PROJECT: I-4928

TIP I

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-4928	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

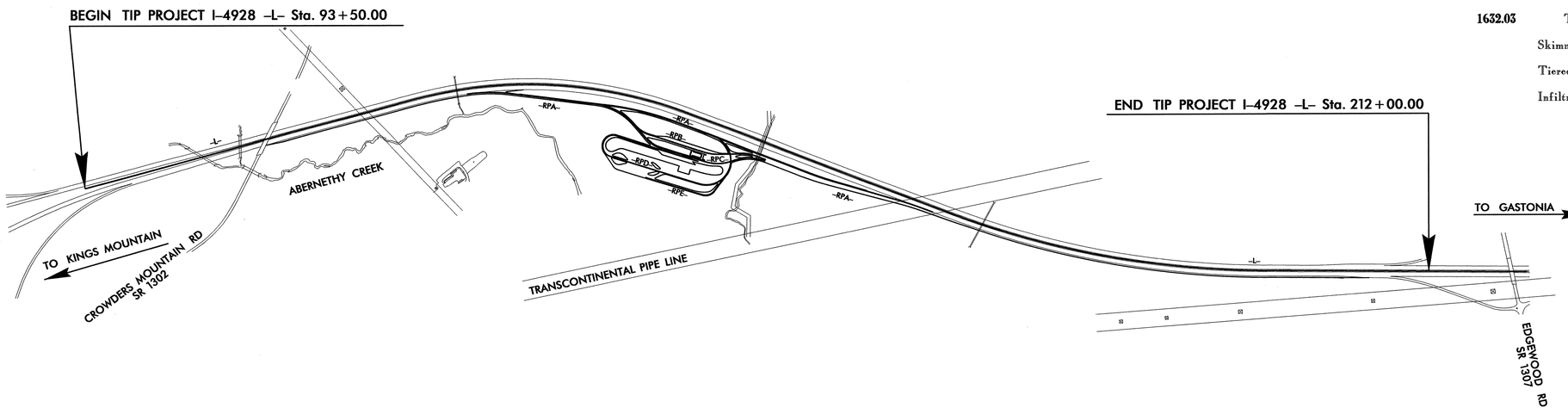
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

GASTON COUNTY

LOCATION: NEW I–85 NBL WEIGH STATION FROM SR 1302 (CROWDERS MOUNTAIN RD) TO SR 1307 (EDGEWOOD ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, CULVERT, WIDENING, PAVEMENT, SIGNING, WEIGH STATION BUILDINGS, STATIC SCALES, COMMERCIAL VEHICLE INFORMATION SYSTEMS NETWORKS (CVISN) WEIGH–IN–MOTION (WIM) SCALE SYSTEM, & LIGHTING

NAD 83/
NSRS 2007



EROSION AND SEDIMENT CONTROL MEASURES

Std.#	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
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	EW CFW
	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
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

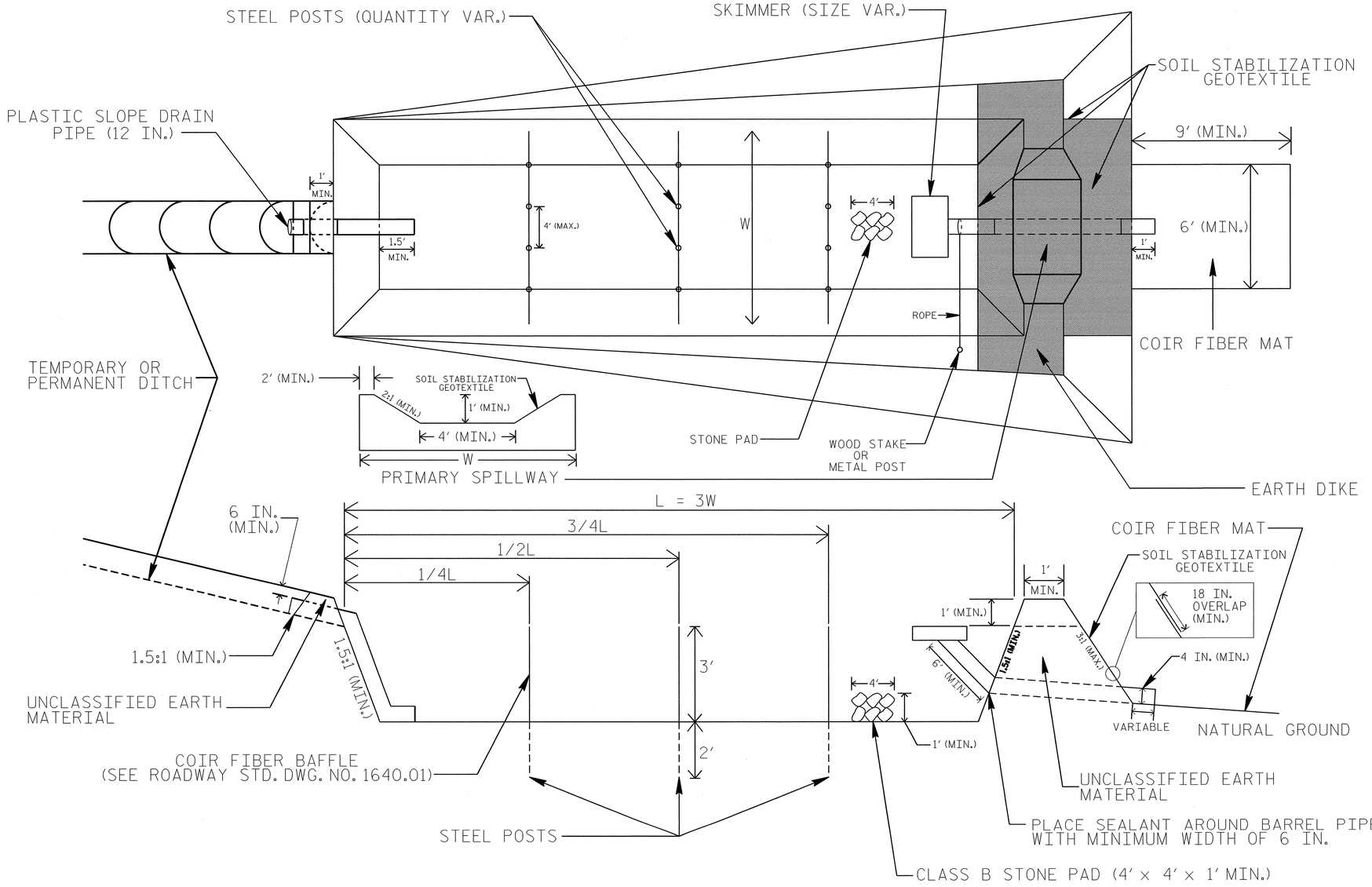
Roadway Standard Drawings

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 revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

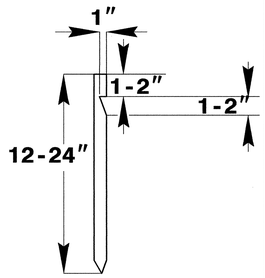
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type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

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

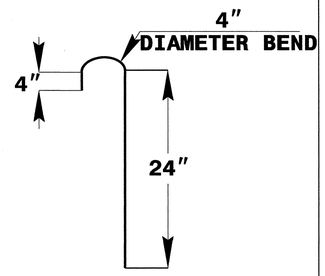
SKIMMER BASIN WITH BAFFLES DETAIL



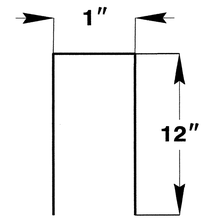
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

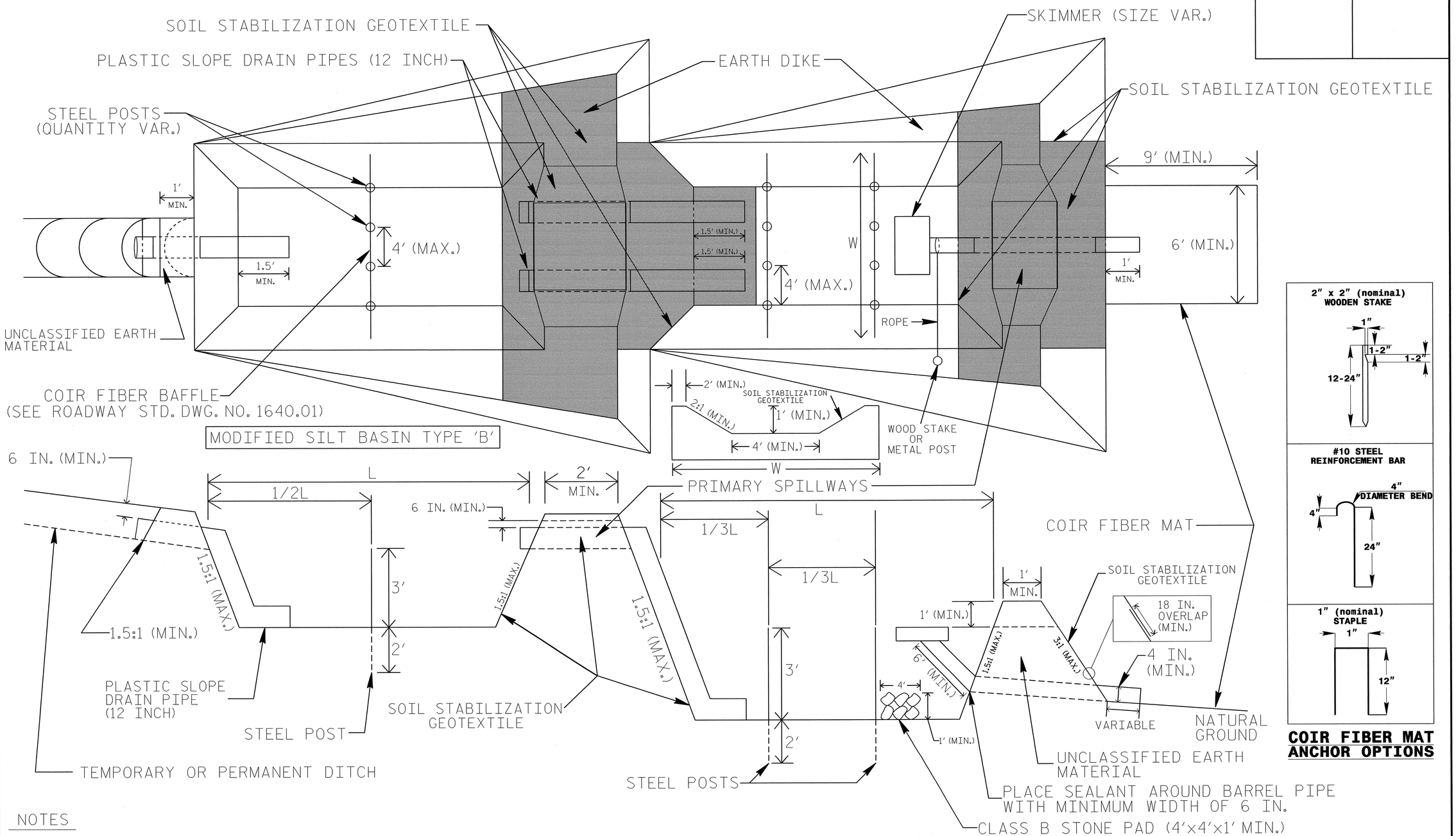
NOTES

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 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-4928	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TIERED SKIMMER BASIN DETAIL



COIR FIBER MAT ANCHOR OPTIONS

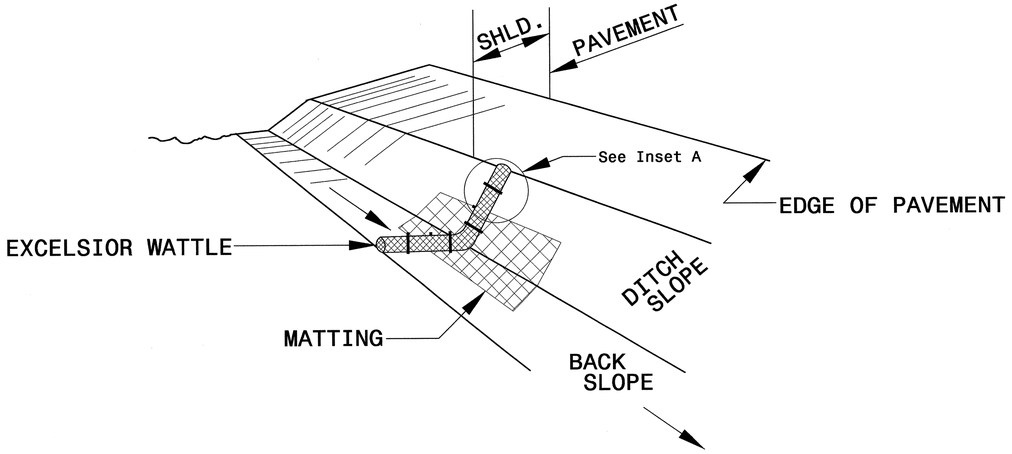
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY LENGTHS (FT.) USING Q/0.4, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

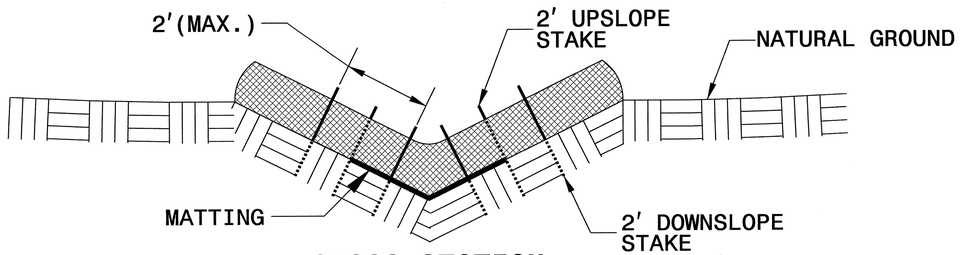
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

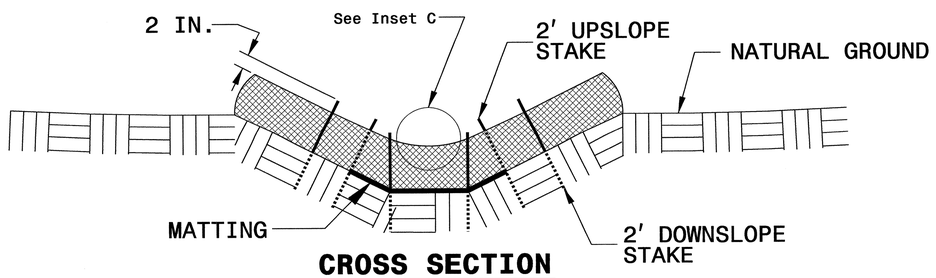
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

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.

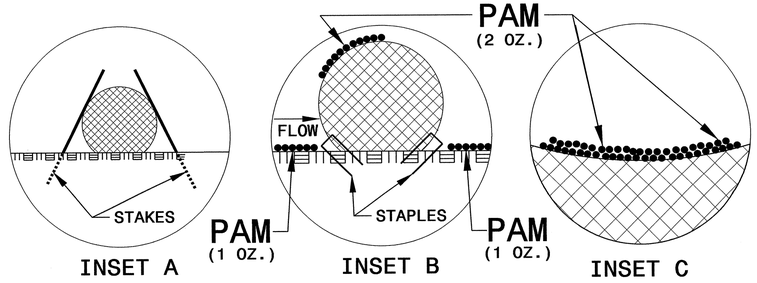
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

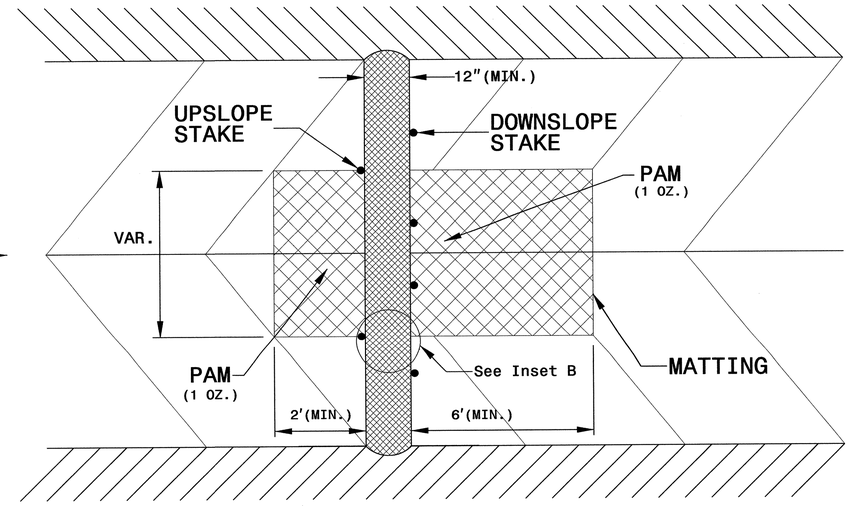
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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.

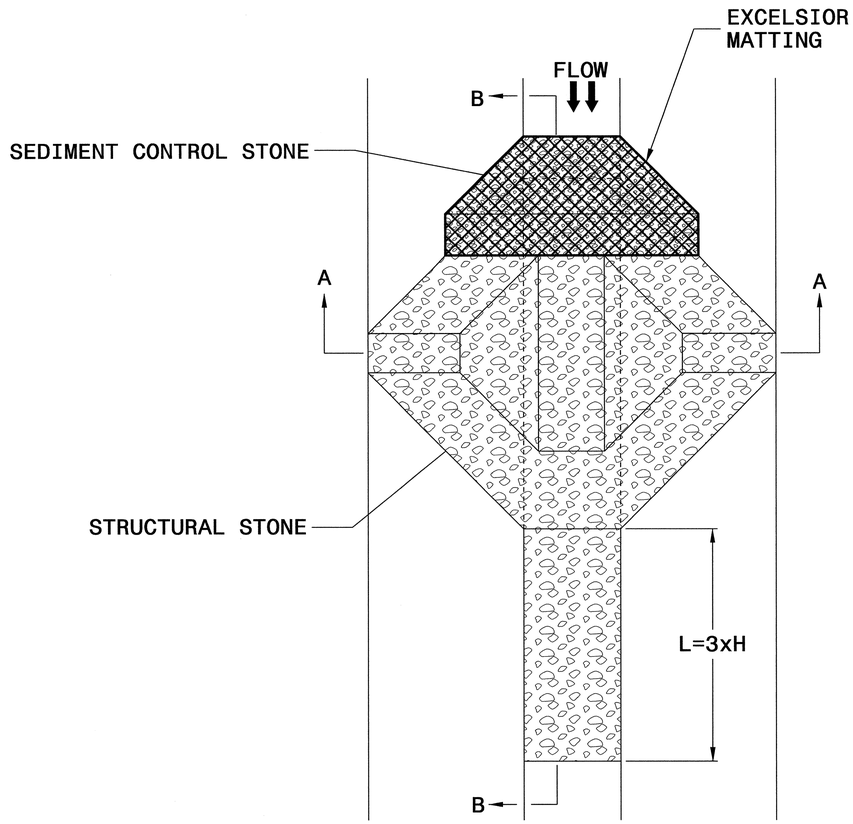




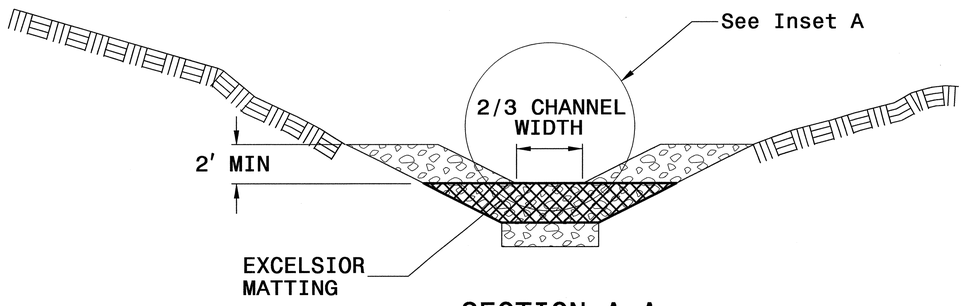
TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN



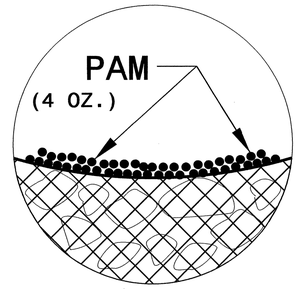
SECTION A-A

NOTES

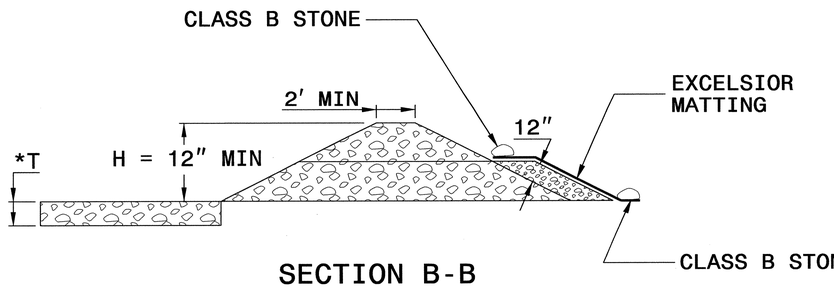
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.



INSET A



SECTION B-B

*T = 12" MIN., 18" MAX.

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-3

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
7	-L-	140+50	149+00	LT	955
7	-L-	141+00	141+50	RT	50
7	-L-	142+00	146+00	RT	365
7	-L-	150+50	162+50	LT	1,350
7	-L-	158+00	163+50	RT	500
7	-RPB-	16+86.31	17+82.77	MED	90
7	-RPB-	17+82.77	18+81.36	MED	95
7	-RPD-	15+50	16+50	MED	95
7	-RPD-	18+20.45	19+67.63	MED	135
8	-L-	167+00	168+00	RT	95
9	-L-	117+00	191+50	LT	1,320
11	-L-	192+50	199+00	RT	870
				SUBTOTAL	5,920
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					45,210
				TOTAL	51,130
				SAY	52,000

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

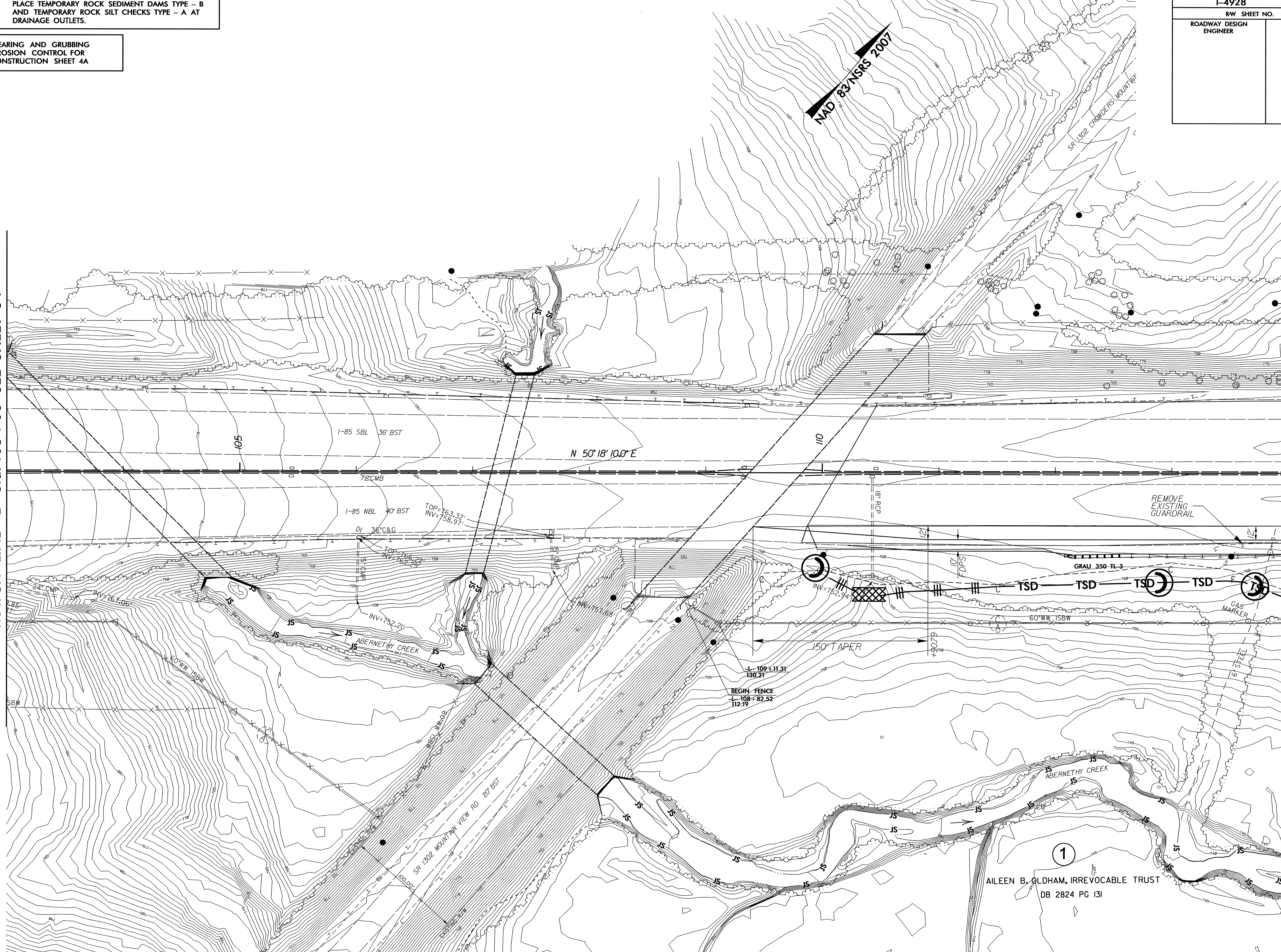
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	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

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 4A

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-4/CONST.4A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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8/17/99

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-5/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE –L– Sta. 114+00 SEE SHEET 04A

MATCH LINE –L–Sta. 125+00 SEE SHEET 06

–L– SC Sta. 123+70.00

–L– TS Sta. 121+25.00

N 50° 18' 10.0" E

I-85 SBL 36' BST

I-85 NBL 36' BST

RETAIN 15" RCP

RETAIN 24" RCP

REMOVE EXISTING GUARDRAIL

REMOVE ~10'-15" CMP

REMOVE DI & 10'-15" CMP

BEG. SBG –L– 114+50 Rt.

END SBG –L– 119+00 Rt.

BEG. SBG –L– 123+50 Rt.

TOP=763.24'

TOP=763.17
INV=760.42

TOP=764.38'

TOP=764.02
INV=758.58

TOP=766.90'

TOP=766.06
INV=763.85

INV=761.22

INV=745.43

INV=758.42'

INV=760.38'

INV=756.76

INV=761.84

15" RCP-III

24" RCP

36"C&G

13'PS

2GI

DI

(0501) (0502) (0503) (0504) (0505) (0506) (0507) (0508) (0509) (0510) (0511) (0512) (0513) (0514) (0515) (0516) (0517)

COLLAR/EXTEND
CL I RIP RAP
EST 2 TONS
FF 6 SY

COLLAR/EXTEND
CL I RIP RAP
EST 4 TONS
FF 12 SY

COLLAR/EXTEND
CL I RIP RAP
EST 2 TONS
FF 12 SY

GRADE TO DRAIN

TSD

TDE

JS

60"WW ISBW

–L– 115+49.00
129.99

–L– 115+72.00
158.00

–L– 117+50.00
130.53

–L– 117+21.00
158.00

–L– 123+42.93
130.31

–L– 123+42.95
150.19

64.00'

DUKE POWER COMPANY DB 954 PG 62

ABERNETHY CREEK

1

ODHAM, IRRECOVABLE TRUST
DB 2824 PG 131

50 x 20 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
12 ft. weir
ID 5.1

48 x 15 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
7 ft. weir
ID 5.2

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jpeacock
All REVISIONS

8/17/99

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 6

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-6/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE –L– Sta. 125+00 SEE SHEET 05

MATCH LINE –L– Sta. 136+00 SEE SHEET 07

I-85 SBL 36' BST

I-85 NBL 36' BST

REMOVE EXISTING GUARDRAIL

RETAIN

RETAIN 15" RCP

REMOVE DI & ~12'-15" CMP

REMOVE DI & ~13'-15" CMP

REMOVE DI PIPE

REMOVE DI PIPE

REMOVE EXISTING GUARDRAIL

RETAIN

RETAIN

-L- POC Sta.127+20.54
-RPA- PC Sta. 10+00.00

-RPA- 12+29.68
EXISTING R/W
(102.10)

-RPA- PT Sta.13+82.17

JB w/Slab Ltd

CL TRIP RAP
EST 2 TONS
FF 6 SY

CL TRIP RAP
EST 2 TONS
FF 6 SY

CL B RIP RAP
DON BANKS ONLY

SEE DETAIL A
BANK STABILIZATION
3' STD. BASE DITCH
W/CL I RIP RAP, BANKS ONLY
EST 11 TONS
FF 6 SY DD 8CUYD

END SBG
-RPA- 15+90 Rt.

BEGIN W/M SLAB
-RPA- STA.16+96.96

GRADE FOR SITE DISTANCE FROM WELSH STATION BUILDING

END FENCE
126+27.97
133.09

BEGIN FENCE
126+49.63
119.36

60 x 23 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
14 ft. weir
ID 6.1

100 x 30 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
20 ft. weir
ID 6.2F

TRUSTEES OF SHADY GROVE BAPTIST CHURCH
DB 3690 PG 047

ABERNETHY CREEK

AILEEN

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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 7

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-7/CONST.7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 136+00 SEE SHEET 06

MATCH LINE -L- Sta. 159+00 SEE SHEET 08

Modified Silt Basin Type 'B' 45 x 30 x 3 19 ft. weir (See Tiered Skimmer Basin Detail) ID 7.8

45 x 30 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 19 ft. weir (See Tiered Skimmer Basin Detail) ID 7.8

42 x 28 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 18 ft. weir (See Tiered Skimmer Basin Detail) ID 7.9

Modified Silt Basin Type 'B' 42 x 28 x 3 18 ft. weir (See Tiered Skimmer Basin Detail) ID 7.9

72 x 36 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 22 ft. weir ID 7.1

100 x 45 x 3 2.0 inch Skimmer with 1.875 inch Orifice Diameter 27 ft. weir ID 7.2F

25 x 60 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 18 ft. weir ID 7.3

18 x 38 x 3 1.5 inch Skimmer with 0.625 inch Orifice Diameter 10 ft. weir ID 7.10

40 x 130 x 3 2.0 inch Skimmer with 2.0 inch Orifice Diameter 28 ft. weir ID 7.4

90 x 42 x 3 2.0 inch Skimmer with 1.675 inch Orifice Diameter 28 ft. weir ID 7.5

92 x 50 x 3 2.0 inch Skimmer with 1.875 inch Orifice Diameter 28 ft. weir ID 7.7F

GRAPHIC SCALE
40 20 0 40 80
PLANS

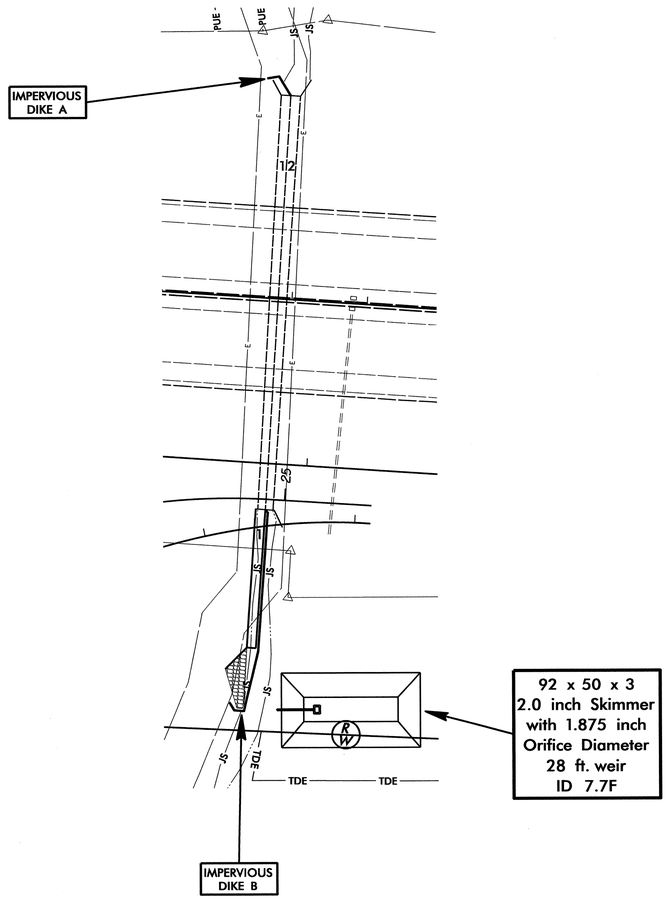
CULVERT CONSTRUCTION SEQUENCE STA. 153+40.68 –L–

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-8/CONST.7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PHASE I

1. UTILIZE SKIMMER BASIN 7.7F AS STILLING BASIN AS NEEDED THROUGHOUT CULVERT CONSTRUCTION.
2. CONSTRUCT IMPERVIOUS DIKES A AND B, DIVERTING FLOW THROUGH BARREL 2.
3. CONSTRUCT PROPOSED CULVERT EXTENSION FOR BARREL 1 AND PORTION OF OUTLET CHANNEL IMPROVEMENTS.
4. REMOVE IMPERVIOUS DIKES A AND B.

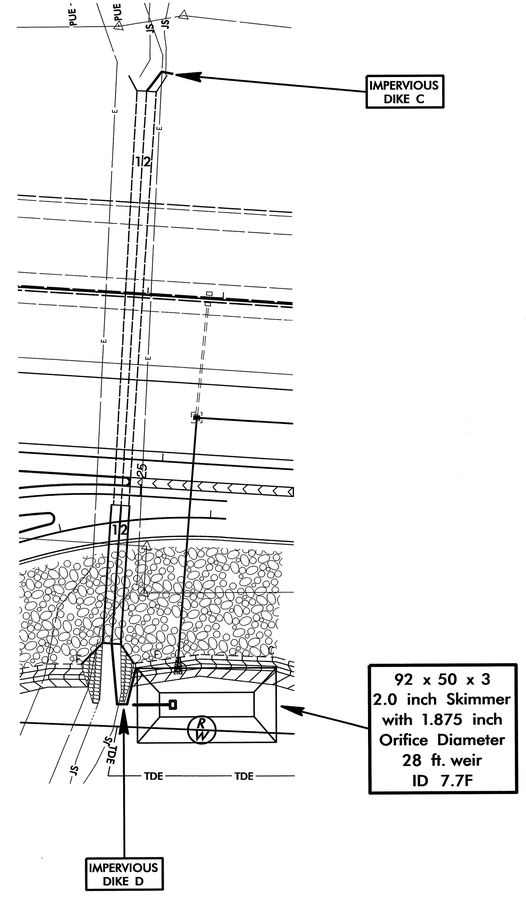
NAD 83/NSRS 2007



PHASE II

5. CONSTRUCT IMPERVIOUS DIKES C AND D, DIVERTING FLOW THROUGH COMPLETED BARREL 1.
6. CONSTRUCT PROPOSED CULVERT EXTENSION FOR BARREL 2 AND REMAINDER OF OUTLET CHANNEL IMPROVEMENTS.
7. REMOVE IMPERVIOUS DIKES C AND D.
8. COMPLETE ROADWAY.

NAD 83/NSRS 2007



8.17.99

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-9/CONST.8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 159+00 SEE SHEET 07

MATCH LINE -L- Sta. 170+00 EE SHEET 09

I-85 SBL 36' BST

I-85 NBL 36' BST

N 86° 17' 47.3" E

-RRA- PT Sta. 42+46.21

REMOVE EXISTING GUARDRAIL

10' FDPS

15" RCP-III

2GI

(0801) TOP=796.13 INV=793.38

(0802) TOP=798.69 INV=795.94

(0803) 2GDP=804.00 INV=800.00

JB w/Slab Lid TOP=811.32 INV=808.29

(0804) TOP=803.18 INV=808.29

(0805) TOP=808.84 INV=808.06

(0806) TOP=802.56

(0807) 2GI TOP=815.70 INV=812.70

(0808) EST 4 TONS FF 10 SY

(0809) INV=815.53 INV=815.00

(0810) TD

REMOVE 78' 18" RCP

INV=813.61' TOP=815.96'

REMOVE DI & PIPE

COLLAR/EXTEND

CL I RIP RAP EST 2 TONS FF 6 SY

END SBG -L- 170+00 Rt.

-L- 169+37.70 EXIST R/W (140.00)

-L- 169+00.00 EXIST R/W (130.38)

-L- 166+99.83 EXIST R/W (130.30)

60'WW ISBW

GRAU 350 TL-3

BEG. SBG -RPA- 46+84 Rt.

GRADE FOR SITE DISTANCE FROM WEIGH STATION BUILDING

500' TRANSITION

-RPA- CS Sta. 49+94.45

-L- POT Sta.169+08.91 = -RPA- ST Sta. 51+44.45 RT 46.37

-L- 169+38.33 244.64

-RPA- PC Sta. 48+37.53

RPA- 43+02.00 175.00

RPA- 46+80.00 118.93

RPA- 48+80.00 150.00

RPA- 47+50.00 108.55

RPA- 47+50.00 150.00

SEE DETAIL J LATERAL V DITCH W/CL I RIP RAP EST 104 TONS FF 54 SY DD 113CUYD

SEE DETAIL K SPECIAL CUT DITCH

TRANSCONTINENTAL GAS PIPE LINE RIGHT OF WAY DB 360 PG 40

TRANSCONTINENTAL GAS PIPE LINE RIGHT OF WAY DB 360 PG 50

POWER MARKER

GAS MARKER

EOI

36" STEEL

30" STEEL

TREE

4 DANIEL E. KINCAID AND RICHARD J. KINCAID DB 1974 PG 239

5

4 DANIEL E. KINCAID AND RICHARD J. KINCAID DB 1974 PG 239

3 I-85 HIGHWAY 27/74 LLC DB 3901 PG 491

58 x 30 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 18 ft. weir ID 8.1

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 8

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

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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 9

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-10/CONST.9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 170+00 SEE SHEET 08

MATCH LINE -L- Sta. 181+00 SEE SHEET 10

-L- PC Sta. 170+43.18

EXISTING R/W

60° WW ISBW

45BW

CUT

60 X 7.0 BARREL

REMOVE EXISTING GUARDRAIL

I-85 SBL 36' BST

I-85 NBL 36' BST

72"CMB

14"PS

175

180

END SBG -L- 170+00 Rt.

500' TRANSITION

-L- 172+63.56
245.73

-L- 173+31.37
245.82

BEGIN FENCE @ WINGWALL

END FENCE @ WINGWALL

-L- 175+37.37
144.44

-L- 175+37.79
246.07

-L- 177+20.00
EXIST R/W
(142.69)

-L- 177+60.00
187.00

-L- 178+64.00
226.00

-L- 179+37.49
140.61

GRAU 350 TL-3

CAT I

TD

3
I-85 HIGHWAY 27/74 LLC
DB 3901 PG 491

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jacoughlin

8/17/99

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 10

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-II/CONST.10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

Modified Silt Basin
Type 'B'
32 x 31 x 3
14 ft. weir
(See Tiered Skimmer Basin Detail)
ID 10.2

32 x 31 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
14 ft. weir
(See Tiered Skimmer Basin Detail)
ID 10.2

MATCH LINE –L– Sta. 181+00 SEE SHEET 09

MATCH LINE –L– Sta. 192+00 SEE SHEET 11

I-85 SBL 36' BST

I-85 NBL 36' BST

185

190

REMOVE DI

COLLAR/EXTEND

2GI, TYPE D

1002 TOP=811.70 INV=809.78

1003 TOP=805.67 INV=803.92 INV=803.73 TOP=806.76

1004 TOP=801.94 INV=800.00 TOP=802.30' INV=799.32'

1005

1006 TOP=793.19 INV=792.44

1007 TOP=792.79 INV=792.54

CAT-I

15" RCP

18" RCP

24" RCP

60"WW ISBW

EXISTING R/W

L– 181+20.00
183.00

L– 182+80.00
150.00

L– 183+70.00
233.00

L– 184+36.76
142.36

L– 184+37.84
178.73

L– 184+54.00
294.00

L– 185+50.00
321.00

L– 189+15.00
313.00

L– 190+52.00
240.00

L– 190+83.89
129.99

L– 190+85.75
179.47

L– 191+55.00
EXIST R/W
(130.05)

23 x 46 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
14 ft. weir
ID 10.1C&G

3
I-85 HIGHWAY 27/74 LLC
DB 3901 PG 491

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Microstation v8 REV 2.1.3

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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 11

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-12/CONST.11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE –L– Sta. 192+00 SEE SHEET 10

MATCH LINE –L– Sta. 203+00 SEE SHEET 12

–L– PT Sta. 197+80.17

N 65° 41' 12.0" E

I-85 SBL 36' BST

I-85 NBL 36' BST

72"CMB

16'PS

36" RCP

15" RCP

18" RCP

72" CMP

12" DIP

8" WELDED STEEL PIPE LINER

INV=792.71'

TOP=791.59'
INV(36")=786.86
INV(42")=786.32
REMOVE SEPERATED 4' SECTION
42" RCP-III
TB w/Hinb Lid
TOP=786.00
INV=786.86'
1102

CL I RIP RAP
EST 3 TONS
FF 7 SY
1101

SEE DETAIL L
4' STD. BASE DITCH
W/CL I RIP RAP
ON BANKS ONLY
–L– 192+42.00
150.00
EST 26 TONS
FF 15 SY
DD 10CUYD

1103
TDE

–L– 192+03.95
129.81

–L– 192+04.00
150.00

–L– 193+78.00
EXIST R/W
(128.98)

TOP=789.98'
INV=786.53'
1105

1104

2GI, TYPE D

B

3
I-85 HIGHWAY 27/74 LLC
DB 3901 PG 491

TOP=784.50
INV=782.58
15" RCP-III
1106

2GI, TYPE D
CL I RIP RAP
EST 2 TONS
FF 6 SY
1107

INV=773.91'

–L– 198+83.00
181.00

–L– 197+98.00
199.00

SEE DETAIL A
3' STD. BASE DITCH
W/CL I RIP RAP
EST 13 TONS
FF 7 SY

REMOVE EXISTING GUARDRAIL

TOP=786.70
INV=780.53

INV=780.75'
TOP=786.56'
1110
TB JB w/MH
INV=780.53'

36"C&G

1111

CL I RIP RAP
EST 11 TONs
FF 22 SY
DD 5CUYD
1112

CL I RIP RAP
EST 2 TONS
FF 8 SY

TOP=756.27
INV=748.78
1113

INV=748.78'
INV=748.00

–L– 199+38.00
EXIST R/W
(127.66)

1109

–L– 201+27.00
EXIST R/W

SEE DETAIL M
TOE PROTECTION
W/CL I RIP RAP
–L– STA. 201+00 TO 202+00 Rt.

–L– 201+27.00
200.00

Energy Dissipator Basin

PDE

JS

SEE DETAIL O
ROCK ENERGY DISSIPATOR BASIN
W/CLASS I RIP RAP

32 x 31 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
14 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 10.2

Modified Silt Basin
Type 'B'
22 x 16 x 3
6 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 11.3F

22 x 16 x 3
1.5 inch Skimmer
with 0.50 inch
Orifice Diameter
6 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 11.3F

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Plot Scale=1.0000 ' / Inch

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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 12

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-13/CONST12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

-L- Sta. 212+00.00 END TIP PROJECT I-4928

MATCH LINE -L- Sta. 203+00 SEE SHEET 11

MATCH LINE -L- Sta. 214+00 SEE SHEET 13

DIRECTION ONLY

DIRECTION ONLY

205

210

N 65°47'20"E

I-85 SBL 36' BST

I-85 NBL 36' BST

36" RCP

15" RCP

REMOVE EXISTING GUARDRAIL

END NEW LANE PAVMENT +91.72

36"C&G

CUT

FILL

CAT-1

INV=795.96'
TOP=799.02'

END RESURFACING +00

END RESURFACING

INV=752.85

1202

RIP RAP CLASS II TYPE 1 752.85

HEADWALL EXTENDED

60"WW ISBW

EXISTING R/W

-L- 205+18.00
EXIST R/W
END FENCE

-L- 205+18.00
163.00

PDE

SEE DETAIL I
3' LATERAL BASE DITCH
W/CL I RIP RAP
EST 136 TONS
FF 104 SY
DD 399CUYD

Temporary Rock Sediment Dam Type A 3 ft. weir height

RUTHERFORD ELECTRIC MEMBERSHIP CORPORATION
DB 1324 PG 810

RUTHERFORD ELECTRIC MEMBERSHIP CORPORATION
DB 1324 PG 810

150.00'

4 PS
16' BST
12 PS

60"WW ISBW

3

I-85 HIGHWAY 27/74 LLC
DB 3901PG 491

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PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-14/CONST.4A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 103+00 SEE SHEET 04

MATCH LINE -L- Sta. 114+00 SEE SHEET 05

SR 1302 CRONDERS MOUNTAIN

I-85 SBL 36' BST

N 50° 18' 10.0" E

72"CMB

I-85 NBL 40' BST

TOP=763.32'
INV=758.37'

D1 36"C&G

TOP=766.22'
INV=762.29'

15" CMP

INV=752.21'

15" CMP

INV=757.68'

24" CMP

INV=767.06'

INV=752.94'

ABERNETHY CREEK

60"WW ISBW

60"WW ISBW

MSL MM09

SR 1302 MOUNTAIN VIEW RD 20' BST

100.00' EXISTING R/W

105

110

18" RCP

REMOVE EXISTING GUARDRAIL

12'

10' FDPS

GRAU 350 TL-3

TSD TSD TSD TSD

GAS MARKER

150' TAPER

+90.79

-L- 109+11.31
130.21

BEGIN FENCE
-L- 108+82.52
112.19

6' STEEL

ABERNETHY CREEK

1

AILEEN B. OLDHAM, IRREVOCABLE TRUST
DB 2824 PG 131

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Projection: NAD83 NC FEET 2011

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PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-15/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 114+00 SEE SHEET 04A

MATCH LINE -L- Sta. 125+00 SEE SHEET 06

-L- SC Sta. 123+70.00

-L- TS Sta. 121+25.00

I-85 SBL 36' BST

I-85 NBL 36' BST

N 50° 18' 10.0" E

115

120

BEG. SBG -L- 114+50 Rt.

END SBG -L- 119+00 Rt.

BEG. SBG -L- 123+50 Rt.

RETAIN 15" RCP

RETAIN 24" RCP

REMOVE ~10'-15" CMP

REMOVE EXISTING GUARDRAIL

REMOVE DI & 10'-15" CMP

TOP=763.24'

TOP=763.17 INV=760.42

TOP=764.38'

TOP=764.02 INV=758.58

TOP=766.90'

TOP=766.45 INV=761.45

TOP=766.00 INV=763.85

INV=761.22'

INV=745.43'

INV=758.42'

INV=760.38'

INV=756.08'

INV=754.

INV=755.16

INV=756.75

INV=742.67'

INV=749.50

INV=754.

INV=754.

0501

0502

0503

0504

0505

0506

0507

0508

0509

0510

0511

0512

0513

0514

0515

0516

0517

15" RCP

24" RCP

18" CMP

15" CSP

15" RCP-III

12GI

36"C&G

13"PS

60"WW ISBW

TSD

TDE

JS

DI

COLLAR/EXTEND

CL I RIP RAP EST 2 TONS FF 6 SY

CL I RIP RAP EST 4 TONS FF 12 SY

GRADE TSD

DRAIN

-L- 115+49.00
129.99

-L- 115+72.00
158.00

-L- 117+50.00
130.53

-L- 117+21.00
158.00

-L- 123+42.93
130.31

-L- 123+42.95
150.19

64.00'

DUKE POWER COMPANY DB 934 PG 62

ABERNETHY CREEK

50 x 20 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
12 ft. weir
ID 5.1

48 x 15 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
7 ft. weir
ID 5.2

1

DHAM, IRREVOCABLE TRUST
DB 2824 PG 131

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PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-16/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 125+00 SEE SHEET 05

MATCH LINE -L- Sta. 136+00 SEE SHEET 07

I-85 SBL 36' BST

I-85 NBL 36' BST

REMOVE EXISTING GUARDRAIL

RETAIN

RETAIN

RETAIN

RETAIN

RETAIN 15" RCP

REMOVE DI & ~12'-15" CMP 0601 TOP=767.82 INV=761.14

REMOVE DI & ~13'-15" CMP 0602

0603

0604

0605

0606

0607 TOP=775.92 INV=773.17

0608 GRAU 350 TL-3

0609 GRAU 350 TL-3

0610

0611

REMOVE DI/PIPE

JB w/Slab Lid

CL I RIP RAP EST 2 TONS FF 6 SY

CL I RIP RAP EST 6 TONS FF 6 SY

CL B RIP RAP ON BANKS ONLY

SEE DETAIL A
BANK STABILIZATION
3' STD. BASE DITCH
W/CL I RIP RAP, BANKS ONLY
EST 11 TONS
FF 6 SY DD 8CUYD

72"CMB

15" CMP

30" RCP

15" RCP

15" RCP-III

N 72° 29' 42.0" E

12' PS

36"C&G

60"WW ISBW

EXISTING R/W

6.5' x 6.5' BARREL

-L- POC Sta.127+20.54
-RPA- PC Sta. 10+00.00

-RPA- PT Sta. 13+82.77

S 58°35'46" W
400.00'

-L- 125+00.00 150.03

-L- 125+54.00 168.00

-L- 126+30.00 168.00

-L- 126+30.00 149.70

-L- 126+01.30 149.79

END FENCE 126+27.97 123.09

BEGIN FENCE 126+49.63 119.36

-L- 126+71.70 149.57

-RPA- 12+29.68 EXISTING R/W (102.10)

-L- 129+42.72 148.36

-L- 130+25.00 174.86

-L- 130+74.00 204.00

-L- 131+32.00 215.00

-RPA- 14+80 112

END SBG -RPA- 15+90 Rt.

BEGIN W.M. SLAB -RPA- STA.16+96.96

GRADE FOR SITE DISTANCE FROM WEIGH STATION BUILDING

ABERNETHY CREEK

AILEEN

CABLE TRUST

TSD

JS

TDE

FDPS

CAT-1

1

60 x 23 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
14 ft. weir
ID 6.1

2

100 x 30 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
20 ft. weir
ID 6.2F

TRUSTEES OF SHADY GROVE
BAPTIST CHURCH
DB 3690 PG 047

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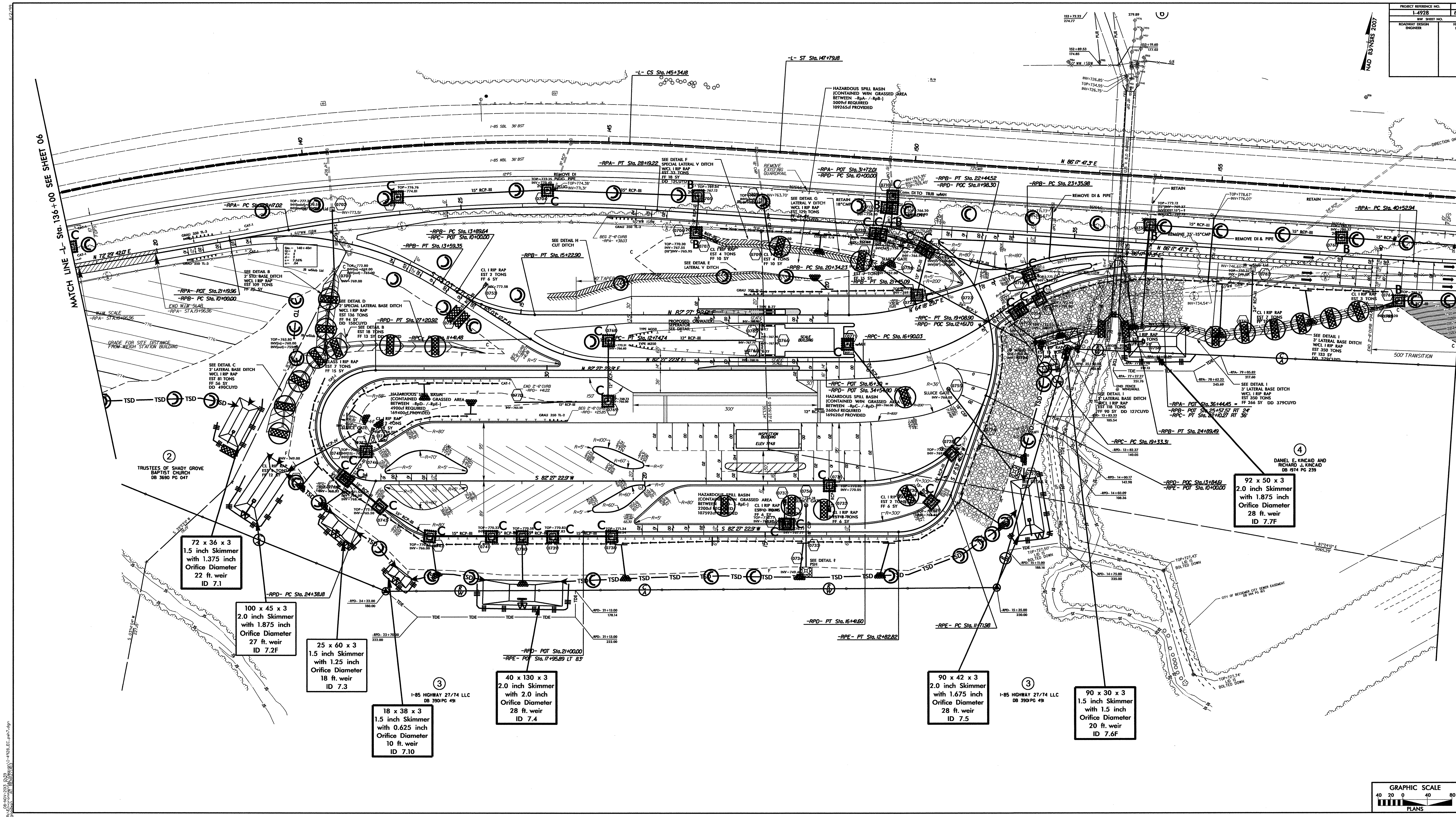
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SHEET NO. EC-17/CONST.7
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NAD 83/NSRS 2007
MATCH LINE -L- Sta. 136+00 SEE SHEET 06
MATCH LINE -L- Sta. 159+00 SEE SHEET 08
-L- CS Sta. 145+34.18
-L- ST Sta. 147+79.18
I-85 SBL 36' BST
I-85 NBL 36' BST
N 86°17' 47.3" E
N 72°29' 42.0" E
HAZARDOUS SPILL BASIN (CONTAINED W/IN GRASSED AREA BETWEEN -RpA- /-RpB-) 5009cf REQUIRED 109265cf PROVIDED
HAZARDOUS SPILL BASIN (CONTAINED W/IN GRASSED AREA BETWEEN -RpD- /-RpE-) 4900cf REQUIRED 169400cf PROVIDED
HAZARDOUS SPILL BASIN (CONTAINED W/IN GRASSED AREA BETWEEN -RpC- /-RpD-) 2600cf REQUIRED 169620cf PROVIDED
HAZARDOUS SPILL BASIN (CONTAINED W/IN GRASSED AREA BETWEEN -RpD- /-RpE-) 2200cf REQUIRED 107592cf PROVIDED
-RPA- PT Sta. 28+19.22
-RPA- POT Sta. 31+72.01
-RPD- PC Sta. 10+00.00
-RPB- PT Sta. 22+44.52
-RPD- POC Sta. 11+98.30
-RPB- PC Sta. 23+35.98
-RPA- PC Sta. 40+52.94
-RPA- POT Sta. 21+19.96
-RPB- PC Sta. 10+00.00
-RPB- PC Sta. 13+89.64
-RPC- POT Sta. 10+00.00
-RPB- PT Sta. 13+59.35
-RPB- PT Sta. 15+22.90
-RPB- PC Sta. 20+34.23
-RPB- PT Sta. 21+45.09
-RPC- PT Sta. 19+08.90
-RPD- POC Sta. 12+61.70
-RPC- PT Sta. 12+74.74
-RPC- PC Sta. 16+90.03
-RPC- POT Sta. 16+30 = -RPD- POT Sta. 34+54.80
-RPD- PT Sta. 27+20.92
-RPC- PC Sta. 11+41.48
-RPA- POT Sta. 36+44.45 = -RPB- POT Sta. 25+57.57 RT 24' -RPC- PT Sta. 22+10.27 RT 36'
-RPB- PT Sta. 24+89.49
-RPC- PC Sta. 19+33.31
-RPD- POC Sta. 13+84.61
-RPE- POT Sta. 10+00.00
-RPD- PC Sta. 24+38.18
-RPD- POT Sta. 21+00.00
-RPE- POT Sta. 17+95.89 LT 83'
-RPD- PT Sta. 16+41.60
-RPE- PT Sta. 12+82.82
-RPE- PC Sta. 11+71.98
SEE DETAIL B 2' STD. BASE DITCH W/CL I RIP RAP EST 109 TONS FF 75 SY
SEE DETAIL C 2' LATERAL BASE DITCH W/CL I RIP RAP EST 81 TONS FF 56 SY DD 490CUYD
SEE DETAIL D 2' SPECIAL LATERAL BASE DITCH W/CL I RIP RAP EST 136 TONS FF 94 SY DD 150CUYD
SEE DETAIL F SPECIAL LATERAL V DITCH W/CL I RIP RAP EST 33 TONS FF 18 SY DD 12CUYD
SEE DETAIL G LATERAL V DITCH W/CL I RIP RAP EST 129 TONS
SEE DETAIL H CUT DITCH
SEE DETAIL E LATERAL V DITCH
SEE DETAIL I 3' LATERAL BASE DITCH W/CL I RIP RAP EST 350 TONS FF 266 SY DD 379CUYD
SEE DETAIL I 3' LATERAL BASE DITCH W/CL I RIP RAP EST 350 TONS FF 133 SY DD 379CUYD
SEE DETAIL I 3' LATERAL BASE DITCH W/CL I RIP RAP EST 118 TONS FF 90 SY DD 127CUYD
GRADE FOR SITE DISTANCE FROM WEIGH STATION BUILDING
PROPOSED OIL/WATER SEPERATOR SEE DETAIL
SCALE BUILDING
INSPECTION BUILDING ELEV 774.8
REMOVE EXISTING GUARDRAIL
REMOVE DI & PIPE
REMOVE 75'-15"CMP
RETAIN
500' TRANSITION
DIRECTION ONLY
SLUICE GATE
(2) TRUSTEES OF SHADY GROVE BAPTIST CHURCH DB 3690 PG 047
(3) I-85 HIGHWAY 27/74 LLC DB 3901 PG 491
(4) DANIEL E. KINCAID AND RICHARD J. KINCAID DB 1974 PG 239
CITY OF BESSEMER CITY SEWER EASEMENT DB 1144 PG 163
S 87°24'12" E 2065.29'
72 x 36 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 22 ft. weir ID 7.1
100 x 45 x 3 2.0 inch Skimmer with 1.875 inch Orifice Diameter 27 ft. weir ID 7.2F
25 x 60 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 18 ft. weir ID 7.3
18 x 38 x 3 1.5 inch Skimmer with 0.625 inch Orifice Diameter 10 ft. weir ID 7.10
40 x 130 x 3 2.0 inch Skimmer with 2.0 inch Orifice Diameter 28 ft. weir ID 7.4
90 x 42 x 3 2.0 inch Skimmer with 1.675 inch Orifice Diameter 28 ft. weir ID 7.5
90 x 30 x 3 1.5 inch Skimmer with 1.5 inch Orifice Diameter 20 ft. weir ID 7.6F
92 x 50 x 3 2.0 inch Skimmer with 1.875 inch Orifice Diameter 28 ft. weir ID 7.7F
GRAPHIC SCALE 40 20 0 40 80 PLANS
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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-18/CONST.8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

Place Matting for Erosion Control on Slope as Work Allows. Sta. 168+50 to Sta. 170+50

MATCH LINE -L- Sta. 159+00 SEE SHEET 07

MATCH LINE -L- Sta. 170+00 EE SHEET 09

I-85 SBL 36' BST

I-85 NBL 36' BST

N 86° 17' 47.3" E

N 81° 52' 01.4" E

REMOVE EXISTING GUARDRAIL

-RPA- PT Sta. 42+46.21

15" RCP-III

15" RCP

18" RCP

24" RCP

30" RCP

36" STEEL

30" STEEL

JB w/Slab Lid
TOP=811.39'
INV=808.29'

REMOVE DI & PIPE

REMOVE 18" RCP

COLLAR/EXTEND

CL I RIP RAP
EST 2 TONS
FF 6 SY

END SBG
-L- 170+00 Rt.

BEG. SBG
-RPA- 46+84 Rt.

GRADE FOR SITE DISTANCE FROM WEIGH STATION BUILDING

500' TRANSITION

-RPA- 46+80.00
118.93

-RPA- 46+80.00
150.00

-RPA- 47+50.00
108.55

-RPA- 47+50.00
150.00

SEE DETAIL J
LATERAL V DITCH
W/CL I RIP RAP
EST 104 TONS
FF 54 SY
DD 113CUYD

SEE DETAIL K
SPECIAL CUT DITCH

-RPA- PC Sta. 48+37.53

-RPA- CS Sta. 49+94.45

-L- POT Sta.169+08.91 =
-RPA- ST Sta. 51+44.45 RT 46.37

-L- 166+99.83
EXIST R/W
(130.30)

-L- 169+00.00
EXIST R/W
(130.38)

-L- 169+37.70
EXIST R/W
(140.00)

-L- 169+38.33
244.64

-RPA- 43+02.00
175.00

TRANSCONTINENTAL PIPE LINE RIGHT OF WAY
DB 360 PG 40

TRANSCONTINENTAL PIPE LINE RIGHT OF WAY
DB 360 PG 40

**58 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
18 ft. weir
ID 8.1**

(4) DANIEL E. KINCAID AND RICHARD J. KINCAID DB 1974 PG 239

(5)

(4) DANIEL E. KINCAID AND RICHARD J. KINCAID DB 1974 PG 239

(3) I-85 HIGHWAY 27/74 LLC DB 3901 PG 491

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pscoggins
ATTENTION: ALL

8.17.99

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-19/CONST.9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE -L- Sta. 170+00 SEE SHEET 08

MATCH LINE -L- Sta. 181+00 SEE SHEET 10

-L- PC Sta. 170+43.18

EXISTING R/W

60" WW ISBW

45BW

CUL2

CUL1

7.0' X 7.0' BARREL

I-85 SBL 36' BST

I-85 NBL 36' BST

72"CMB

14"PS

REMOVE EXISTING GUARDRAIL

12'

10' FDPS

GRAU 350 TL-3

CAT-1

END SBG
-L- 170+00 Rt.

500' TRANSITION

+59.8

CUL3

CUL4

-L- 172+63.56
245.73

-L- 173+31.37
245.82

-L- 175+37.37
144.44

-L- 175+37.79
246.07

-L- 177+20.00
EXIST R/W
(142.69)

-L- 177+60.00
187.00

-L- 179+37.49
140.61

-L- 178+64.00
226.00

BEGIN FENCE @ WINGWALL

END FENCE @ WINGWALL

Place Matting for Erosion Control on Slope as Work Allows. Sta. 168+50 to Sta. 170+50

Place Matting for Erosion Control on Slope as Work Allows. Sta. 175+50 to Sta. 176+00

3

I-85 HIGHWAY 27/74 LLC
DB 3901 PG 491

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bpeacock
ATTENTION!!!

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-20/CONST.10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

MATCH LINE –L– Sta. 181+00 SEE SHEET 09

MATCH LINE –L– Sta. 192+00 SEE SHEET 11

I-85 SBL 36' BST

I-85 NBL 36' BST

185

190

15" RCP

REMOVE DI

COLLAR/EXTEND

TOP=812.24'
INV=809.83'

TOP=811.70
INV=809.78

TOP=806.67'
INV=803.97'

INV=803.73'
TOP=806.76'

TOP=801.94'
INV=798.80'

TOP=802.30'
INV=799.32'

TOP=796.44'
INV=793.44'

INV=792.

36" RCP

RCP-III

CAT-1

FDPS

12'

10'

1001

1002

1003

1004

1005

60'WW ISBW

EXISTING R/W

-L- 181+20.00
183.00

-L- 182+80.00
150.00

-L- 183+70.00
233.00

-L- 184+54.00
294.00

-L- 185+50.00
321.00

-L- 184+36.76
142.36

-L- 184+32.84
178.73

-L- 189+15.00
313.00

-L- 190+52.00
240.00

-L- 190+85.75
179.47

-L- 190+83.89
129.99

-L- 191+55.00
EXIST R/W
(130.05)

3

I-85 HIGHWAY 27/74 LLC
DB 3901 PG 491

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Microstation V8i (SELECTseries 2)

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-21/CONST.11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

Place Matting for Erosion Control on Slope as Work Allows. Sta. 199+00 to Sta. 205+00

MATCH LINE -L- Sta. 192+00 SEE SHEET 10

MATCH LINE -L- Sta. 203+00 SEE SHEET 12

-L- PT Sta. 197+80.17

N 65° 47' 12.0" E

I-85 SBL 36' BST

I-85 NBL 36' BST

72"CMB

36"RCP

15"RCP

18"RCP

16"PS

12"

10' FDPS

36"C&G

60'WW ISBW

INV=792.71'

TOP=791.59'
INV(36")=786.96
INV(42")=786.32
REMOVE SEPERATED 4' SECTION 42" RCP-III
1102 JB w/Slab Lid TOP=788.00 INV=786.86'
1101 CL I RIP RAP EST 3 TONS FF 7 SY
1103 TDE
SEE DETAIL L 4' STD. BASE DITCH W/CL I RIP RAP ON BANKS ONLY EST 26 TONS FF 15 SY DD 10CUYD
-L- 192+42.00 150.00
-L- 192+03.95 129.81
-L- 192+04.00 150.00
-L- 193+78.00 EXIST R/W (128.98)

REMOVE DI TOP=789.98' INV=786.53'
1104 1105 B

3
I-85 HIGHWAY 27/74 LLC
DB 3901PG 491

GRAU 350 TL-3
1106 TOP=784.50 INV=782.58 JB w/Slab Lid
15" RCP-III
B TYPE 9.00
1107 CL I RIP RAP EST 2 TONS FF 6 SY
INV=773.91'
-L- 198+83.00 181.00
-L- 199+38.00 EXIST R/W (127.66)
SEE DETAIL A 3' STD. BASE DITCH W/CL I RIP RAP EST 13 TONS FF 7 SY
-L- 197+98.00 199.00

REMOVE EXISTING GUARDRAIL
TOP=786.70 INV=780.53
INV=780.75' TOP=786.56'
1110 TB JB w/MH INV=780.53'
24" WELDED STEEL PIPE LINER
72" CMP
GRAU 350 TL-3
1108 TOP=777.10 INV(36")=773.91 INV(30")=772.83 INV=773.00
CL III RIP RAP EST 11 TONs FF 22 SY DD 5CUYD
1112 CL I RIP RAP EST 2 TONS FF 8 SY
1109 -L- 201+27.00 EXIST R/W
SEE DETAIL M TOE PROTECTION W/CL I RIP RAP -L- STA. 201+00 TO 202+00 Rt.
-L- 201+27.00 200.00
1111 TOP=756.27 INV=748.78 INV=748.50
1113 JB w/Slab Lid INV=748.78 INV=748.00
Energy Dissipator Basin
SEE DETAIL O ROCK ENERGY DISSIPATOR BASIN W/CLASS I RIP RAP
PDE JS

Modified Silt Basin Type 'B' 22 x 16 x 3 6 ft. weir (See Tiered Skimmer Basin Detail) ID 11.3F

22 x 16 x 3 1.5 inch Skimmer with 0.50 inch Orifice Diameter 6 ft. weir (See Tiered Skimmer Basin Detail) ID 11.3F

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Microstation 8.1 (DEVELOPER)

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
I-4928	EC-22/CONSTJ2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

-L- Sta.212+00.00 END TIP PROJECT I-4928

Place Matting for Erosion Control on Slope as Work Allows. Sta. 199+00 to Sta. 205+00

MATCH LINE -L- Sta. 203+00 SEE SHEET 11

MATCH LINE -L- Sta. 214+00 SEE SHEET 13

TION ONLY

DIRECTION ONLY

205

210

I-85 SBL 36' BST

N 65°47'12.0" E

I-85 NBL 36' BST

DIRECTION ONLY

36" RCP

REMOVE EXISTING GUARDRAIL

END NEW LANE PAVMENT +91.72

12'

36"C&G

10' FDPS

10' FDPS

14' FDPS

CAT-1

15" RCP

INV=795.96'
TOP=799.02'

END RESURFACING +00

1202

INV=752.85'

COLLAR AND EXTEND

INV=755.65'

60"WW, ISBW

EXISTING R/W

PDE

-L- 205+18.00
EXIST RW
END FENCE

-L- 205+18.00
163.00

20

21

22

END RESURFACING

48" BST

16' BST

12"PS

23

RUTHERFORD ELECTRIC MEMBERSHIP CORPORATION
DB 1324 PG 810

60"WW, ISBW

SEE DETAIL I
3' LATERAL BASE DITCH
W/CL I RIP RAP
EST 136 TONS
FF 104 SY
DD 399CUYD

150.00'

Temporary Rock Sediment Dam Type A 3 ft. weir height

RUTHERFORD ELECTRIC MEMBERSHIP CORPORATION
DB 1324 PG 810

3

I-85 HIGHWAY 27/74 LLC
DB 3901 PG 491

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jwoodburn
ALL REVISIONS