

TIP PROJECT: B-4214

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

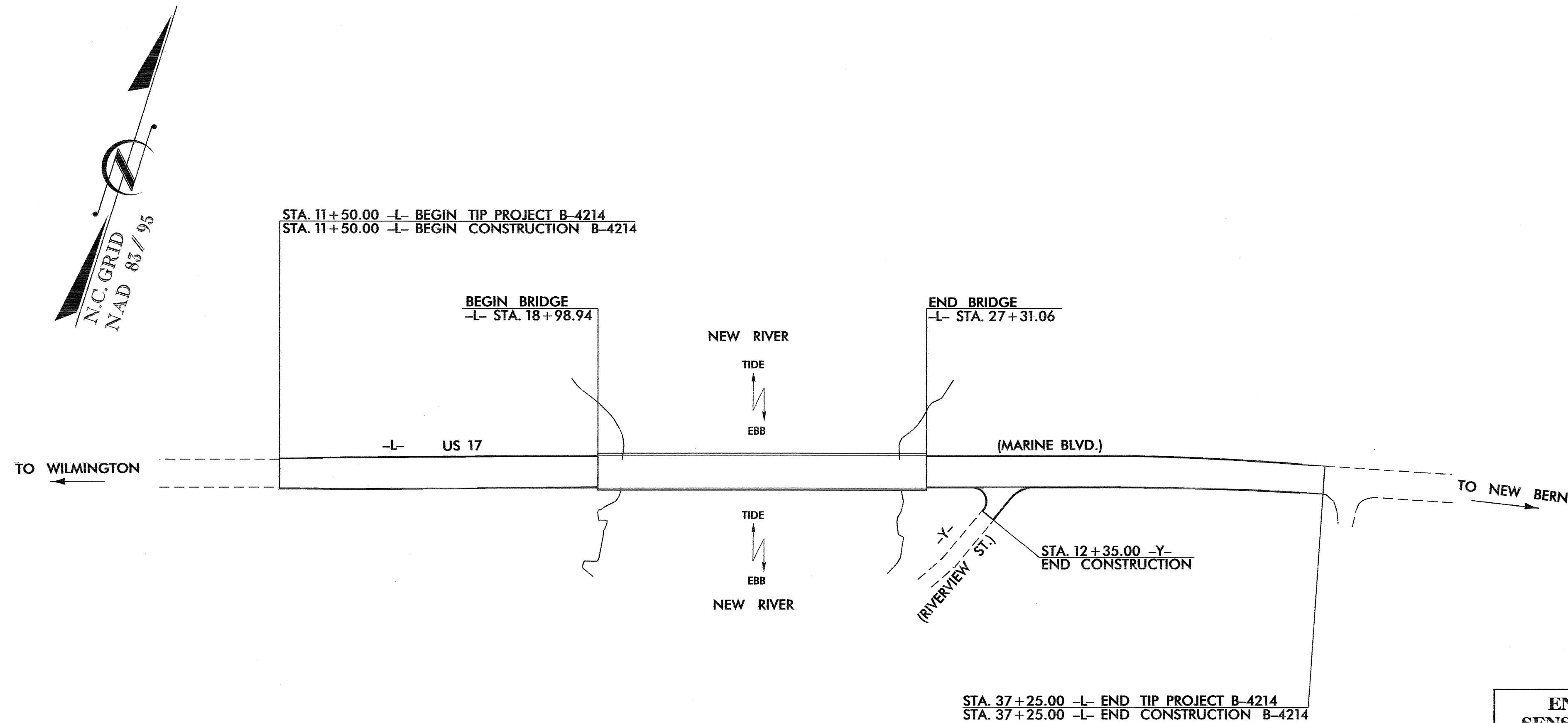
ONSLOW COUNTY

LOCATION: BRIDGE NO. 24 OVER NEW RIVER ON US 17 (MARINE BLVD.) IN JACKSONVILLE
TYPE OF WORK: PAVING, GRADING, DRAINAGE, SIGNALS AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4214	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

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	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
	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	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	



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

**THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.**

**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**
*Refer To E. C. Special Provisions
for Special Considerations.*

**HIGH QUALITY WATER(S) EXIST
ON THIS PROJECT**
*High Quality Water Zone(s) Exist
From Sta. _____ Begin
to Sta. _____ End
Refer To E. C. Special Provisions
for Special Considerations.*

GRAPHIC SCALE

0

PLANS

0

PROFILE (HORIZONTAL)

0

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

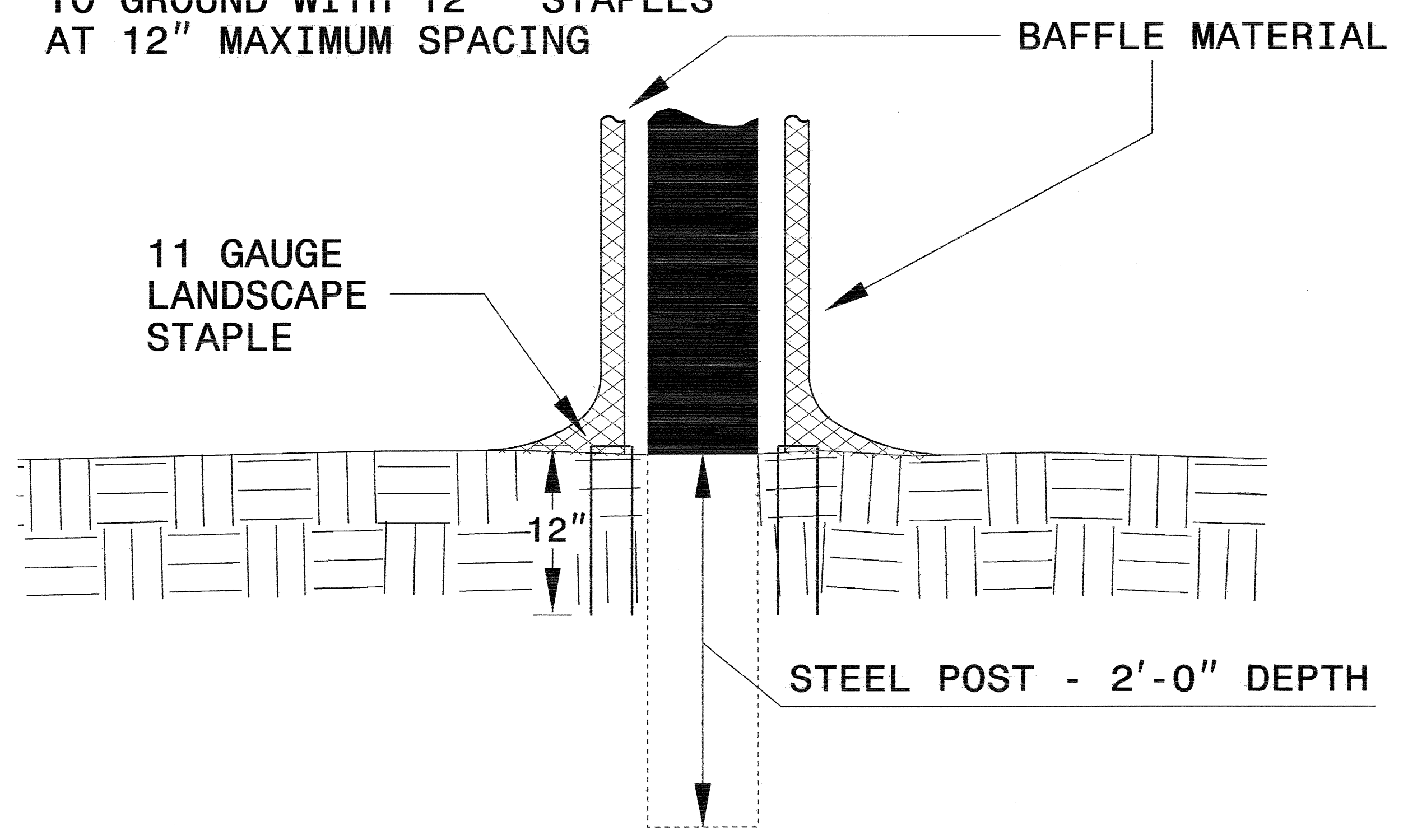
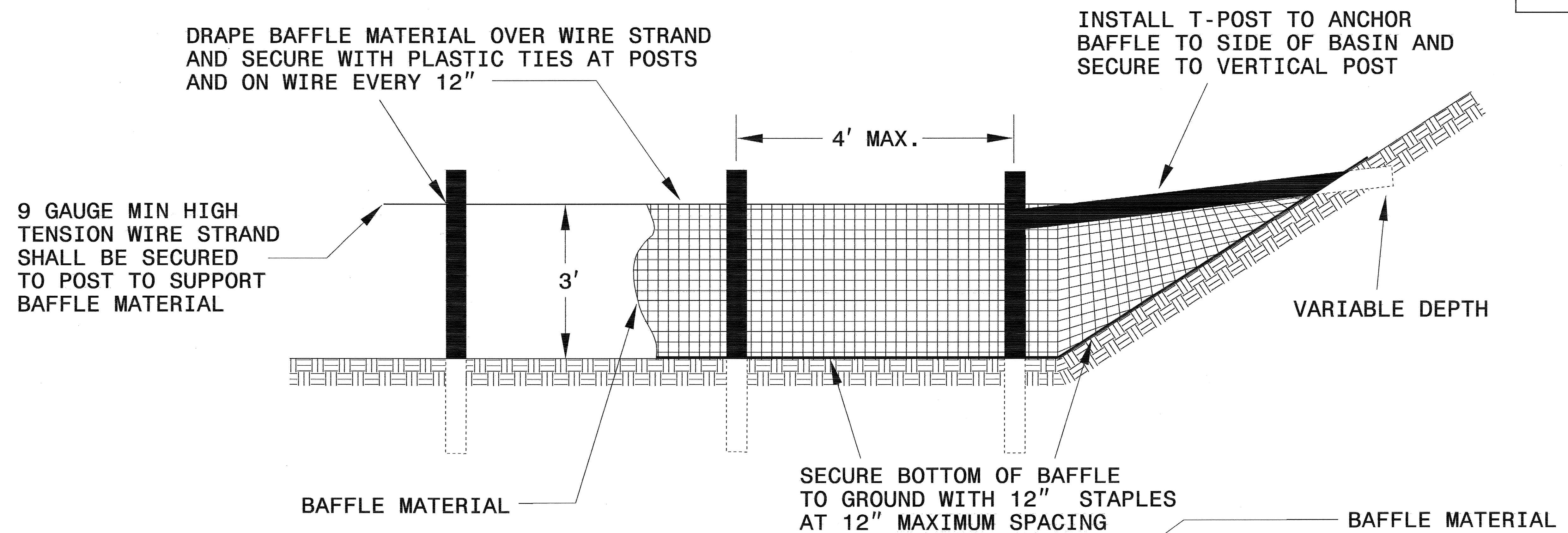
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1632.03 Rock Inlet Sediment Trap Type C
1606.01 Special Sediment Control Fence	1633.01 Temporary Rock Silt Check Type A
1607.01 Gravel Construction Entrance	
1622.01 Temporary Berms and Slope Drains	

05-JAN-2010 13:22
F:\Environment\4214\4214.ec.tah.dgn
Jenn.Tahara

PROJECT REFERENCE NO. B-4214	SHEET NO. EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



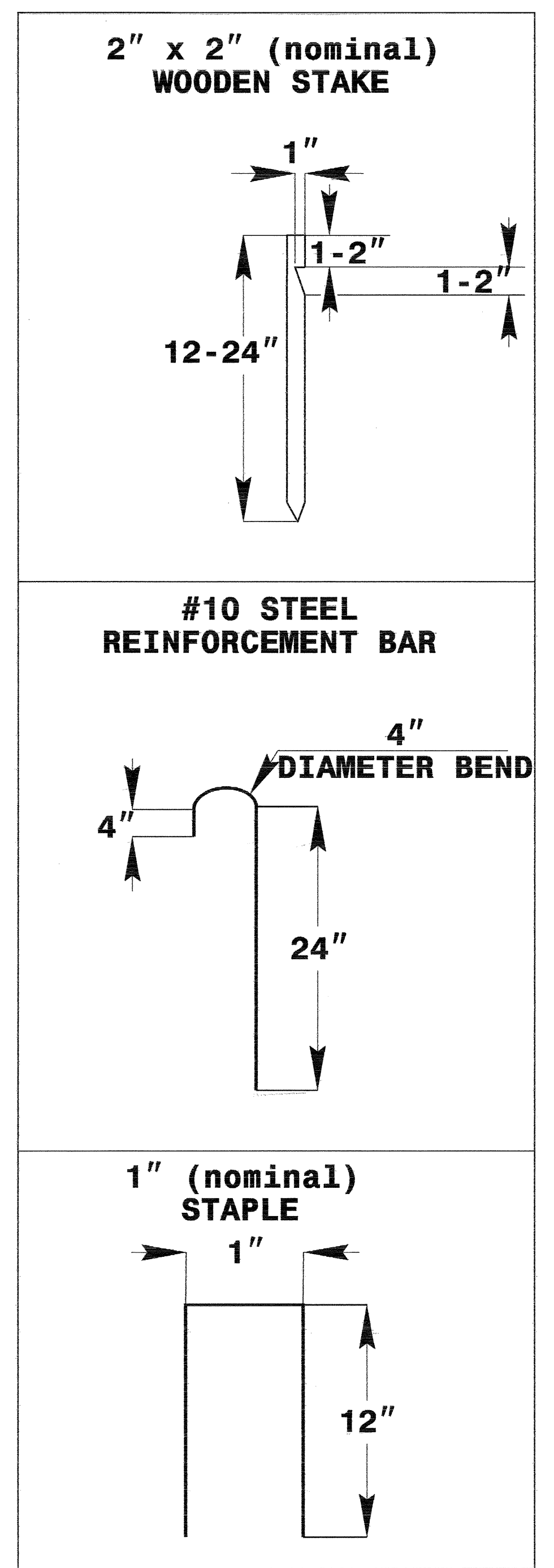
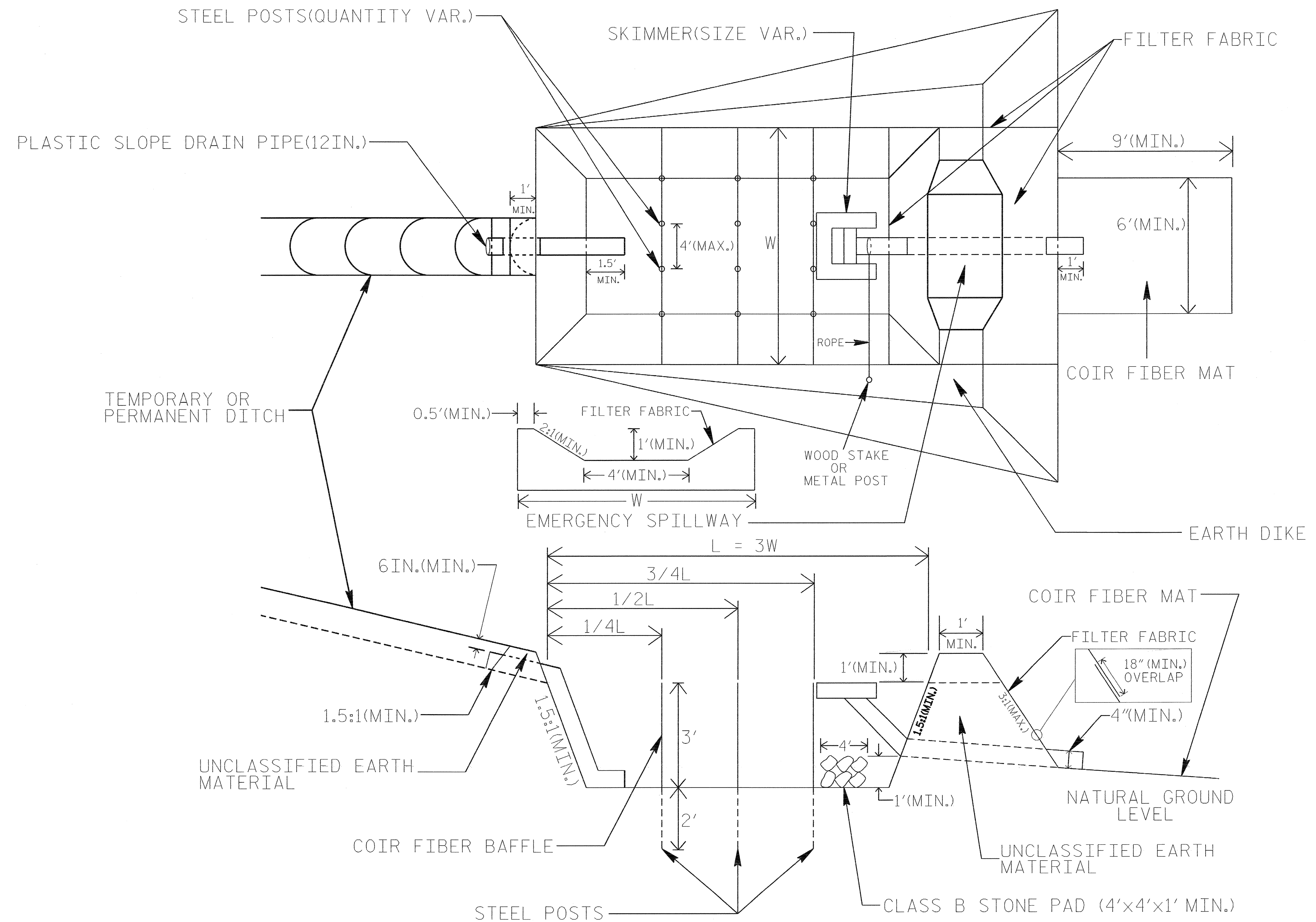
NOTES:

1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.
2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-4214	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

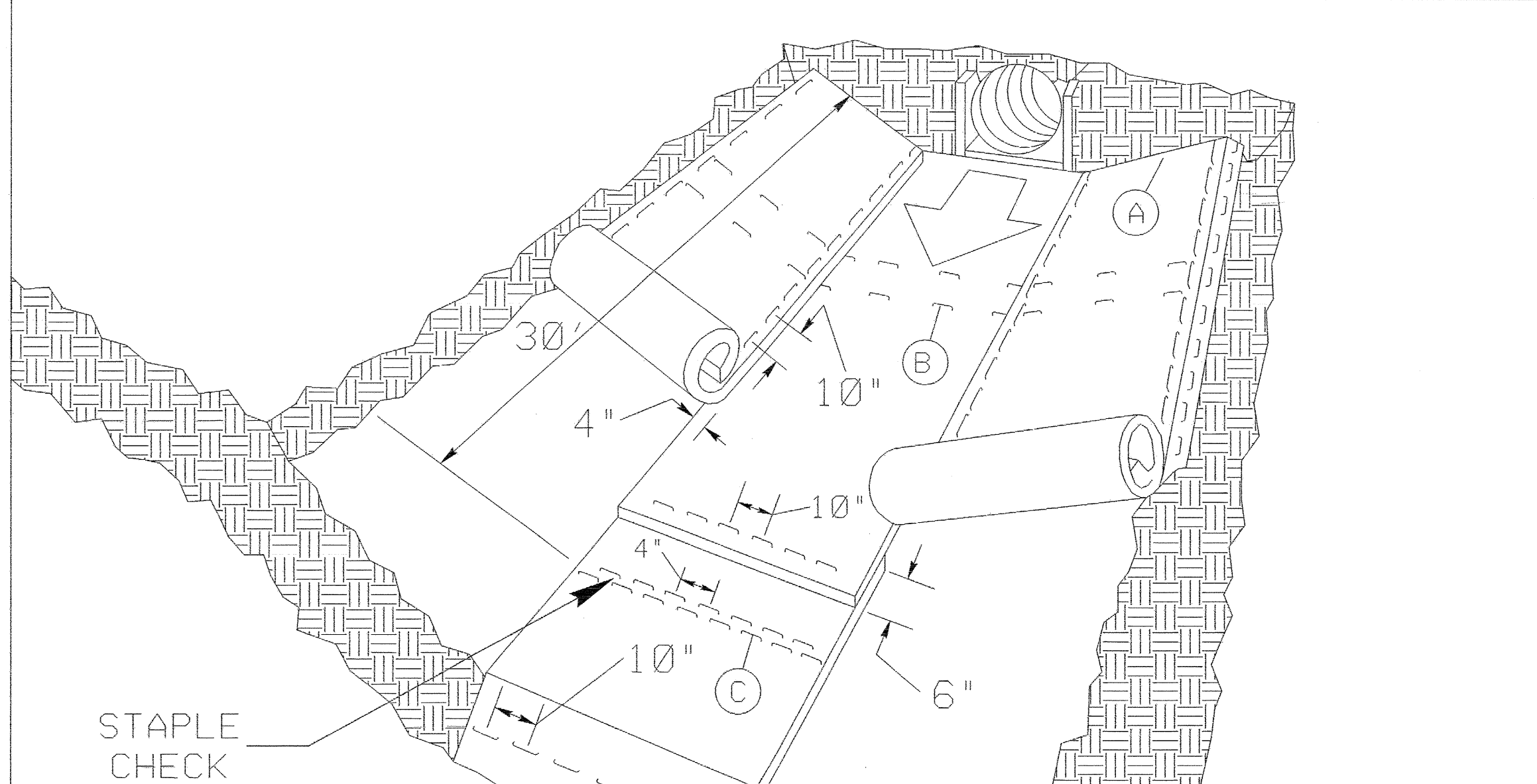
NOTES

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 EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTER FABRIC AS DIRECTED.
6. FILTER FABRIC FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18" (MIN.) AS SHOWN.

NOT TO SCALE

PROJECT REFERENCE NO. B-4214	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

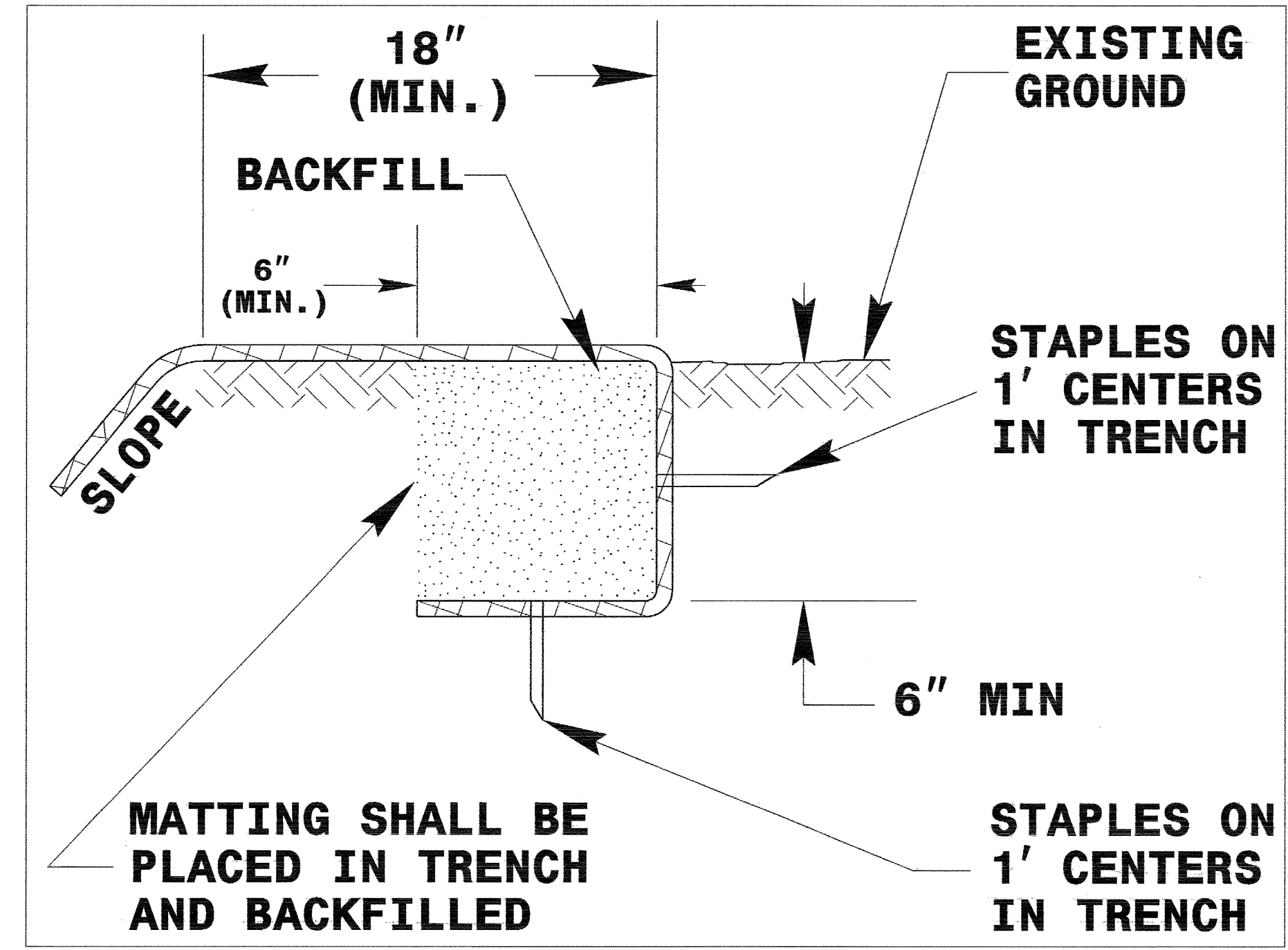
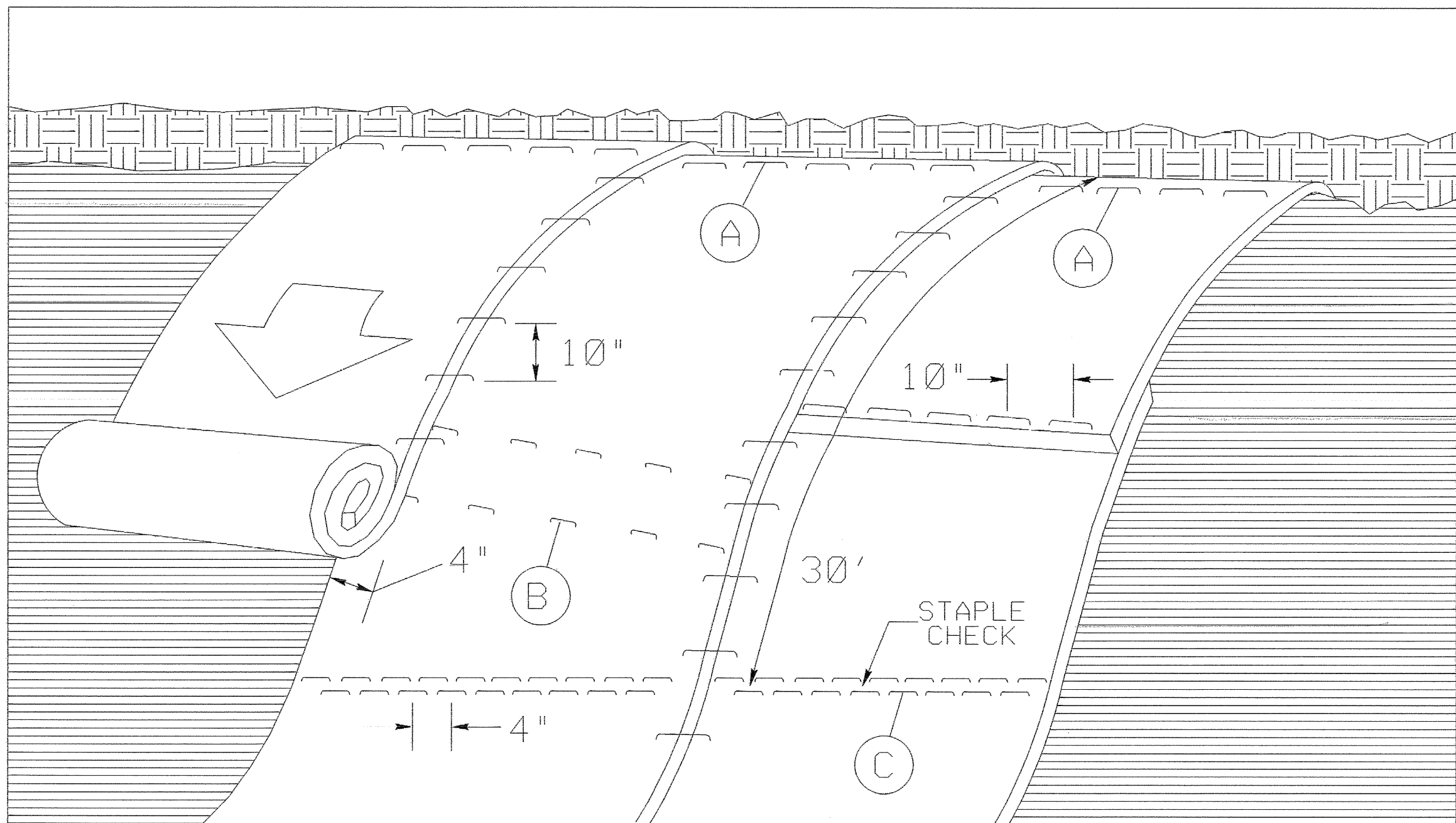


DIAGRAM (A)



MATTING ON SLOPES

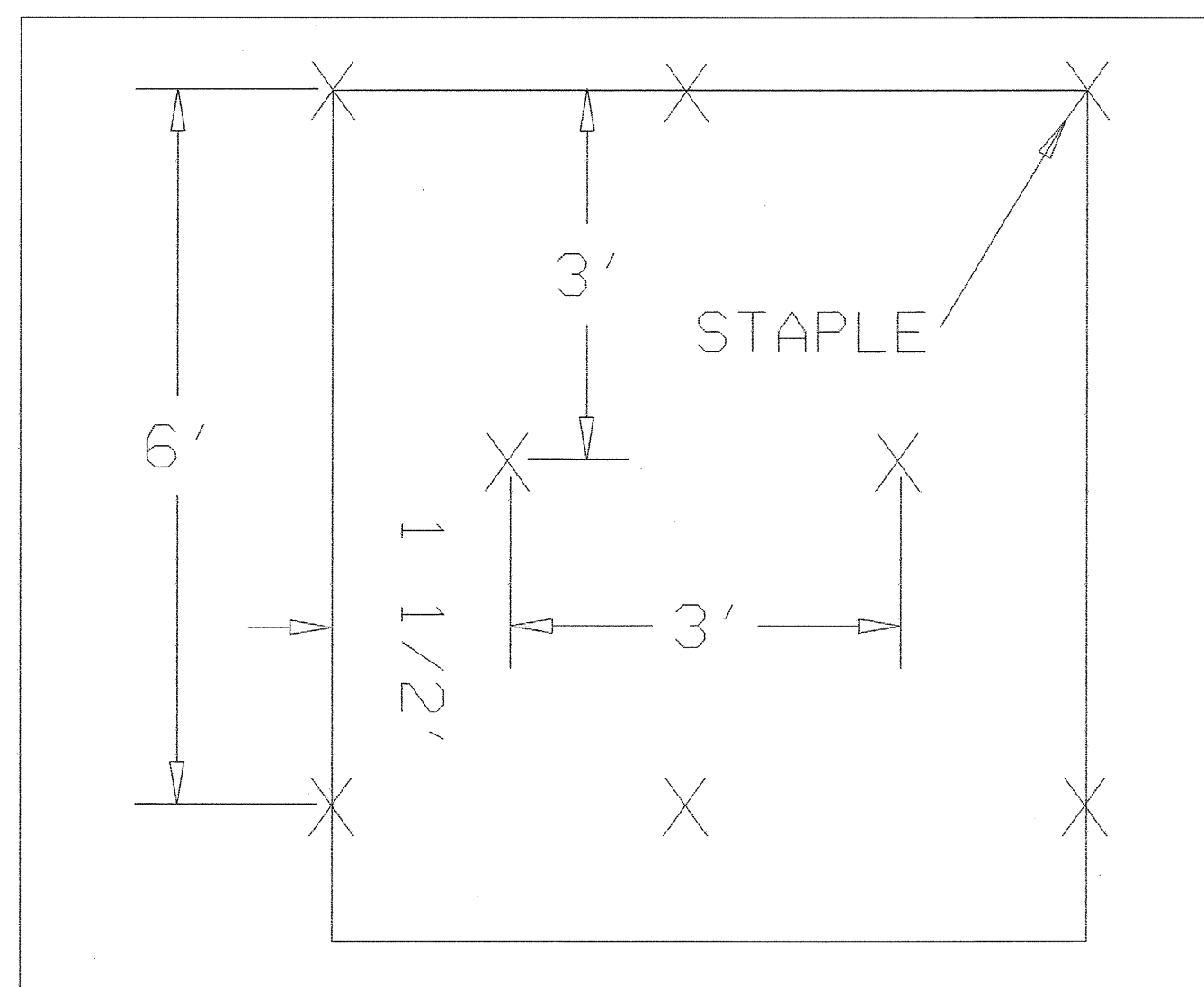


DIAGRAM (B)

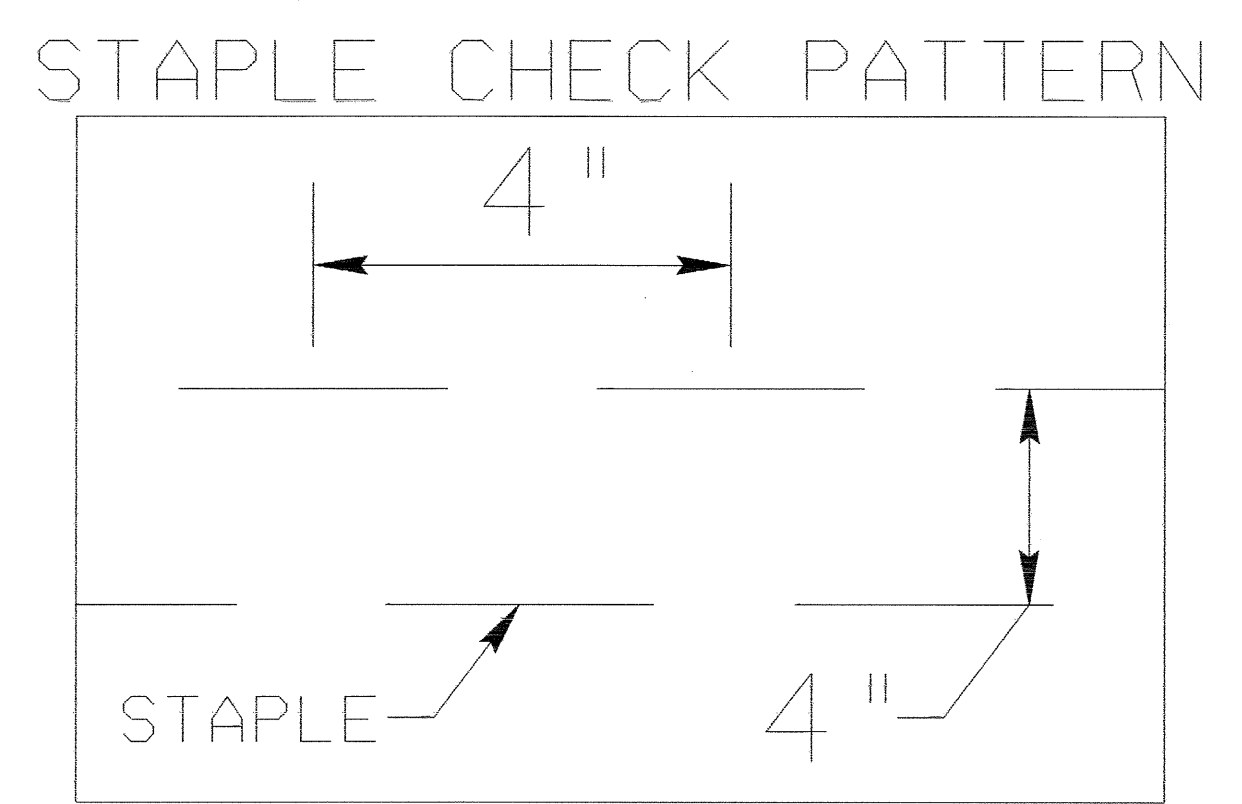


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

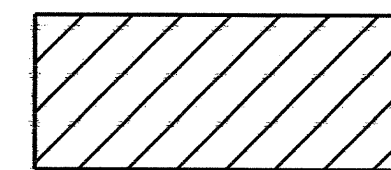
STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

NOTE:
FOR DROP INLETS AND CATCH BASINS NOT RECEIVING WATER FROM DISTURBED AREAS, INLET PROTECTION MAY BE DISREGARDED.

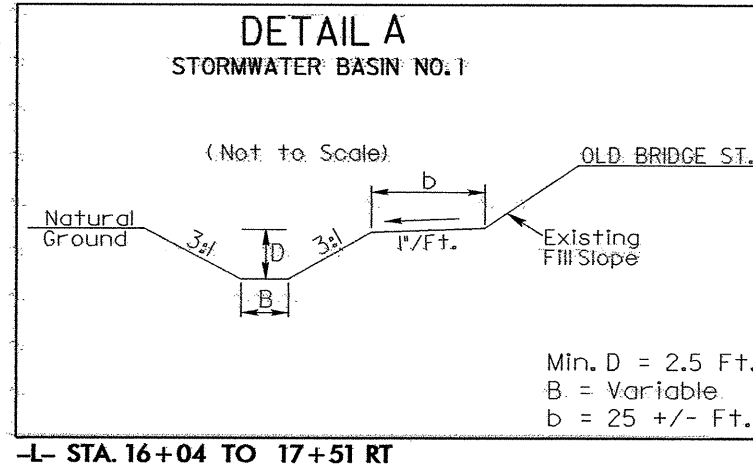
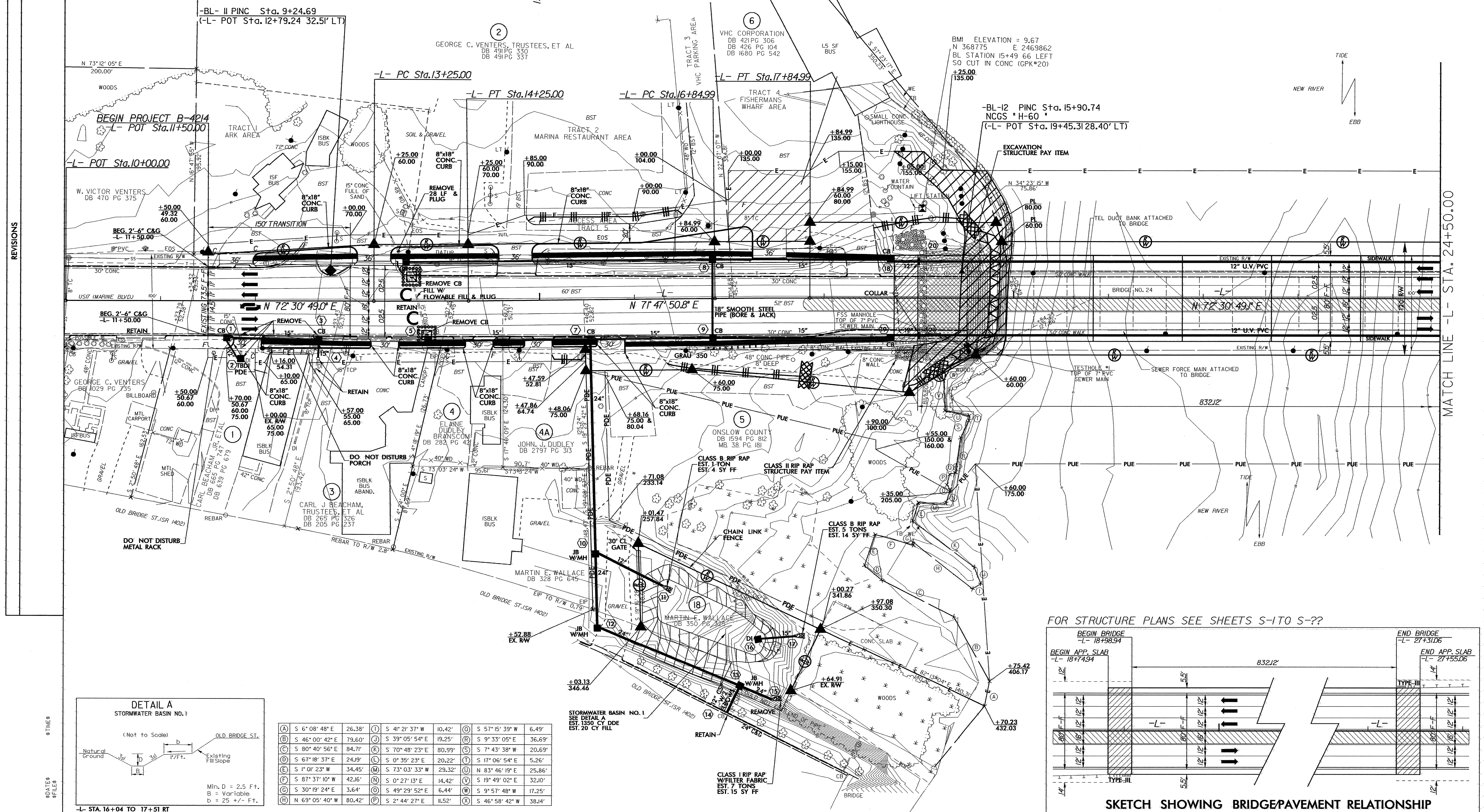
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

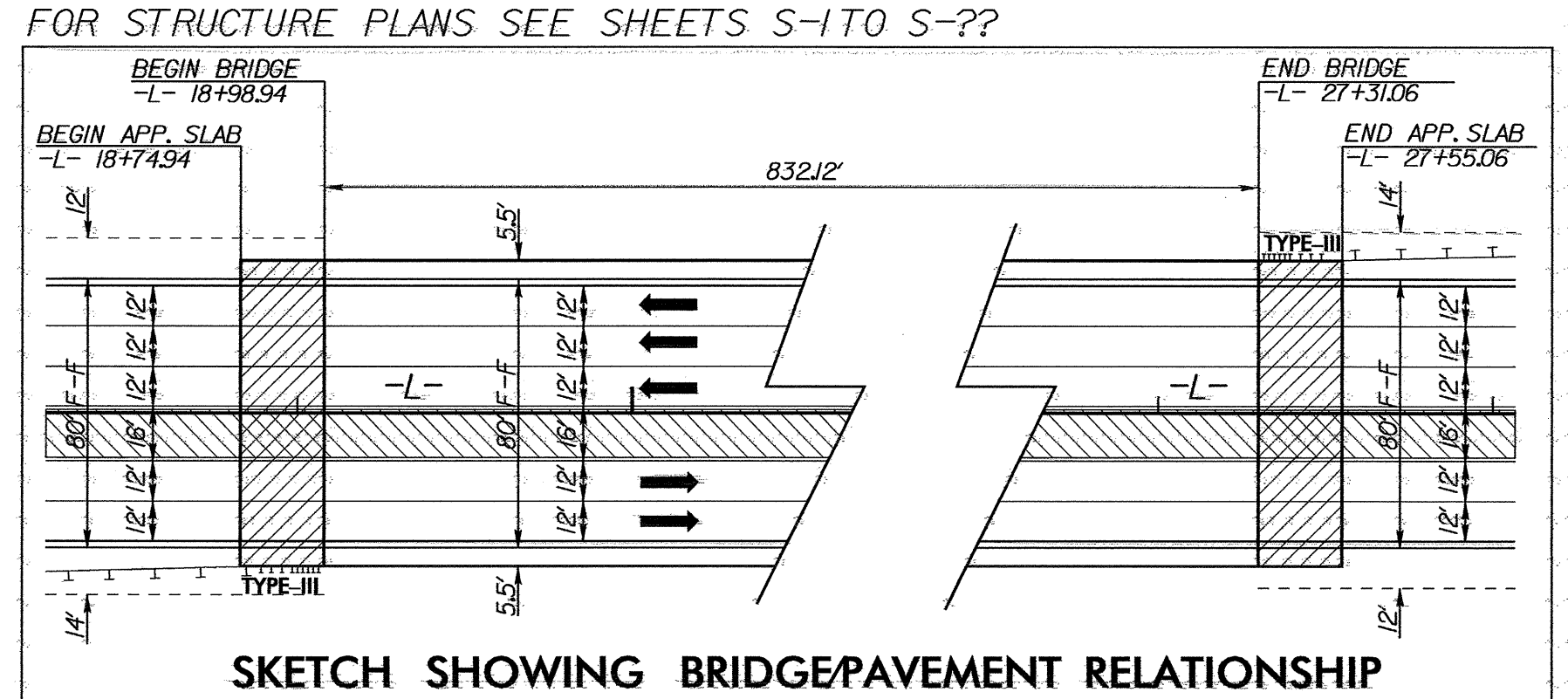
 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTE: UTILIZE TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.

FOR -L- PROFILE SEE SHEET 6



(A) S 6° 08' 48" E	26.38'	(I) S 41° 21' 37" W	10.42'	(O) S 57° 15' 39" W	6.49'
(B) S 46° 00' 42" E	79.60'	(J) S 39° 05' 54" E	19.25'	(P) S 9° 33' 05" E	36.69'
(C) S 80° 40' 56" E	84.71'	(K) S 70° 48' 23" E	80.99'	(Q) S 1° 43' 38" W	20.69'
(D) S 67° 18' 37" E	24.19'	(L) S 0° 35' 23" E	20.22'	(T) S 17° 06' 54" E	5.26'
(E) S 1° 01' 23" W	34.45'	(M) S 73° 03' 33" W	29.32'	(U) N 83° 46' 19" E	25.86'
(F) S 87° 37' 10" W	42.16'	(N) S 0° 27' 13" E	14.42'	(V) S 19° 49' 02" E	32.10'
(G) S 30° 19' 24" E	3.64'	(P) S 49° 29' 52" E	6.44'	(W) S 9° 57' 48" W	17.25'
(H) N 69° 05' 40" W	80.42'	(R) S 2° 44' 27" E	11.52'	(X) S 46° 58' 42" W	38.14'



REVISIONS

MATCH LINE -L- STA. 24+50.00

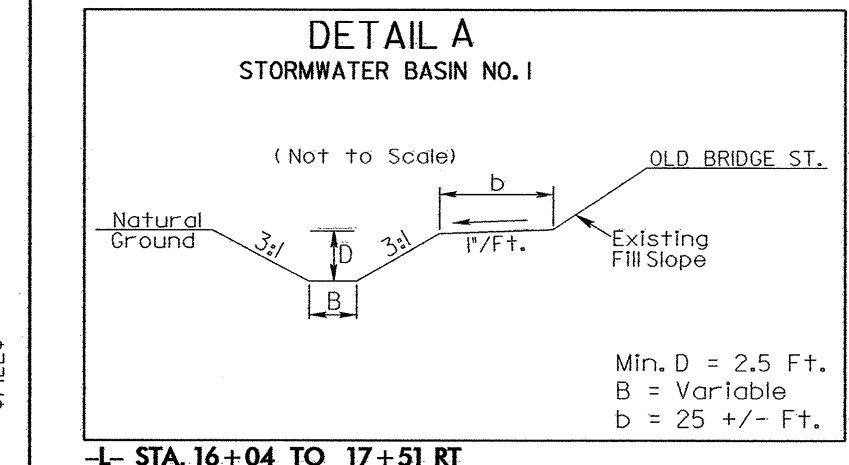
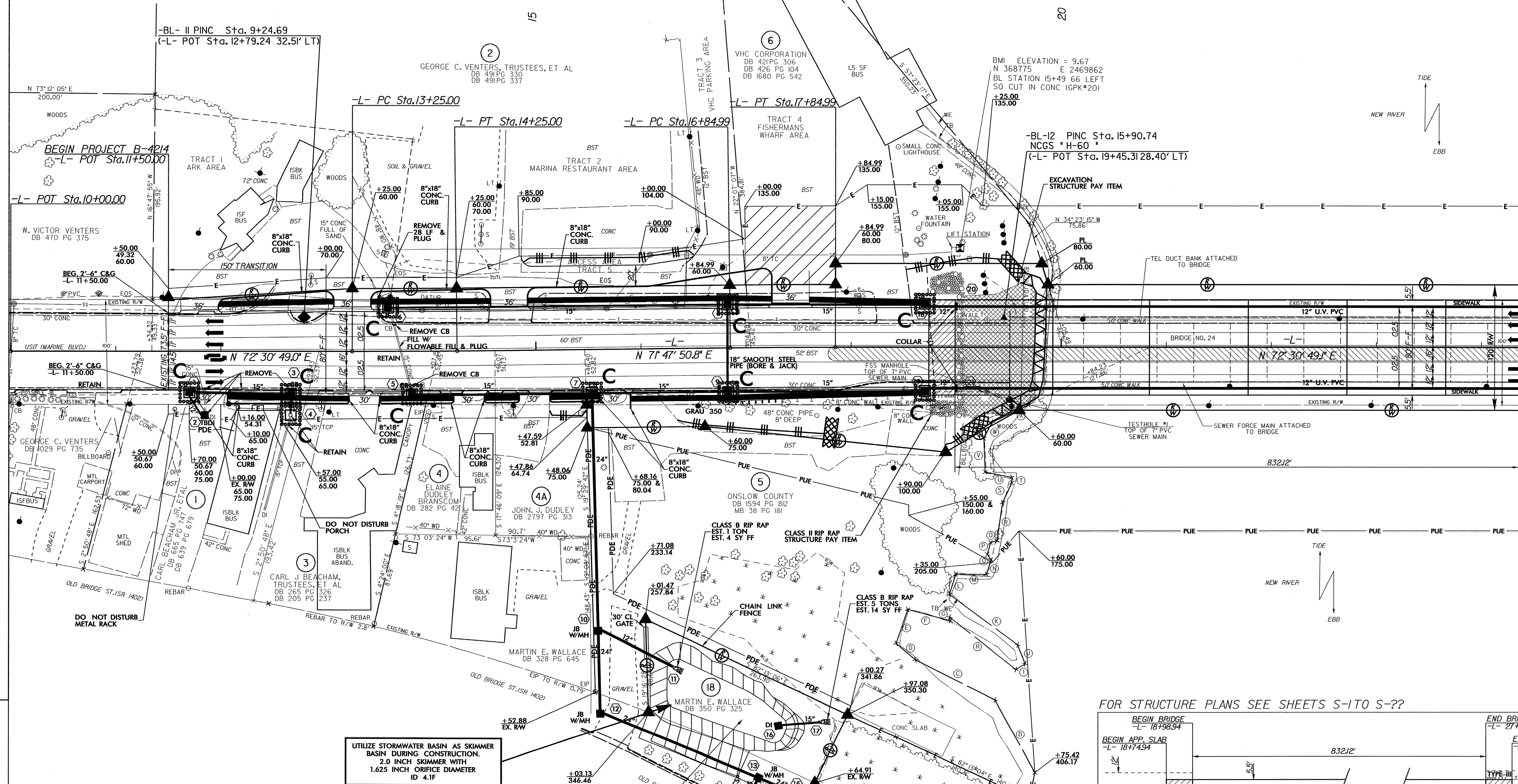
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-L- STA. 16+04 TO 17+51 RT

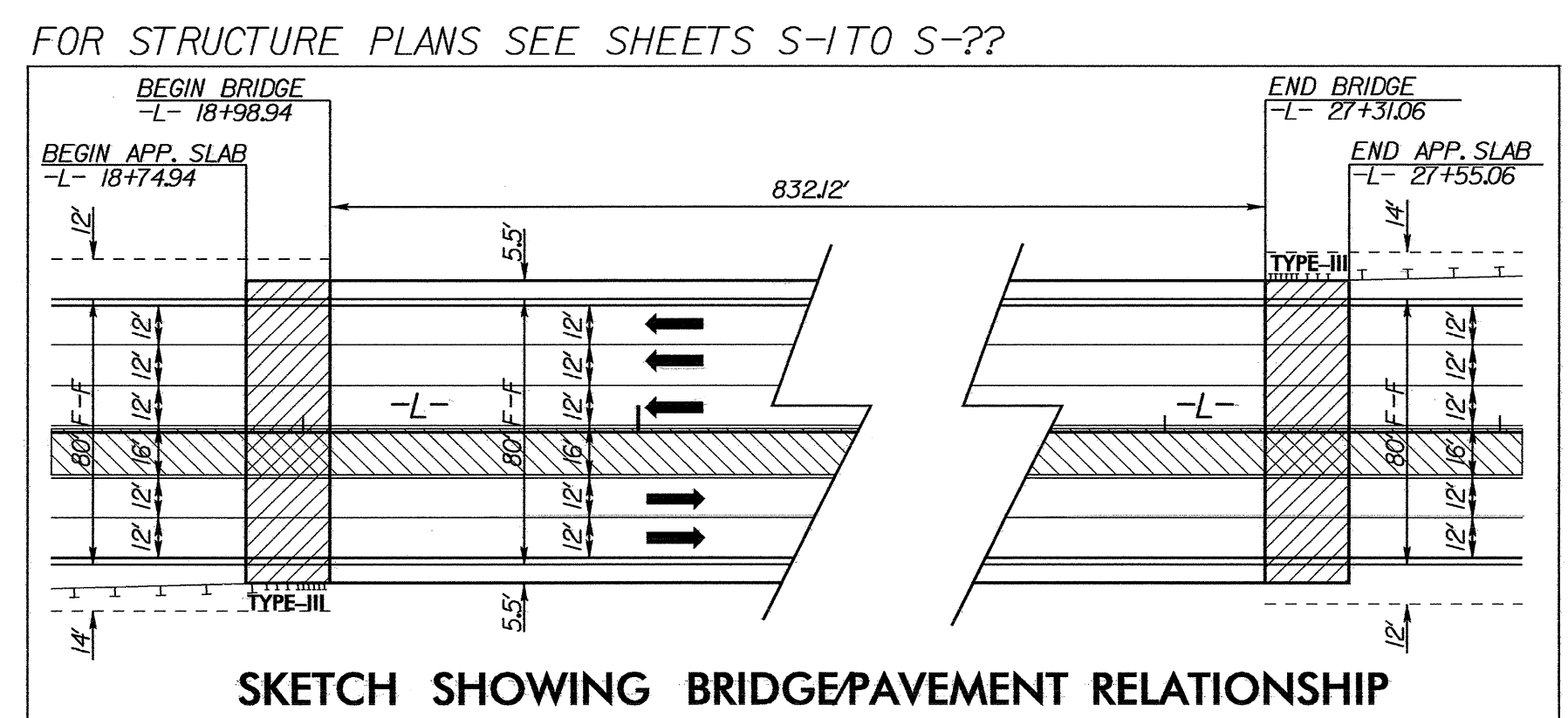
FOR -L- PROFILE SEE SHEET 6

NOTE:
FOR DROP INLETS AND CATCH BASINS NOT RECEIVING WATER FROM DISTURBED AREAS, INLET PROTECTION MAY BE DISREGARDED.

NOTE: UTILIZE SKIMMER BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.



(A) S 6° 08' 48" E	26.38'	(I) S 41° 21' 37" W	10.42'	(O) S 57° 15' 39" W	6.49'
(B) S 46° 00' 42" E	79.60'	(J) S 39° 05' 54" E	19.25'	(P) S 9° 33' 05" E	36.69'
(C) S 80° 40' 56" E	84.71'	(K) S 70° 48' 23" E	80.99'	(Q) S 7° 43' 38" W	20.69'
(D) S 67° 18' 37" E	24.19'	(L) S 0° 35' 23" E	20.22'	(T) S 17° 06' 54" E	5.26'
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(G) S 30° 19' 24" E	3.64'	(O) S 49° 29' 52" E	6.44'	(W) S 9° 57' 48" W	17.25'
(H) N 69° 05' 40" W	80.42'	(P) S 2° 44' 27" E	11.52'	(X) S 46° 58' 42" W	38.14'



REVISIONS

MATCH LINE -L- STA. 24+50.00

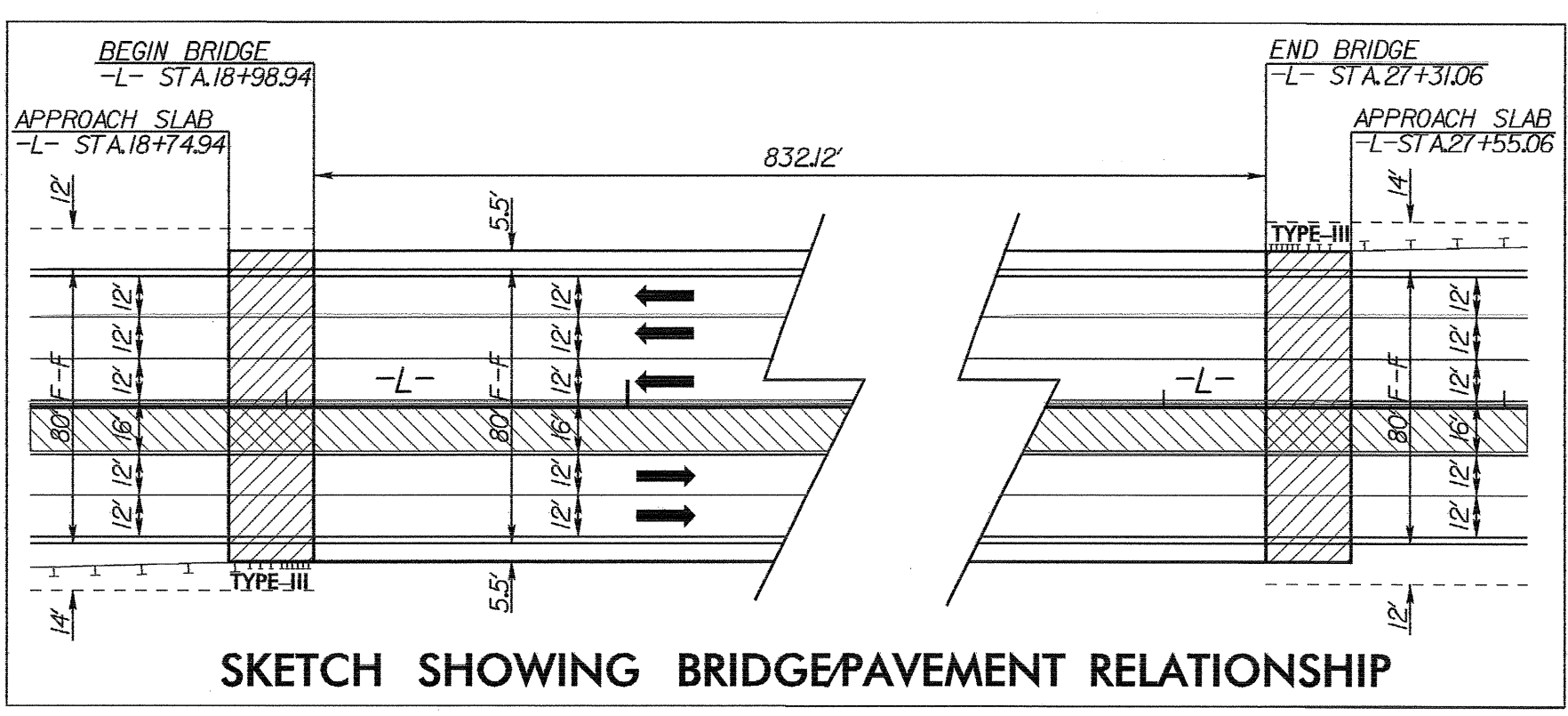
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-L- STA. 16+04 TO 17+51 RT

PROJECT REFERENCE NO.	SHEET NO.
B-4214	EC-6/CONST.5
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ENGINEER

FOR -L- PROFILE SEE SHEET 6

NOTE: UTILIZE SKIMMER BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.



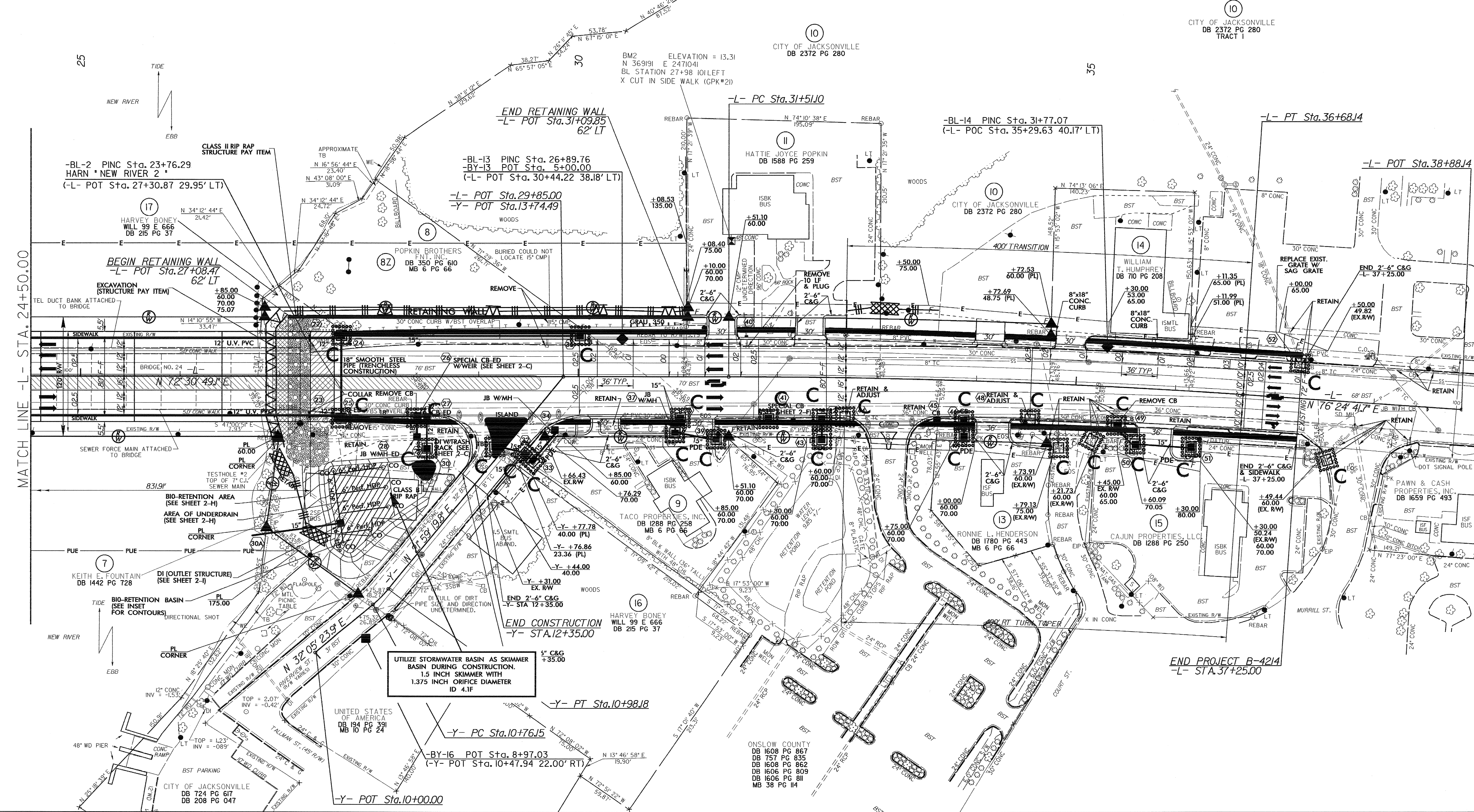
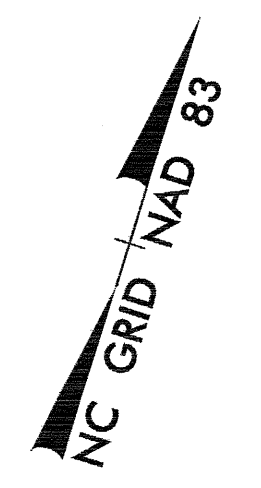
SKETCH SHOWING BRIDGE PAVEMENT RELATIONSHIP

FOR STRUCTURE PLANS SEE SHEETS S-1 TO S-??

-L-
 PI Sta 34+09.72
 $\Delta = 3' 53' 52.6''$ (RT)
 $D = 0' 45' 14.0''$
 $L = 517.04'$
 $T = 258.62'$
 $R = 7,600.00'$
 $SE = RC 025$
 $RO = 90'$
 $V = 50$ mph

-Y-
 PI Sta 10+87.19
 $\Delta = 10' 06' 04.1''$ (LT)
 $D = 45' 50' 11.8''$
 $L = 22.04'$
 $T = 11.05'$
 $R = 125.00'$

NOTE:
 FOR DROP INLETS AND CATCH BASINS NOT RECEIVING WATER FROM DISTURBED AREAS, INLET PROTECTION MAY BE DISREGARDED.



MATCH LINE -L- STA. 24+50.00

END PROJECT B-4214
 -L- STA. 37+25.00

UTILIZE STORMWATER BASIN AS SKIMMER BASIN DURING CONSTRUCTION.
 1.5 INCH SKIMMER WITH
 1.375 INCH ORIFICE DIAMETER
 ID 4.1F

REVISIONS

\$TIME\$
 \$DATE\$
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