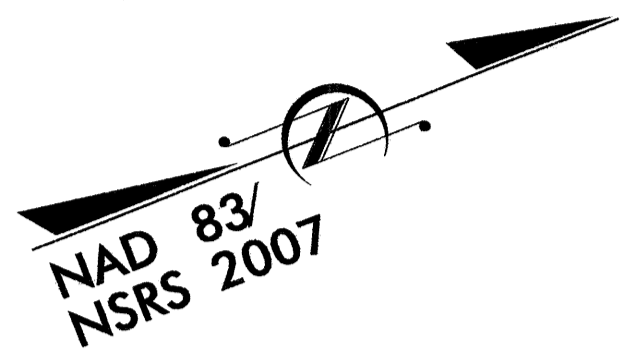


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5501	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**TIP PROJECT: I-5501**

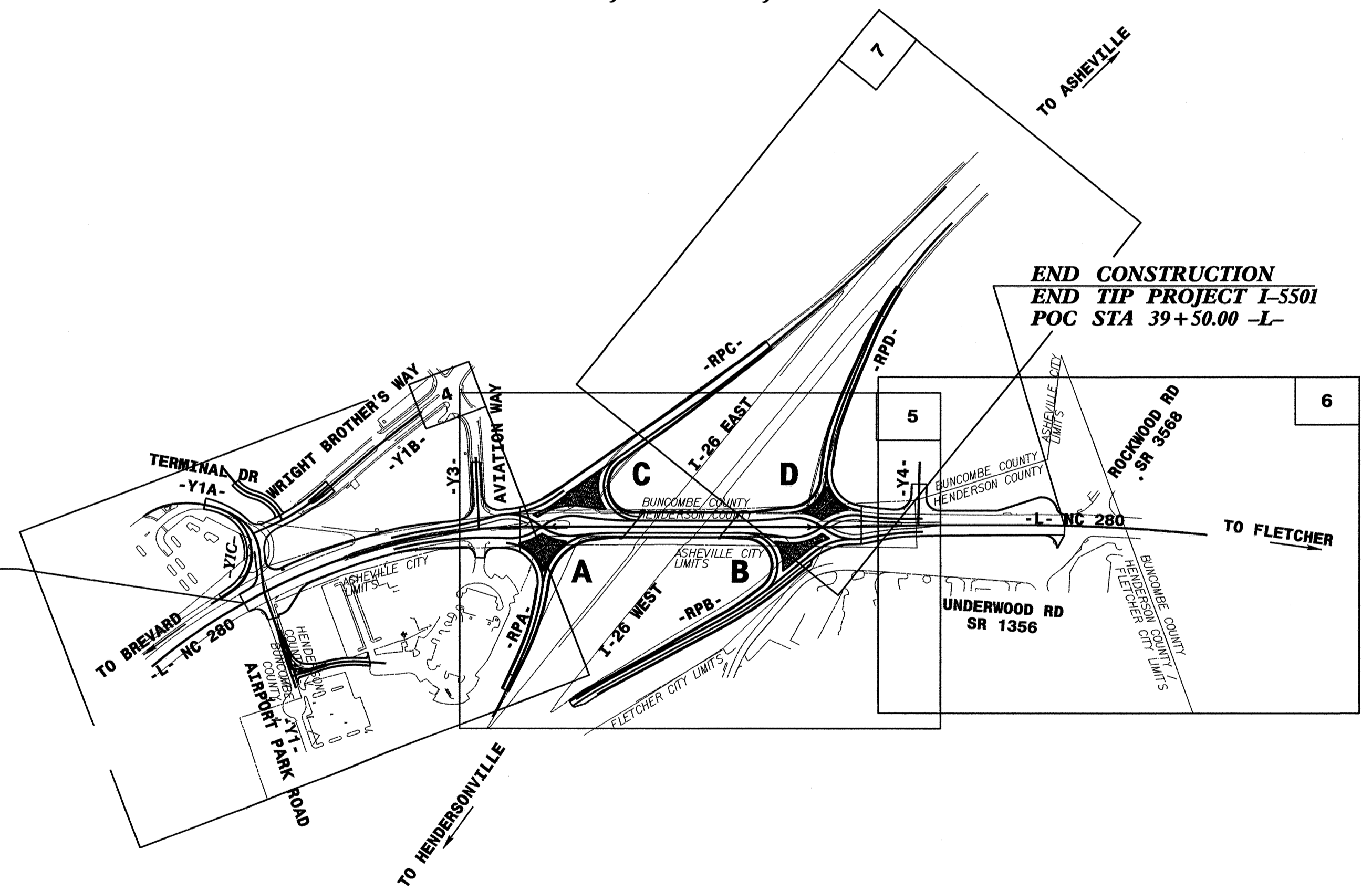
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
  
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL  
  
**BUNCOMBE &  
HENDERSON COUNTIES**



**LOCATION: I-26 / NC 280 INTERCHANGE IN ASHEVILLE**  
**TYPE OF WORK: GRADING, PAVING, DRAINAGE AND SIGNALS**

**BEGIN CONSTRUCTION**  
**BEGIN TIP PROJECT I-5501**  
**POT STA 13+50.00 -L-**

**END CONSTRUCTION**  
**END TIP PROJECT I-5501**  
**POC STA 39+50.00 -L-**



**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSO
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.**

**GRAPHIC SCALE**

0

PLANS

0

PROFILE (HORIZONTAL)

0

PROFILE (VERTICAL)

**ROADSIDE ENVIRONMENTAL UNIT**  
**DIVISION OF HIGHWAYS**  
**STATE OF NORTH CAROLINA**

**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.**

Prepared in the Office of:  
**ROADSIDE ENVIRONMENTAL UNIT**  
1 South Wilmington St.  
Raleigh, NC 27611  
**2012 STANDARD SPECIFICATIONS**

Roadway Standard Drawings

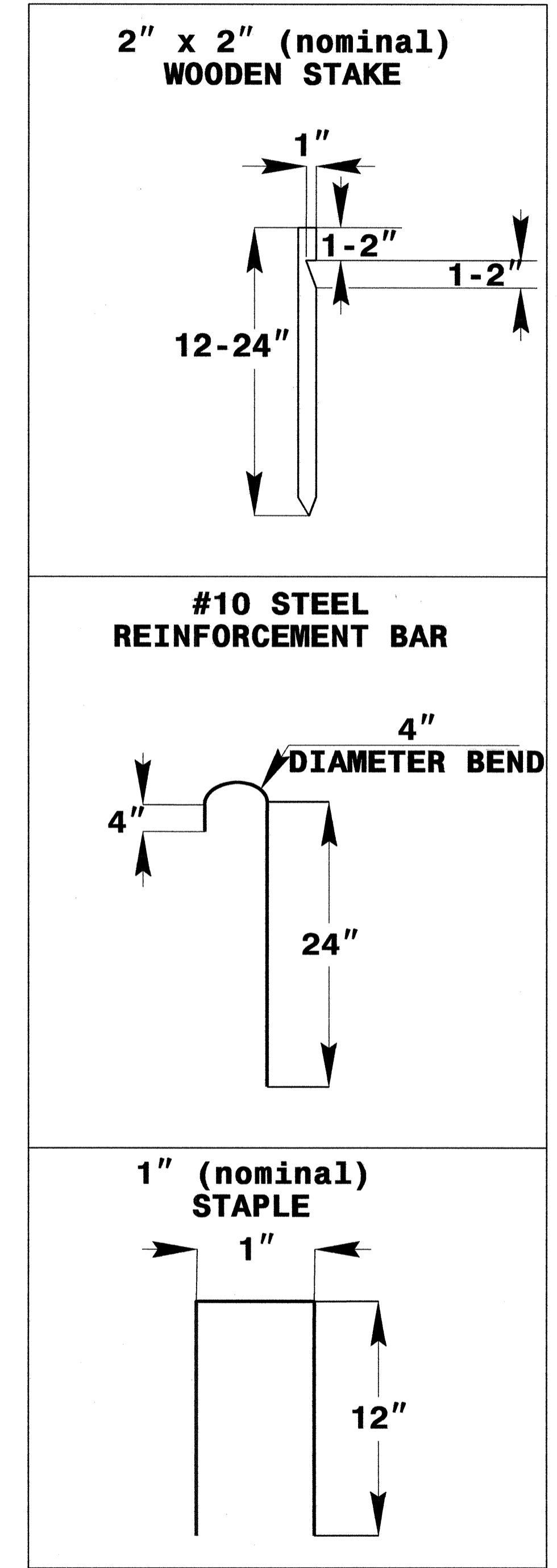
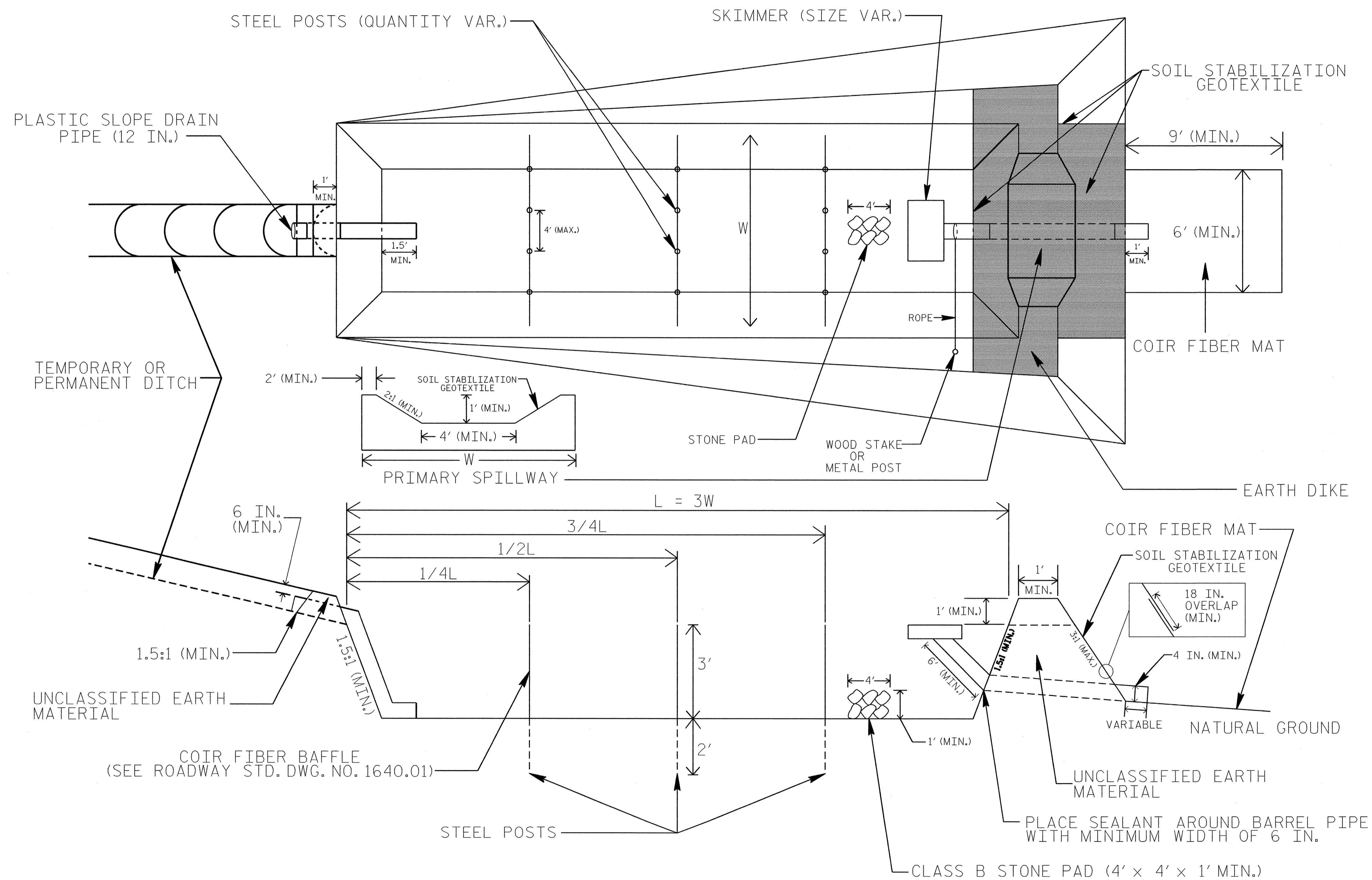
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	1633.02 Temporary Rock Silt Check Type B
1630.02 Silt Basin Type B	1634.01 Temporary Rock Sediment Dam Type A
1630.03 Temporary Silt Ditch	1634.02 Temporary Rock Sediment Dam Type B
1630.04 Stilling Basin	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.05 Temporary Diversion	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.06 Special Stilling Basin	1640.01 Coir Fiber Baffle
1631.01 Matting Installation	1645.01 Temporary Stream Crossing

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PROJECT REFERENCE NO. I-550I	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SKIMMER BASIN WITH BAFFLES DETAIL



## NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING  $Q/0.4$ , WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

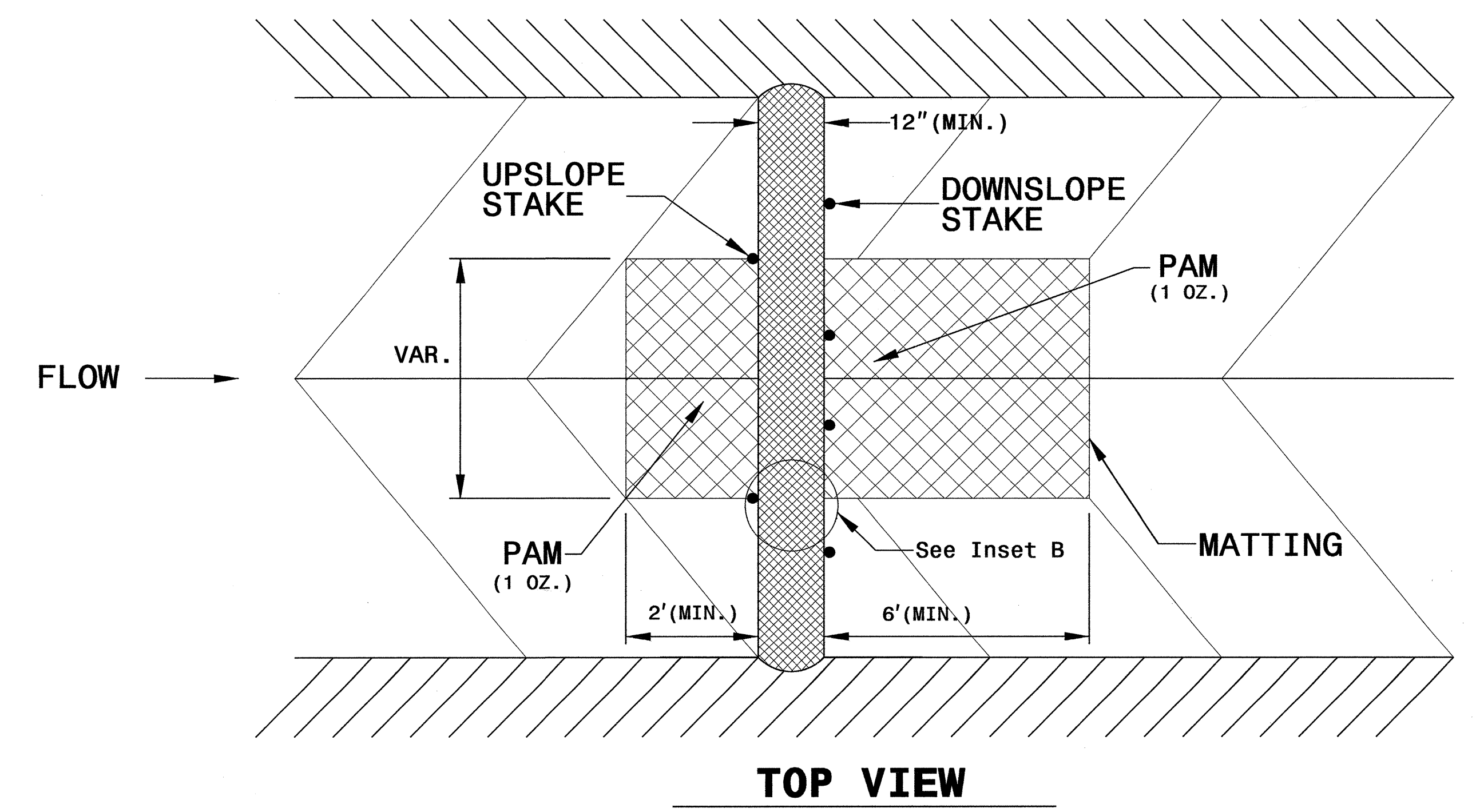
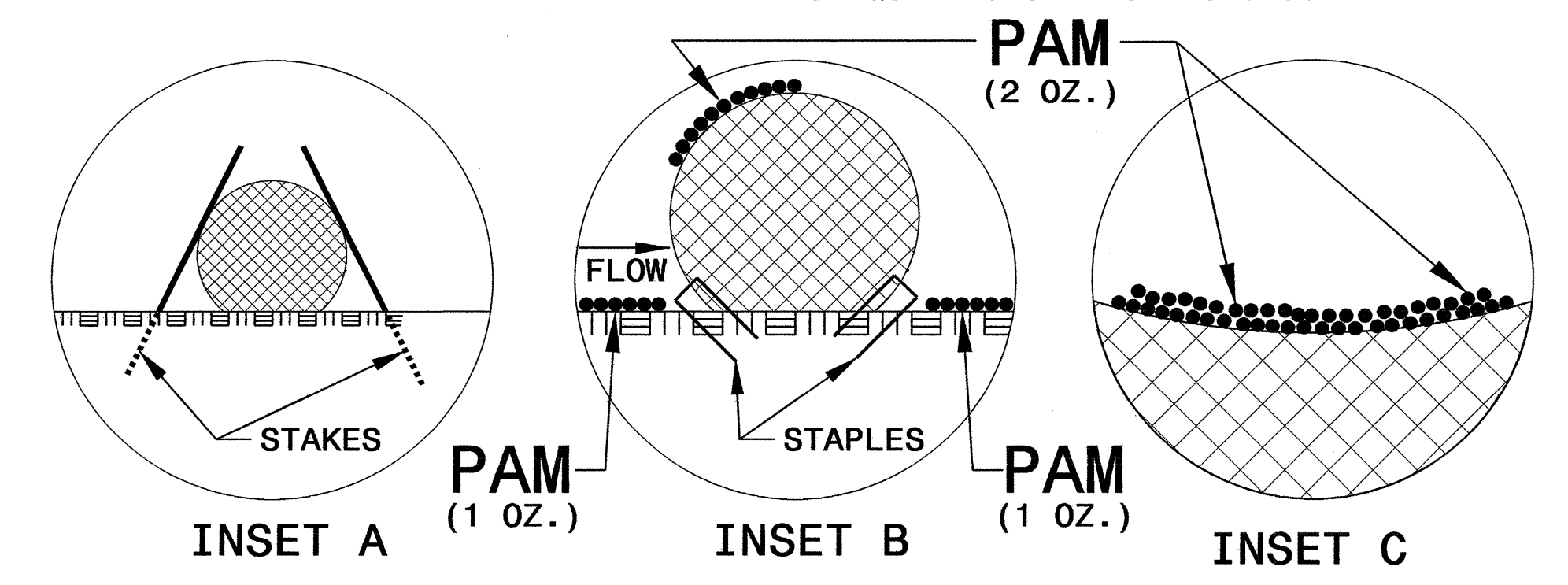
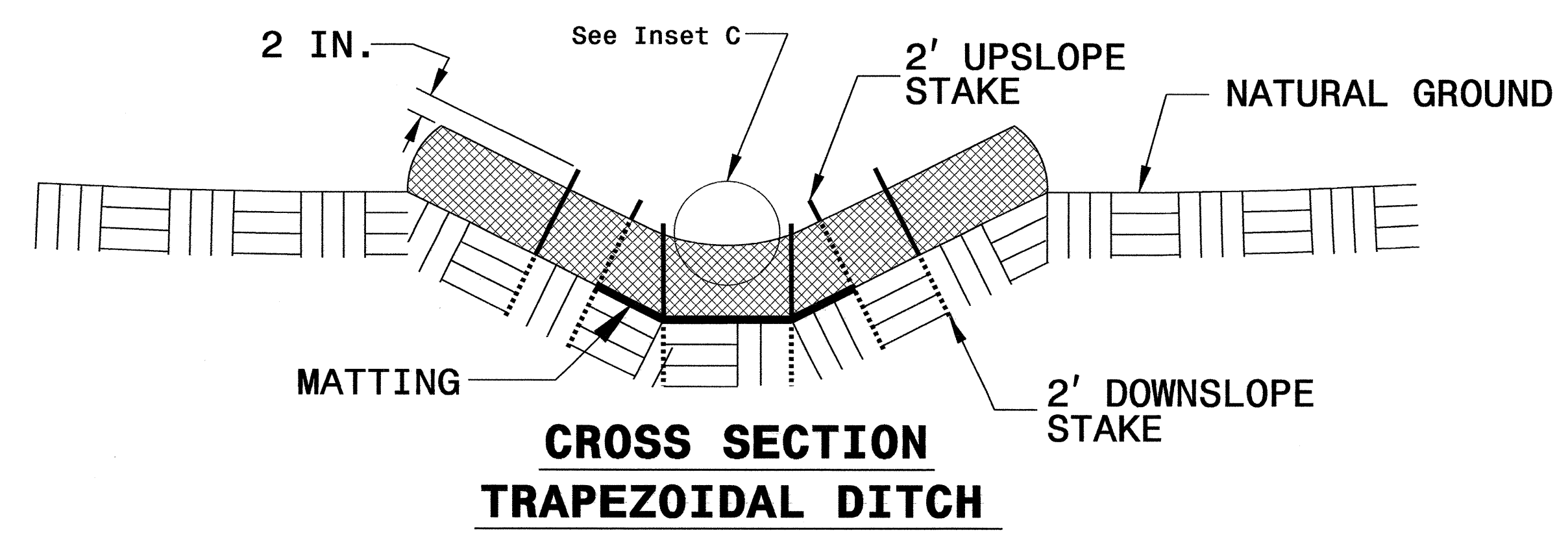
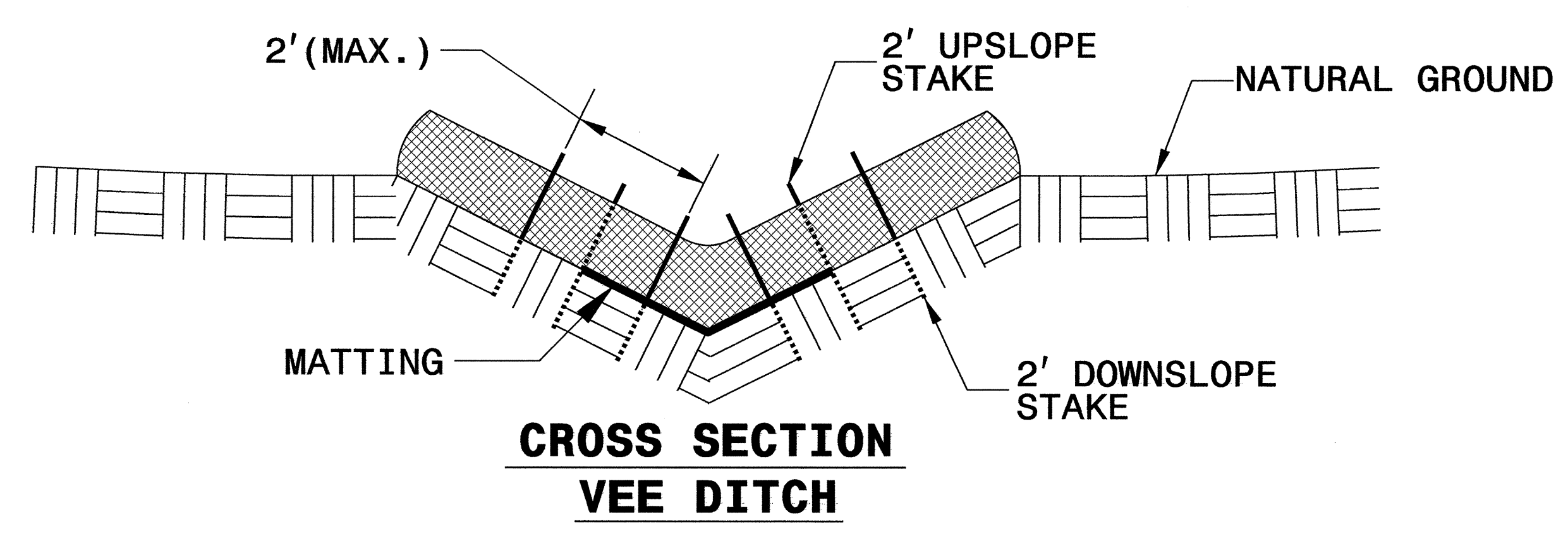
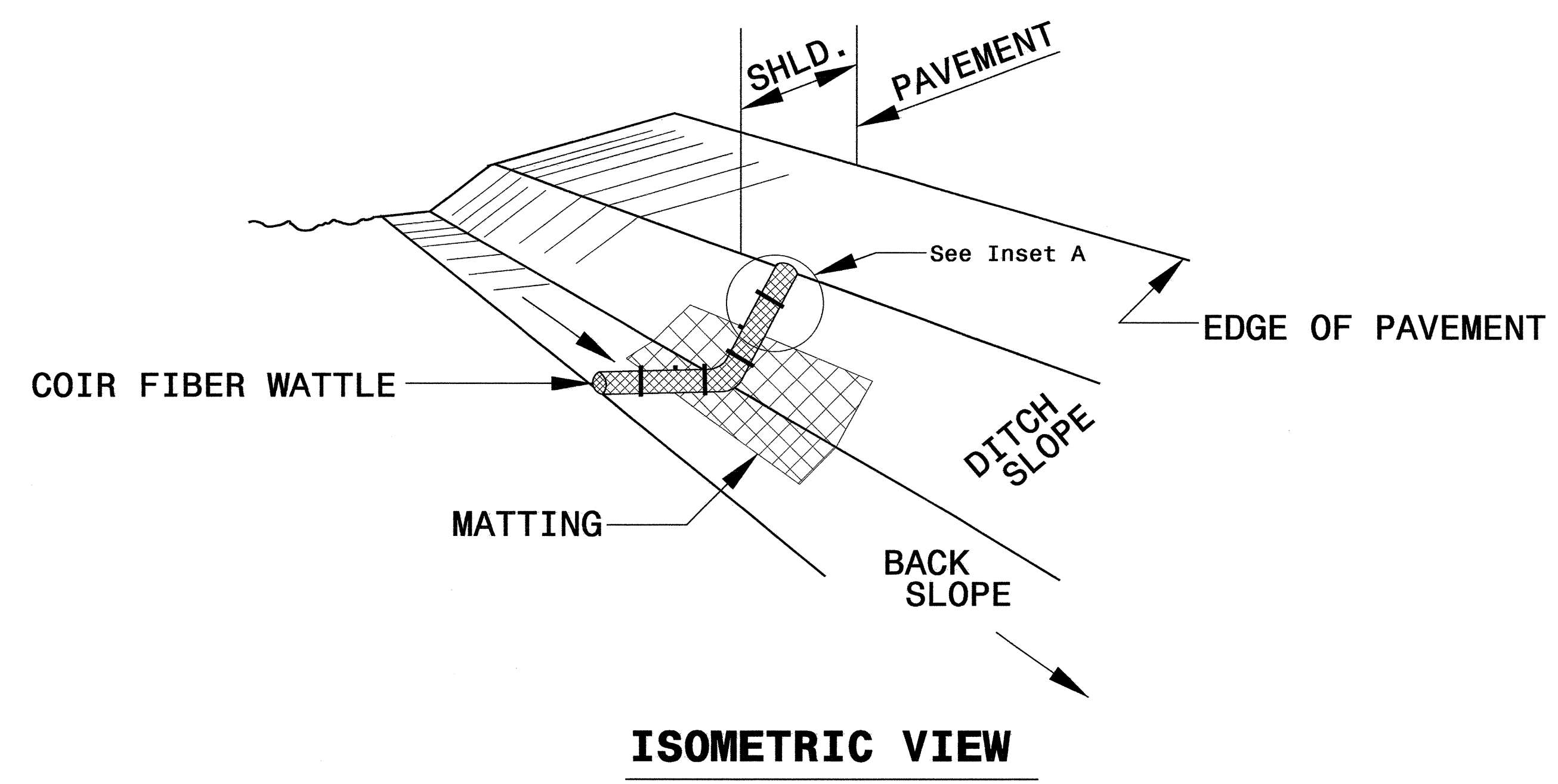
NOT TO SCALE

PROJECT REFERENCE NO.		SHEET NO.	
I-550I		EC-2A	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

# COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

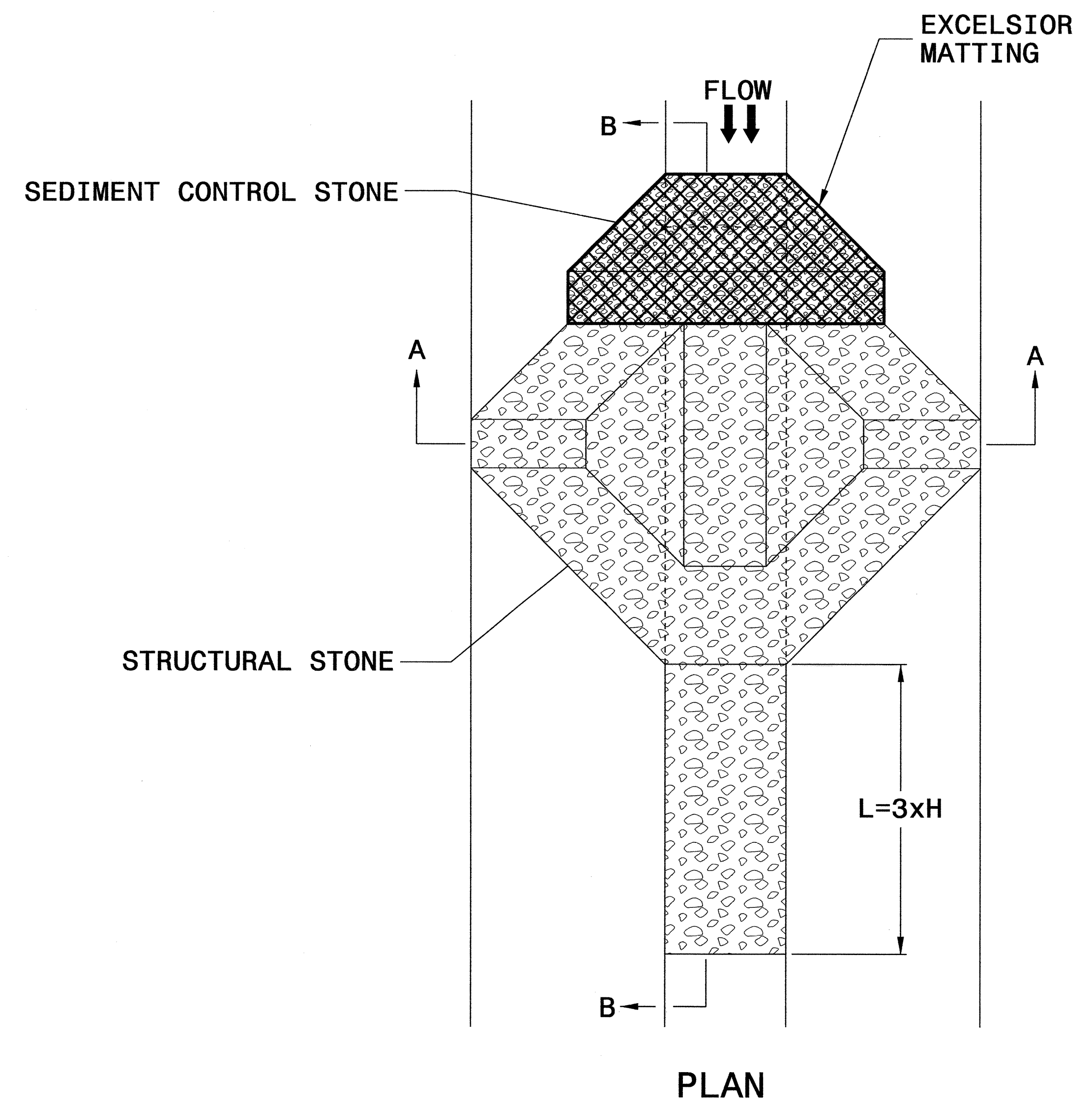
**NOTES:**

- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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 EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. 1-5501	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

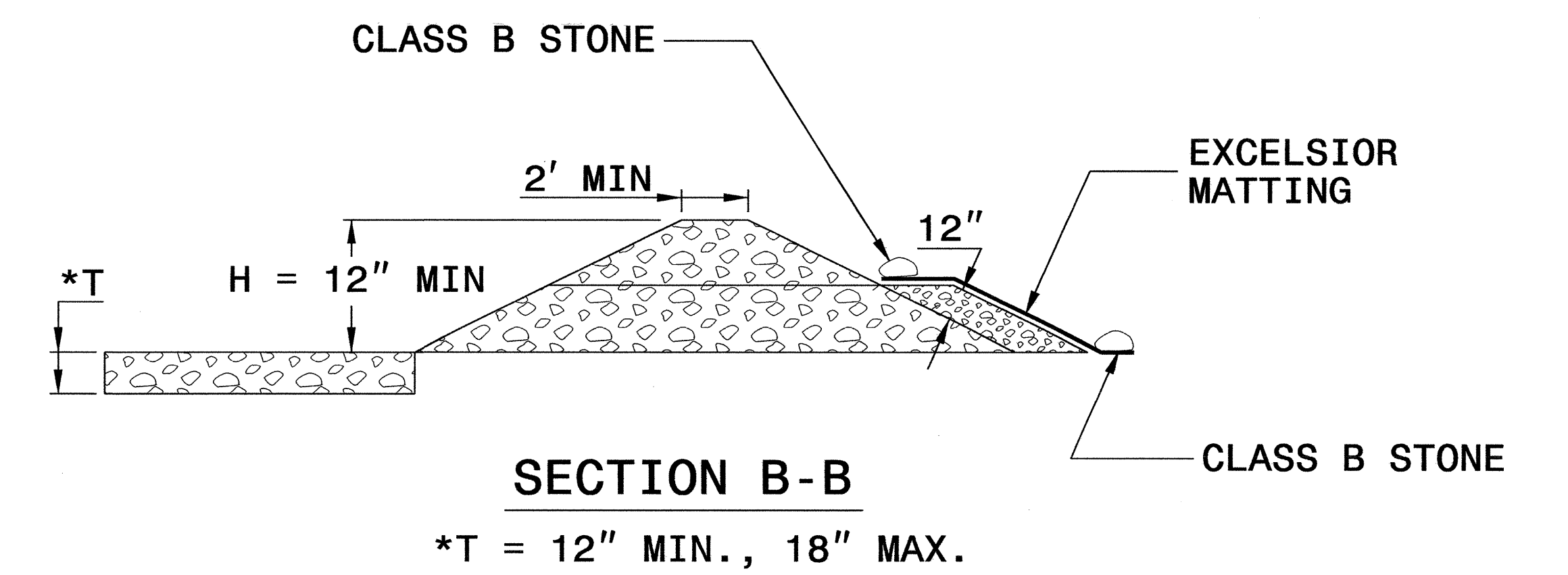
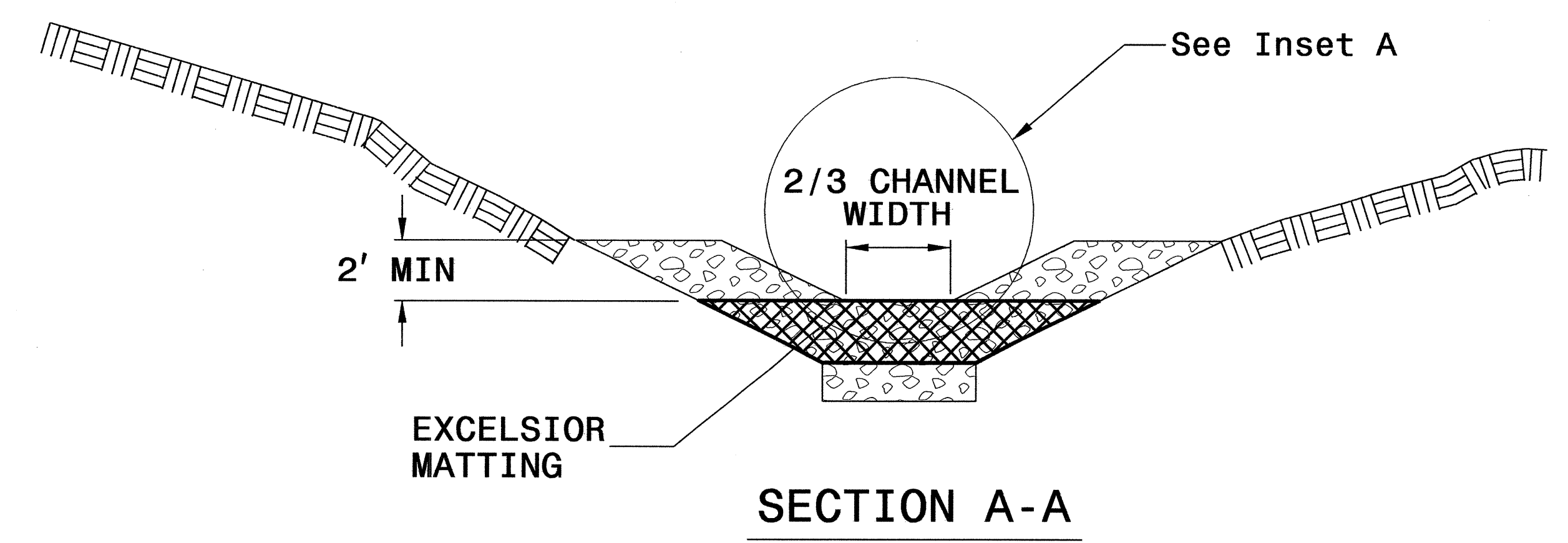
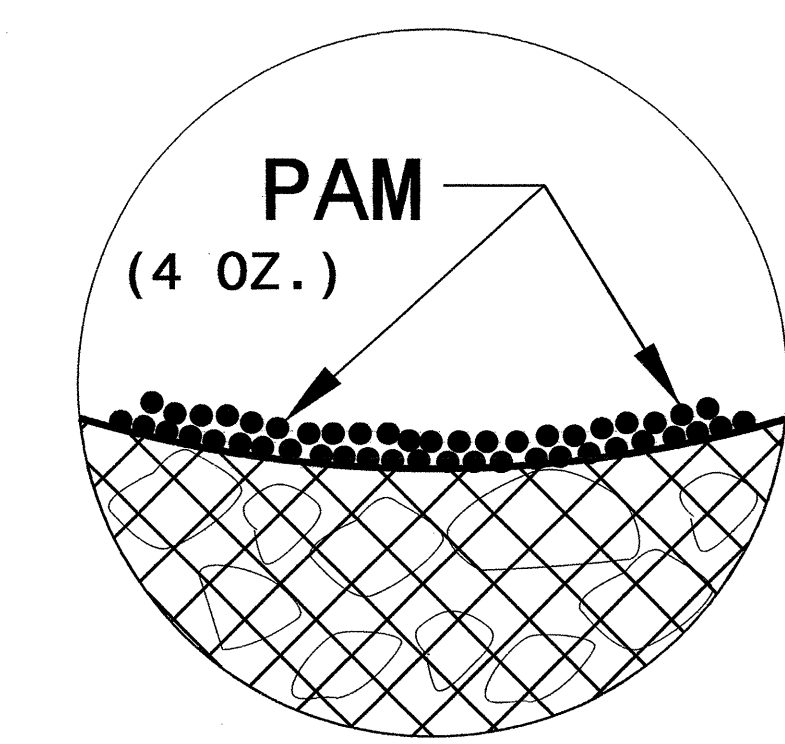


## NOTES

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.		SHEET NO.	
I-550I		EC-3	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		

**SOIL STABILIZATION SUMMARY SHEET**

**MATTING FOR EROSION CONTROL**

**PERMANENT SOIL REINFORCEMENT MAT**

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	14+50	15+00	RT	25
4	-L-	18+50	20+50	LT	100
5	-RPB*SPUR*RT-	10+55	11+05	RT	30
			SUBTOTAL		155
			MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER		4,300
			TOTAL		4,455
			SAY		4,500

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-RPB-	14+50	21+00	RT	390
5	-RPD-	13+65	18+50	LT	650
			SUBTOTAL		1,040
			ADDITIONAL PSRM TO BE INSTALLED		95
			TOTAL		1,135
			SAY		1,150

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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PROJECT REFERENCE NO. <i>1-5501</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

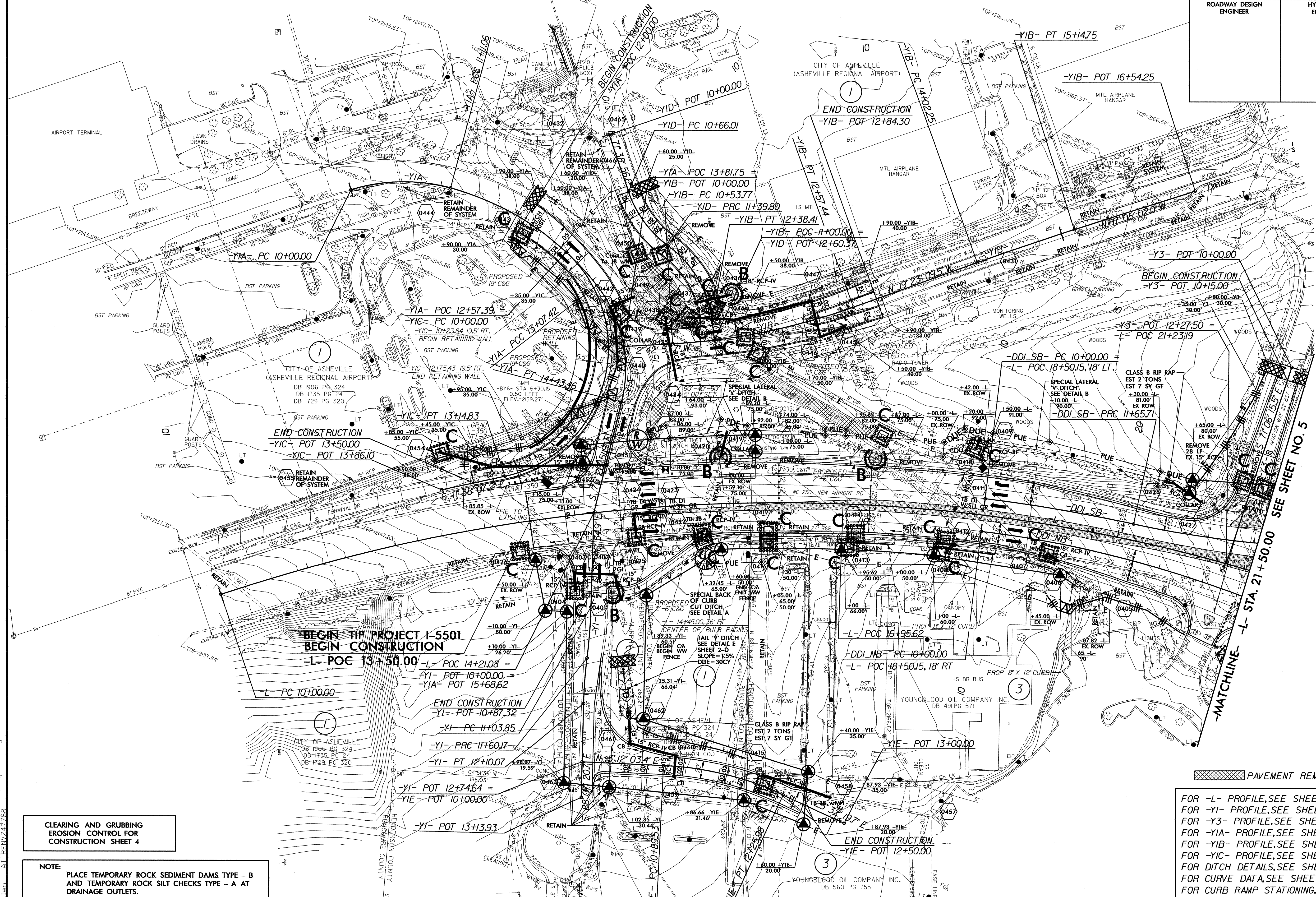
# ***SOIL STABILIZATION TIMEFRAMES***

<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 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.

SEWER LINE IS CURRENTLY UNDER CONSTRUCTION AND AS OF JANUARY 4TH, 2013, HAS NOT BEEN COMPLETED.

NAD 83/NSRS 2007

PROJECT REFERENCE NO.		SHEET NO.	
1-5501		EC-4/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 4

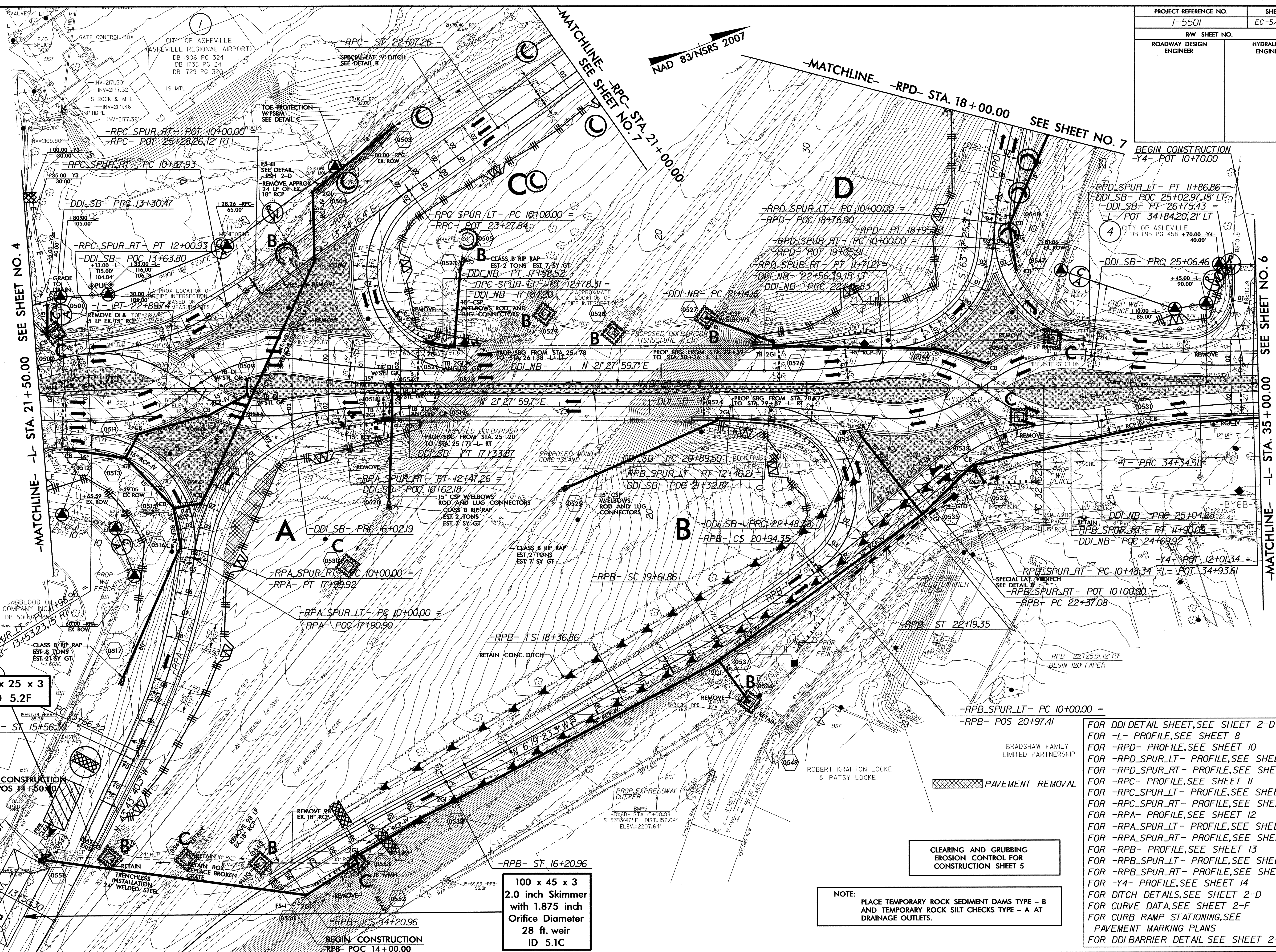
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.

PAVEMENT REMOVAL

FOR -L- PROFILE, SEE SHEET 8  
FOR -YI- PROFILE, SEE SHEET 14  
FOR -Y3- PROFILE, SEE SHEET 14  
FOR -YIA- PROFILE, SEE SHEET 15  
FOR -YIB- PROFILE, SEE SHEET 15  
FOR -YIC- PROFILE, SEE SHEET 15  
FOR DITCH DETAILS, SEE SHEET 2-D  
FOR CURVE DATA, SEE SHEET 2-F  
FOR CURB RAMP STATIONING, SEE  
PAVEMENT MARKING PLANS

05 JUN 2013 14:56 D:\projects\15501\EC-phs\_04.dgn  
 CITY OF ASHEVILLE  
 PROJECT NO. 1-5501

NAD 83/NSRS 2007



SEE SHEET NO. 4

SEE SHEET NO. 6

53 x 25 x 3  
ID 5.2F

100 x 45 x 3  
2.0 inch Skimmer  
with 1.875 inch  
Orifice Diameter  
28 ft. weir  
ID 5.1C

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

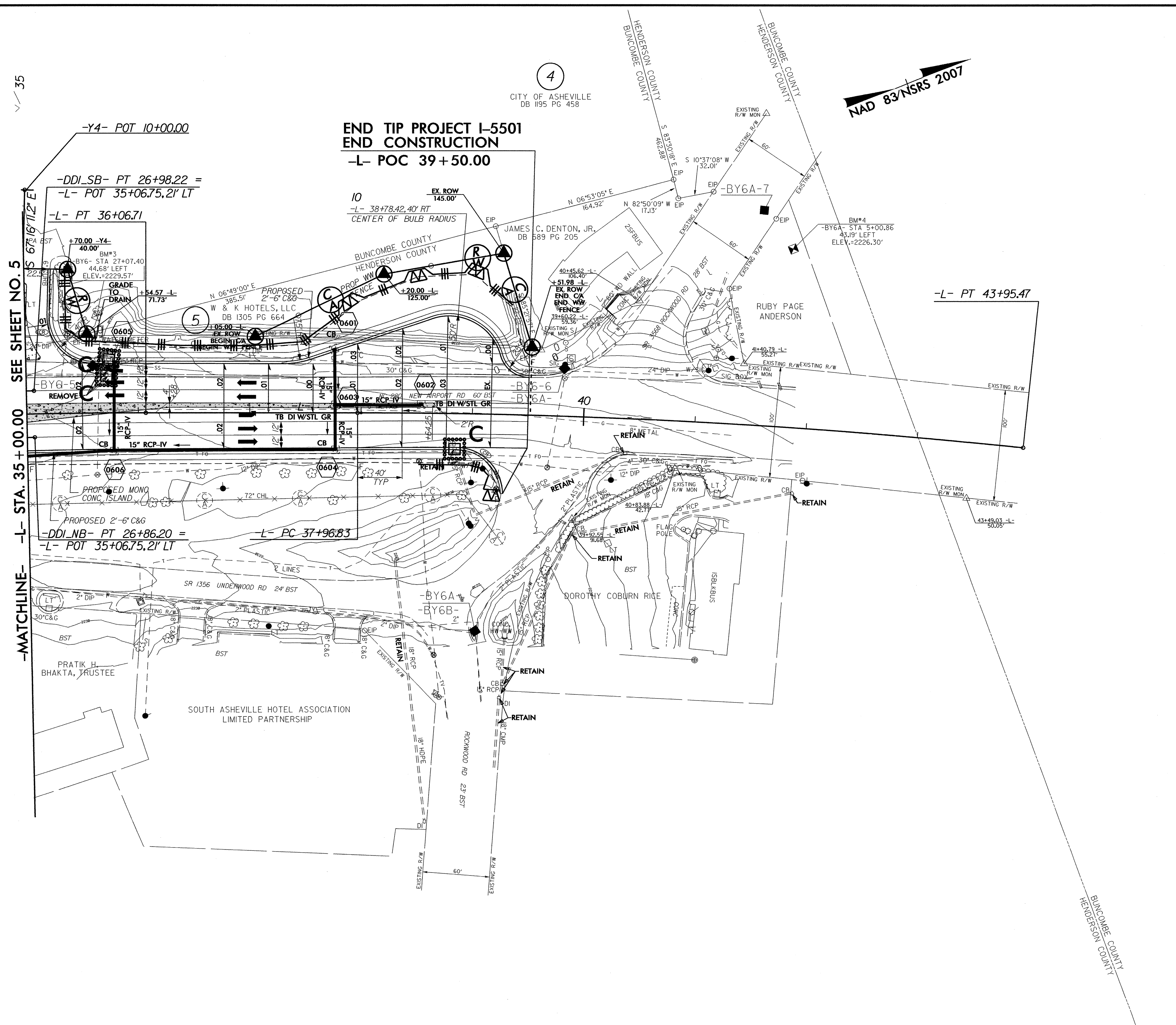
- FOR DDI DETAIL SHEET, SEE SHEET 2-D
- FOR -L- PROFILE, SEE SHEET 8
- FOR -RPD- PROFILE, SEE SHEET 10
- FOR -RPD\_SPUR\_LT- PROFILE, SEE SHEET 10
- FOR -RPD\_SPUR\_RT- PROFILE, SEE SHEET 10
- FOR -RPC- PROFILE, SEE SHEET 11
- FOR -RPC\_SPUR\_LT- PROFILE, SEE SHEET 11
- FOR -RPC\_SPUR\_RT- PROFILE, SEE SHEET 11
- FOR -RPA- PROFILE, SEE SHEET 12
- FOR -RPA\_SPUR\_LT- PROFILE, SEE SHEET 12
- FOR -RPA\_SPUR\_RT- PROFILE, SEE SHEET 12
- FOR -RPB- PROFILE, SEE SHEET 13
- FOR -RPB\_SPUR\_LT- PROFILE, SEE SHEET 13
- FOR -RPB\_SPUR\_RT- PROFILE, SEE SHEET 13
- FOR -Y4- PROFILE, SEE SHEET 14
- FOR DITCH DETAILS, SEE SHEET 2-D
- FOR CURVE DATA, SEE SHEET 2-F
- FOR CURB RAMP STATIONING, SEE PAVEMENT MARKING PLANS
- FOR DDI BARRIER DETAIL SEE SHEET 2-

8/17/99

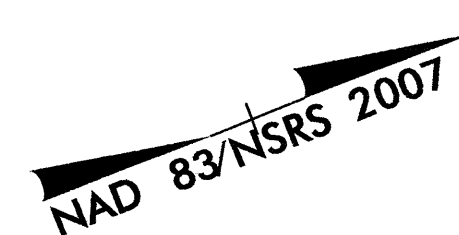
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PROJECT REFERENCE NO.		SHEET NO.	
I-550I		EC-6/CONST.6	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



**END TIP PROJECT I-550I  
END CONSTRUCTION  
-L- POC 39 + 50.00**



SEE SHEET NO. 5  
-L- STA. 35 + 00.00  
-MATCHLINE-

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 6

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

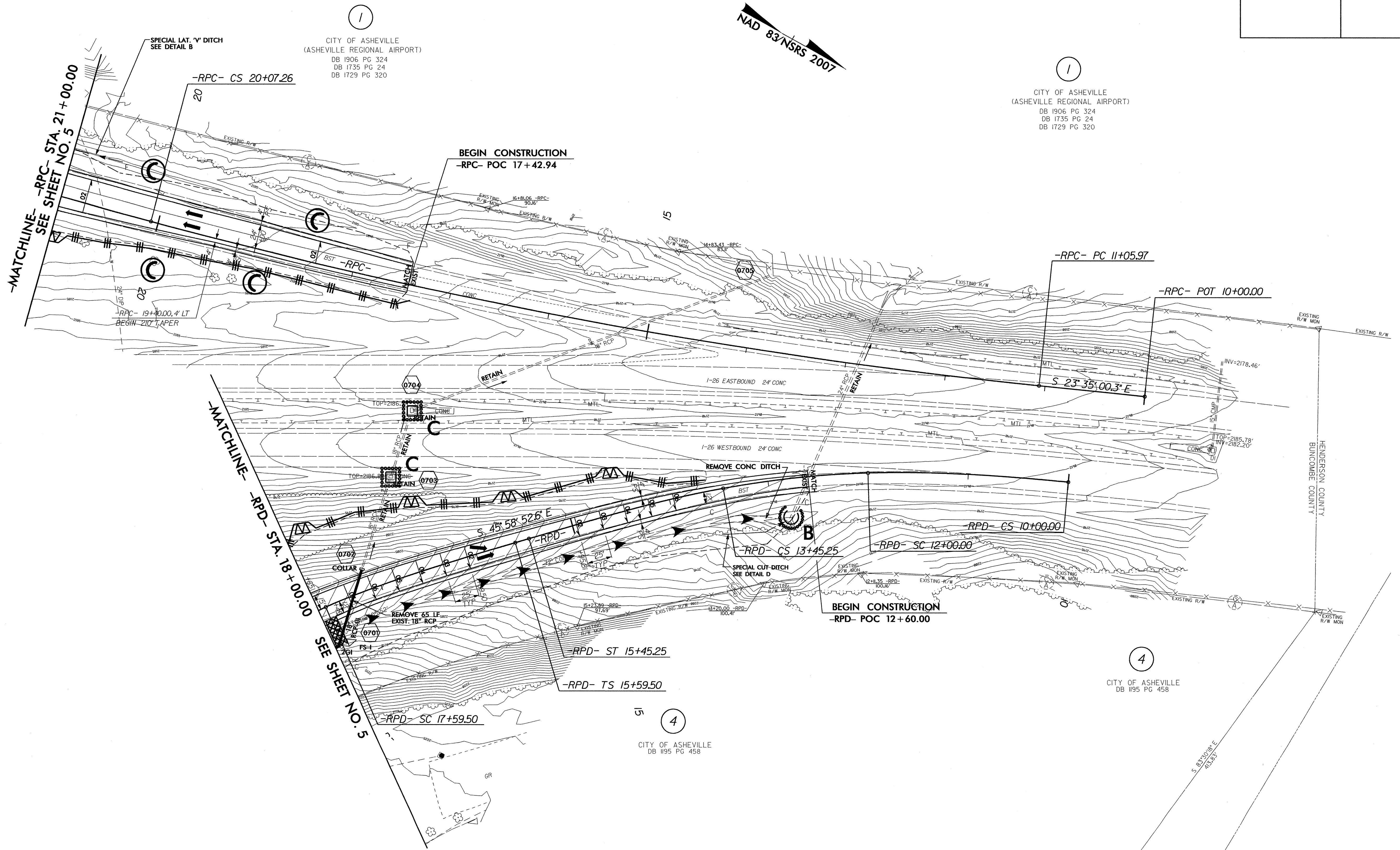
FOR -L- PROFILE, SEE SHEET 9  
FOR -Y4- PROFILE, SEE SHEET 14  
FOR -RPA- PROFILE, SEE SHEET 12  
FOR -RPB- PROFILE, SEE SHEET 13  
FOR DITCH DETAILS, SEE SHEET 2-D  
FOR CURVE DATA, SEE SHEET 2-F  
FOR CURB RAMP STATIONING, SEE  
PAVEMENT MARKING PLANS

PROJECT REFERENCE NO.	SHEET NO.
1-5501	EC-7/CONST.7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 7

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

NAD 83/NSRS 2007



1  
CITY OF ASHEVILLE  
(ASHEVILLE REGIONAL AIRPORT)  
DB 1906 PG 324  
DB 1735 PG 24  
DB 1729 PG 320

1  
CITY OF ASHEVILLE  
(ASHEVILLE REGIONAL AIRPORT)  
DB 1906 PG 324  
DB 1735 PG 24  
DB 1729 PG 320

4  
CITY OF ASHEVILLE  
DB 1195 PG 458

5  
4  
CITY OF ASHEVILLE  
DB 1195 PG 458

FOR -RPD- PROFILE, SEE SHEET 10  
FOR -RPC- PROFILE, SEE SHEET 11  
FOR DITCH DETAILS, SEE SHEET 2-D  
FOR CURVE DATA SEE SHEET 2-F

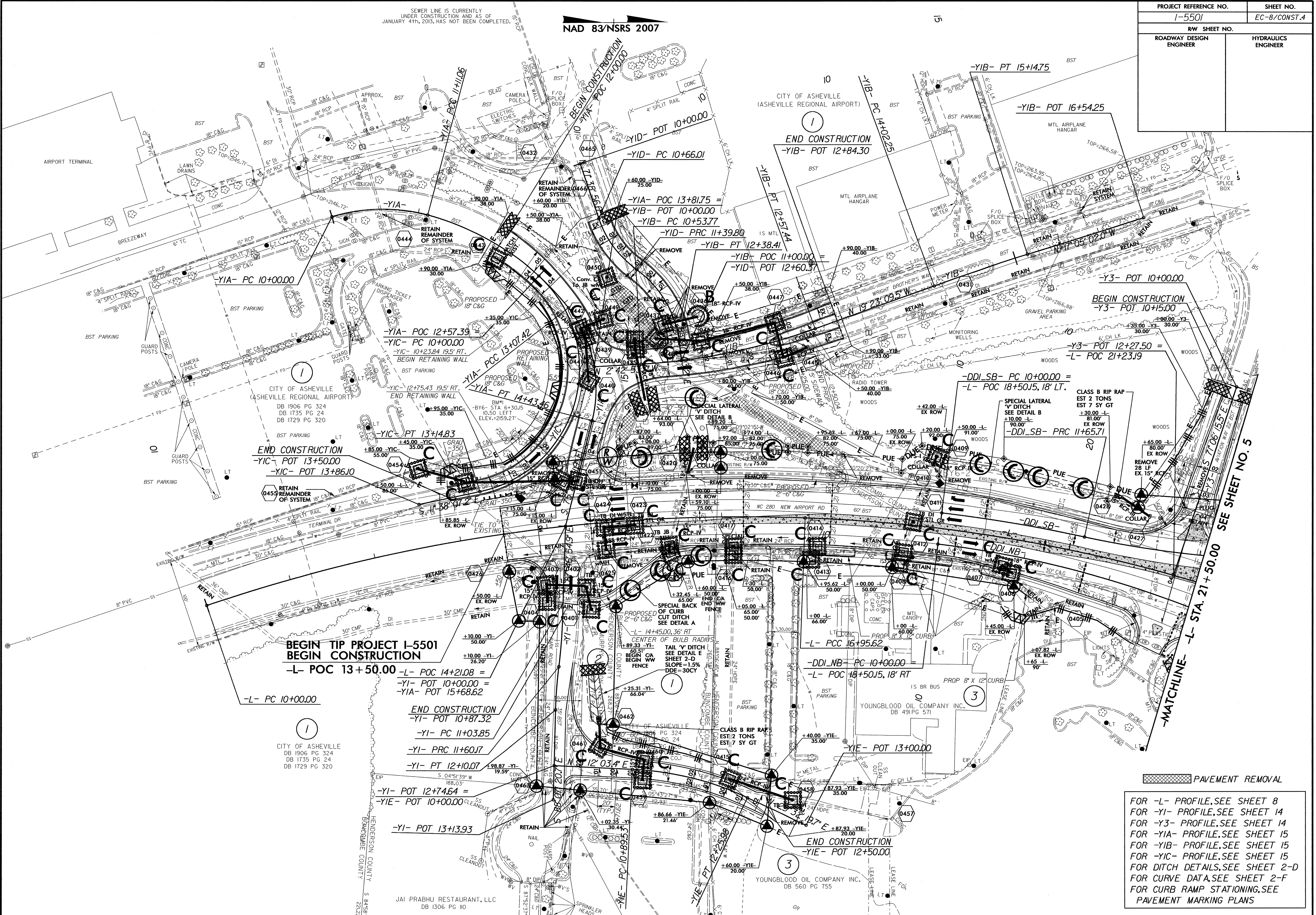
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adholen

8/17/99

SEWER LINE IS CURRENTLY UNDER CONSTRUCTION AND AS OF JANUARY 4TH, 2013, HAS NOT BEEN COMPLETED.

NAD 83/NSRS 2007

PROJECT REFERENCE NO.		SHEET NO.	
I-5501		EC-8/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



**PAVEMENT REMOVAL**

FOR -L- PROFILE, SEE SHEET 8  
 FOR -YI- PROFILE, SEE SHEET 14  
 FOR -Y3- PROFILE, SEE SHEET 14  
 FOR -YIA- PROFILE, SEE SHEET 15  
 FOR -YIB- PROFILE, SEE SHEET 15  
 FOR -YIC- PROFILE, SEE SHEET 15  
 FOR DITCH DETAILS, SEE SHEET 2-D  
 FOR CURB RAMP STATIONING, SEE PAVEMENT MARKING PLANS

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CITY OF ASHEVILLE  
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 DB 1735 PG 24  
 DB 1729 PG 320

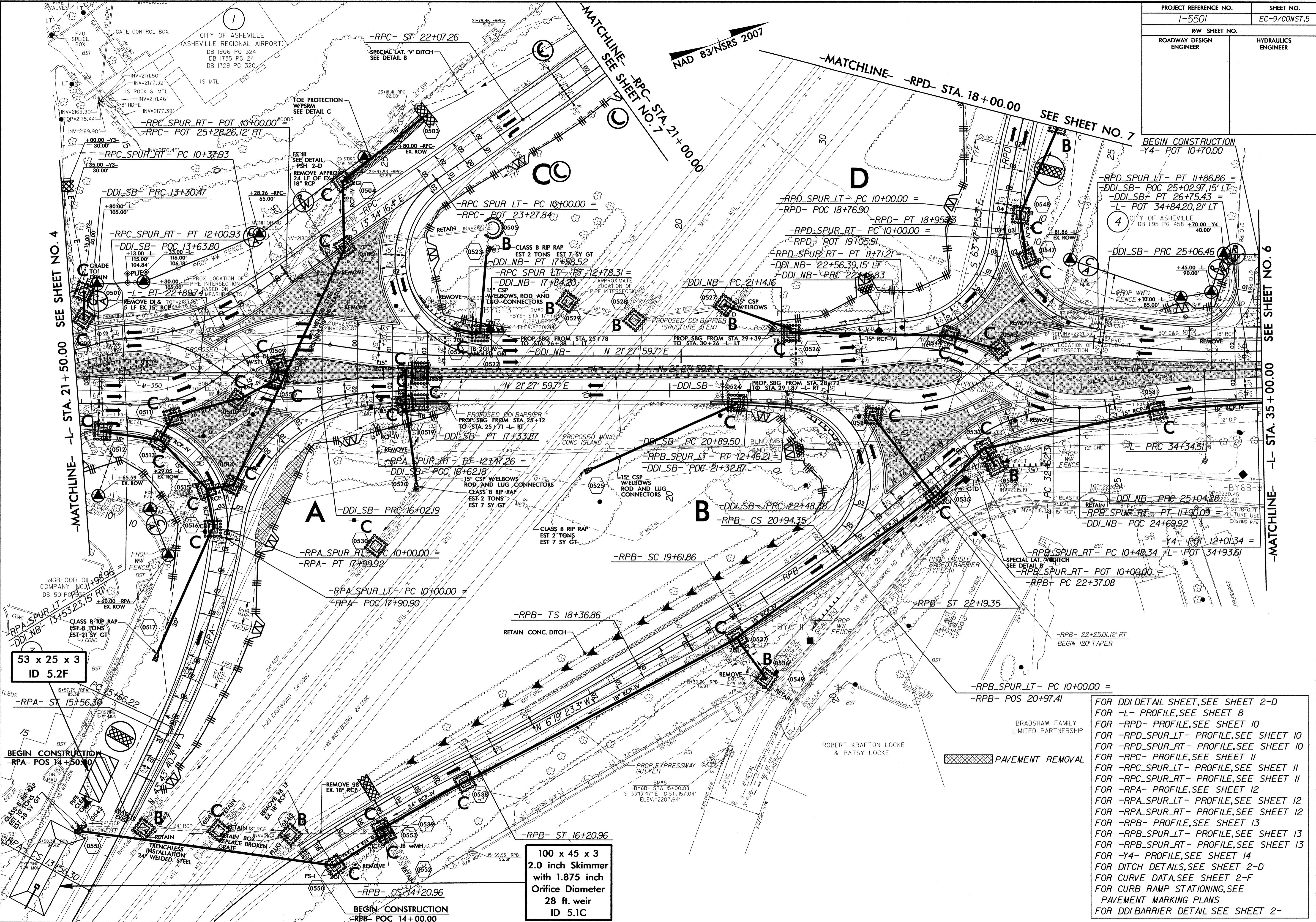
JAI PRABHU RESTAURANT, LLC  
 DB 1306 PG 110

YOUNGBLOOD OIL COMPANY INC.  
 DB 560 PG 755

YOUNGBLOOD OIL COMPANY INC.  
 DB 491 PG 571

PROJECT REFERENCE NO.	SHEET NO.
1-5501	EC-9/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

05-JUN-2013 15:02 \\d:\proj\15501\EC\psh\_05.dgn



53 x 25 x 3  
ID 5.2F

100 x 45 x 3  
2.0 inch Skimmer  
with 1.875 inch  
Orifice Diameter  
28 ft. weir  
ID 5.1C

FOR DDI DETAIL SHEET, SEE SHEET 2-D  
 FOR -L- PROFILE, SEE SHEET 8  
 FOR -RPD- PROFILE, SEE SHEET 10  
 FOR -RPD\_SPUR\_LT- PROFILE, SEE SHEET 10  
 FOR -RPC\_SPUR\_RT- PROFILE, SEE SHEET 10  
 FOR -RPC- PROFILE, SEE SHEET 11  
 FOR -RPC\_SPUR\_LT- PROFILE, SEE SHEET 11  
 FOR -RPA- PROFILE, SEE SHEET 12  
 FOR -RPA\_SPUR\_LT- PROFILE, SEE SHEET 12  
 FOR -RPA\_SPUR\_RT- PROFILE, SEE SHEET 12  
 FOR -RPB- PROFILE, SEE SHEET 13  
 FOR -RPB\_SPUR\_LT- PROFILE, SEE SHEET 13  
 FOR -RPB\_SPUR\_RT- PROFILE, SEE SHEET 13  
 FOR -Y4- PROFILE, SEE SHEET 14  
 FOR DITCH DETAILS, SEE SHEET 2-D  
 FOR CURB RAMP STATIONING, SEE PAVEMENT MARKING PLANS  
 FOR DDI BARRIER DETAIL SEE SHEET 2-

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-550I	EC-10/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

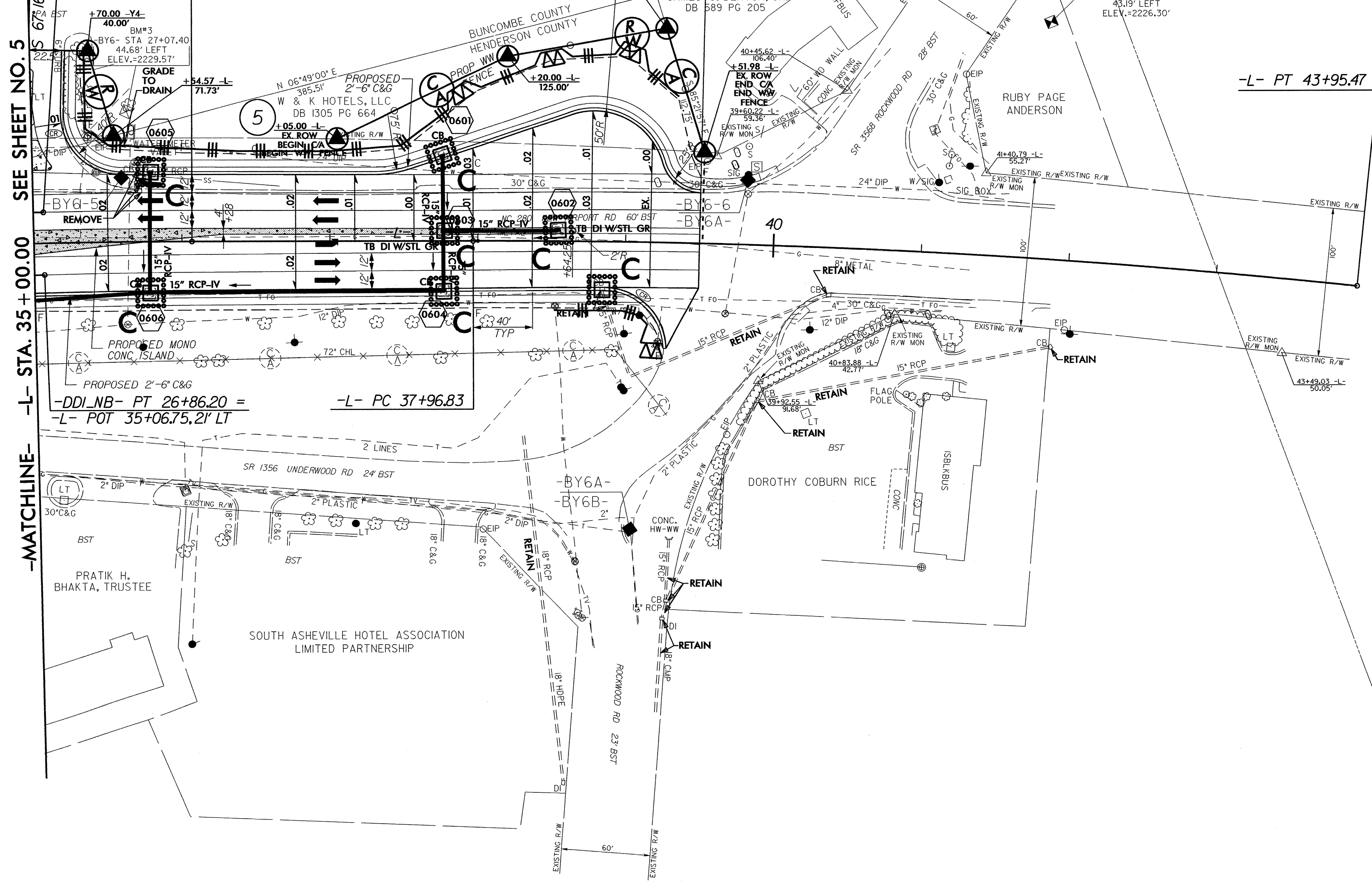
35

-Y4- POT 10+00.00  
-DDI\_SB- PT 26+98.22 =  
-L- POT 35+06.75, 2' LT  
-L- PT 36+06.71

**END TIP PROJECT I-550I  
END CONSTRUCTION  
-L- POC 39+50.00**

4  
CITY OF ASHEVILLE  
DB 1195 PG 458

NAD 83/NSRS 2007



SEE SHEET NO. 5  
-L- STA. 35+00.00  
-MATCHLINE-

-DDI\_NB- PT 26+86.20 =  
-L- POT 35+06.75, 2' LT

-L- PC 37+96.83

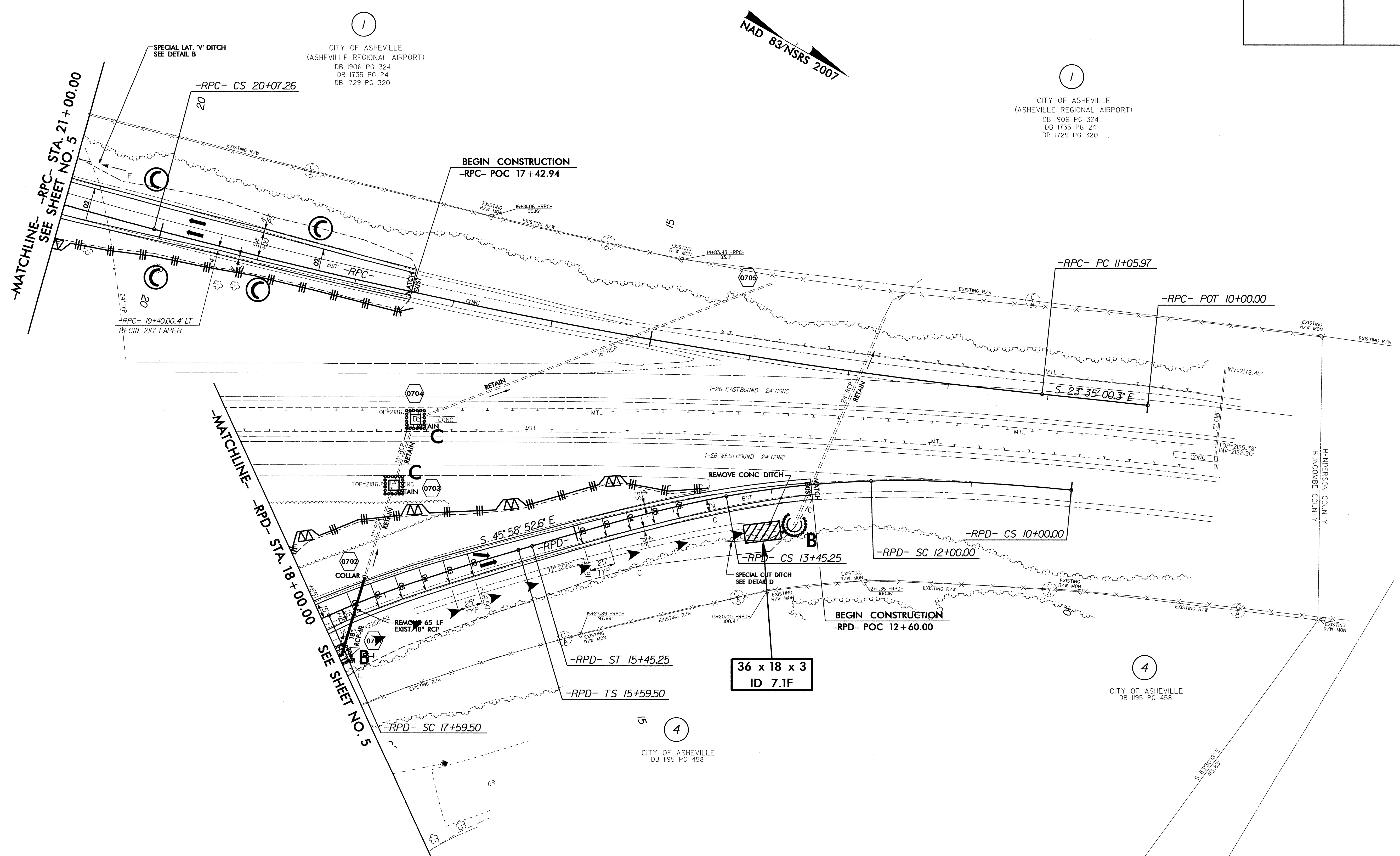
-L- PT 43+95.47

FOR -L- PROFILE, SEE SHEET 9  
FOR -Y4- PROFILE, SEE SHEET 14  
FOR -RPA- PROFILE, SEE SHEET 12  
FOR -RPB- PROFILE, SEE SHEET 13  
FOR DITCH DETAILS, SEE SHEET 2-D  
FOR CURVE DATA, SEE SHEET 2-F  
FOR CURB RAMP STATIONING, SEE  
PAVEMENT MARKING PLANS

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PROJECT REFERENCE NO.		SHEET NO.	
I-550I		EC-II/CONST.7	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

8/17/99  
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 17/17



CITY OF ASHEVILLE  
 (ASHEVILLE REGIONAL AIRPORT)  
 DB 1906 PG 324  
 DB 1735 PG 24  
 DB 1729 PG 320

CITY OF ASHEVILLE  
 (ASHEVILLE REGIONAL AIRPORT)  
 DB 1906 PG 324  
 DB 1735 PG 24  
 DB 1729 PG 320

**36 x 18 x 3**  
**ID 7.1F**

FOR -RPD- PROFILE, SEE SHEET 10  
 FOR -RPC- PROFILE, SEE SHEET 11  
 FOR DITCH DETAILS, SEE SHEET 2-F  
 FOR CURVE DATA SEE SHEET 2-F