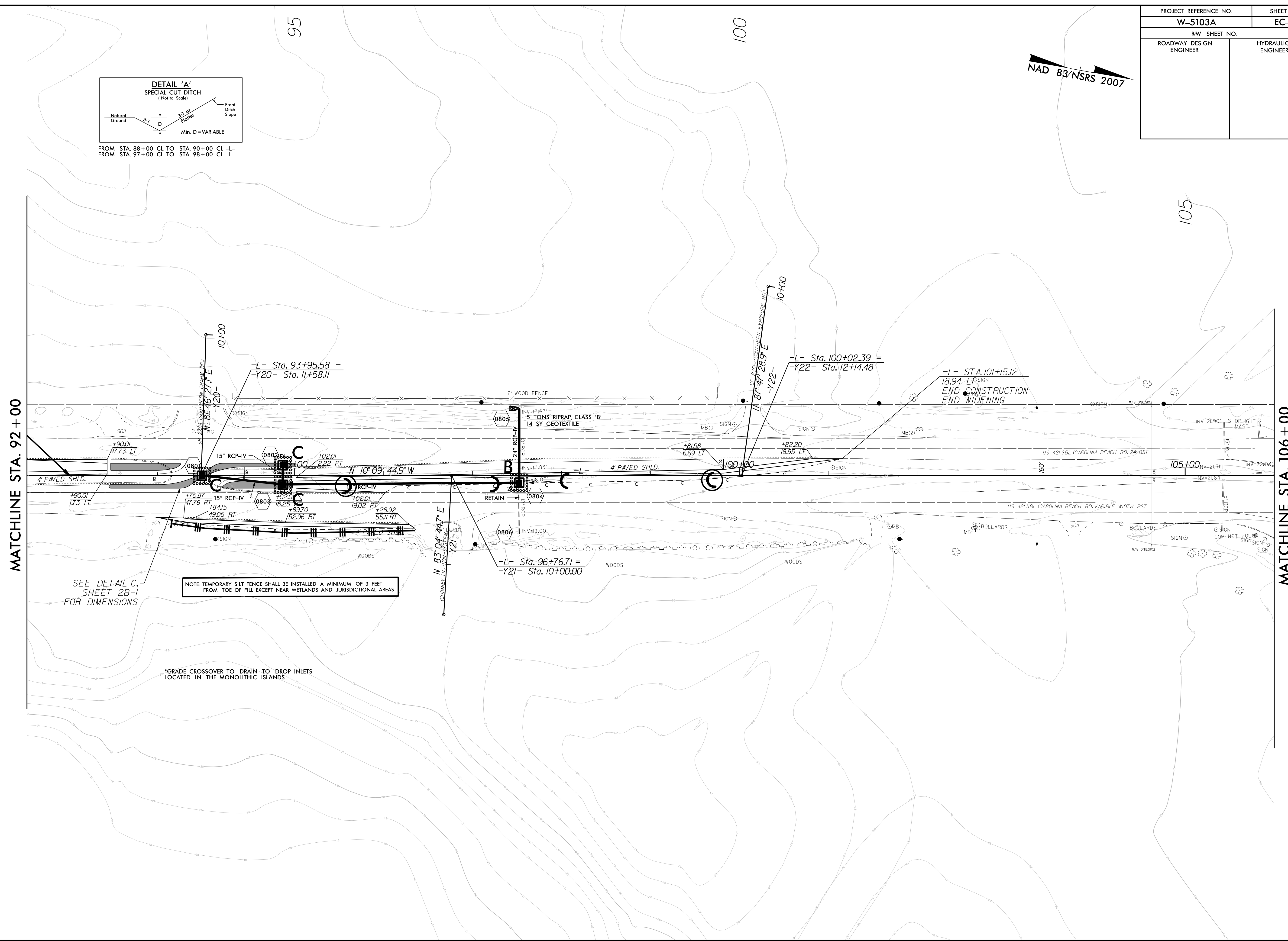
*GRADE CROSSOVER TO DRAIN TO DROP INLETS LOCATED IN THE MONOLITHIC ISLANDS

100 YR. FLOODPLAIN

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



REVISIONS
 02 JUL 2015
 C:\PROJ\2015\NEW HANDOVER\W-5103-41867-1.1\1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\PROJ\PLAN SHEETS\EROSION CONTROL\W5103.D03_EC_07_PSH_8.dgn
 \$\$\$SUSTAINABLE\$\$\$



MATCHLINE STA. 92 + 00

MATCHLINE STA. 106 + 00

SEE DETAIL C,
SHEET 2B-1
FOR DIMENSIONS

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

*GRADE CROSSOVER TO DRAIN TO DROP INLETS LOCATED IN THE MONOLITHIC ISLANDS

-L- STA. 101+15.12
18.94 LT^{SIGN}
END CONSTRUCTION
END WIDENING

-L- Sta. 96+76.71 =
-Y21- Sta. 10+00.00

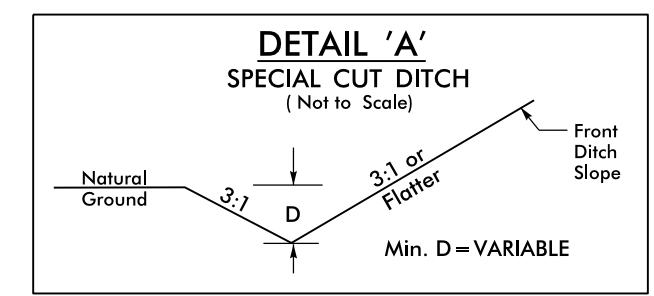
-L- Sta. 93+95.58 =
-Y20- Sta. 11+58.11

-L- Sta. 100+02.39 =
-Y22- Sta. 12+14.48

8/17/99

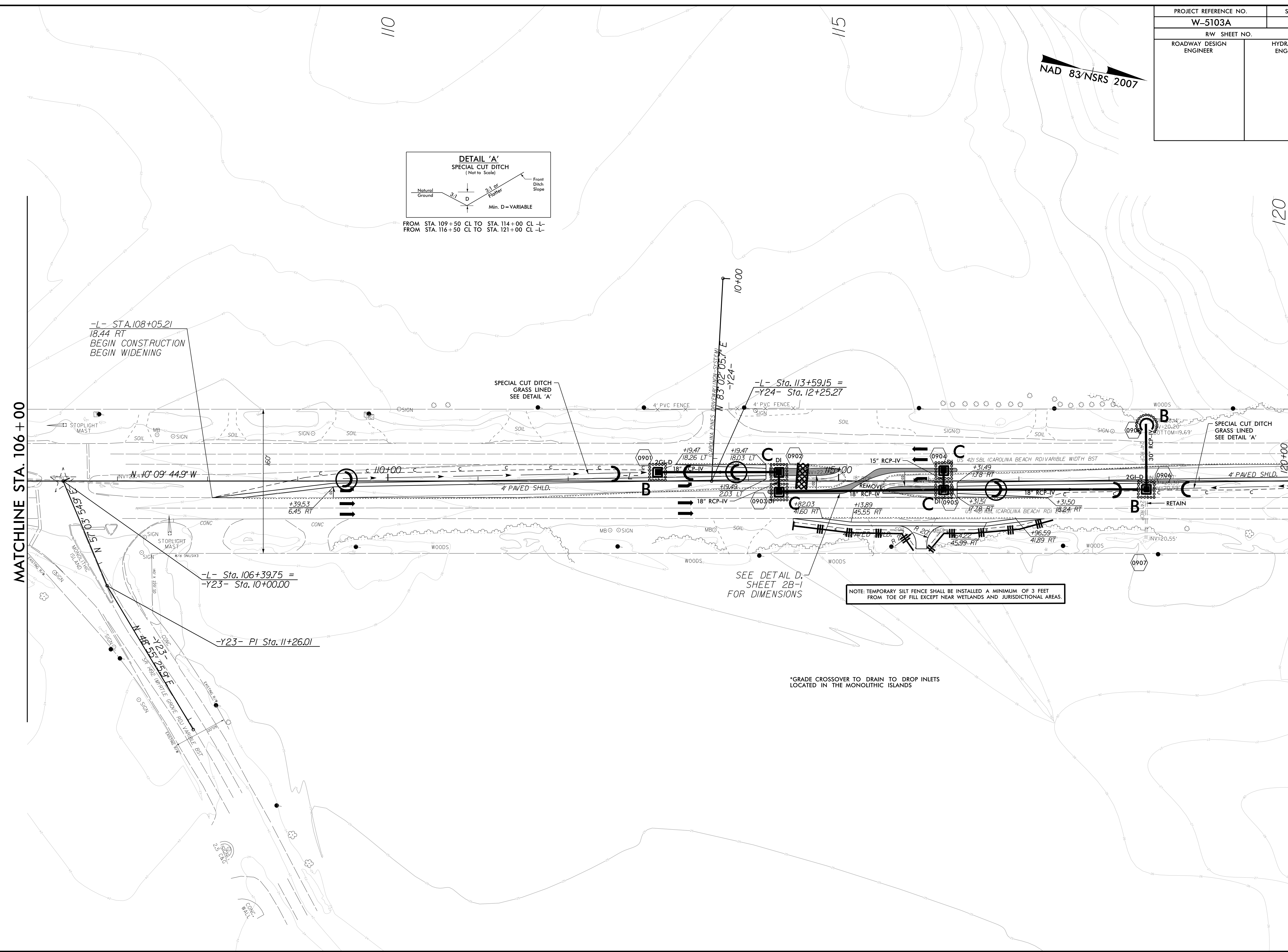
PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007



FROM STA. 109+50 CL TO STA. 114+00 CL -L-
FROM STA. 116+50 CL TO STA. 121+00 CL -L-

REVISIONS
 02 JUL 2015 NEW HANDOVER W-5103.41867.1.1.1 US 421 Median Crossover Relet (use this file)\ROADWAY\Proj\PLAN SHEETS\EROSION CONTROL\W5103.D03_EC_08_PSH_9.dgn
 8/17/99



MATCHLINE STA. 106+00

MATCHLINE STA. 120+00

-L- STA. 108+05.21
18.44 RT
BEGIN CONSTRUCTION
BEGIN WIDENING

SPECIAL CUT DITCH
GRASS LINED
SEE DETAIL 'A'

-L- Sta. 113+59.15 =
-Y24- Sta. 12+25.27

-L- Sta. 106+39.75 =
-Y23- Sta. 10+00.00

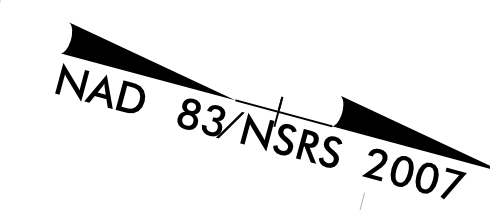
-Y23- PI Sta. 11+26.01

SEE DETAIL D,
SHEET 2B-1
FOR DIMENSIONS

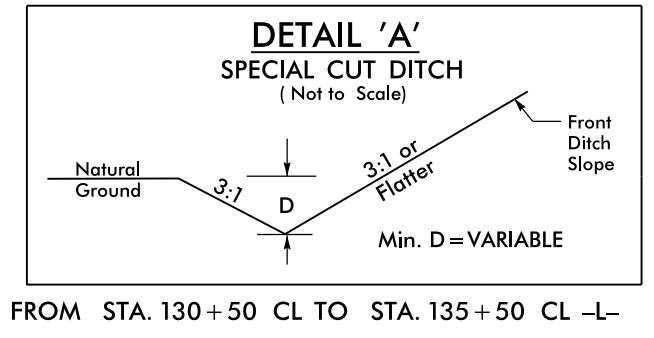
NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

*GRADE CROSSOVER TO DRAIN TO DROP INLETS LOCATED IN THE MONOLITHIC ISLANDS

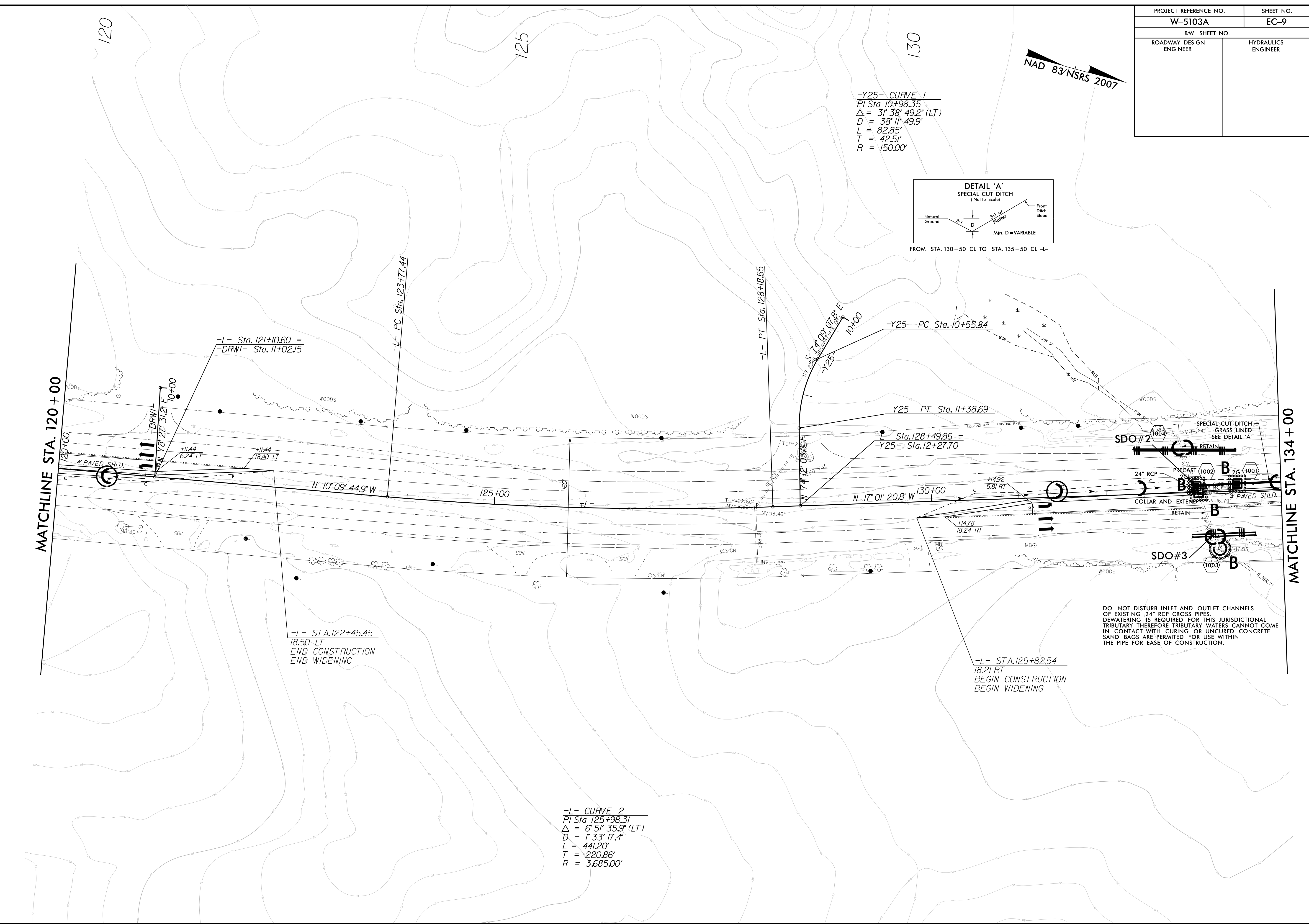
PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-Y25- CURVE 1
 PI Sta 10+98.35
 $\Delta = 31^{\circ} 38' 49.2''$ (LT)
 D = 38' 11" 49.9"
 L = 82.85'
 T = 42.5'
 R = 150.00'



REVISIONS
 02 JUL 2015 1320 NEW HANDOVER W-5103.41867.1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Proj\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC.09_PSH.10.dgn
 8/17/99



-L- Sta. 121+10.60 =
 -DRWI- Sta. 11+02.15

-L- PC Sta. 123+77.44

-L- PT Sta. 128+18.65

-Y25- PC Sta. 10+55.84

-Y25- PT Sta. 11+38.69

-L- Sta. 128+49.86 =
 -Y25- Sta. 12+27.70

-L- STA. 122+45.45
 18.50 LT
 END CONSTRUCTION
 END WIDENING

-L- STA. 129+82.54
 18.21 RT
 BEGIN CONSTRUCTION
 BEGIN WIDENING

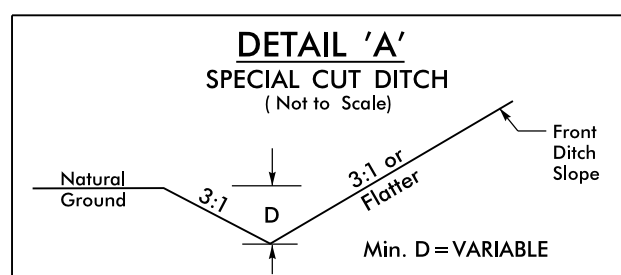
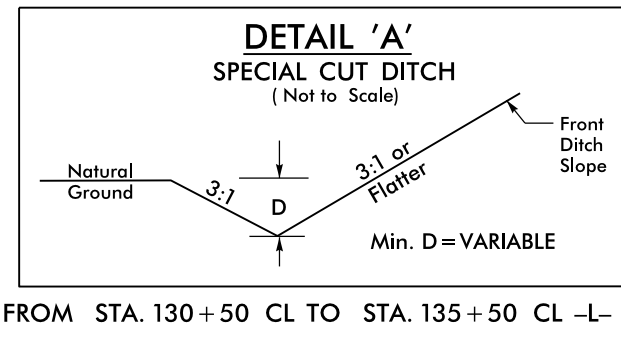
-L- CURVE 2
 PI Sta 125+98.31
 $\Delta = 6^{\circ} 51' 35.9''$ (LT)
 D = 1' 33' 17.4"
 L = 441.20'
 T = 220.86'
 R = 3,685.00'

MATCHLINE STA. 134 + 00

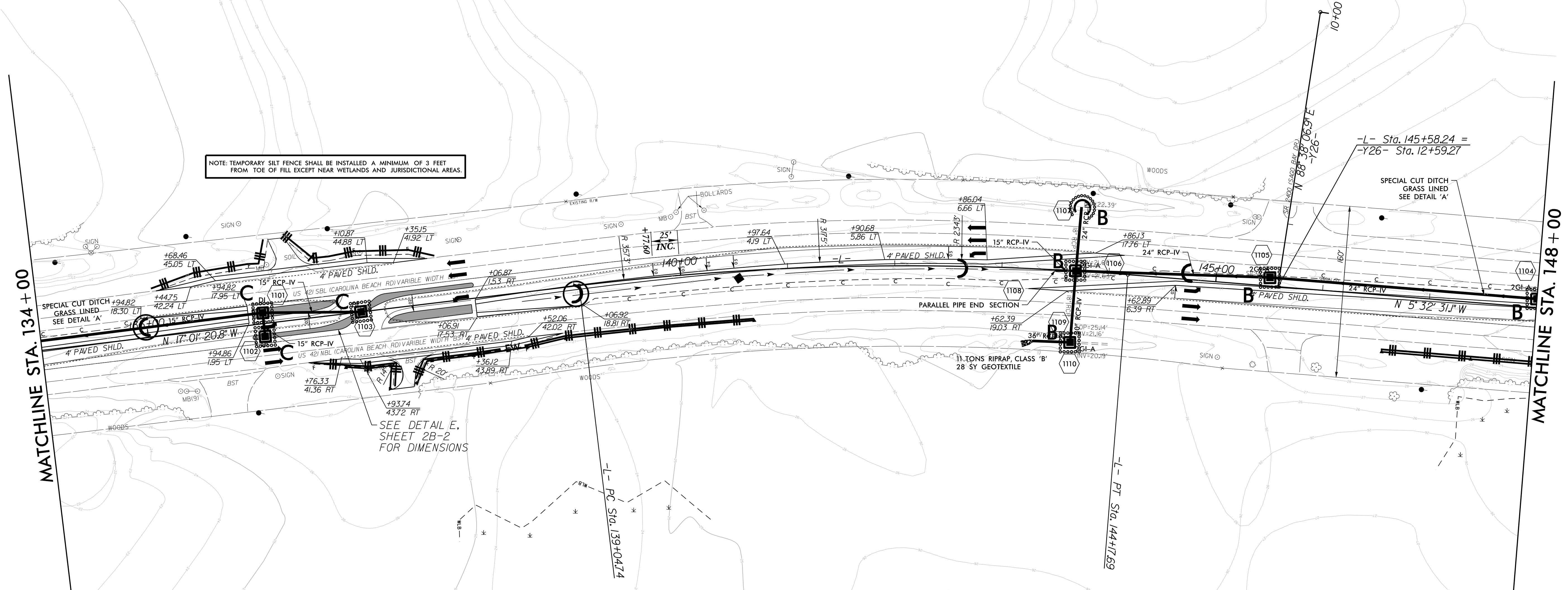
MATCHLINE STA. 120 + 00

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

145
NAD 83/NSRS 2007



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



SEE DETAIL E, SHEET 2B-2 FOR DIMENSIONS

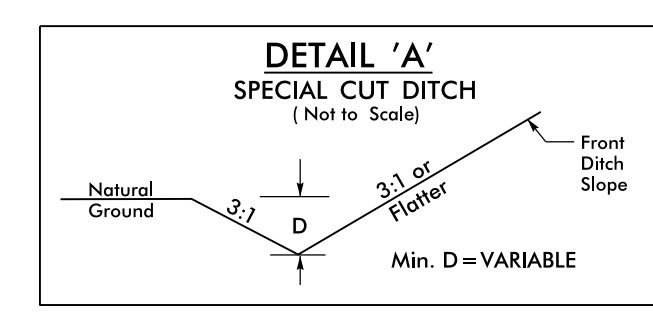
*GRADE CROSSOVER TO DRAIN TO DROP INLETS LOCATED IN THE MONOLITHIC ISLANDS

-L- CURVE 3
PI Sta 141+62.08
 $\Delta = 11^\circ 28' 49.6''$ (RT)
D = 2' 14' 17.2"
L = 512.95'
T = 257.34'
R = 2,560.00'

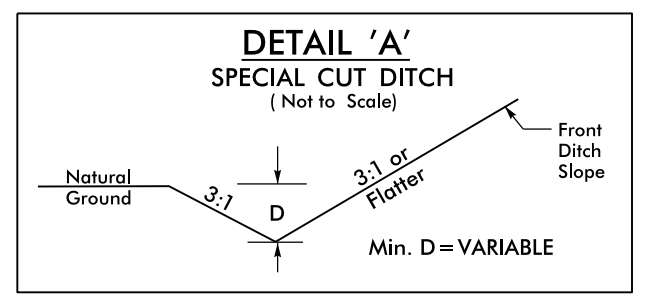
REVISIONS
 02 JUL 2015 1321 NEW HANDOVER W-5103.41867.1.1.1 US 421 Median Crossover Relet (use this file)\ROADWAY\ProJ\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC.10_PSH_11.dgn
 \$\$\$\$\$\$SUSSTENANCE\$\$\$\$\$\$

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

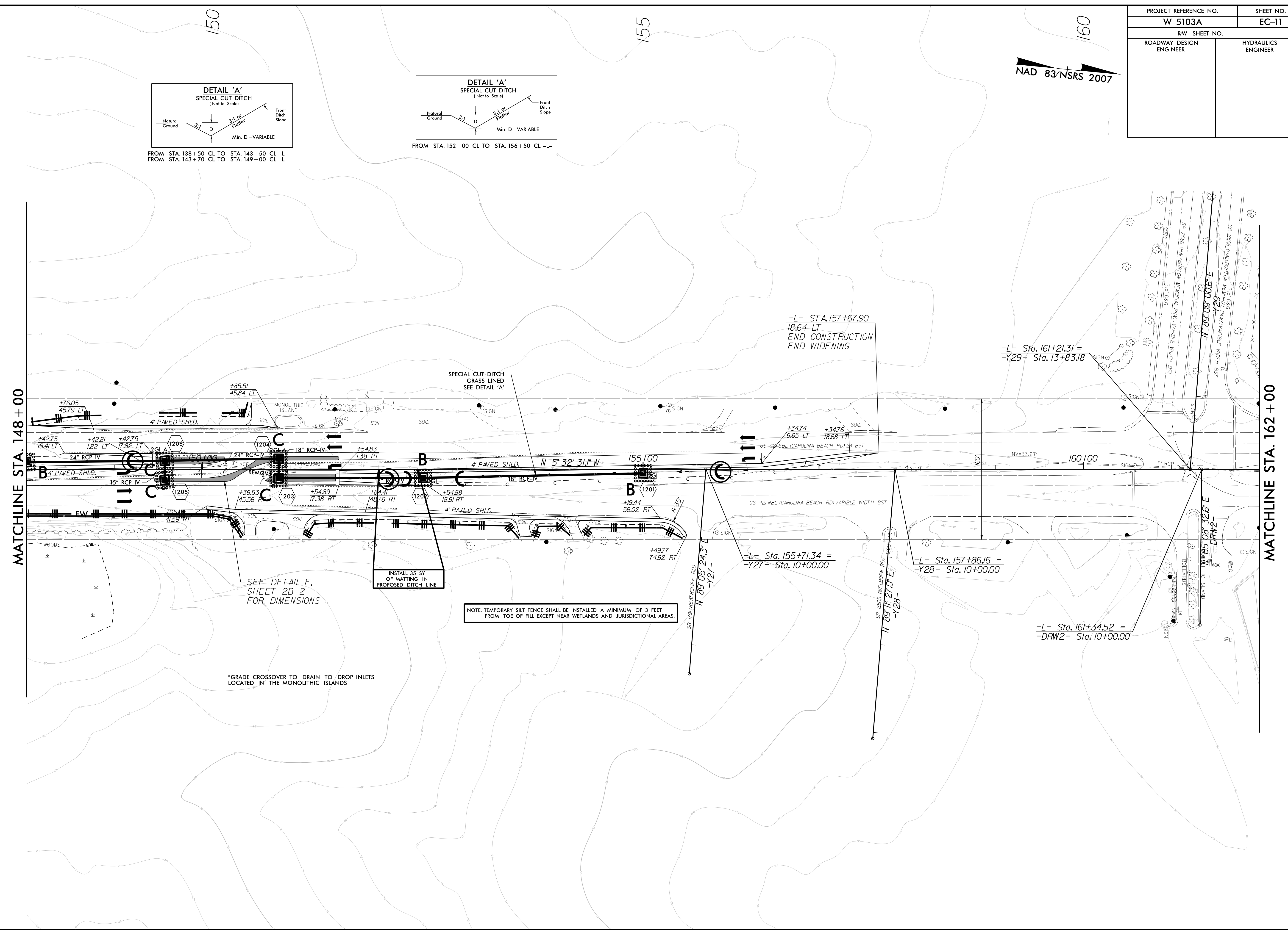


FROM STA. 138+50 CL TO STA. 143+50 CL -L-
FROM STA. 143+70 CL TO STA. 149+00 CL -L-



FROM STA. 152+00 CL TO STA. 156+50 CL -L-

REVISIONS
 02 JUL 2015 1345 NEW HANDOVER W-5103-41867-1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Pro\PLAN SHEETS-EROSION CONTROL\W5103.D03-EC-11_PSH-12.dgn
 8/17/99



MATCHLINE STA. 148+00

MATCHLINE STA. 162+00

SEE DETAIL F, SHEET 2B-2 FOR DIMENSIONS

INSTALL 35 SY OF MATTING IN PROPOSED DITCH LINE

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

*GRADE CROSSOVER TO DRAIN TO DROP INLETS LOCATED IN THE MONOLITHIC ISLANDS

-L- STA. 157+67.90
18.64 LT
END CONSTRUCTION
END WIDENING

-L- Sta. 161+21.31 =
-Y29- Sta. 13+83.18

-L- Sta. 155+71.34 =
-Y27- Sta. 10+00.00

-L- Sta. 157+86.16 =
-Y28- Sta. 10+00.00

-L- Sta. 161+34.52 =
-DRW2- Sta. 10+00.00

8/17/99

02 JUL 2016 13:12 NEW HANDOVER W-5103.41867.1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Pro\PLAN SHEETS_EROSION CONTROL\W5103.D03_EC.12_PSH_13.dgn

REVISIONS

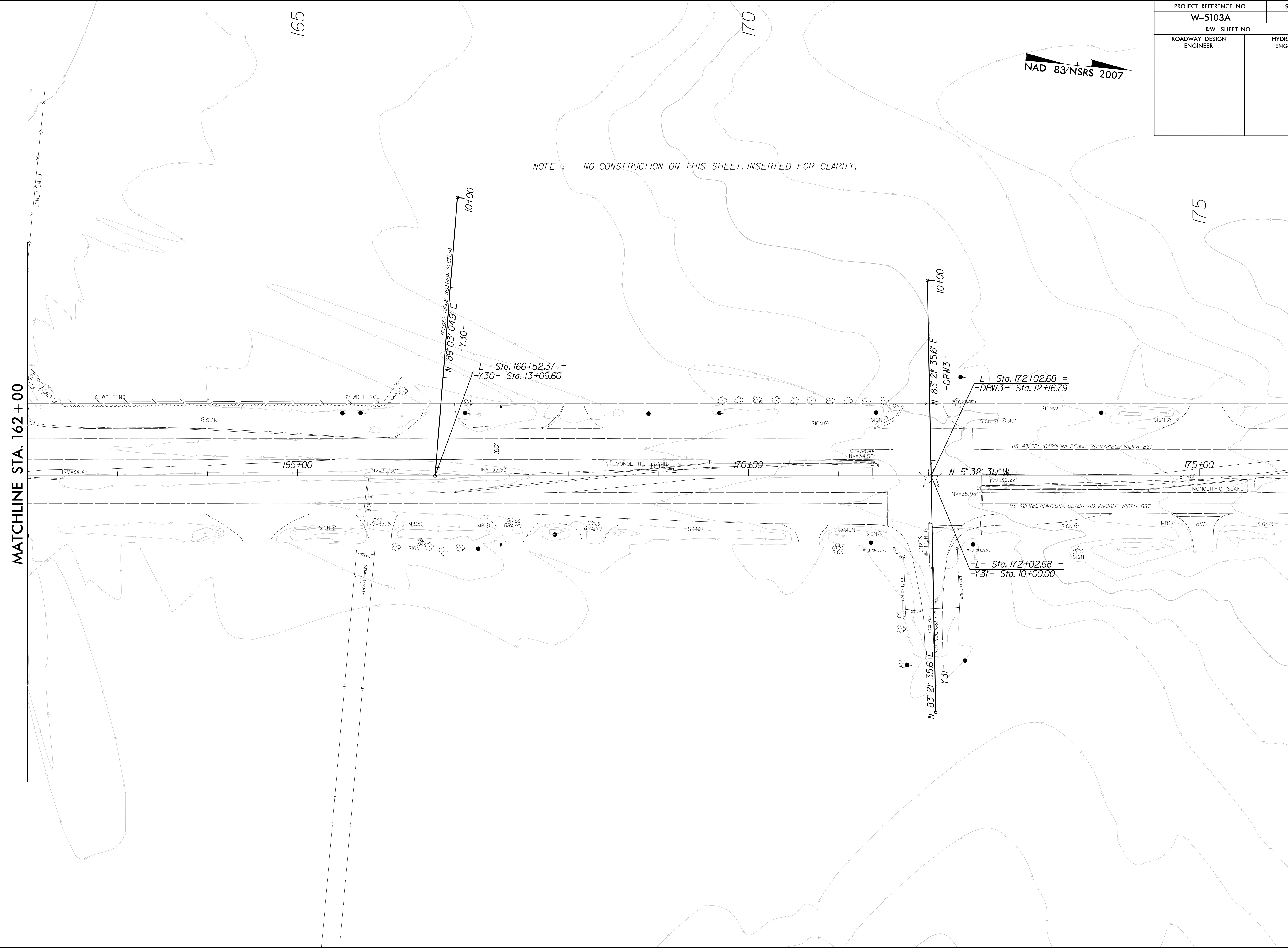
PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE STA. 162 + 00

MATCHLINE STA. 176 + 00

NOTE : NO CONSTRUCTION ON THIS SHEET. INSERTED FOR CLARITY.



165

170

175

165+00

170+00

175+00

10+00

10+00

N 89° 03' 04.9" E
-Y 30-

N 83° 21' 35.6" E
-DRW 3-

-L- Sta. 166+52.37 =
-Y 30- Sta. 13+09.60

-L- Sta. 172+02.68 =
-DRW 3- Sta. 12+16.79

-L- Sta. 172+02.68 =
-Y 31- Sta. 10+00.00

N 83° 21' 35.6" E
-Y 31-

N 5° 32' 31.1" W 1.31

ASB
INVERTED TYPING

BST
INV=33.15'

MB (5)

SOIL & GRAVEL

SOIL & GRAVEL

SOIL & GRAVEL

SOIL & GRAVEL

SOIL & GRAVEL

SOIL & GRAVEL

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SOIL & GRAVEL

SOIL & GRAVEL

SOIL & GRAVEL

SOIL & GRAVEL

INV=34.41'

INV=33.30'

INV=33.33'

TOP=38.44

INV=34.50'

INV=35.95'

INV=36.22'

INV=36.22'

INV=36.22'

INV=36.22'

INV=36.22'

INV=36.22'

INV=36.22'

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INV=33.15'

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INV=33.15'

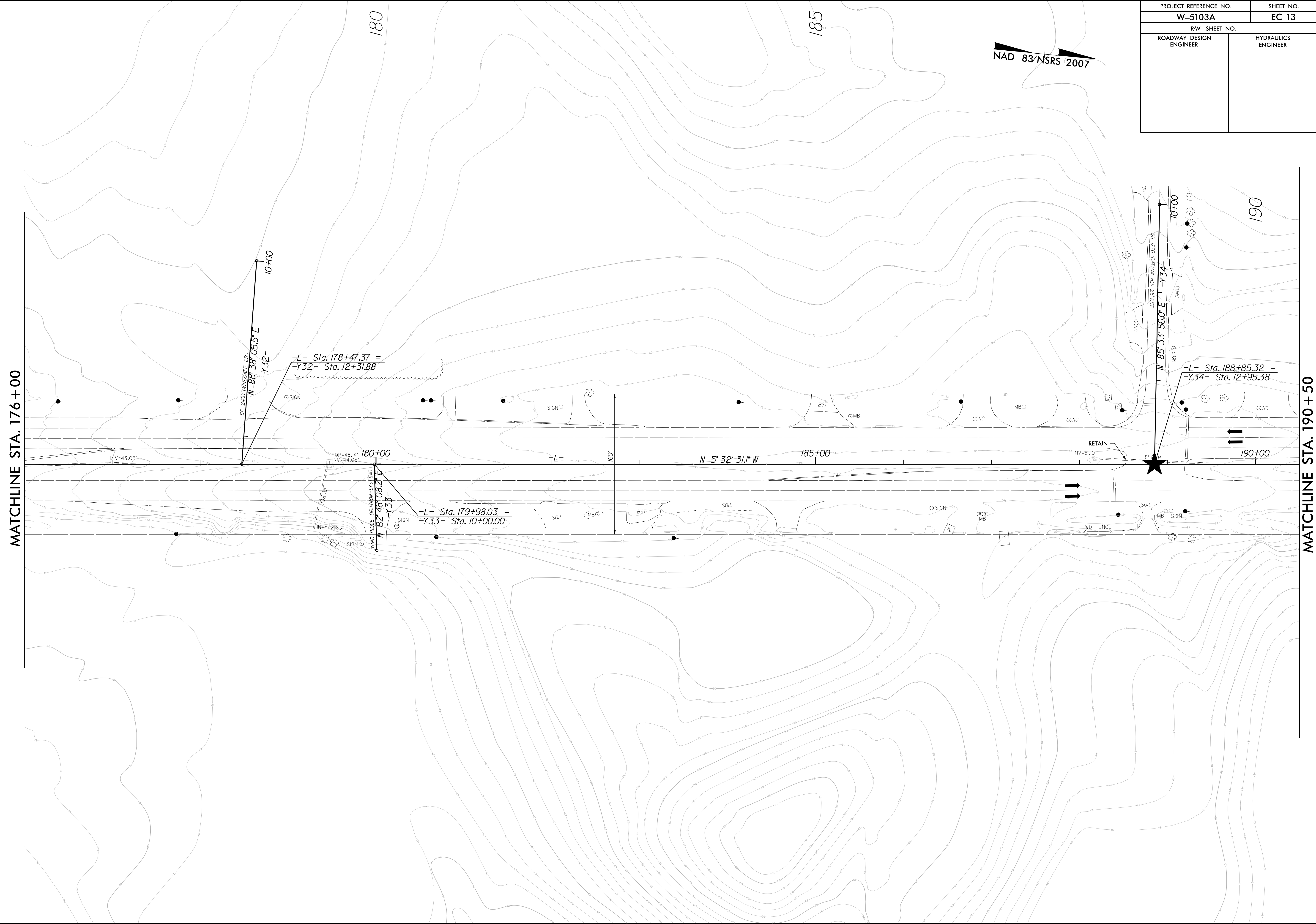
INV=33.15'

INV=33.15'

INV=33.15'

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007



MATCHLINE STA. 176+00

MATCHLINE STA. 190+50

SR 2400 WINDGATE DR.
N 88° 38' 05.5" E
-Y32-
10+00

-L- Sta. 178+47.37 =
-Y32- Sta. 12+31.88

WIND RIDGE DRAINAGE SYSTEM
N 82° 48' 08.2" E
-Y33-
10+00

-L- Sta. 179+98.03 =
-Y33- Sta. 10+00.00

N 5° 32' 31" W

N 85° 33' 56.0" E -Y34-
10+00

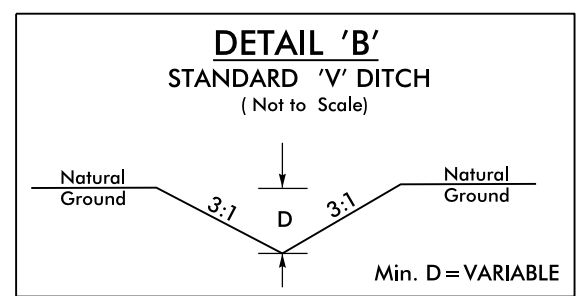
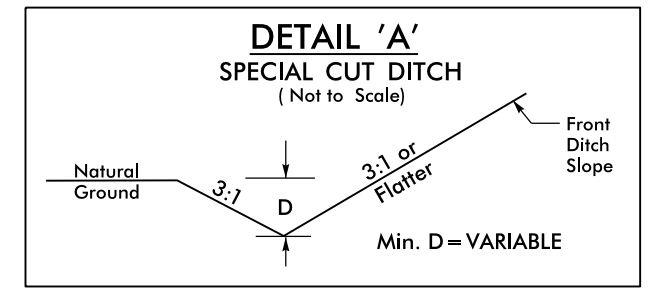
-L- Sta. 188+85.32 =
-Y34- Sta. 12+95.38

190

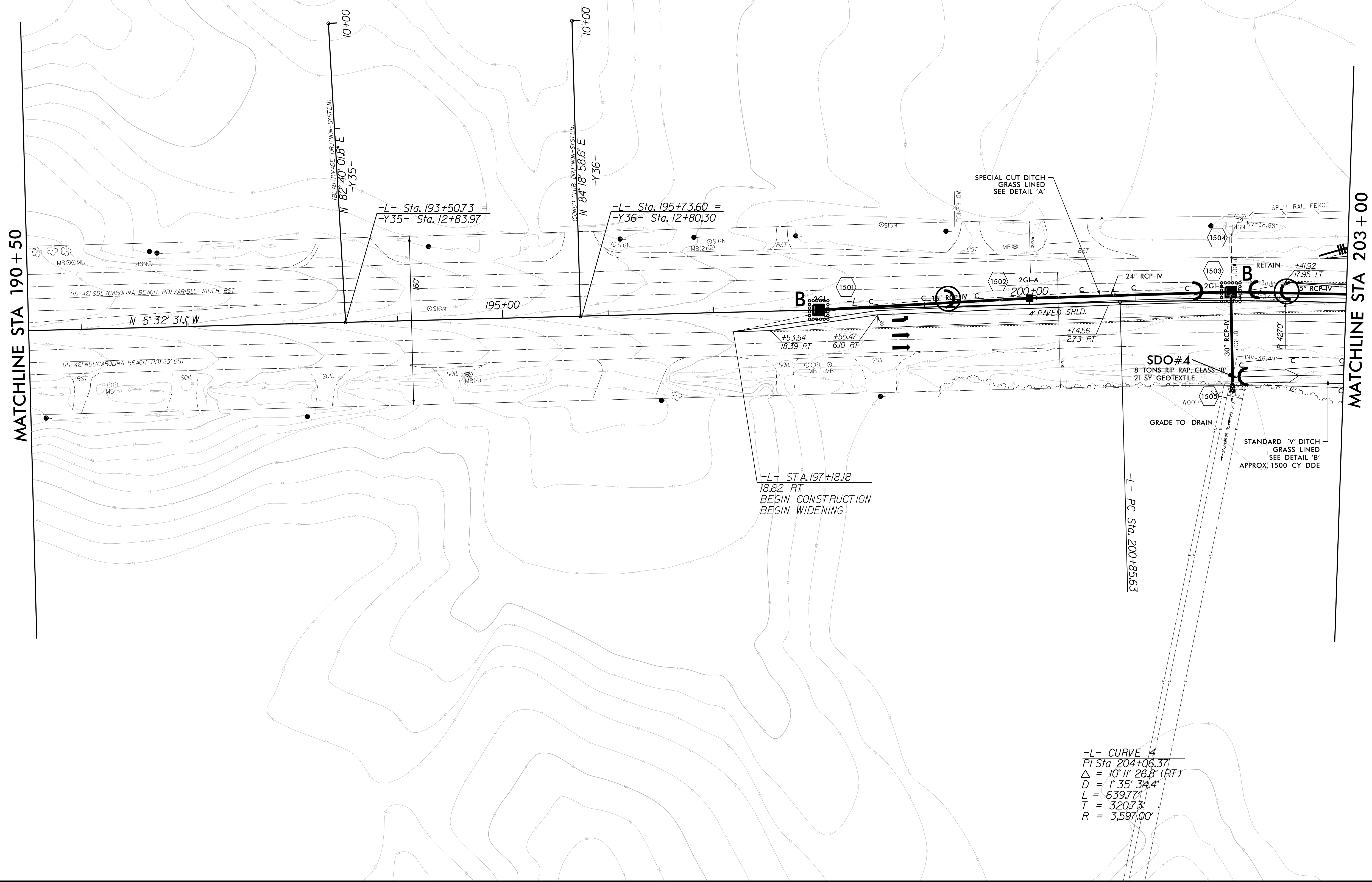
190+00

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007



FROM STA. 193+50 CL TO STA. 195+50 CL -L-
FROM STA. 199+00 CL TO STA. 203+00 CL -L-



MATCHLINE STA 190+50

MATCHLINE STA 203+00

-L- Sta. 193+50.73 =
-Y35- Sta. 12+83.97

-L- Sta. 195+73.60 =
-Y36- Sta. 12+80.30

-L- STA. 197+18.18
18.62 RT
BEGIN CONSTRUCTION
BEGIN WIDENING

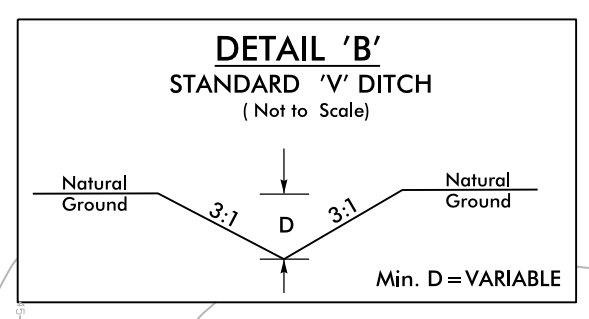
-L- CURVE 4
PI Sta 204+06.37
 $\Delta = 10^\circ 11' 26.8''$ (RT)
D = 1' 35' 34.4"
L = 639.77'
T = 320.73'
R = 3,597.00'

8/17/99

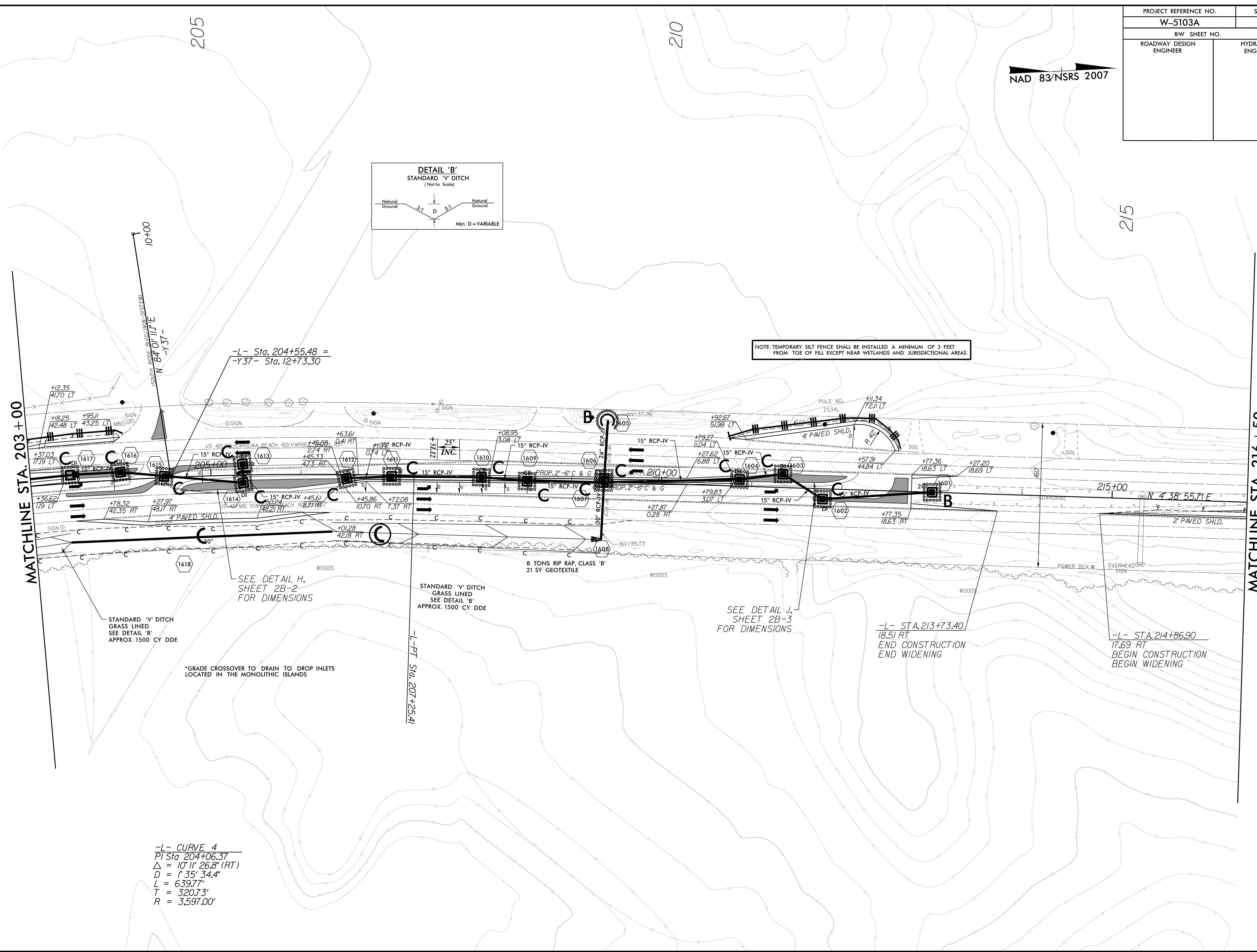
C:\PROJ\2016\1330_NEW_HANDOVER\W-5103_41867_1.1.1_US_421_Medton_Crosscover_Relet (use this file)\ROADWAY\Plan_SHEETS_EROSION_REVISIONS\W5103.D03_EC.14_PSH_15.dgn

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



-L- CURVE 4
 PI Sta 204+06.37
 $\Delta = 10^\circ 11' 26.8''$ (RT)
 $D = 1^\circ 35' 34.4''$
 $L = 639.77'$
 $T = 320.73'$
 $R = 3,597.00'$

REVISIONS

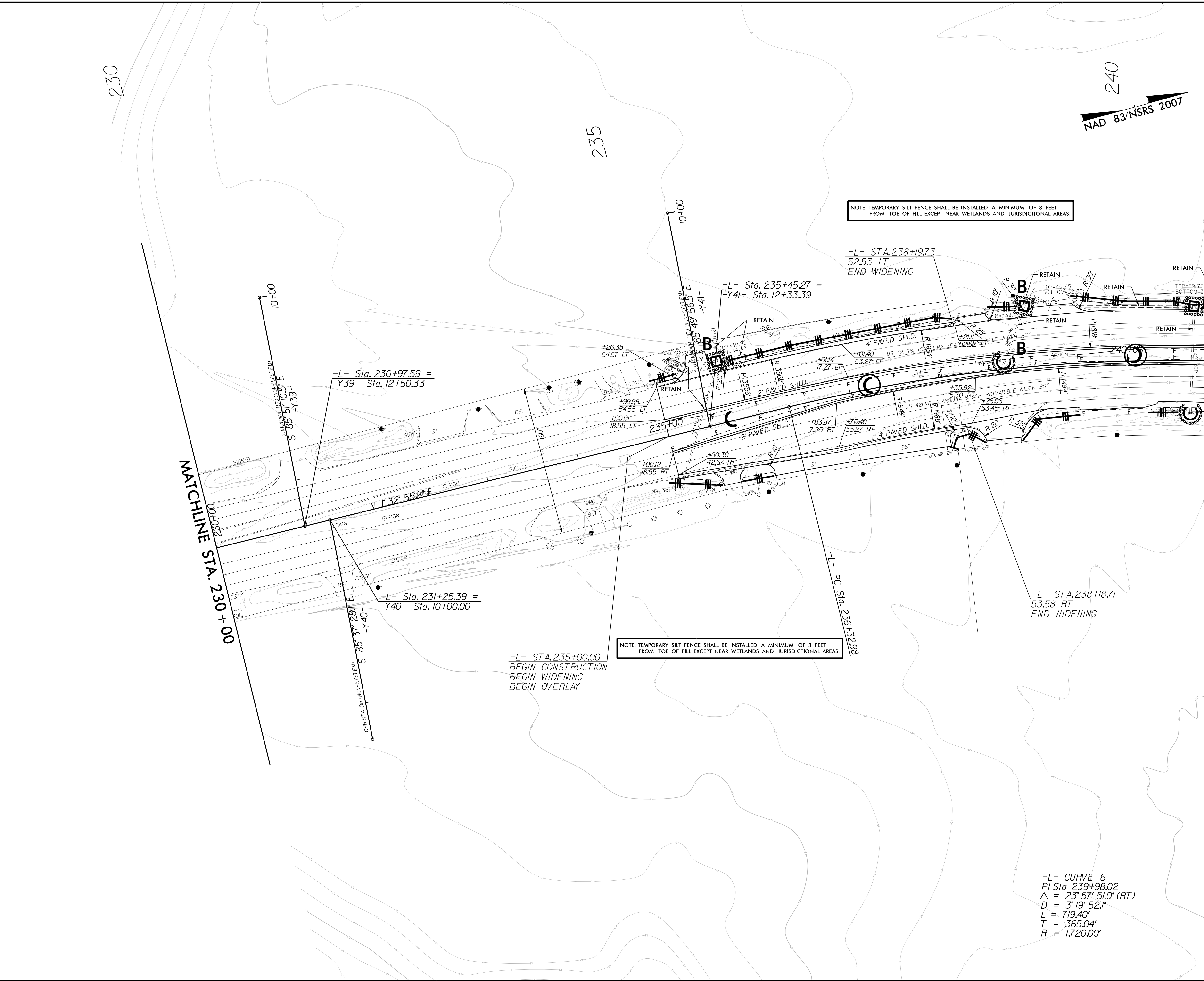
8/17/99
 02-JUL-2015 13:30 NEW HANDOVER W-5103-41867-1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Pro\PLAN SHEETS_EROSION CONTROL\W5103.D03.EC.15_PSH_16.dgn
 \$\$\$\$\$\$SUSSTENANCE\$\$\$\$\$\$

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

C:\PROJ\2015\1332 NEW HANDOVER\W-5103.41867.1.1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\Pro\PLAN SHEETS\EROSION CONTROL\W5103.D03_EC.17_PSH_18.dgn



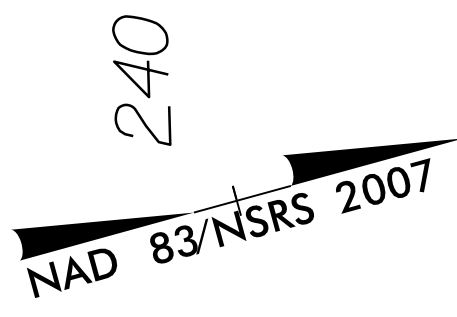
NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

-L- CURVE 6
 PI Sta. 239+98.02
 $\Delta = 23^\circ 57' 51.0''$ (RT)
 $D = 3^\circ 19' 52.1''$
 $L = 719.40'$
 $T = 365.04'$
 $R = 1,720.00'$

MATCHLINE STA. 230 + 00

MATCHLINE STA. 241 + 00



230

235

240

10+00

10+00

00+00

230+00

235+00

238+00

241+00

244+00

247+00

250+00

253+00

256+00

259+00

262+00

265+00

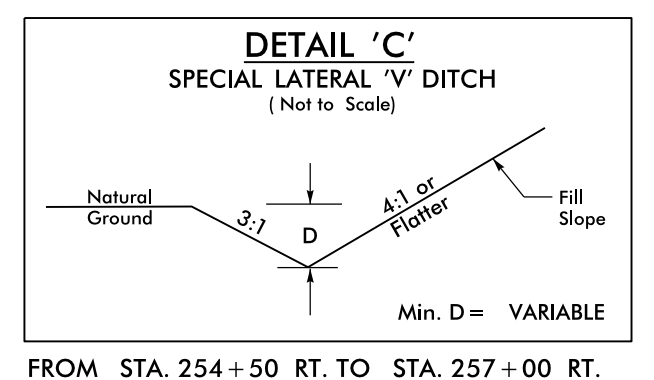
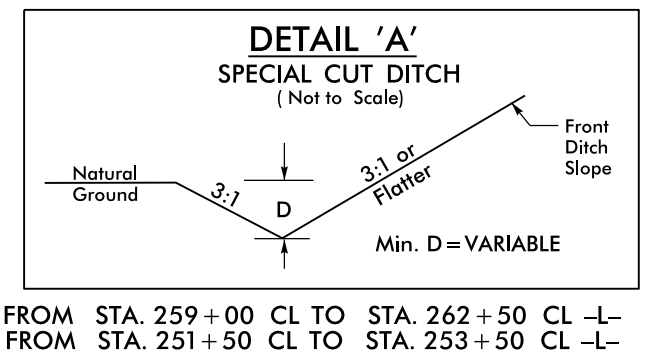
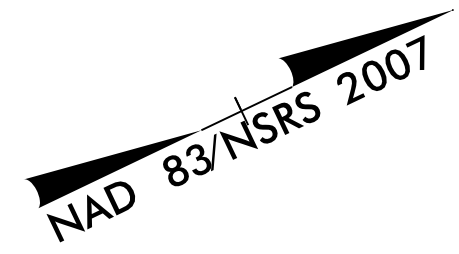
268+00

271+00

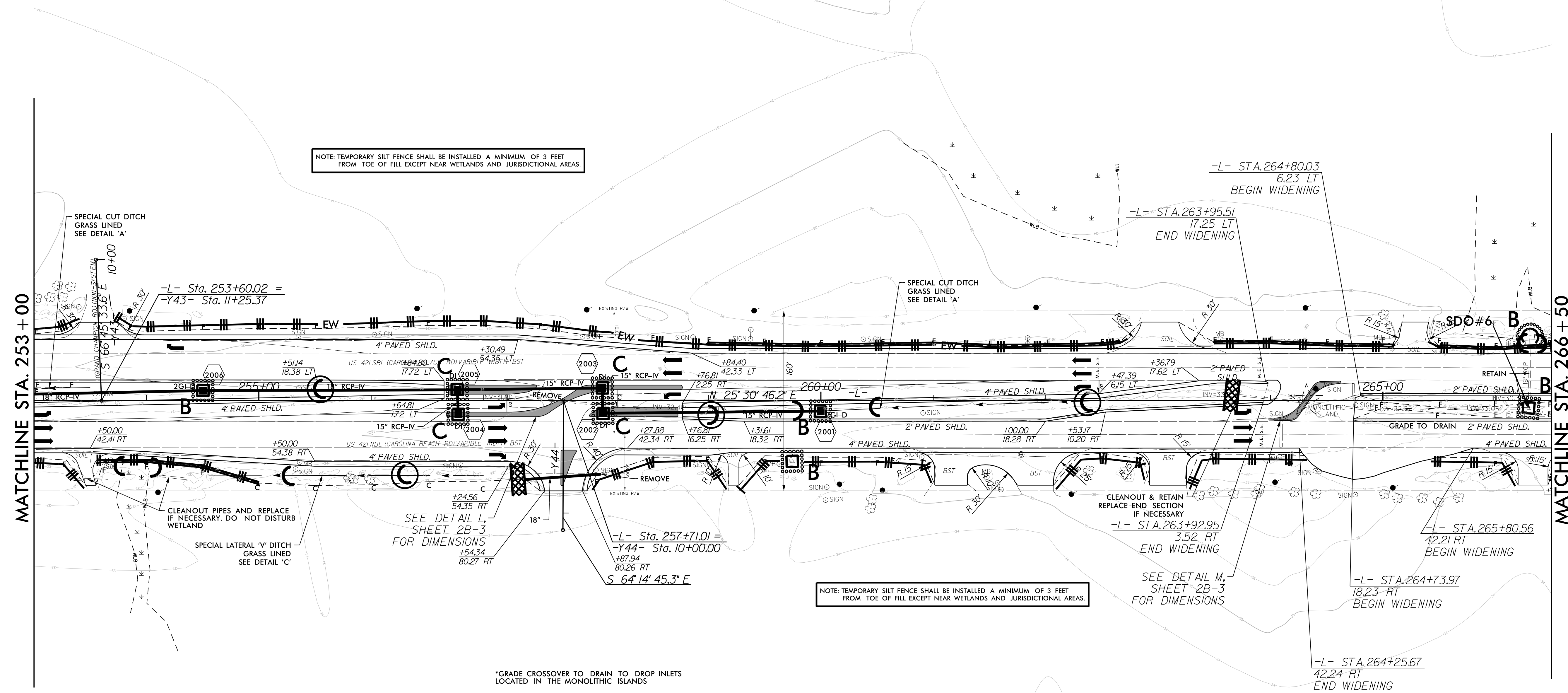
274+00

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

265



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



MATCHLINE STA. 253 + 00

MATCHLINE STA. 266 + 50

REVISIONS

8/17/99
02-JUL-2016 13:33 NEW HANDOVER W-5103-41867-1.1.1 US 421 Median Crossover Relet (use this file) \\\ROADWAY\Proj\PLAN SHEETS-EROSION CONTROL\W5103.D03-EC-19_PSH-20.dgn
\$\$\$\$\$SUSTAINABLE\$\$\$\$\$

*GRADE CROSSOVER TO DRAIN TO DROP INLETS LOCATED IN THE MONOLITHIC ISLANDS

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

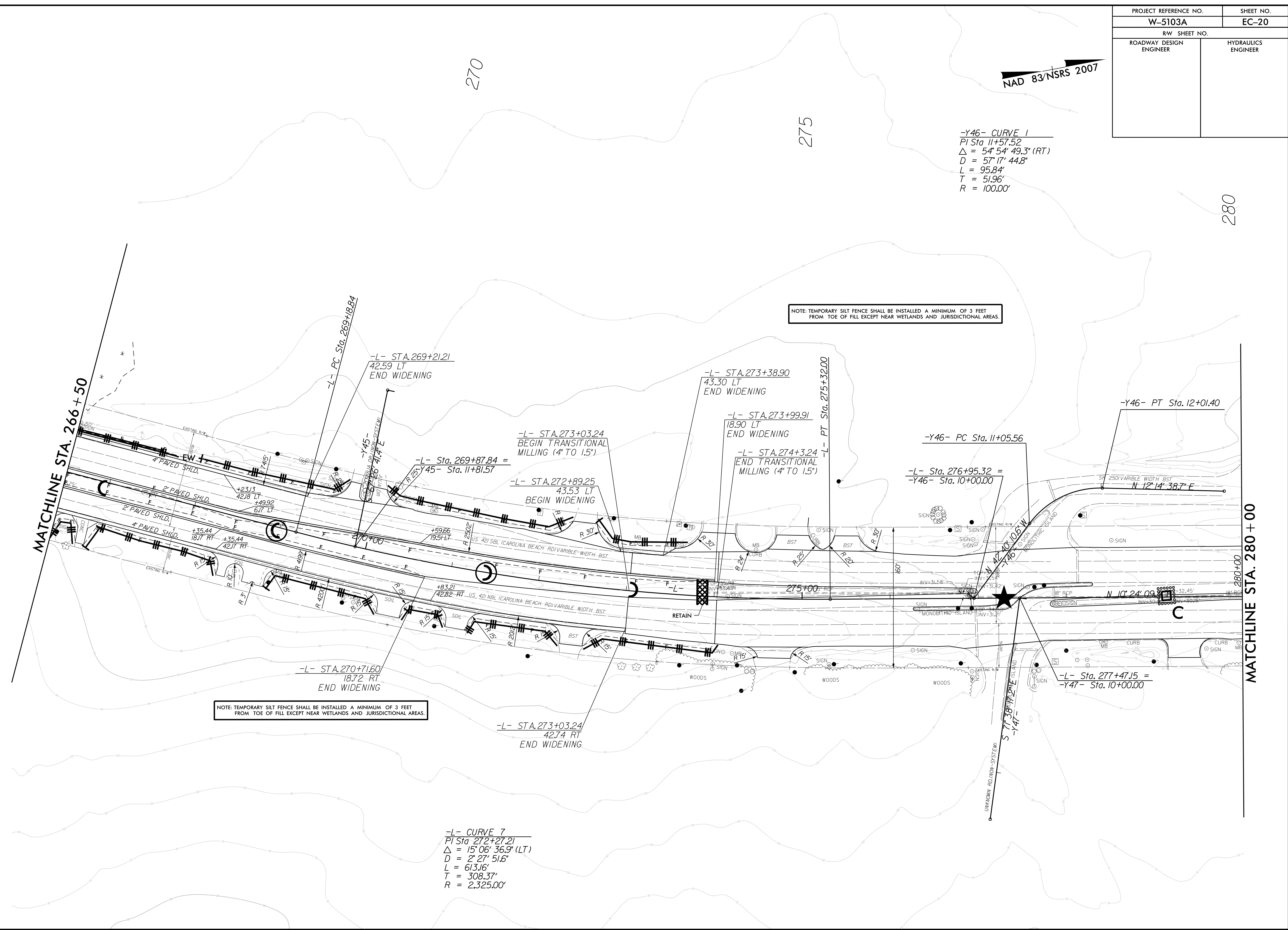
NAD 83/NSRS 2007

-Y46- CURVE 1
 PI Sta. 11+57.52
 $\Delta = 54^{\circ} 54' 49.3" (RT)$
 $D = 57^{\circ} 17' 44.8"$
 $L = 95.84'$
 $T = 51.96'$
 $R = 100.00'$

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

-L- CURVE 7
 PI Sta. 272+27.21
 $\Delta = 15^{\circ} 06' 36.9" (LT)$
 $D = 2^{\circ} 27' 51.6"$
 $L = 613.16'$
 $T = 308.37'$
 $R = 2,325.00'$



REVISIONS

8/17/99
 C:\JULY 2015 1334
 C:\RDY\PROJECTS\NEW HANDOVER\W-5103-41867-1.1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC-20.PSH-21.dgn
 \$\$\$SUSANMAYE\$\$\$

MATCHLINE STA. 280+00

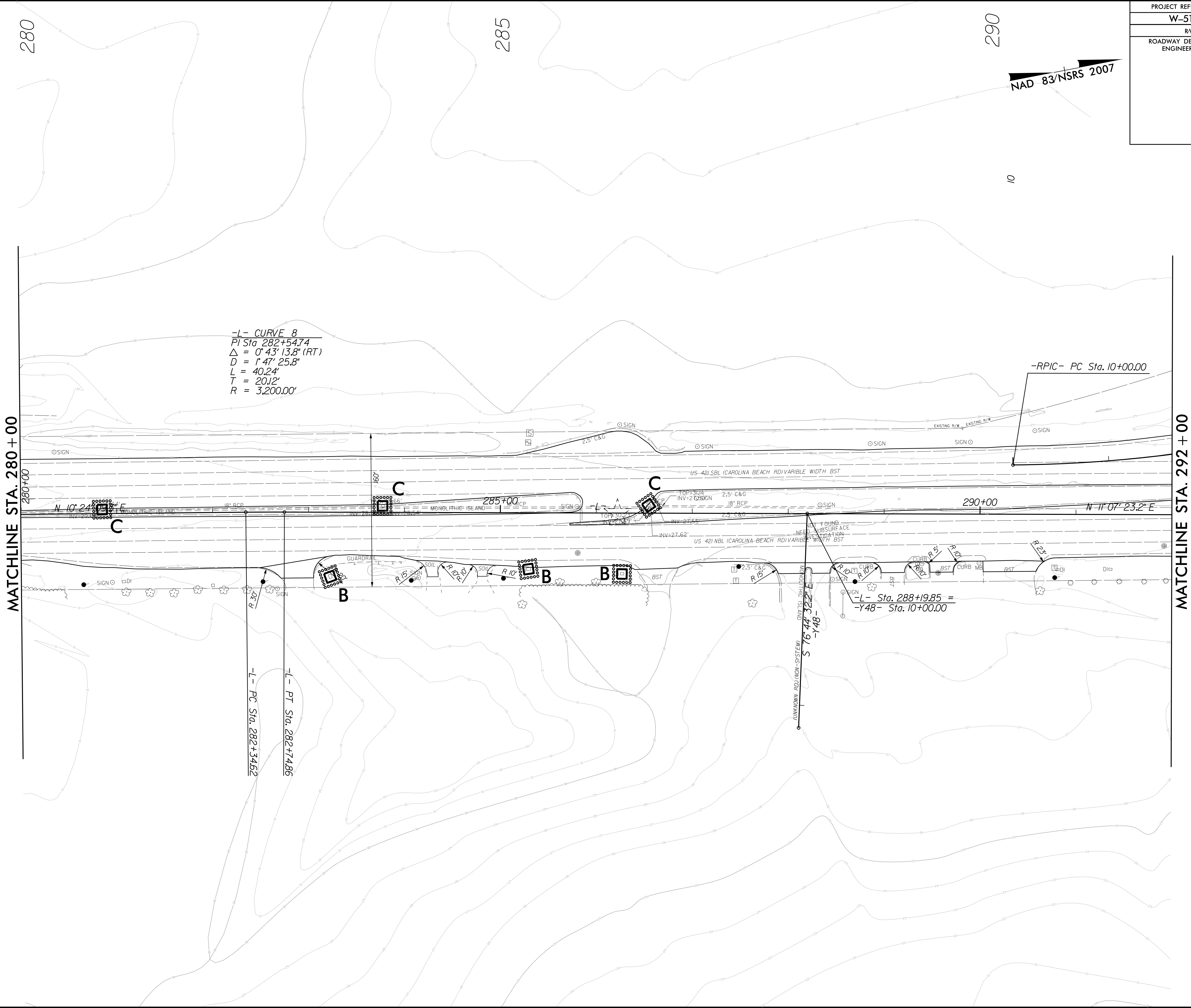
MATCHLINE STA. 266+50

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

C:\JULY_2015_1334_NEW_HANDOVER\W-5103_41867_1.1.1_US_421_Medton_Crossover_Relet (use this file)\ROADWAY\Proj\PLAN SHEETS_EROSION_CONTROL\W5103.D03_EC_21_PSH_22.dgn



MATCHLINE STA. 280+00

MATCHLINE STA. 292+00

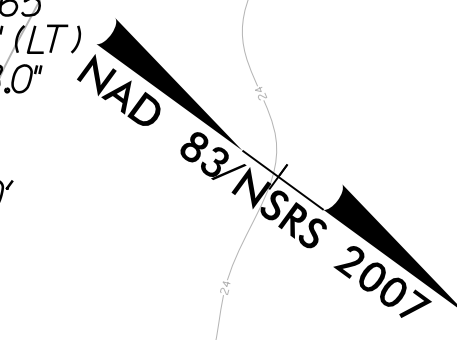
-L- CURVE 8
PI Sta. 282+54.74
Δ = 0° 43' 13.8" (RT)
D = 1' 47" 25.8"
L = 40.24'
T = 20.12'
R = 3,200.00'

-RPIC- PC Sta. 10+00.00

-L- Sta. 288+19.85 =
-Y48- Sta. 10+00.00

UNIKONN ROAD-IN SYSTEM
S 16° 47' 32.2" E
-Y48-

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-RPIC- CURVE 1
 PI Sta 15+84.80
 $\Delta = 45^{\circ} 20' 31.9''$ (LT)
 $D = 4^{\circ} 05' 33.2''$
 $L = 1,107.92'$
 $T = 584.80'$
 $R = 1,400.00'$

-Y5I- CURVE 1
 PI Sta 11+88.26
 $\Delta = 74^{\circ} 22' 04.4''$ (RT)
 $D = 114^{\circ} 35' 29.6''$
 $L = 64.90'$
 $T = 37.93'$
 $R = 50.00'$

-LI- CURVE 2
 PI Sta 20+89.65
 $\Delta = 4^{\circ} 31' 11.0''$ (LT)
 $D = 2^{\circ} 29' 28.0''$
 $L = 181.43'$
 $T = 90.76'$
 $R = 2,300.00'$

-RPIA- CURVE 1
 PI Sta 11+47.87
 $\Delta = 41^{\circ} 36' 21.5''$ (RT)
 $D = 28^{\circ} 38' 52.4''$
 $L = 145.23'$
 $T = 75.98'$
 $R = 200.00'$

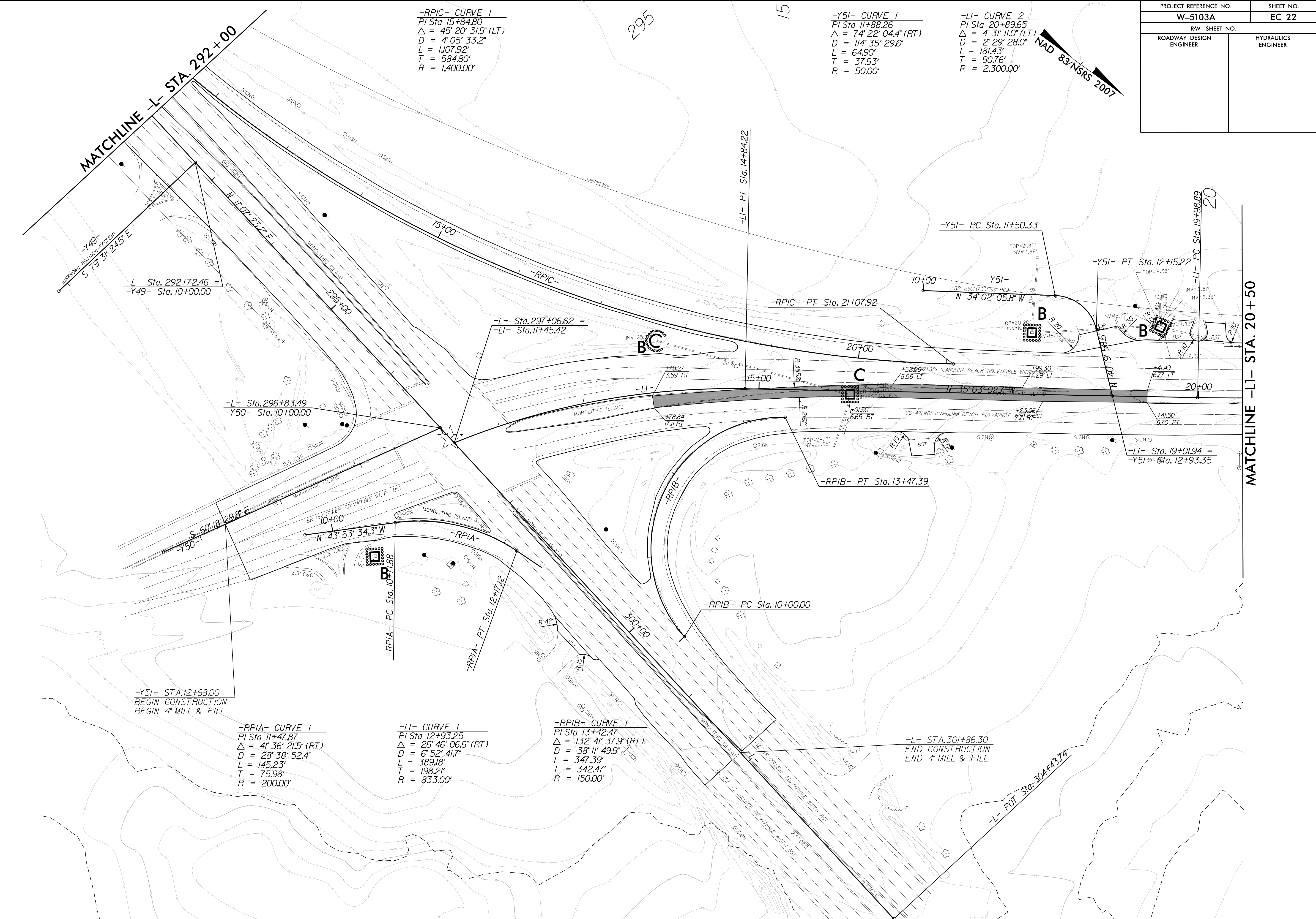
-LI- CURVE 1
 PI Sta 12+93.25
 $\Delta = 26^{\circ} 46' 06.6''$ (RT)
 $D = 6^{\circ} 52' 41.7''$
 $L = 389.18'$
 $T = 198.21'$
 $R = 833.00'$

-RPIB- CURVE 1
 PI Sta 13+42.47
 $\Delta = 132^{\circ} 41' 37.9''$ (RT)
 $D = 38^{\circ} 11' 49.9''$
 $L = 347.39'$
 $T = 342.47'$
 $R = 150.00'$

-L- STA. 301+86.30
 END CONSTRUCTION
 END 4' MILL & FILL

MATCHLINE -L- STA. 292+00

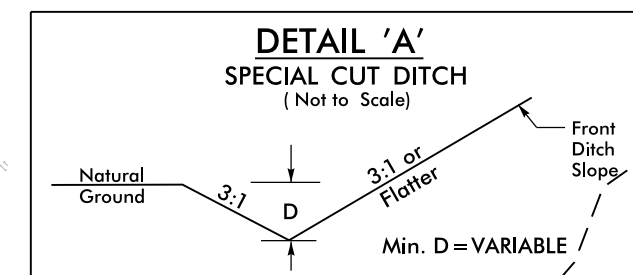
MATCHLINE -LI- STA. 20+50



REVISIONS

02 JUL 2015 13:35 NEW HANDOVER W-5103-41867-1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Pro\PLAN SHEETS-EROSION CONTROL W5103.D03-EC-22.PSH-23.dgn
 8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5103A	EC-23
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



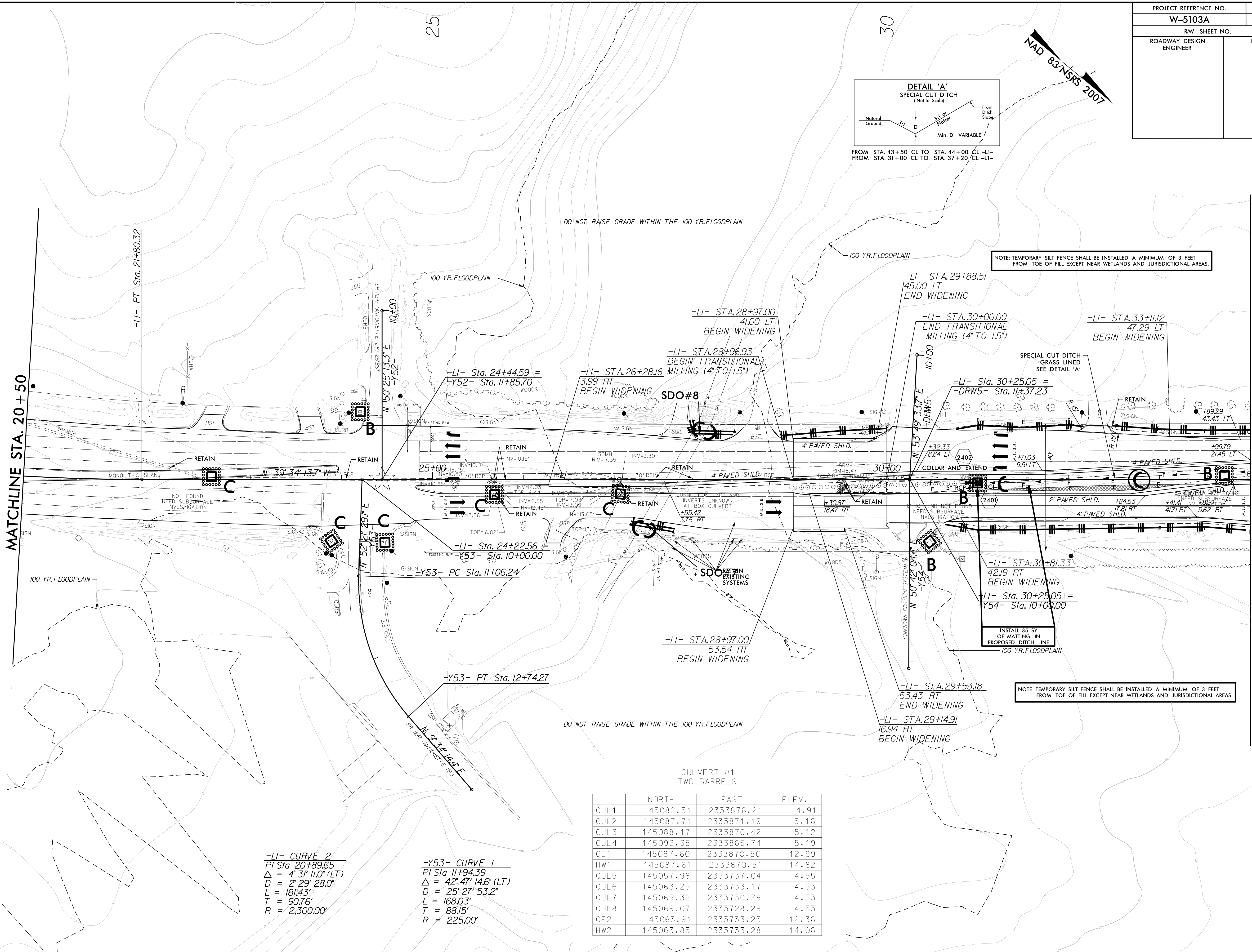
FROM STA. 43+50 CL TO STA. 44+00 CL -LI-
FROM STA. 31+00 CL TO STA. 37+20 CL -LI-

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

8/17/99
C:\JULY 2015 1339 NEW HANDOVER\W-5103_41867_1.1.1.JS 421 Medion Crossover Relet (use this file)\ROADWAY\Pro\PLAN SHEETS\EROSION CONTROL\W5103.D03_EC_23_PSH_24.dgn
\$\$\$\$\$SUSANMAY\$\$\$\$\$

REVISIONS



MATCHLINE STA. 20+50

MATCHLINE STA. 34+00

-LI- CURVE 2
PI Sta 20+89.65
Δ = 4° 31' 11.0" (LT)
D = 2° 29' 28.0"
L = 181.43'
T = 90.76'
R = 2,300.00'

-Y53- CURVE 1
PI Sta 11+94.39
Δ = 42° 47' 14.6" (LT)
D = 25° 27' 53.2"
L = 168.03'
T = 88.15'
R = 225.00'

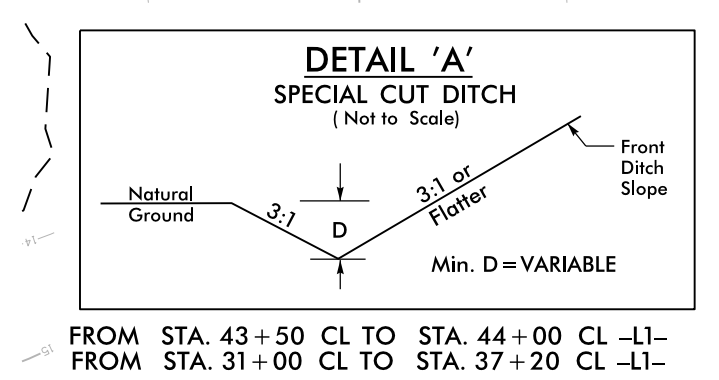
CULVERT #1
TWO BARRELS

	NORTH	EAST	ELEV.
CUL 1	145082.51	2333876.21	4.91
CUL 2	145087.71	2333871.19	5.16
CUL 3	145088.17	2333870.42	5.12
CUL 4	145093.35	2333865.74	5.19
CE 1	145087.60	2333870.50	12.99
HW 1	145087.61	2333870.51	14.82
CUL 5	145057.98	2333737.04	4.55
CUL 6	145063.25	2333733.17	4.53
CUL 7	145065.32	2333730.79	4.53
CUL 8	145069.07	2333728.29	4.53
CE 2	145063.91	2333733.25	12.36
HW 2	145063.85	2333733.28	14.06

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-24
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

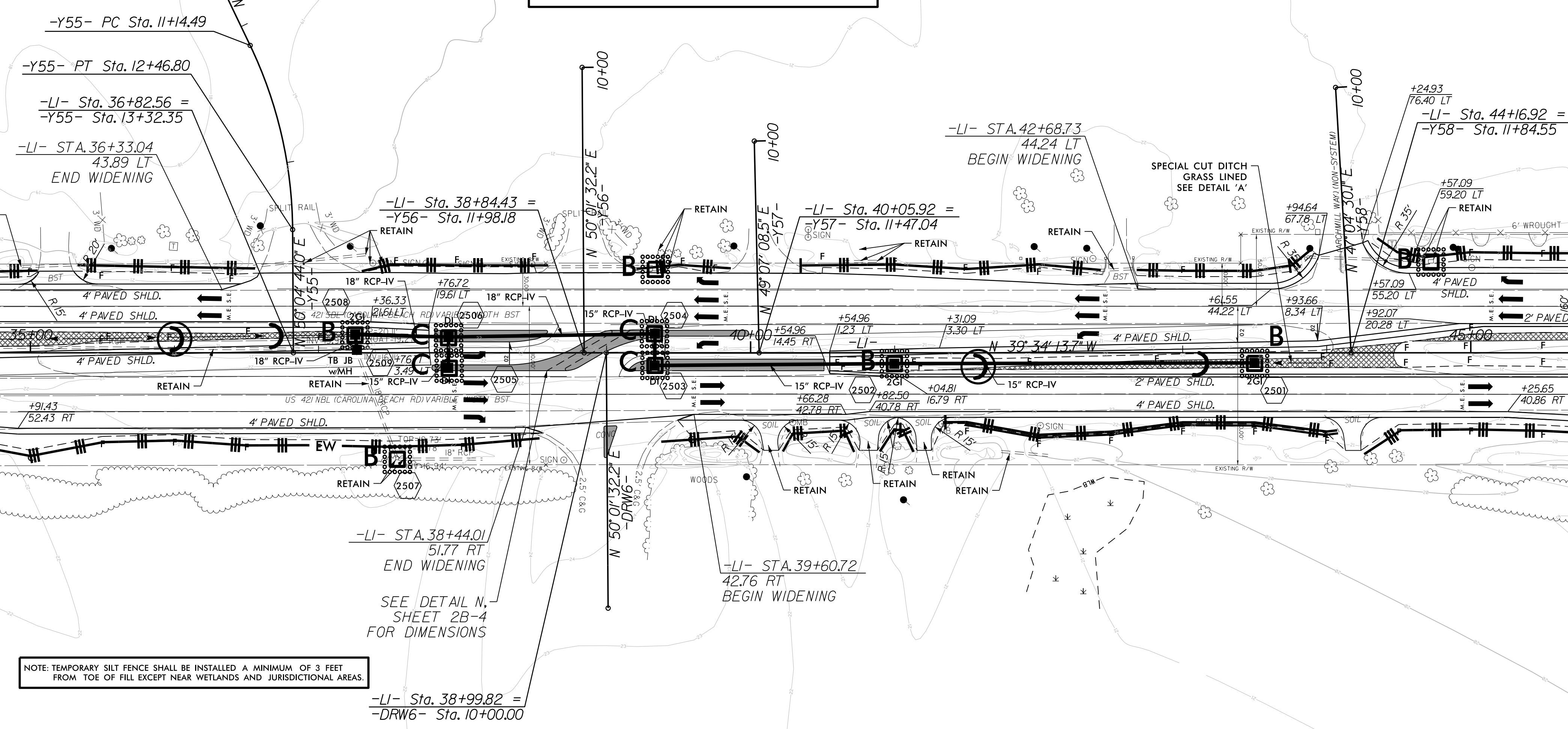
NAD 83 NSRS 2007

-Y55- CURVE 1
 PI Sta 11+81.74
 $\Delta = 25^{\circ}16'07.5"$ (RT)
 $D = 19^{\circ}05'54.9"$
 $L = 132.31'$
 $T = 67.25'$
 $R = 300.00'$



FROM STA. 43+50 CL TO STA. 44+00 CL -LI-
 FROM STA. 31+00 CL TO STA. 37+20 CL -LI-

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

*GRADE CROSSOVER TO DRAIN TO DI'S IN MONOLITHIC ISLAND

REVISIONS

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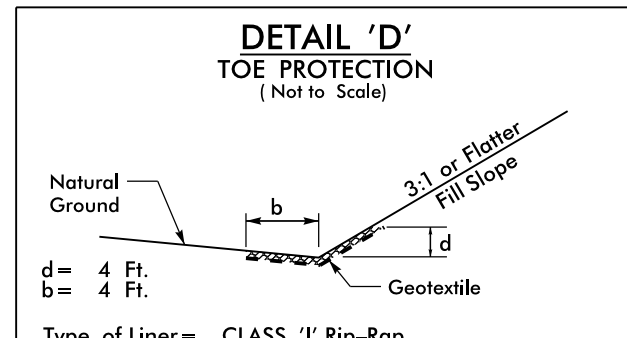
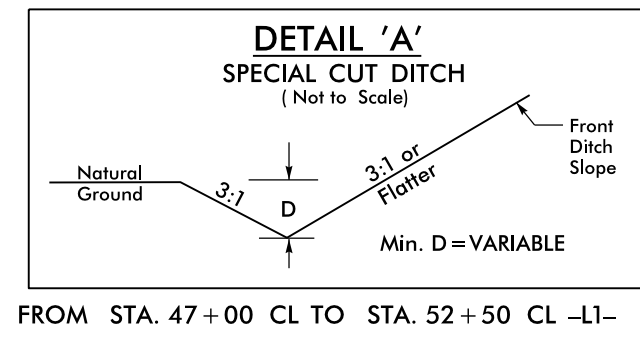
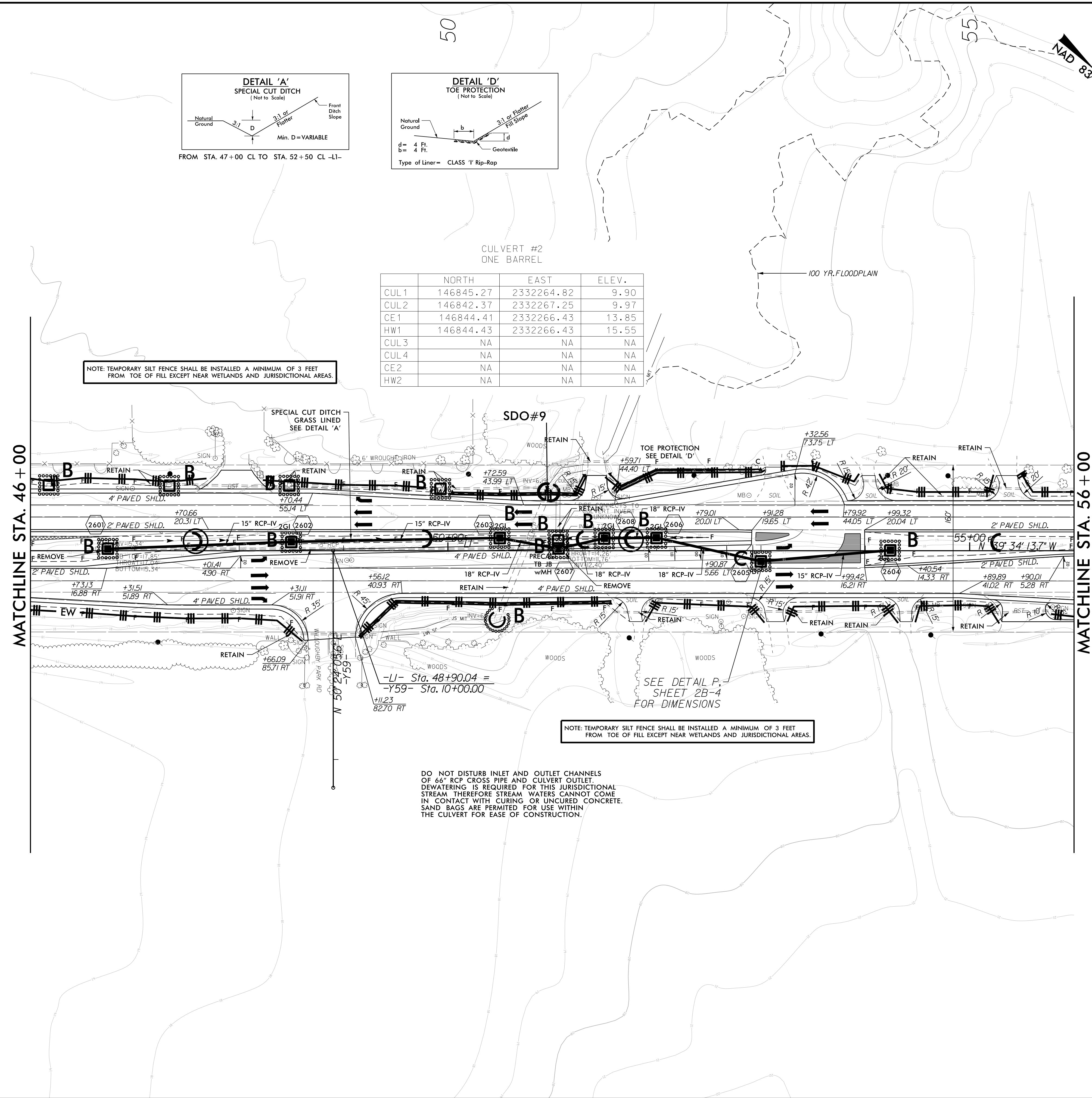
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PROJECT REFERENCE NO.	SHEET NO.
W-5103A	EC-25
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

C:\JULY 2005 1240 NEW HANDOVER\W-5103-41867-1.1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\ProJ\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC.25.PSH.26.dgn



CULVERT #2
ONE BARREL

	NORTH	EAST	ELEV.
CUL 1	146845.27	2332264.82	9.90
CUL 2	146842.37	2332267.25	9.97
CE 1	146844.41	2332266.43	13.85
HW 1	146844.43	2332266.43	15.55
CUL 3	NA	NA	NA
CUL 4	NA	NA	NA
CE 2	NA	NA	NA
HW 2	NA	NA	NA

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

DO NOT DISTURB INLET AND OUTLET CHANNELS OF 66" RCP CROSS PIPE AND CULVERT OUTLET. DEWATERING IS REQUIRED FOR THIS JURISDICTIONAL STREAM. THEREFORE STREAM WATERS CANNOT COME IN CONTACT WITH CURING OR UNCURED CONCRETE. SAND BAGS ARE PERMITTED FOR USE WITHIN THE CULVERT FOR EASE OF CONSTRUCTION.

MATCHLINE STA. 46+00

MATCHLINE STA. 56+00

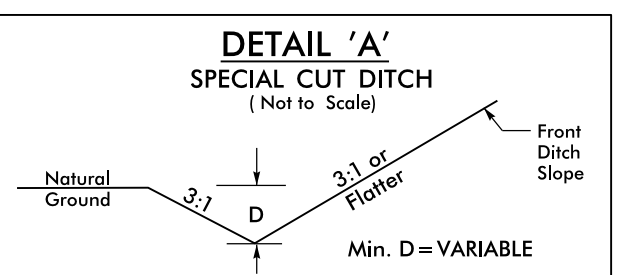
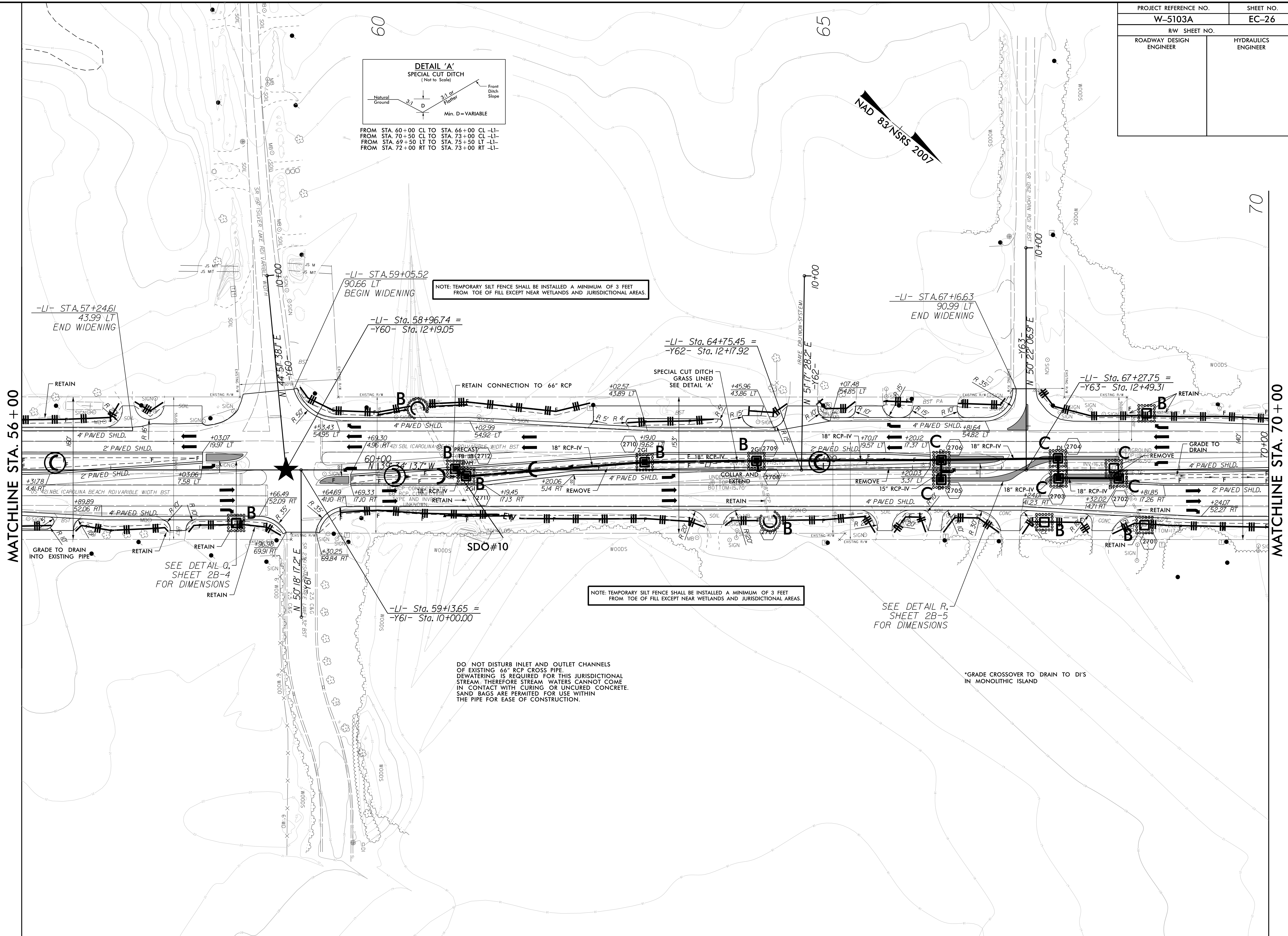
NAD 83 NSRS 2007

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-26
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

02 JUL 2016 13:41 NEW HANDOVER W-5103-41867-1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Proj\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC-26.PSH.27.dgn

REVISIONS



FROM STA. 60+00 CL TO STA. 66+00 CL -LI-
 FROM STA. 70+50 CL TO STA. 73+00 CL -LI-
 FROM STA. 69+50 LT TO STA. 75+50 LT -LI-
 FROM STA. 72+00 RT TO STA. 73+00 RT -LI-

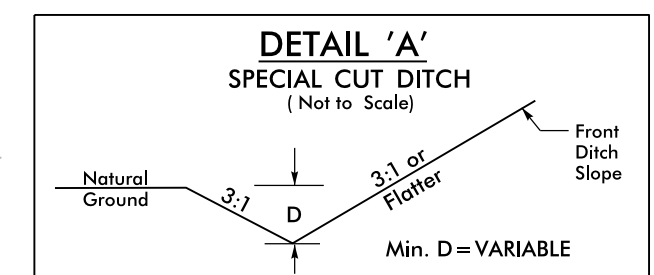
NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

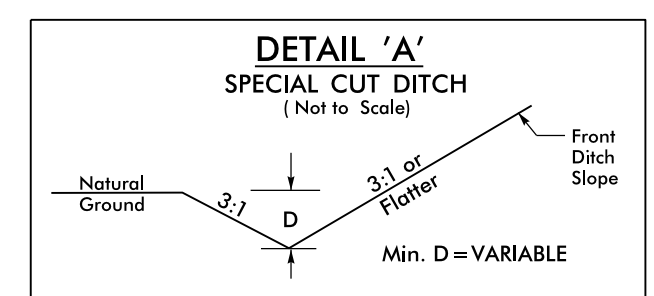
DO NOT DISTURB INLET AND OUTLET CHANNELS OF EXISTING 66" RCP CROSS PIPE. DEWATERING IS REQUIRED FOR THIS JURISDICTIONAL STREAM. THEREFORE STREAM WATERS CANNOT COME IN CONTACT WITH CURING OR UNCURED CONCRETE. SAND BAGS ARE PERMITTED FOR USE WITHIN THE PIPE FOR EASE OF CONSTRUCTION.

*GRADE CROSSOVER TO DRAIN TO D'S IN MONOLITHIC ISLAND

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-27
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



FROM STA. 60+00 CL TO STA. 66+00 CL -LI-
 FROM STA. 70+50 CL TO STA. 73+00 CL -LI-
 FROM STA. 72+00 RT TO STA. 73+00 RT -LI-

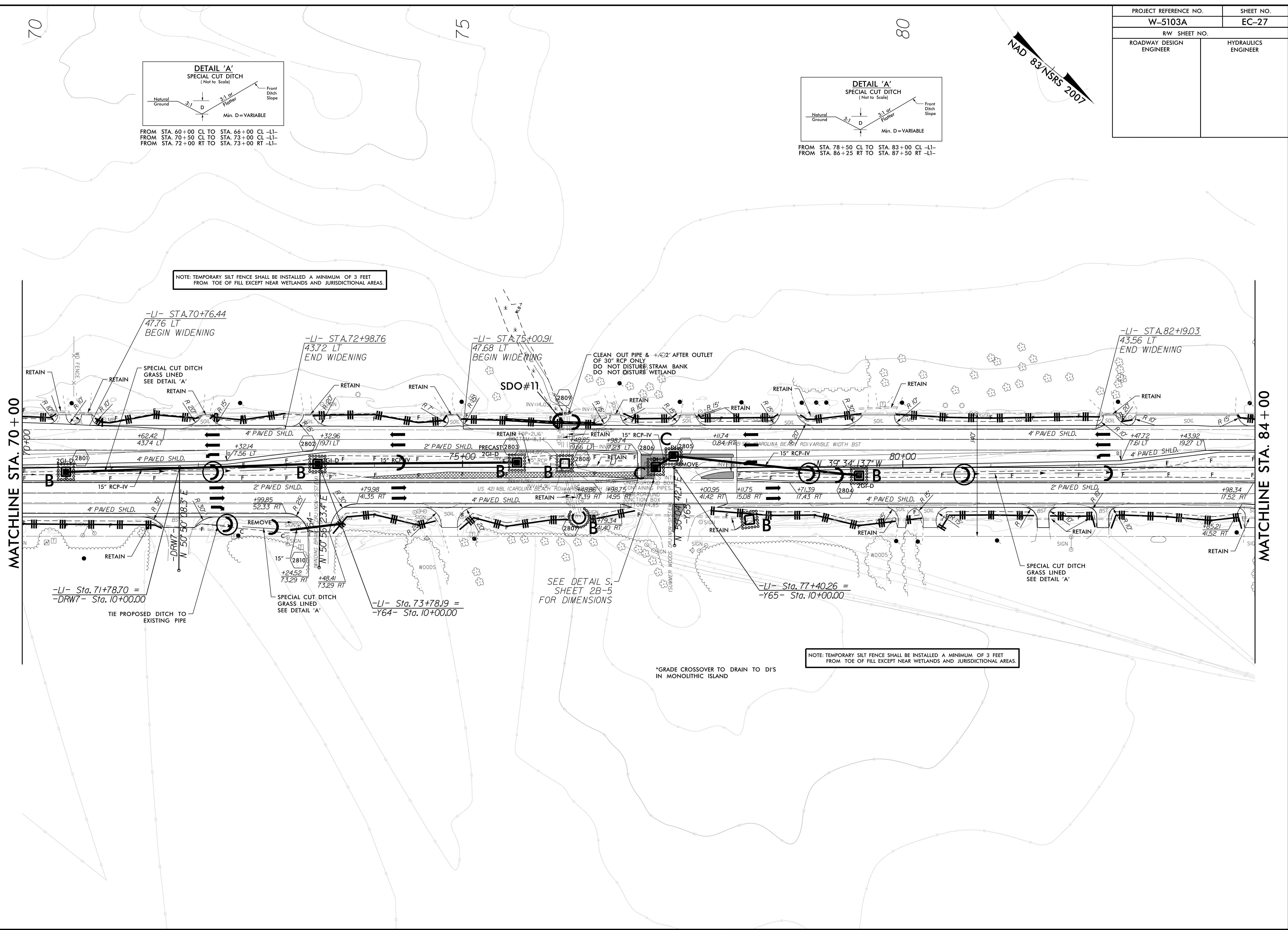


FROM STA. 78+50 CL TO STA. 83+00 CL -LI-
 FROM STA. 86+25 RT TO STA. 87+50 RT -LI-

NAD 83 NSRS 2007

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



MATCHLINE STA. 70+00

MATCHLINE STA. 84+00

REVISIONS

8/17/99

C:\JULY 2015 1342 NEW HANDOVER\W-5103.41867.1.1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\Pro\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC.27_PSH.28.dgn

SEE DETAIL S, SHEET 2B-5 FOR DIMENSIONS

*GRADE CROSSOVER TO DRAIN TO DI'S IN MONOLITHIC ISLAND

-LI- Sta. 71+78.70 =
 -DRW7- Sta. 10+00.00
 TIE PROPOSED DITCH TO EXISTING PIPE

-LI- Sta. 73+78.19 =
 -Y64- Sta. 10+00.00

-LI- Sta. 77+40.26 =
 -Y65- Sta. 10+00.00

-LI- STA. 70+76.44
 47.76 LT
 BEGIN WIDENING

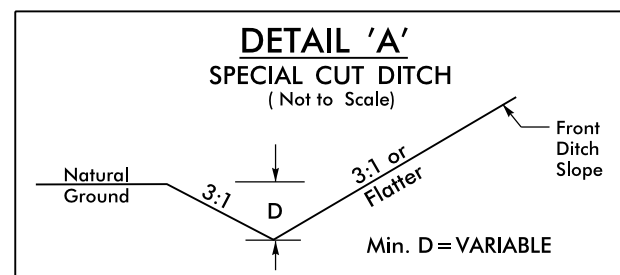
-LI- STA. 72+98.76
 43.72 LT
 END WIDENING

-LI- STA. 75+00.91
 47.68 LT
 BEGIN WIDENING

-LI- STA. 82+19.03
 43.56 LT
 END WIDENING

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-28
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 NSRS 2007

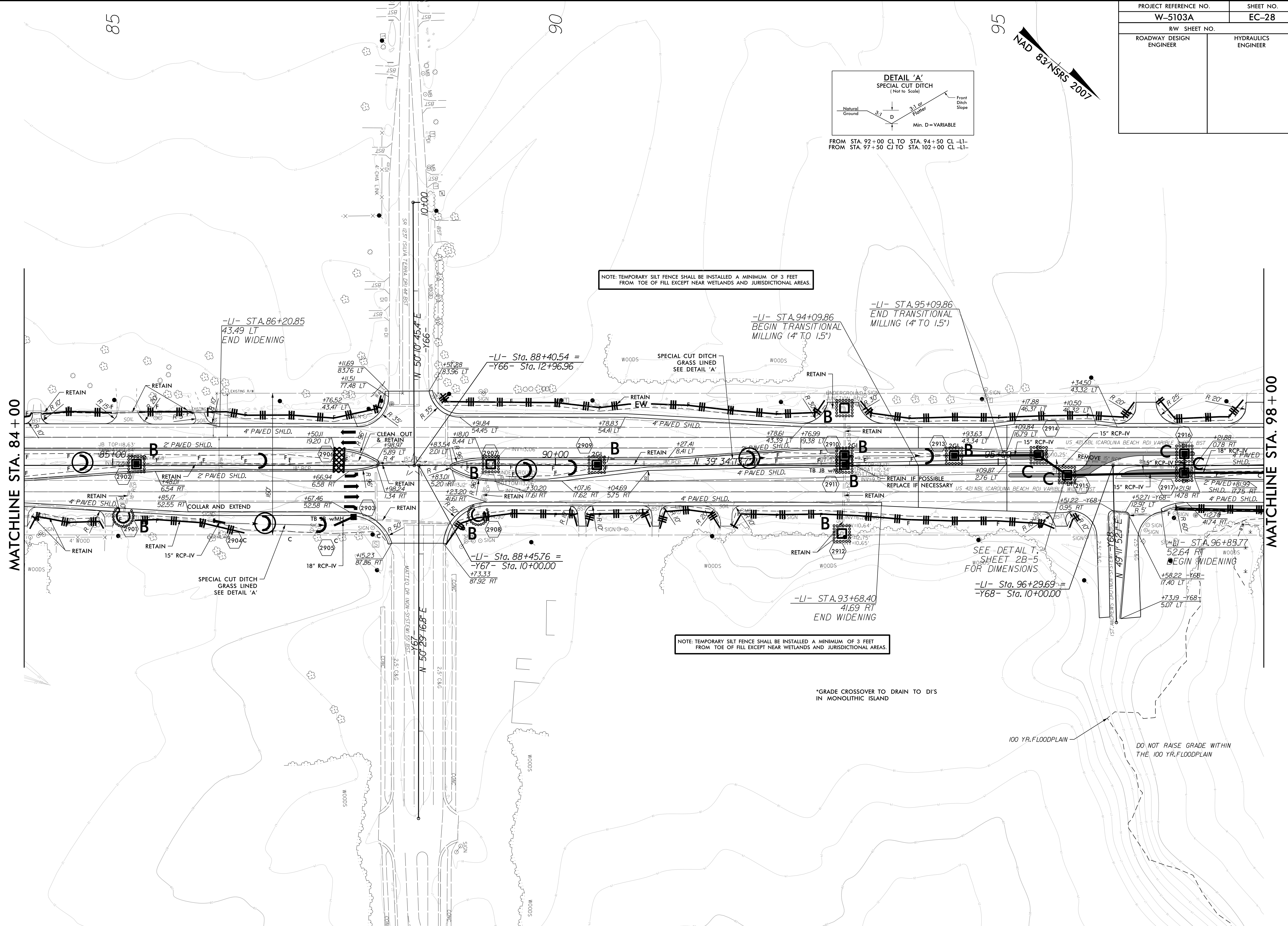


FROM STA. 92+00 CL TO STA. 94+50 CL -LI-
FROM STA. 97+50 CL TO STA. 102+00 CL -LI-

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

-LI- STA. 94+09.86
BEGIN TRANSITIONAL MILLING (4" TO 1.5")

-LI- STA. 95+09.86
END TRANSITIONAL MILLING (4" TO 1.5")



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

*GRADE CROSSOVER TO DRAIN TO DI'S IN MONOLITHIC ISLAND

100 YR. FLOODPLAIN

DO NOT RAISE GRADE WITHIN THE 100 YR. FLOODPLAIN

MATCHLINE STA. 84 + 00

MATCHLINE STA. 98 + 00

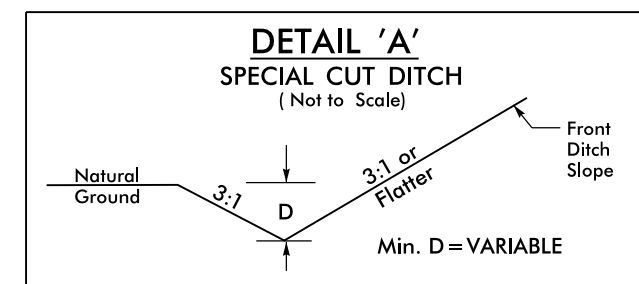
REVISIONS

8/17/99

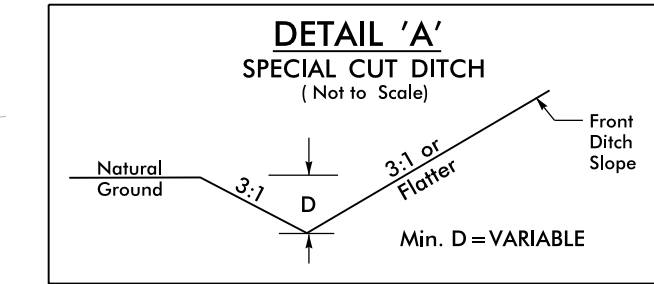
02 JUL 2016 13:44 NEW HANDOVER W-5103.41867.1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Proj\PLAN SHEETS\EROSION CONTROL\W5103.D03_EC_28_PSH_29.dgn
\$\$\$\$\$SUSSTERNAN\$\$\$\$\$

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-29
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

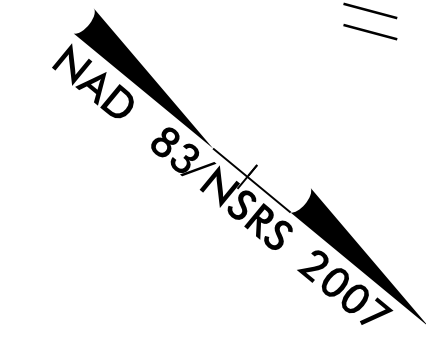
8/17/99



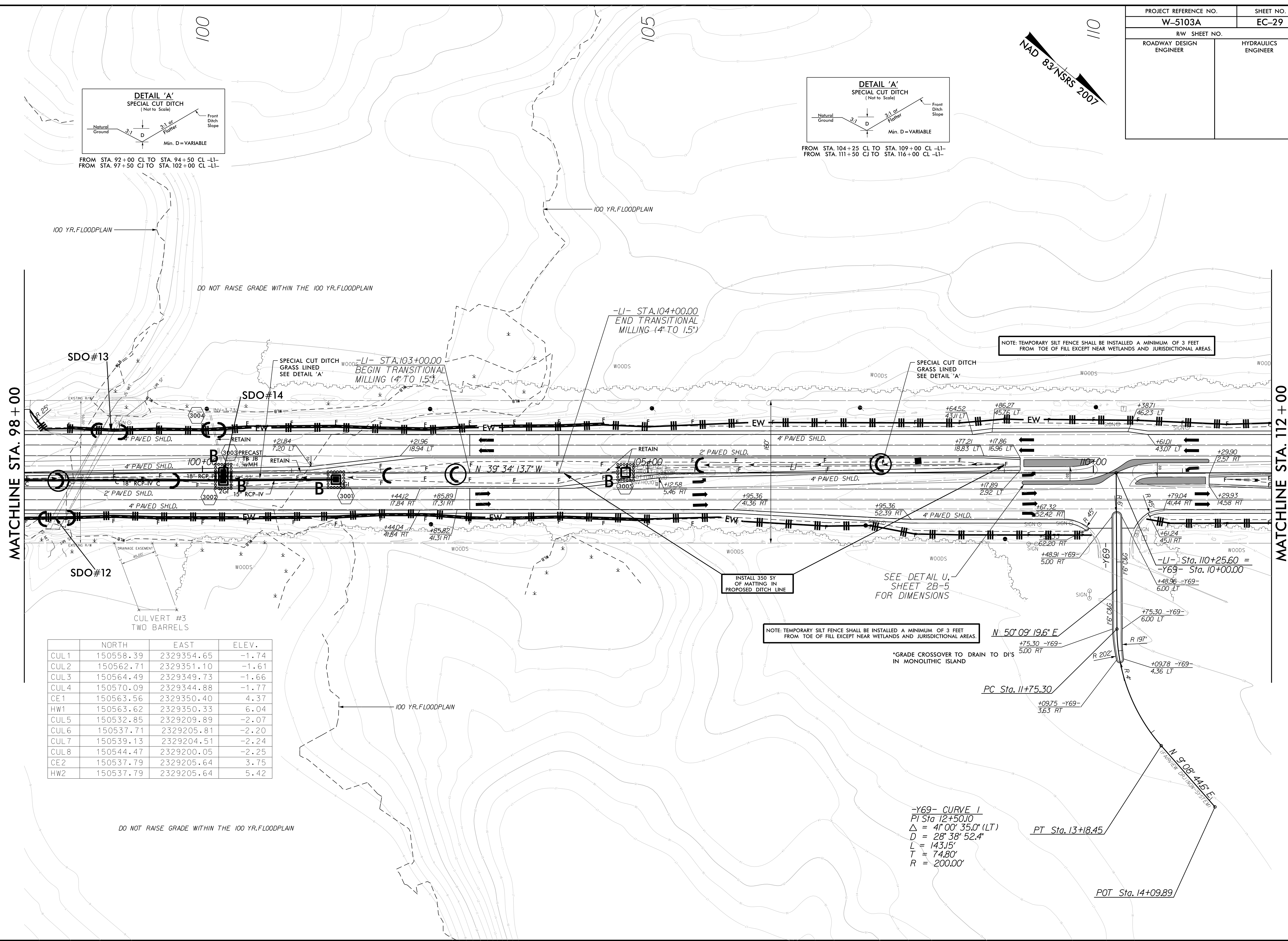
FROM STA. 92+00 CL TO STA. 94+50 CL -LI-
FROM STA. 97+50 CL TO STA. 102+00 CL -LI-



FROM STA. 104+25 CL TO STA. 109+00 CL -LI-
FROM STA. 111+50 CL TO STA. 116+00 CL -LI-



REVISIONS
 02 JUL 2015 13:45 NEW HANDOVER W-5103.41867.1.1.1 US 421 Median Crossover Relet (use this file) \ROADWAY\Proj\PLAN SHEETS\EROSION CONTROL\W5103.D03.EC.29_PSH_30.dgn
 \$\$\$\$\$\$SUSPENSE\$\$\$\$\$\$



	NORTH	EAST	ELEV.
CUL1	150558.39	2329354.65	-1.74
CUL2	150562.71	2329351.10	-1.61
CUL3	150564.49	2329349.73	-1.66
CUL4	150570.09	2329344.88	-1.77
CE1	150563.56	2329350.40	4.37
HW1	150563.62	2329350.33	6.04
CUL5	150532.85	2329209.89	-2.07
CUL6	150537.71	2329205.81	-2.20
CUL7	150539.13	2329204.51	-2.24
CUL8	150544.47	2329200.05	-2.25
CE2	150537.79	2329205.64	3.75
HW2	150537.79	2329205.64	5.42

-Y69- CURVE 1
 PI Sta. 12+50.00
 $\Delta = 41^{\circ} 00' 35.0''$ (LT)
 $D = 28^{\circ} 38' 52.4''$
 $L = 143.15'$
 $T = 74.80'$
 $R = 200.00'$

POT Sta. 14+09.89

MATCHLINE STA. 98+00

MATCHLINE STA. 112+00

DO NOT RAISE GRADE WITHIN THE 100 YR.FLOODPLAIN

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

SEE DETAIL U, SHEET 2B-5 FOR DIMENSIONS

INSTALL 350 SY OF MATTING IN PROPOSED DITCH LINE

*GRADE CROSSOVER TO DRAIN TO DI'S IN MONOLITHIC ISLAND

100 YR.FLOODPLAIN

-LI- STA.104+00.00
END TRANSITIONAL MILLING (4" TO 1.5")

-LI- STA.103+00.00
BEGIN TRANSITIONAL MILLING (4" TO 1.5")

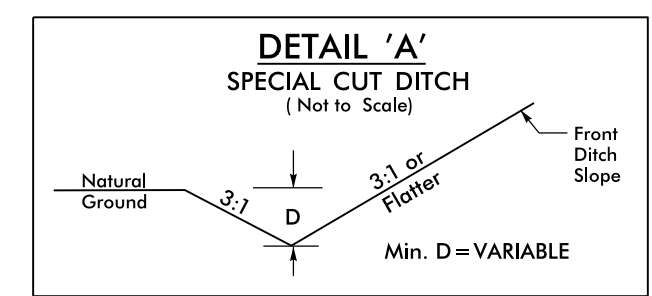
$N 50^{\circ} 09' 19.6'' E$
 $+75.30 -Y69- 5.00 RT$
 $+0975 -Y69- 3.63 RT$
 $+0978 -Y69- 4.36 LT$
 $+75.30 -Y69- 6.00 LT$
 $+62.20 RT$
 $+48.91 -Y69- 5.00 RT$
 $+67.32$
 $+52.42 RT$
 $+95.36$
 $52.39 RT$
 $+95.36$
 $41.36 RT$
 $+17.89$
 $2.92 LT$
 $+17.86$
 $16.96 LT$
 $+86.27$
 $45.76 LT$
 $+64.52$
 $43.11 LT$
 $+38.71$
 $46.23 LT$
 $+61.01$
 $43.07 LT$
 $+29.90$
 $2.57 RT$
 $+29.93$
 $14.58 RT$
 $+79.04$
 $41.44 RT$
 $+48.96 -Y69- 6.00 LT$
 $+49.24$
 $45.11 RT$
 $-LI- Sta. 110+25.60 = -Y69- Sta. 110+00.00$

PC Sta. 11+75.30

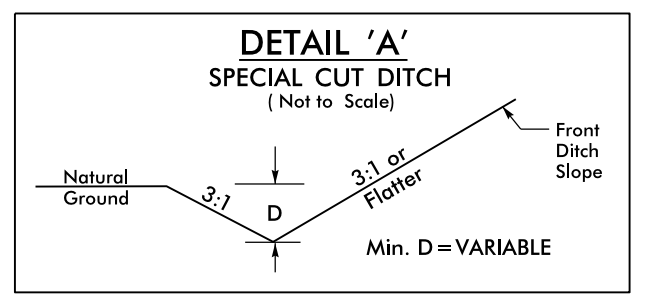
PT Sta. 13+18.45

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-30
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 NSRS 2007



FROM STA. 121+00 CL TO STA. 123+50 CL -LI-



FROM STA. 104+25 CL TO STA. 109+00 CL -LI-
FROM STA. 111+50 CJ TO STA. 116+00 CL -LI-

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

-LI- STA. 123+00.00
BEGIN TRANSITIONAL
MILLING (4" TO 1.5")

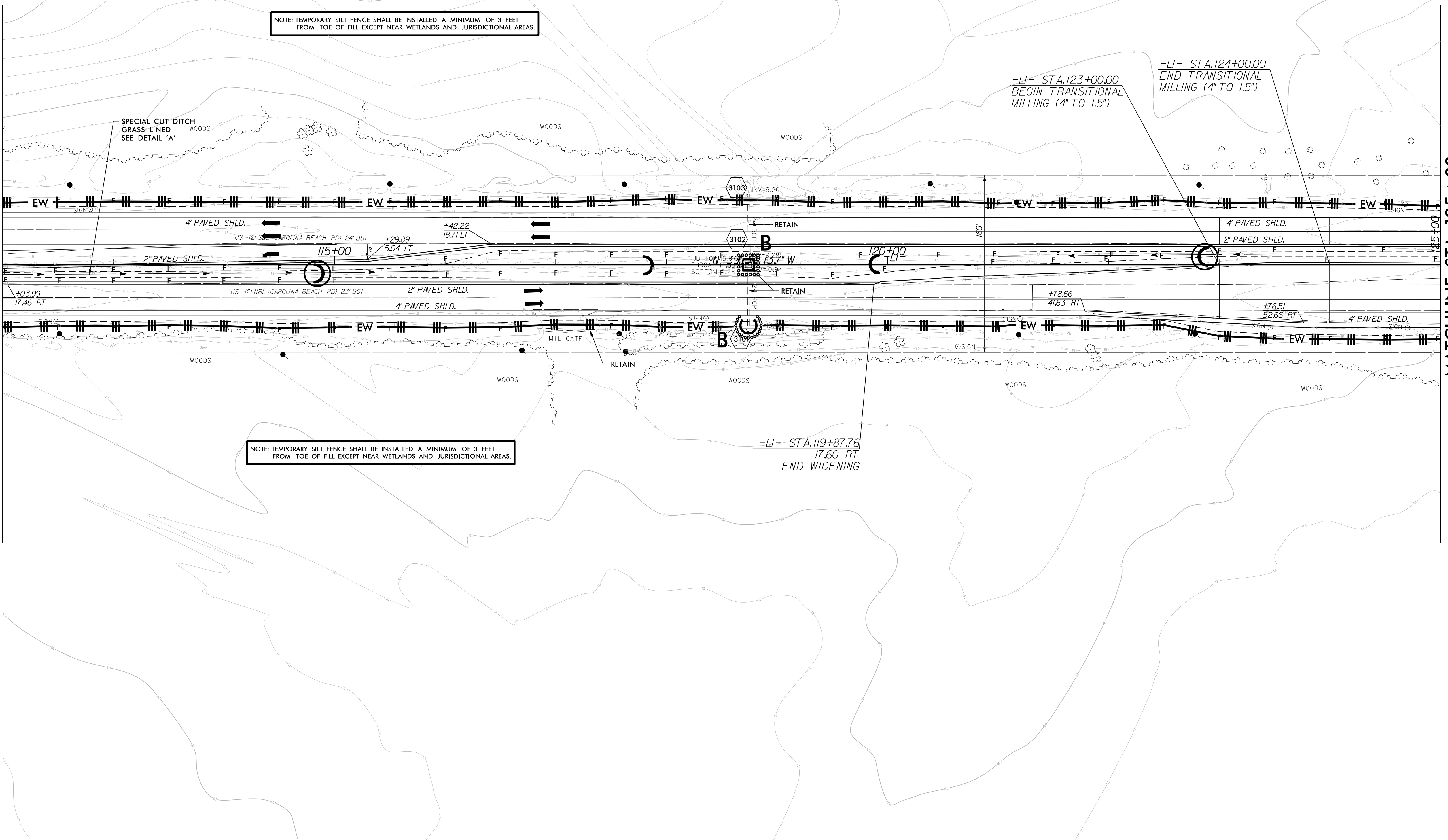
-LI- STA. 124+00.00
END TRANSITIONAL
MILLING (4" TO 1.5")

-LI- STA. 119+87.76
17.60 RT
END WIDENING

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

MATCHLINE STA. 112+00

MATCHLINE STA. 125+00

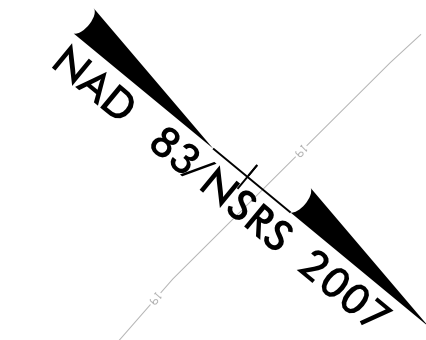


REVISIONS

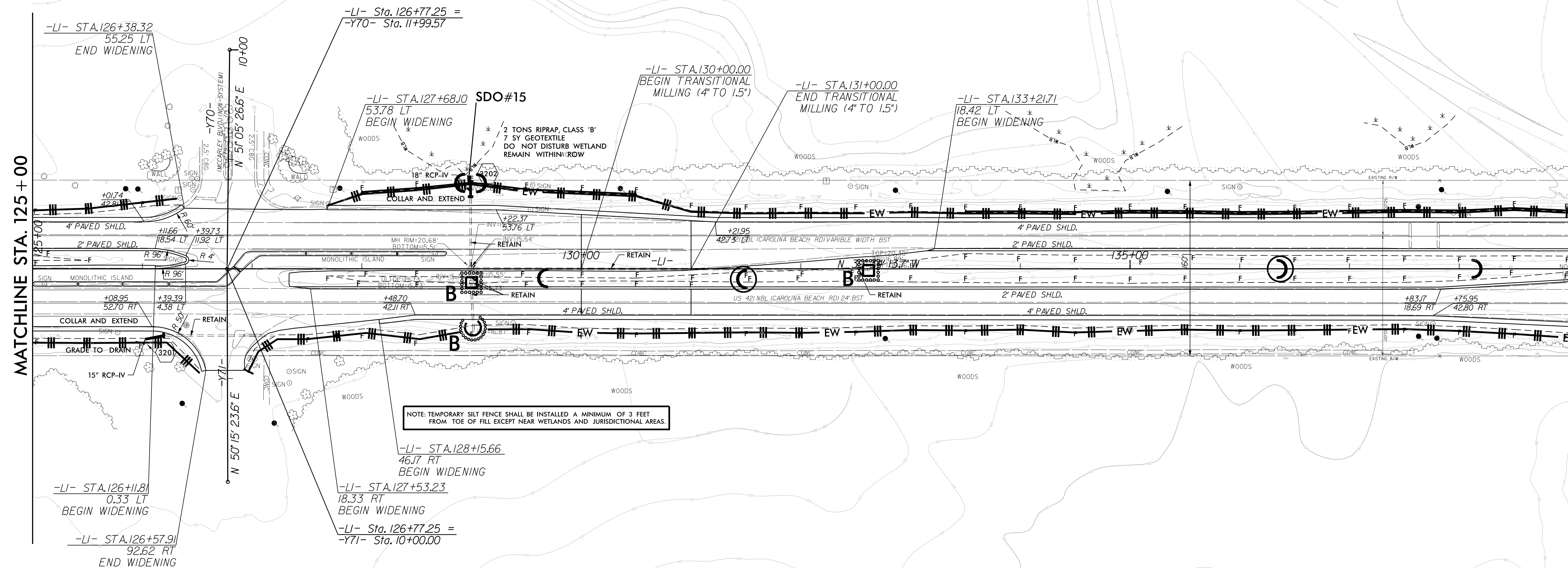
8/17/99

C:\JULY_2016_1346_NEW_HANDOVER\W-5103_41867_1.1.1_US_421_Medion_Crossover_Relet (use this file)\ROADWAY\ProJ\PLAN_SHEETS\EROSION_CONTROL\W5103.D03_EC_30_PSH_31.dgn
\$\$\$\$\$SUSPENSE\$\$\$\$\$

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-31
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

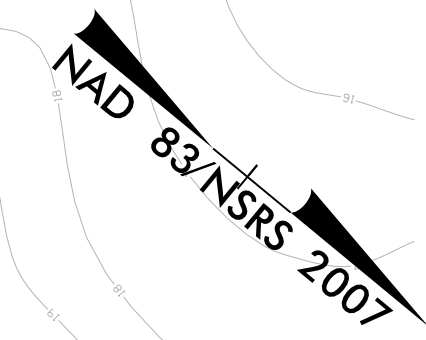
MATCHLINE STA. 125 + 00

MATCHLINE STA. 139 + 00

REVISIONS

8/17/99
 C:\PROJ\2015\1347_NEW_HANDOVER\W-5103_41867_1.1.1_US_421_Medton_Crossover_Relet_(use_this_file)\ROADWAY\Pro\PLAN_SHEETS\EROSION_CONTROL\W5103.D03_EC_31_PSH_32.dgn
 02 JUL 2015 13:47 NEW_HANDOVER\W-5103_41867_1.1.1_US_421_Medton_Crossover_Relet_(use_this_file)\ROADWAY\Pro\PLAN_SHEETS\EROSION_CONTROL\W5103.D03_EC_31_PSH_32.dgn
 \$\$\$\$\$\$SUSTAINABLE\$\$\$\$\$\$

PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-32
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



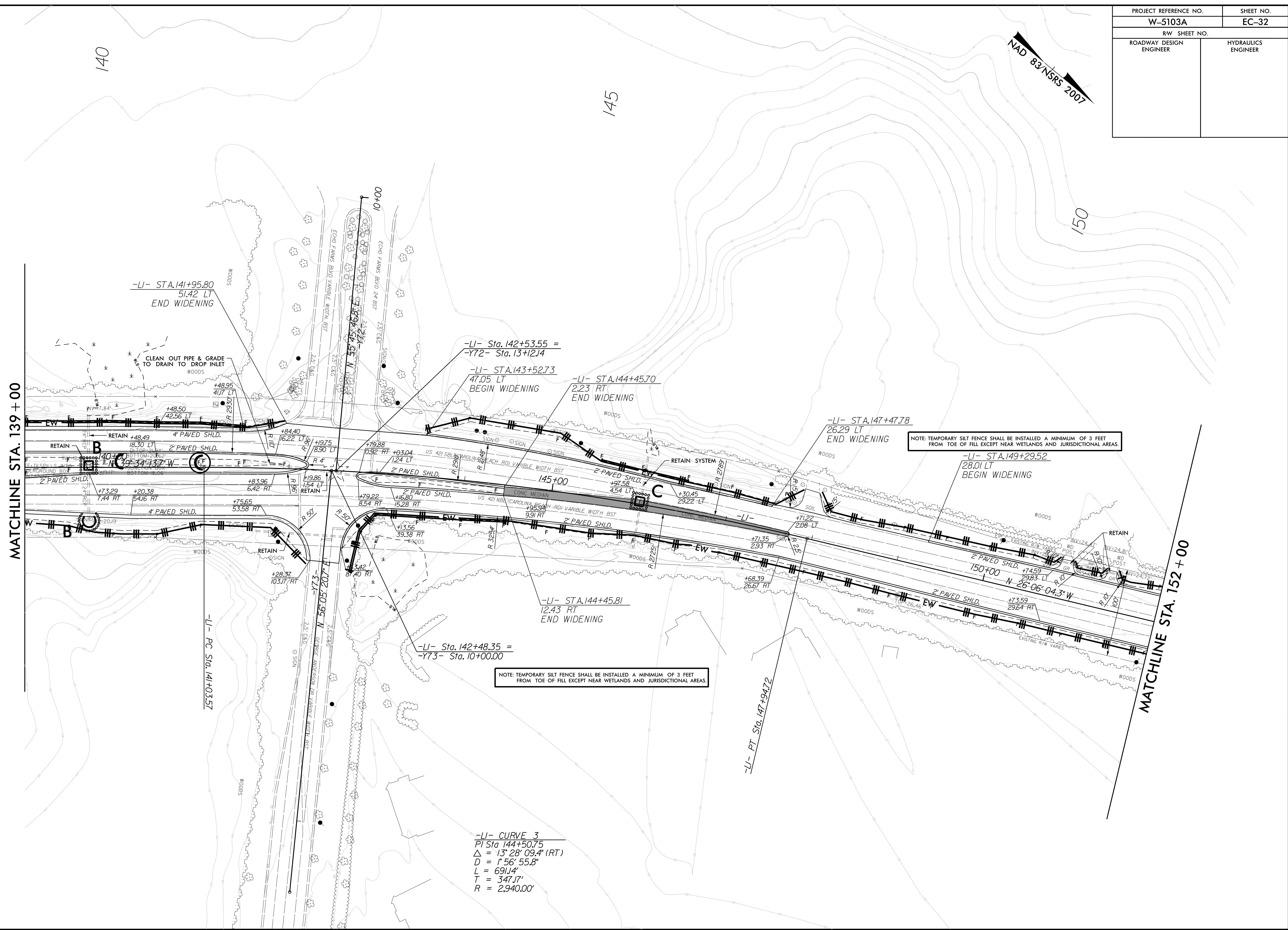
8/17/99

REVISIONS

C:\PROJ\2015\1316 NEW HANDOVER\W-5103-41867-1.1\1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\Pro\PLAN SHEETS\EROSION CONTROL\W5103.D03_EC_32_PSH_33.dgn

MATCHLINE STA. 139 + 00

MATCHLINE STA. 152 + 00



-LI- CURVE 3
PI Sta 144+50.75
Δ = 13° 28' 09.4" (RT)
D = 1° 56' 55.8"
L = 691.14'
T = 347.17'
R = 2,940.00'

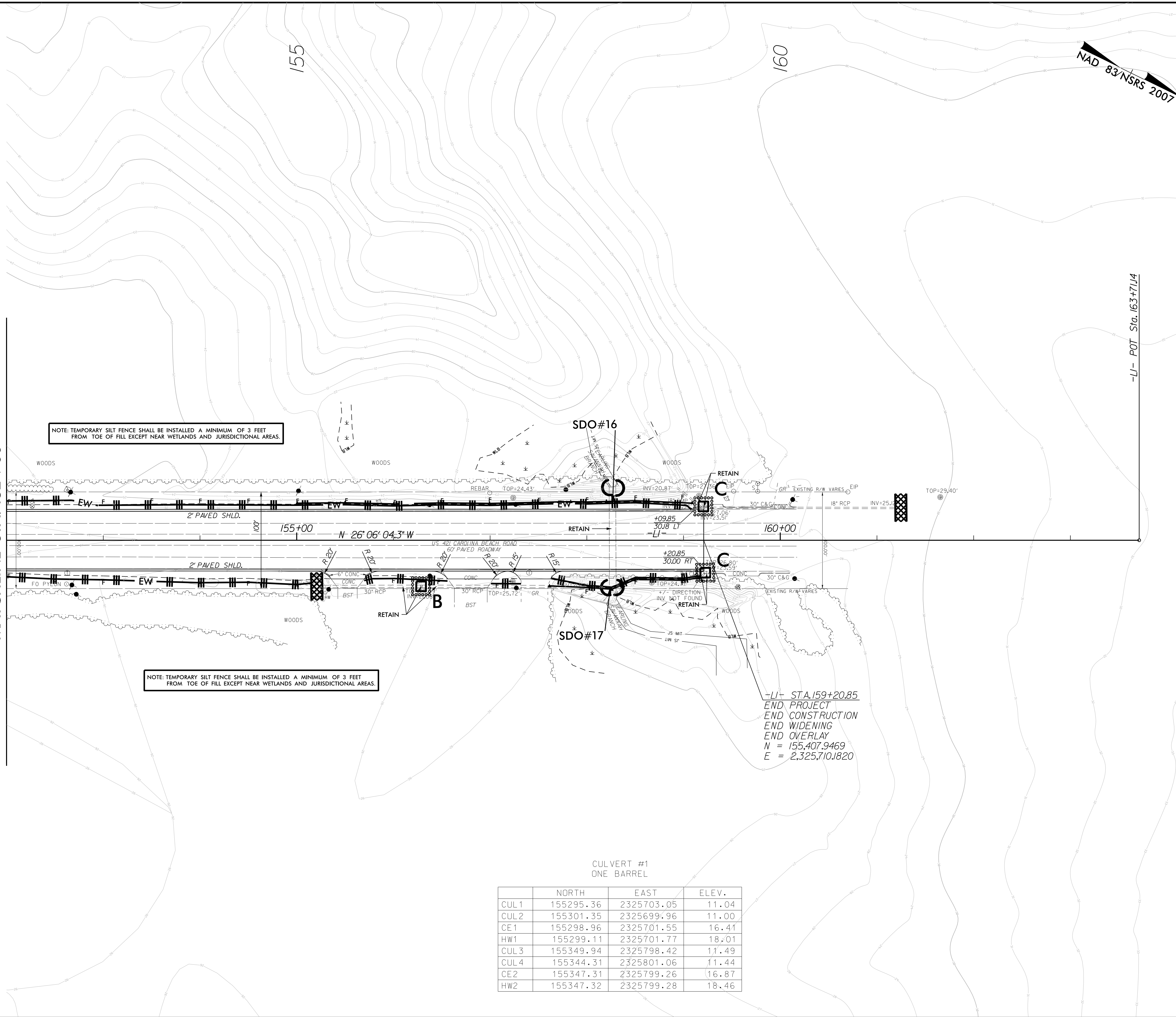
PROJECT REFERENCE NO. W-5103A	SHEET NO. EC-33
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

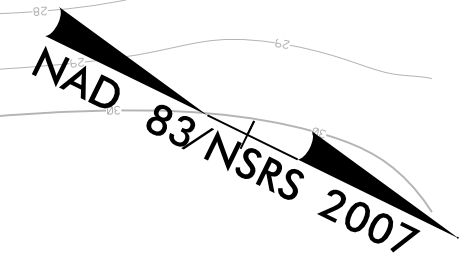
C:\JULY 2015 12:49 PM HANDOVER\W-5103-41867-1.1\US 421 Median Crossover Relet (use this file)\ROADWAY\Plan SHEETS_EROSION CONTROL\W5103.D03_EC_33_PSH_34.dgn

MATCHLINE STA. 152 + 00



NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.

NOTE: TEMPORARY SILT FENCE SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM TOE OF FILL EXCEPT NEAR WETLANDS AND JURISDICTIONAL AREAS.



-LI- POT Sta. 163+71.14

-LI- STA. 159+20.85
 END PROJECT
 END CONSTRUCTION
 END WIDENING
 END OVERLAY
 N = 155,407.9469
 E = 2,325,710.1820

CULVERT #1
ONE BARREL

	NORTH	EAST	ELEV.
CUL1	155295.36	2325703.05	11.04
CUL2	155301.35	2325699.96	11.00
CE1	155298.96	2325701.55	16.41
HW1	155299.11	2325701.77	18.01
CUL3	155349.94	2325798.42	11.49
CUL4	155344.31	2325801.06	11.44
CE2	155347.31	2325799.26	16.87
HW2	155347.32	2325799.28	18.46