02/03/98

PROJECT REFERENCE NO.	SHEET NO.
K-3807	E1

PLANS AND DETAILS FOR PROPOSED LIGHTING / ELECTRICAL CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER PAUL KI-BUN CHIN 10/9/07

NOTES

1. PLACE LIGHT STANDARDS 10′ FROM EDGE OF TRAVEL LANE, 6′ BEHIND CURB, OR 3′ BEHIND SIDEWALK.
2. INSTALL JUNCTION BOXES 1′ FROM BACK OF CURB OR EDGE OF SIDEWALK.
3. USE SCALED DIMENSIONS FOR STANDARDS NOT LOCATED WITH STATION NUMBERS.
4. AT THESE LOCATIONS TILT LUMINAIRE UP BY 2 DEGREES
5. AT THESE LOCATIONS USE DAVIT POLES WITH 25′ MOUNTING HEIGHT
6. STUB CIRCUIT OUT IN JUNCTION BOX. CONNECTION TO STORAGE BUILDING TO BE PROVIDED BY OTHERS.
7. AT THESE LOCATIONS PROVIDE 3″ ELECTRICAL DUCT IN ACCORDANCE WITH NEC REQUIREMENTS FOR AN APPROVED RACEWAY. SEE TABLE C THIS SHEET.
8. STUB CIRCUIT OUT IN JUNCTION BOX. CONNECTION TO ENTRY SIGN LIGHTS TO BE PROVIDED BY OTHERS.
9. STUB CIRCUIT OUT IN JUNCTION BOX. CONNECTION TO FLAG LIGHTS TO BE PROVIDED BY OTHERS.
10. STUB CIRCUIT OUT IN JUNCTION BOX. CONNECTION TO FOUNTAIN PUMP AND CONNECTION INSIDE BUILDING TO BE PROVIDED BY OTHERS.

ROADWAY STANDARDS

THE FOLLOWING ROADWAY ENGLISH STANDARDS AS APPEAR IN "ROADWAY ENGLISH STANDARD DRAWINGS", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD DRAW	DESCRIPTION
1405.01	STANDARD FOUNDATION
1406.01	LIGHT STANDARD LUMINAIRES
1409.01	ELECTRICAL DUCT
1410.01	FEEDER CIRCUIT
1411.01	ELECTRICAL JUNCTION BOXES

PERFORM ALL WORK IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES DATED JULY 2006, AND PROJECT SPECIAL PROVISIONS TITLED " REST AREA LIGHTING."

SCOPE OF WORK

PROVIDE REST AREA LIGHTING BY INSTALLING POST TOP STANDARDS WITH 100 WATT METAL HALIDE (MH) LUMINAIRES, BOLLARD PRE-CAST CONCRETE STANDARDS WITH 100 WATT MH LUMINAIRES, ROADWAY DAVIT STYLE LIGHT STANDARDS WITH 250 WATT HIGH PRESSURE SODIUM (HPS) LUMINAIRES, UNDERGROUND CIRCUITRY IN CONDUIT, JUNCTION BOXES AND CONTROL SYSTEMS.

DESIGN CRITERIA

2005 AASHTO "ROADWAY LIGHTING DESIGN GUIDE"

2005 NATIONAL ELECTRICAL CODE

2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS

2002 AASHTO ROADSIDE DESIGN GUIDE

LEGEND

- PROPOSED LIGHT STANDARD
  TYPE DAVIT 35′ OR 25′ MH W/ 6′ ARM
  110MPH WIND SPEED
  WITH TYPE RDW 250W HPS LUMINAIRE
  IES DISTRIBUTION: FLAT GLASS, CUTOFF TYPE II (C2)
- JB1 — PROPOSED ELECTRICAL JUNCTION BOX (JB)
  --TYPE PC18--
  MIN SIZE: 18″L X 11″W X 18″H
  --TYPE PG30--
  MIN SIZE: 30″L X 17″W X 18″H
  --TYPE PG36--
  MIN SIZE: 36″L S 24″W X 18″H
  SEE TABLE B, THIS SHEET.
- A1 / 2 — PROPOSED FEEDER CIRCUIT
  CONTROL SYSTEM (A), CIRCUIT (1),
  PLAN SYMBOL (2).
  SEE TABLE A,THIS SHEET.
- 1 — REFERENCE TO CORRESPONDING △ NOTE AS NUMBERED
- PROPOSED POST TOP STANDARD 15′,
  110MPH WIND SPEED WITH 100W METAL HALIDE LUMINAIRE IES DISTRIBUTION: CUTOFF TYPE V (C5). ARROW INDICATES LUMINARE ORIENTATION.
- PROPOSED CAST LOUVER BOLLARD LIGHT 42″, WITH 100W METAL HALIDE LUMINAIRE. NATURAL PRECAST CONCRETE WITH SANDBLAST FINISH.
- 3″ ELEC. DUCT, JA OR BD — PROPOSED ELECTRICAL DUCT
  SIZE 3″
  TYPE JACKED (JA) OR BURIED (BD).
  SEE TABLE C, THIS SHEET.

TABLE "A"
CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE

PLAN SYMBOL	DESCRIPTION		CONTRACT ITEM
8	2#8 Ø 1 #10G 1.5″ P	2 AWG SIZE 8 CONDUCTOR (BK & RD) 1 AWG SIZE 10 GROUNDING CONDUCTOR 1.5″ PVC CONDUIT	2 - 8 W/G FEEDER CIRCUIT IN 1.5″ CONDUIT
*8	2#8 Ø 1 #10G	2 AWG SIZE 8 CONDUCTOR (BK & RD) 1 AWG SIZE 10 GROUNDING CONDUCTOR	2 - 8 W/G FEEDER CIRCUIT
6	2#6 Ø 1 #8G 1.5″ P	2 AWG SIZE 6 CONDUCTOR (BK & RD) 1 AWG SIZE 8 GROUNDING CONDUCTOR 1.5″ PVC CONDUIT	2 - 6 W/G FEEDER CIRCUIT IN 1.5″ CONDUIT
*6	2#6 Ø 1 #8G	2 AWG SIZE 6 CONDUCTOR (BK & RD) 1 AWG SIZE 8 GROUNDING CONDUCTOR	2 - 6 W/G FEEDER CIRCUIT
4	2#4 Ø 1 #6G 1.5″ P	2 AWG SIZE 4 CONDUCTOR (BK & RD) 1 AWG SIZE 6 GROUNDING CONDUCTOR 1.5″ PVC CONDUIT	2 - 4 W/G FEEDER CIRCUIT IN 1.5″ CONDUIT
*4	2#4 Ø 1 #6G	2 AWG SIZE 4 CONDUCTOR (BK & RD) 1 AWG SIZE 6 GROUNDING CONDUCTOR	2 - 4 W/G FEEDER CIRCUIT
2	2#2 Ø 1 #4G 1.5″ P	2 AWG SIZE 2 CONDUCTOR (BK & RD) 1 AWG SIZE 4 GROUNDING CONDUCTOR 1.5″ PVC CONDUIT	2 - 2 W/G FEEDER CIRCUIT IN 1.5″ CONDUIT
*2	2#2 Ø 1 #4G	2 AWG SIZE 2 CONDUCTOR (BK & RD) 1 AWG SIZE 4 GROUNDING CONDUCTOR	2 - 2 W/G FEEDER CIRCUIT
N2	2#2 Ø 1 #2N 2″ P	2 AWG SIZE 2 CONDUCTOR (BK & RD) 1 AWG SIZE 2 NEUTRAL CONDUCTOR (WH) 2″ PVC CONDUIT	2 - 2 W/N FEEDER CIRCUIT IN 2″ CONDUIT

ABBREVIATIONS

BD	BURIED	PVC	PVC SCHEDULE 40 CONDUIT
LT	LIGHT	RGC	RIGID GALVANIZED STEEL CONDUIT
JA	JACKED	C	CONDUIT
MH	MOUNTING HEIGHT	CKT	CIRCUIT
Ø	PHASE	N	NEUTRAL
SER LAT	SERVICE LATERAL	G	GROUND
		HM	HIGH MAST

TABLE "B"
JUNCTION BOX SUMMARY

NUMBER	LOCATION	TYPE			SHEET
JB1	NEAR SOUTHBOUND BUILDING			PG36	E2
JB2	17+96 -L4- 27′ LT		PG30		E2
JB3	17+90 -L4- 20′ RT		PG30		E2
JB4	31+84 -L3- 35′ RT	PC18			E2
JB5	32+47 -L3- 33′ RT	PC18			E2
JB6	35+27 -L3- 33′ RT	PC18			E2
JB7	29+83 -L3- 34′ RT	PC18			E2
JB8	27+19 -L3- 35′ LT	PC18			E2
JB9	NEAR SIDEWALK AT SB BUILDING		PG30		E2
JB10	17+75 -L5- 45′ RT		PG30		E2
JB11	17+75 -L5- 49′ LT		PG30		E2
JB12	46+63 -L3- 18′ LT	PC18			E2
JB13	46+60 -L3- 27′ RT	PC18			E2
JB14	37+16 -L3- 46′ LT	PC18			E2
JB15	24+24 -L3- 15′ LT	PC18			E3
JB16	NEAR NORTHBOUND BUILDING			PG36	E4
JB17	NEAR NB WATER FEATURE	PC18			E4
JB18	NEAR NB TRUCK PARKING EXIT	PC18			E4
JB19	23+22 -L1- 38′ LT		PG30		E4
JB20	23+29 -L1- 44′ RT	PC18			E4
JB21	NEAR FLAG POLES AT NB BUILDING	PC18			E4
JB22	17+80 -L1- 58′ LT	PC18			E4
TOTALS		14	6	2	

TABLE "C"
ELECTRICAL DUCT SUMMARY
(ESTIMATED LENGTH IN FEET)

			TYPE		
			BURIED (BD) FEET		
LOCATION	RACEWAY 7	SHEET	SIZE 2″	SIZE 3″	SIZE 4″
24+13 -L3-		E3		29	
12+09 -L4-		E2		26	
17+90 -L4-	JB2 - JB3	E2		48	
31+85 -L3-	JB3 - JB4	E2		158	
27+15 -L3-		E2		32	
29+88 -L3-		E2		48	
32+49 -L3-		E2		48	
35+27 -L3-		E2		40	
37+27 -L3-		E2			50
17+75 -L3-	JB10 - JB11	E2		92	
46+62 -L3-	JB12 - JB13	E2		46	
15+00 -L2-		E4		38	
17+32 -L2-		E4		52	
23+25 -L1-	JB19 - JB20	E4		83	
19+09 -L2-		E4		63	
TOTALS				803	50

COMPUTED BY: _____ DATE: _____
CHECKED BY: _____ DATE: 10-9-07

02/03/98

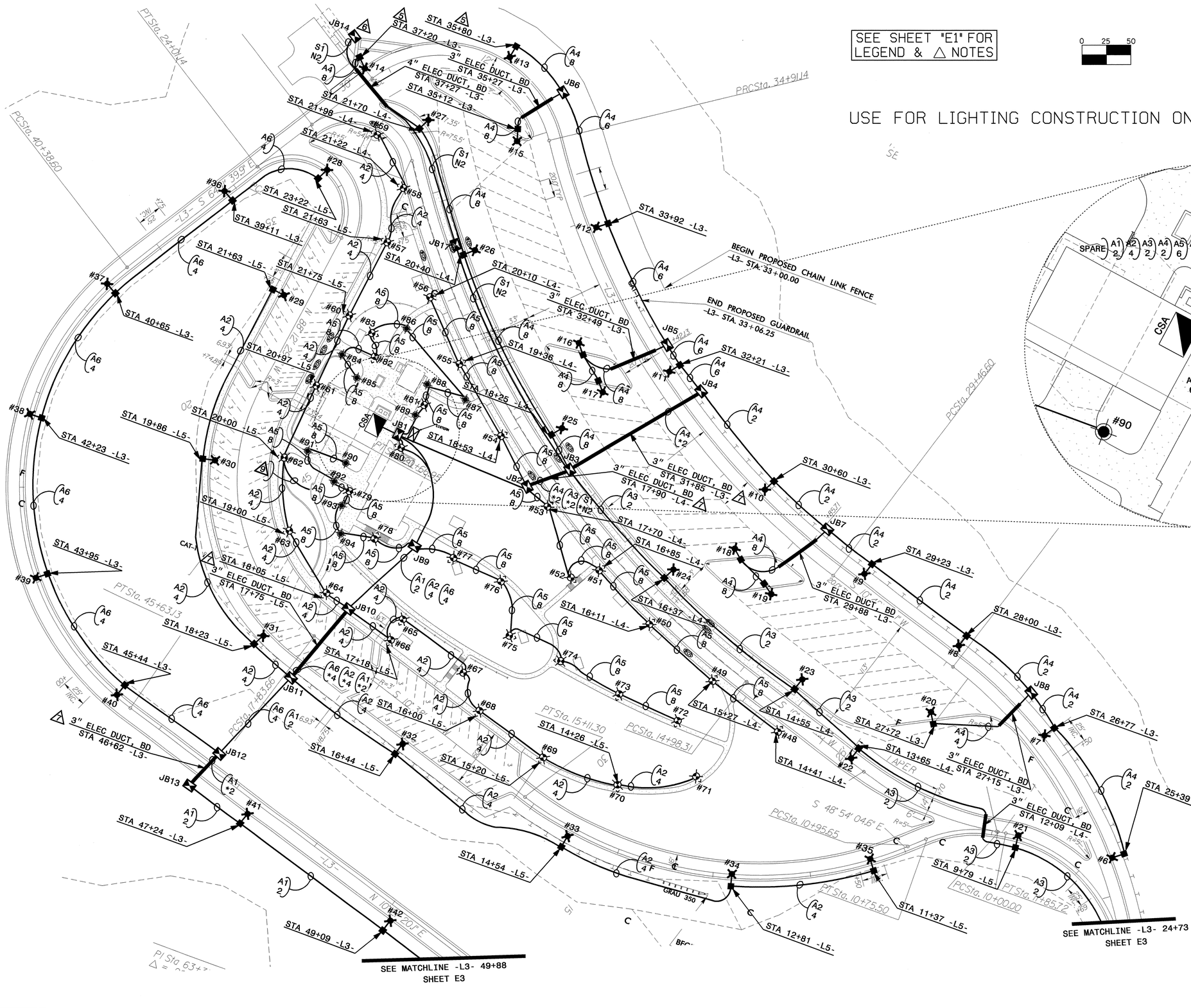
PROJECT REFERENCE NO.	SHEET NO.
K-3807	E2

SEE SHEET "E1" FOR LEGEND & △ NOTES

0 25 50

NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER KI-BUN CHIN
11/29/07

USE FOR LIGHTING CONSTRUCTION ONLY



Rev.	Date	Description	Approved
2			
1			

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN — LIGHTING/ELECTRICAL SECTION

LIGHTING LAYOUT

K-3807 SOUTHBOUND REST AREA
SHEET 1 OF 2

RANDOLPH COUNTY

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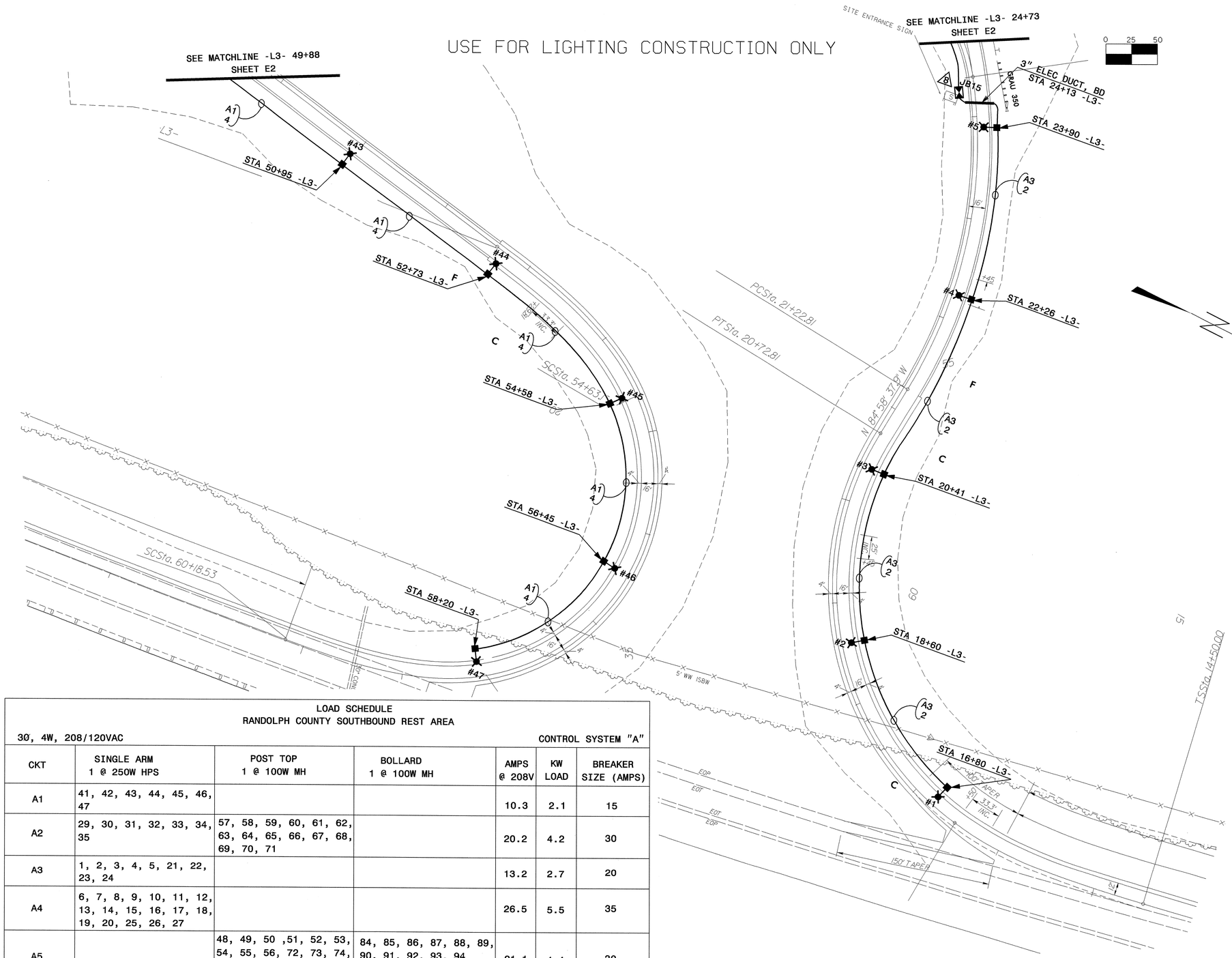
02/03/98

PROJECT REFERENCE NO.	SHEET NO.
K-3807	E3

NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER PARK KI-BUN CHUN 10/9/07

USE FOR LIGHTING CONSTRUCTION ONLY



SEE SHEET "E1" FOR LEGEND & △ NOTES

LOAD SCHEDULE
RANDOLPH COUNTY SOUTHBOUND REST AREA

3Ø, 4W, 208/120VAC — CONTROL SYSTEM "A"

CKT	SINGLE ARM 1 @ 250W HPS	POST TOP 1 @ 100W MH	BOLLARD 1 @ 100W MH	AMPS @ 208V	KW LOAD	BREAKER SIZE (AMPS)
A1	41, 42, 43, 44, 45, 46, 47			10.3	2.1	15
A2	29, 30, 31, 32, 33, 34, 35	57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71		20.2	4.2	30
A3	1, 2, 3, 4, 5, 21, 22, 23, 24			13.2	2.7	20
A4	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 26, 27			26.5	5.5	35
A5		48, 49, 50 ,51, 52, 53, 54, 55, 56, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83	84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94	21.1	4.4	30
A6	28, 36, 37, 38, 39, 40			8.8	1.8	15
SPARE						30
TOTAL	47	36	11	100.1	20.7	

*CIRCUIT 'S1' TO BE FED FROM 85A BREAKER

Rev.	Date	Description	Approved
2			
1			

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN — LIGHTING/ELECTRICAL SECTION

LIGHTING LAYOUT

K-3807 SOUTHBOUND REST AREA
SHEET 2 OF 2

RANDOLPH COUNTY

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02/03/98

PROJECT REFERENCE NO.	SHEET NO.
K-3807	E4

USE FOR LIGHTING CONSTRUCTION ONLY

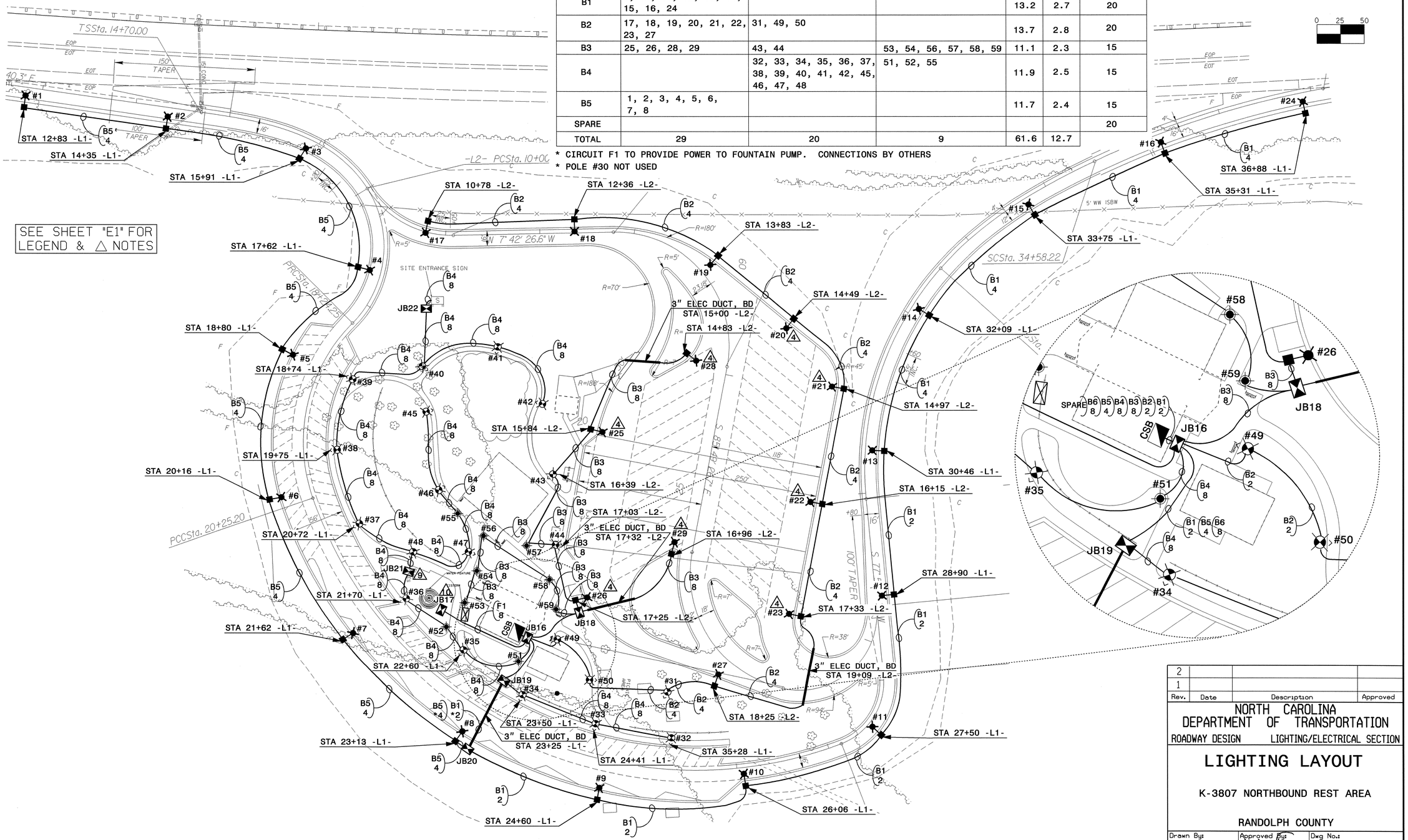
LOAD SCHEDULE
RANDOLPH COUNTY NORTHBOUND REST AREA

3Ø, 4W, 208/120VAC — CONTROL SYSTEM "B"

CKT	SINGLE ARM 1 @ 250W HPS	POST TOP 1 @ 100W MH	BOLLARD 1 @ 100W MH	AMPS @ 208V	KW LOAD	BREAKER SIZE (AMPS)
B1	9, 10, 11, 12, 13, 14, 15, 16, 24			13.2	2.7	20
B2	17, 18, 19, 20, 21, 22, 23, 27	31, 49, 50		13.7	2.8	20
B3	25, 26, 28, 29	43, 44	53, 54, 56, 57, 58, 59	11.1	2.3	15
B4		32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48	51, 52, 55	11.9	2.5	15
B5	1, 2, 3, 4, 5, 6, 7, 8			11.7	2.4	15
SPARE						20
TOTAL	29	20	9	61.6	12.7	

* CIRCUIT F1 TO PROVIDE POWER TO FOUNTAIN PUMP. CONNECTIONS BY OTHERS
* POLE #30 NOT USED

SEE SHEET "E1" FOR LEGEND & △ NOTES



Rev.	Date	Description	Approved
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NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN — LIGHTING/ELECTRICAL SECTION

LIGHTING LAYOUT

K-3807 NORTHBOUND REST AREA

RANDOLPH COUNTY

Drawn By:	Approved By:	Dwg No.:
RGH		

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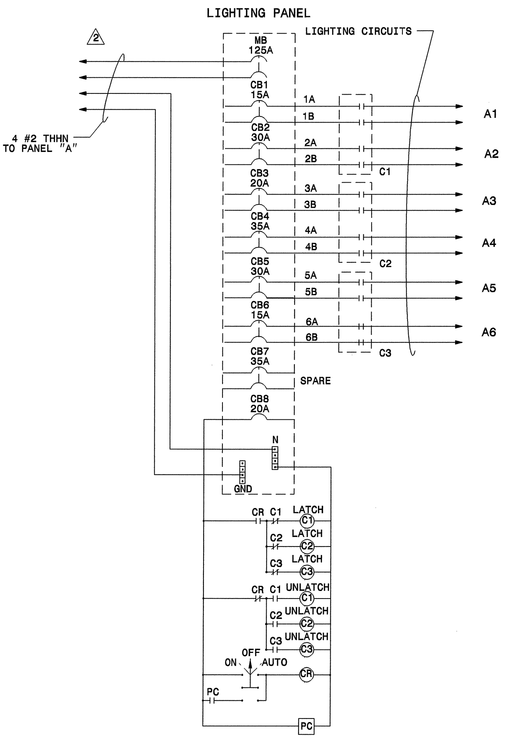
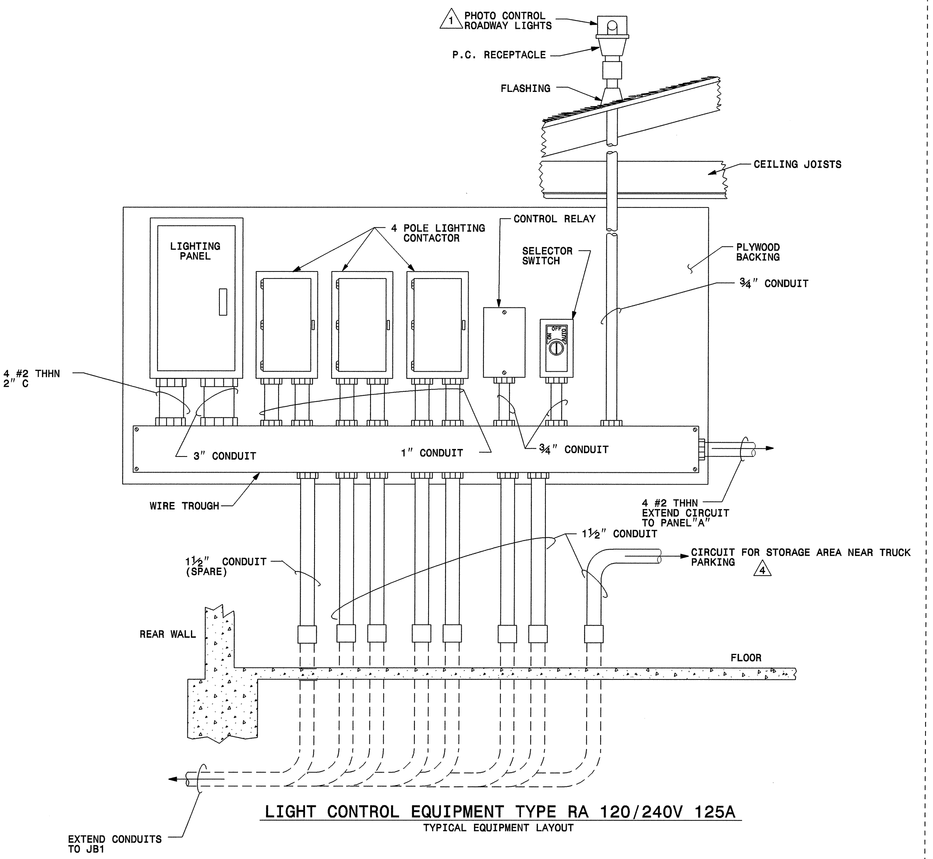


LIGHTING CONTROL SCHEMATIC

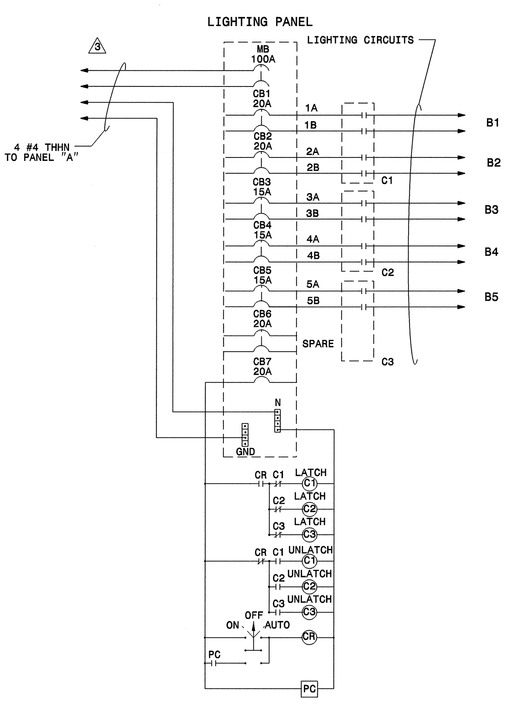
EQUIPMENT GROUNDING CONDUCTORS NOT SHOWN



LIGHT CONTROL EQUIPMENT TYPE RA 120/240V 125A

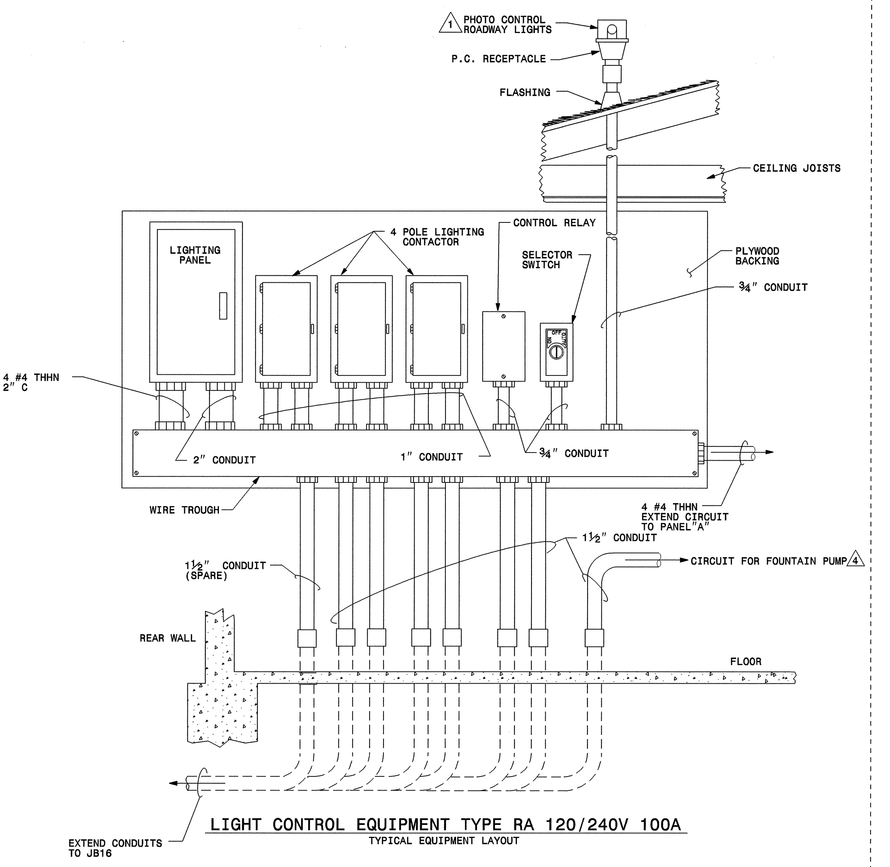
TYPICAL EQUIPMENT LAYOUT

SOUTHBOUND REST AREA SCHEMATIC AND EQUIPMENT LAYOUT



LIGHTING CONTROL SCHEMATIC

EQUIPMENT GROUNDING CONDUCTORS NOT SHOWN



LIGHT CONTROL EQUIPMENT TYPE RA 120/240V 100A

TYPICAL EQUIPMENT LAYOUT

NORTHBOUND REST AREA SCHEMATIC AND EQUIPMENT LAYOUT

△ NOTES

1. LOCATE PHOTO CELL IN AN UNSHADED AREA ON THE ROOF.
2. INSTALL ONE 125 AMP, 2 POLE BREAKER FOR LIGHTING PANEL SERVICE ADDED TO PANEL "A" UNDER OTHER CONTRACT PAY ITEM.
3. INSTALL ONE 100 AMP, 2 POLE BREAKER FOR LIGHTING PANEL SERVICE ADDED TO PANEL "A" UNDER OTHER CONTRACT PAY ITEM.
4. EXTEND CIRCUIT TO PANEL "A". CONNECTION TO PANEL "A" BY OTHERS.

USE FOR LIGHTING CONSTRUCTION ONLY

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN SERVICES LIGHTING/ELECTRICAL SECTION

LIGHTING DETAILS

K-3807 REST AREA

RANDOLPH COUNTY

Drawn By: RGH	Checked by:	Approved By:

Rev.	Date	Description	Approved
2			

PROJECT REFERENCE NO. K-3807

SHEET NO. E5

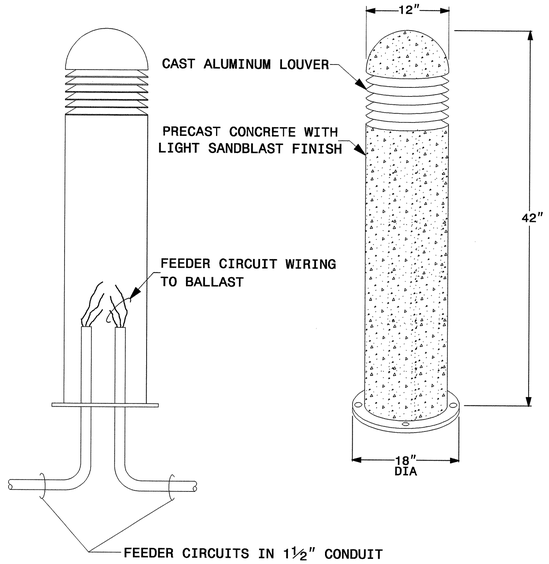
SEAL 022582 NORTH CAROLINA PROFESSIONAL ENGINEER 10/19/07

02/03/98

USE FOR LIGHTING CONSTRUCTION ONLY

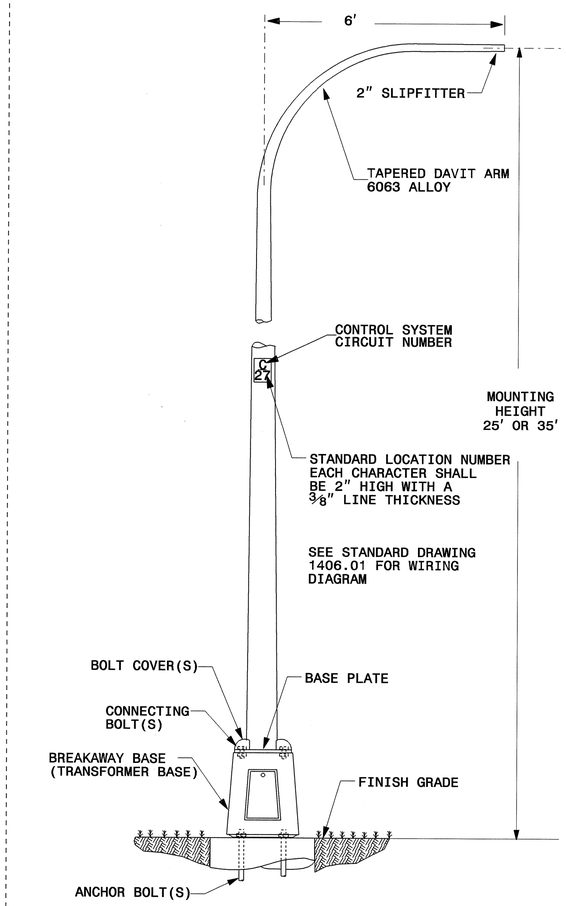
PROJECT REFERENCE NO.	SHEET NO.
K-3807	E6

NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER KI-BUN CHIN
10/9/07



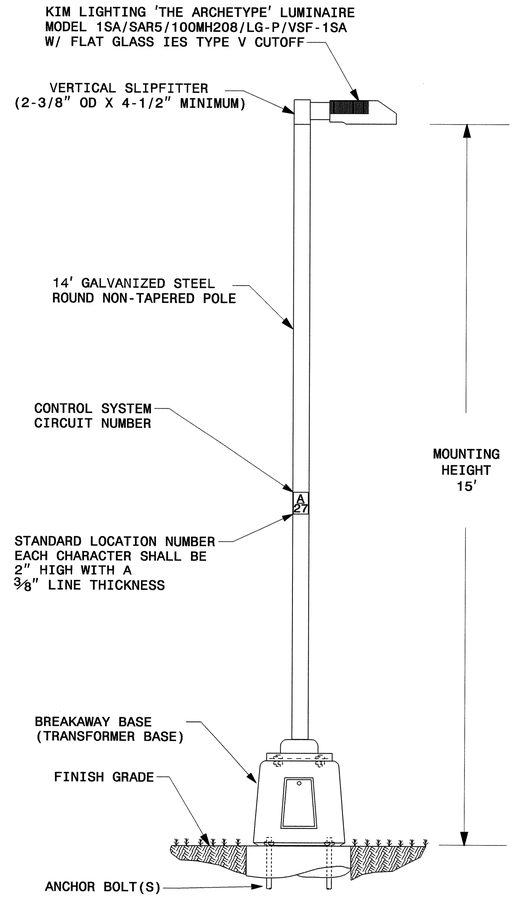
BOLLARD LIGHT STANDARD, H 42"

NOT TO SCALE



LIGHT STANDARD DAVIT STYLE MH 25' OR 35' SA 6'

NOT TO SCALE



POST TOP LIGHT STANDARD MH 15'

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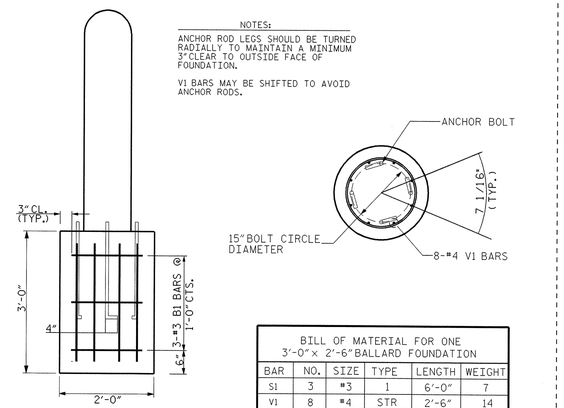
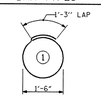


BILL OF MATERIAL FOR ONE 3'-0" x 2'-6" BALLARD FOUNDATION

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
S1	3	#3	1	6'-0"	7
V1	8	#4	STR	2'-6"	14
REINFORCING STEEL =					21 lbs
CLASS A CONCRETE =					0.35 CU. YD.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BOLLARD LIGHT FOUNDATION DESIGN (TYPE B1)

NOT TO SCALE

Rev.	Date	Description	Approved
2			
1			

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN SERVICES LIGHTING/ELECTRICAL SECTION

LIGHTING DETAILS

K-3807 REST AREAS

RANDOLPH COUNTY

Drawn By: RGH | Approved By: | Dwg No.:

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TIP PROJECT: K-3807

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	K-3807	EC-1	

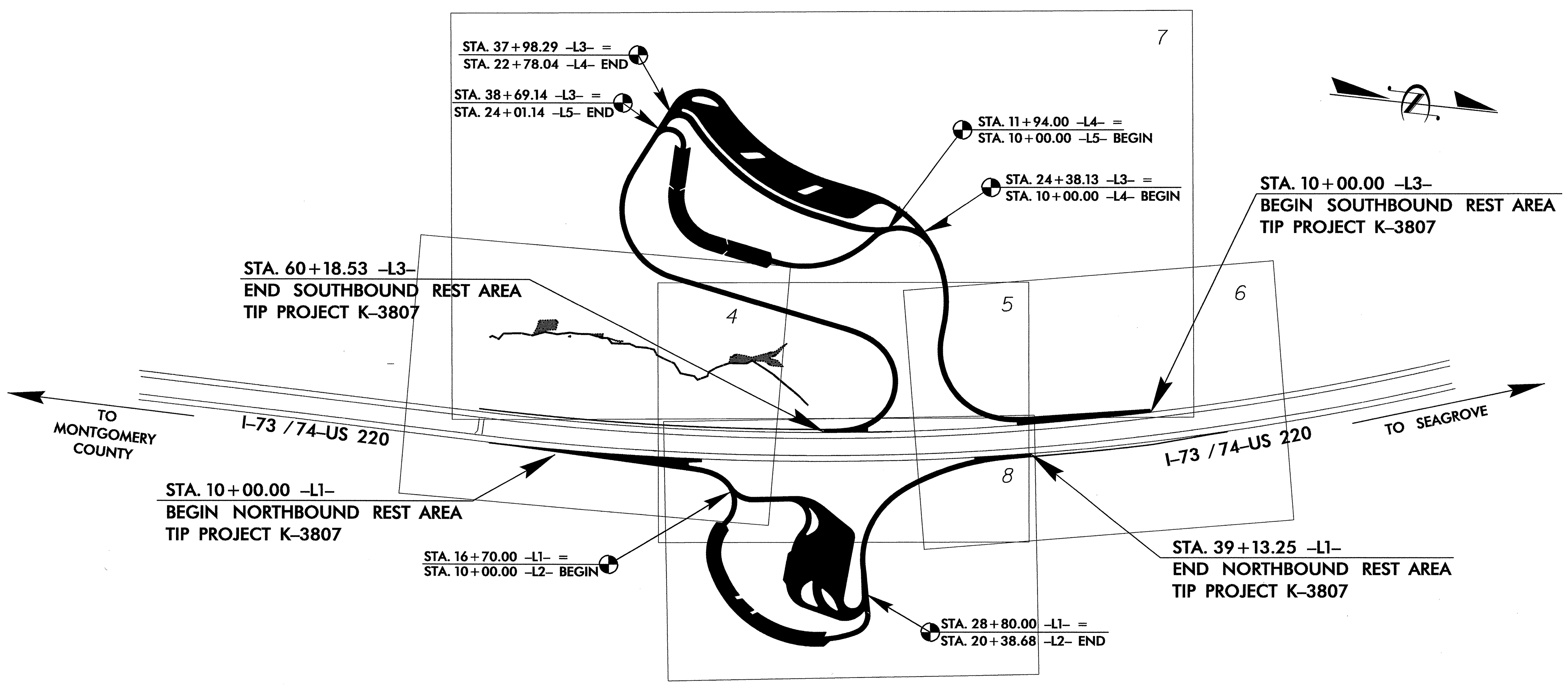
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

RANDOLPH COUNTY

LOCATION: SOUTH OF SEAGROVE — I-73/74 AND U.S. 220 BYPASS NORTHBOUND AND SOUTHBOUND REST AREAS
TYPE OF WORK: GRADING, DRAINAGE, PAVING, TRAFFIC CONTROL AND SIGNING



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
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	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
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	
	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

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2006 STANDARD SPECIFICATIONS

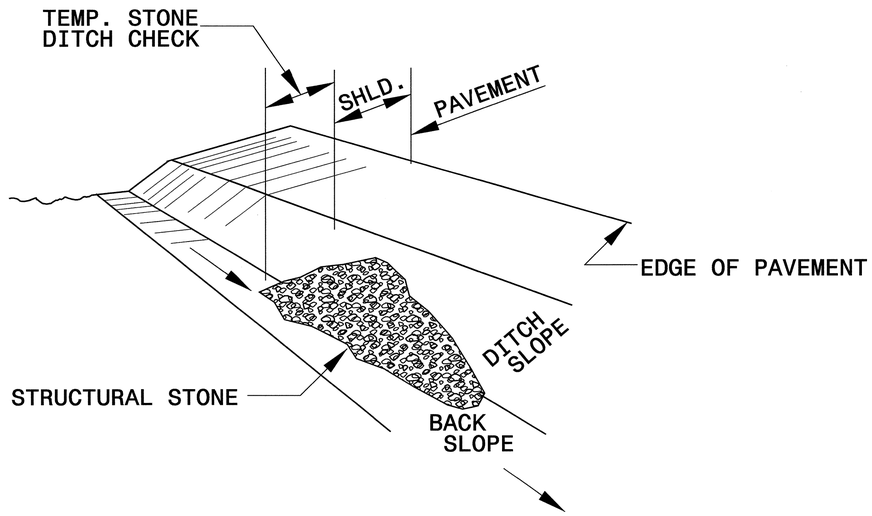
Roadway Standard Drawings

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

1605.01 Temporary Silt Fence
1607.01 Gravel Construction Entrance
1622.01 Temporary Berms and Slope Drains
1630.02 Silt Basin Type B
1630.03 Temporary Silt Ditch
1630.05 Temporary Diversion
1632.01 Rock Inlet Sediment Trap Type A
1632.02 Rock Inlet Sediment Trap Type B
1632.03 Rock Inlet Sediment Trap Type C
1633.01 Temporary Rock Silt Check Type A
1634.02 Temporary Rock Sediment Dam Type B
1635.01 Rock Pipe Inlet Sediment Trap Type A

PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

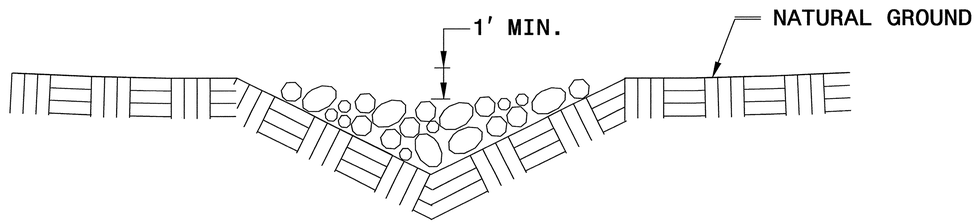


ISOMETRIC VIEW

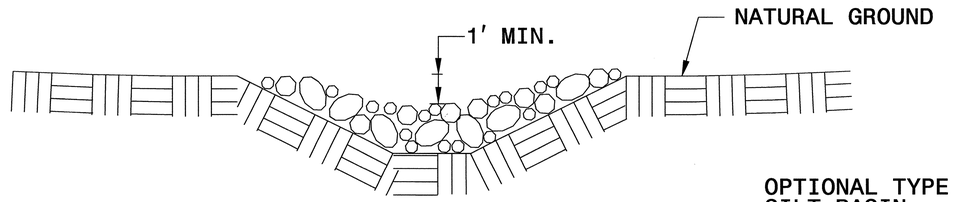
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

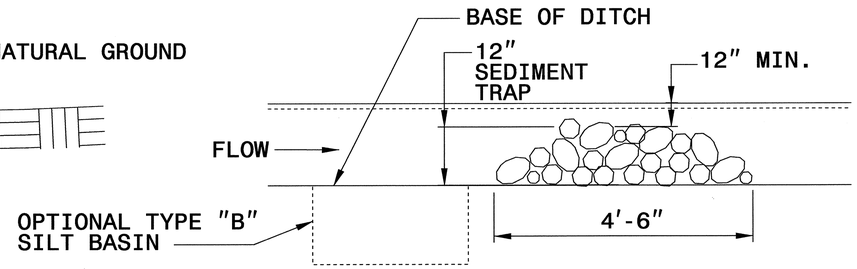
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



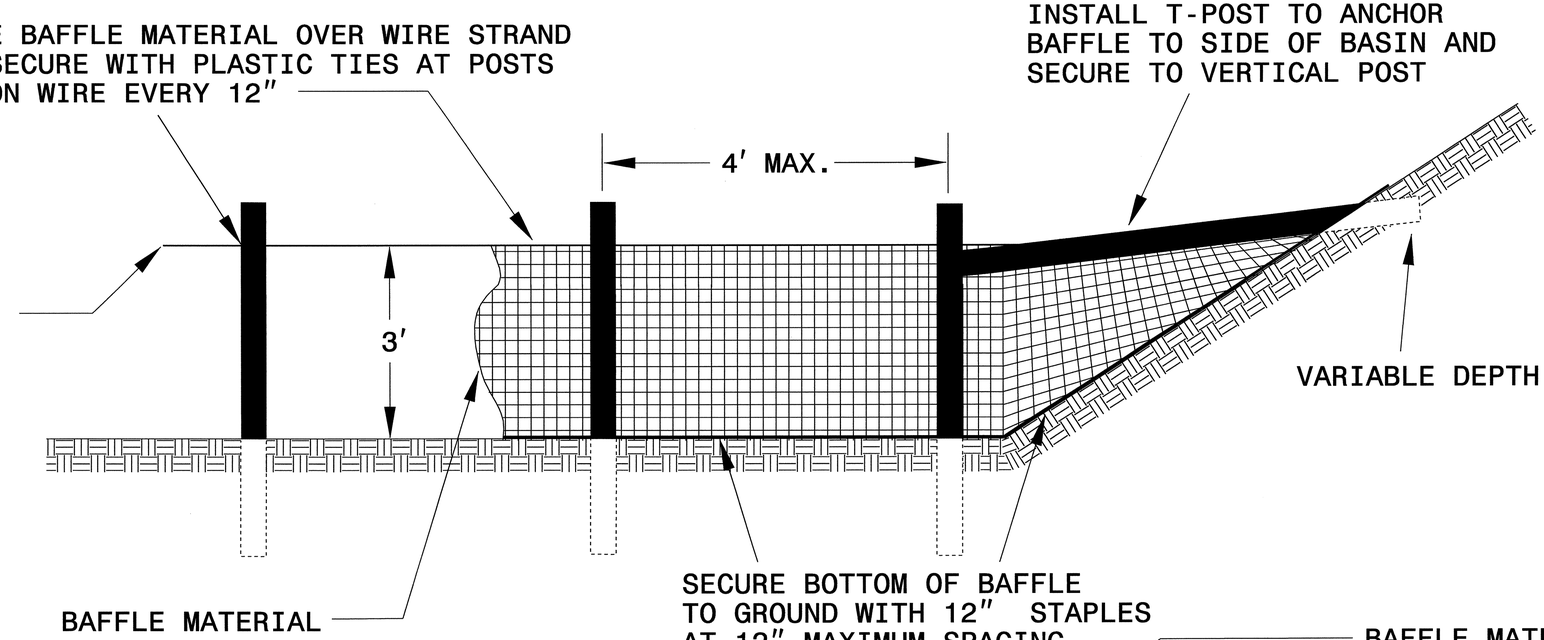
CROSS SECTION TRAPEZOIDAL DITCH

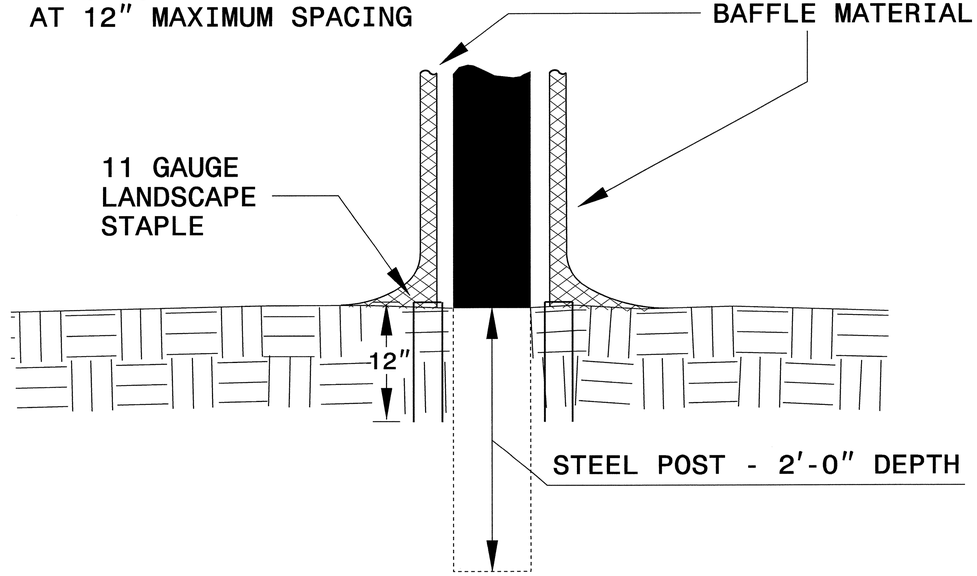


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



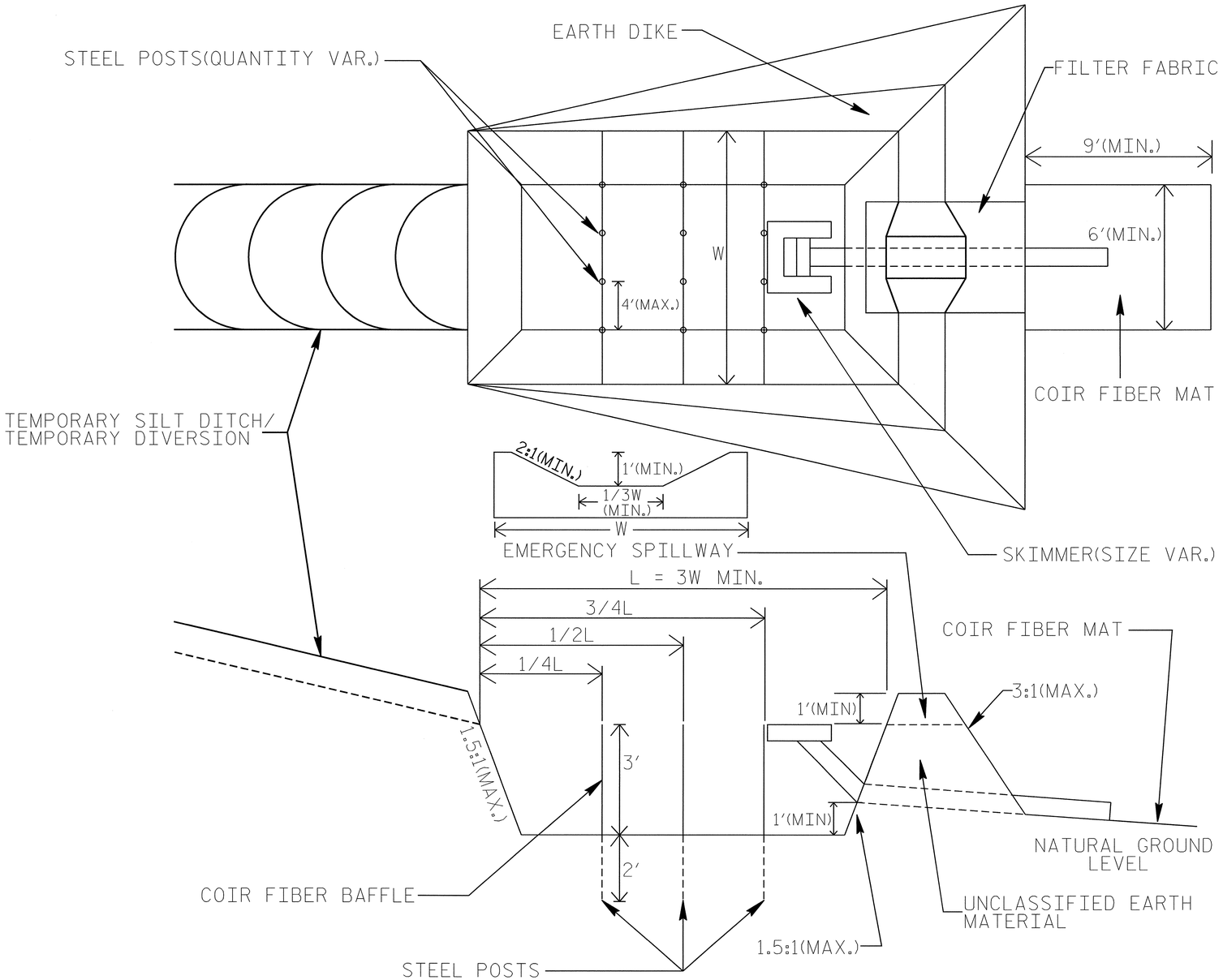


BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

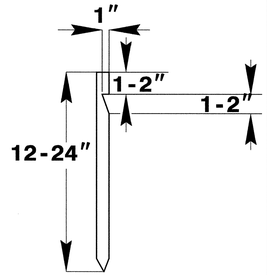
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

SKIMMER BASIN WITH BAFFLES DETAIL

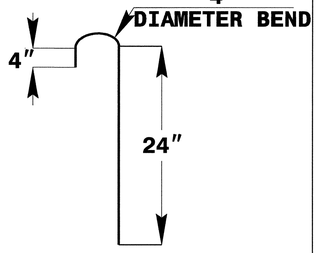
PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



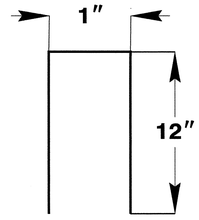
2" x 2" (nominal)
WOODEN STAKE



#10 STEEL
REINFORCEMENT BAR



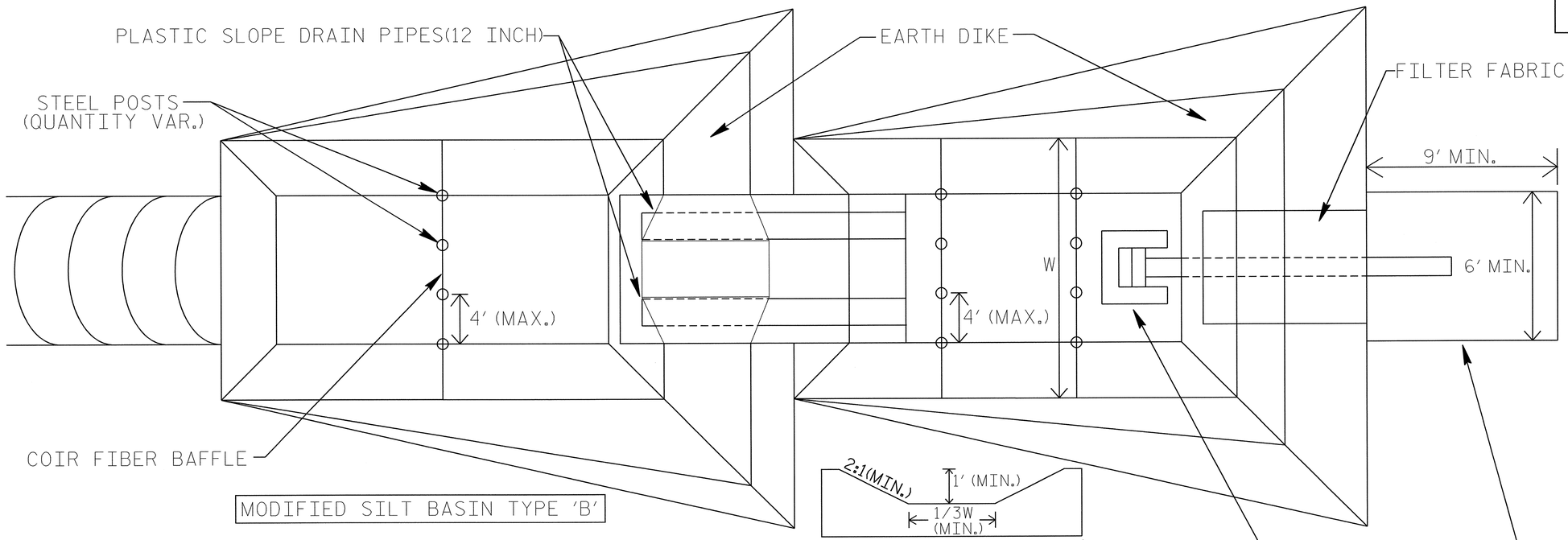
1" (nominal)
STAPLE

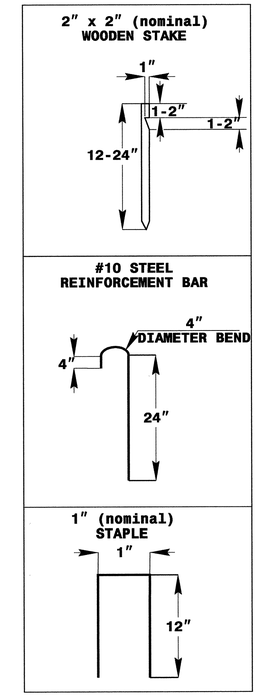


COIR FIBER MAT ANCHOR OPTIONS

PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-2C
R/W SHEET NO.	
~~ROADWAY DESIGN ENGINEER~~	HYDRAULICS ENGINEER

TIERED SKIMMER BASIN DETAIL





COIR FIBER MAT ANCHOR OPTIONS

NOTE

ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.

PROJECT REFERENCE NO.	SHEET NO.
K-3807	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)
4	L	46+50	54+50	LT	560
5	L3	58+76.72	59+37.72	RT	90
6	L3	11+50	21+00	RT	1070
7	L3	46+37	52+61	LT	985
7	L3	53+04	58+50	RT	735
8	L1	19+86	25+25	RT	865
8	L1	18+50	21+00	LT	405
8	L1	31+00	32+50	RT	75
8	L1	35+50	39+15	RT	490
8	L2	10+79.5	11+44.37	RT	90
				SUBTOTAL	5365
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					12000
				TOTAL	17365
				SAY	17375

PERMANENT SOIL REINFORCEMENT MAT

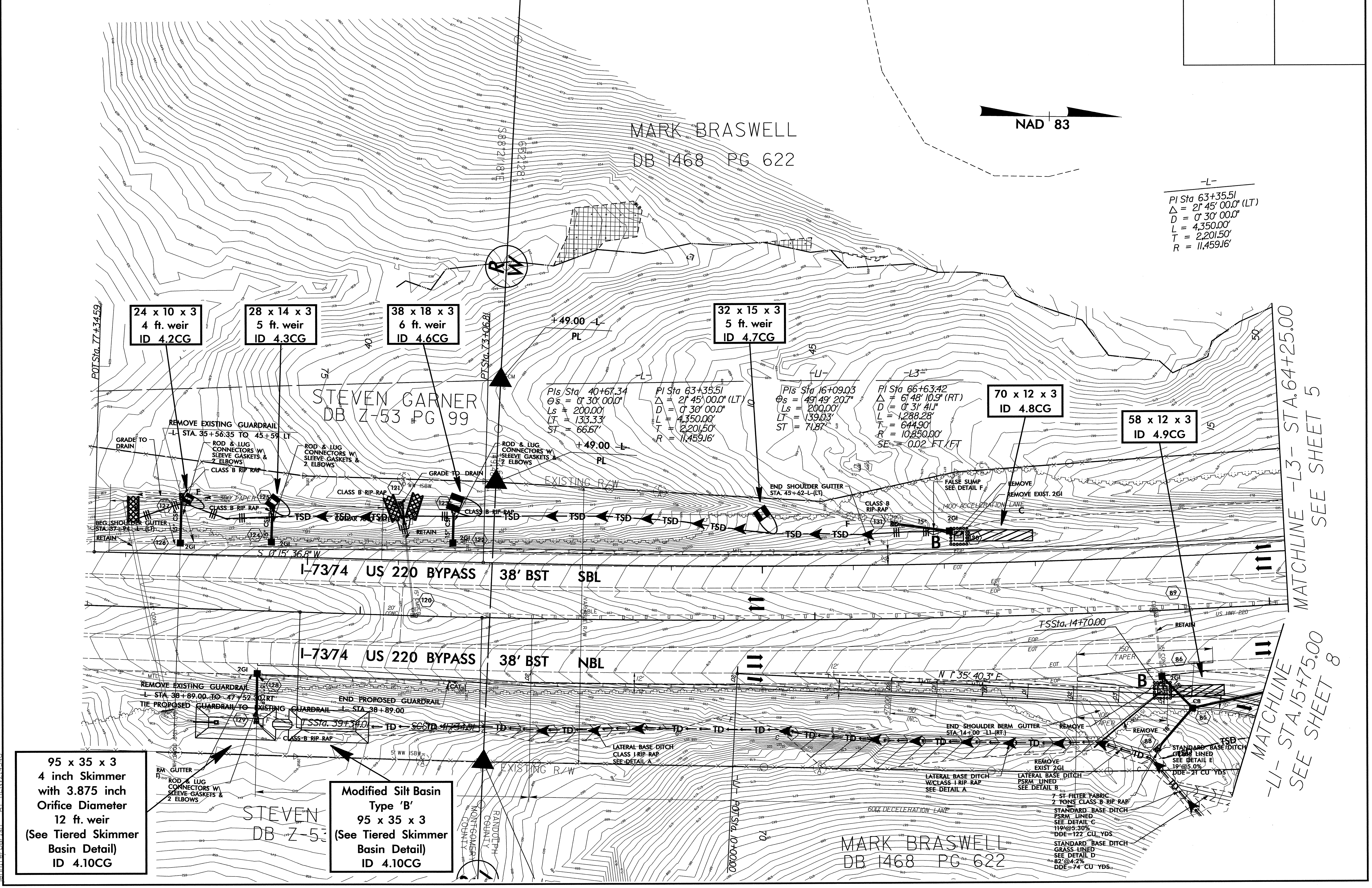
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L1	14+69.5	14+88.5	RT	25
4	L1	14+88.34	15+70	RT	120
6	L3	17+50	21+00	LT	325
8	L1	25+46	26+00	RT	50
			SUBTOTAL		520
		ADDITIONAL PSRM TO BE INSTALLED			2800
				TOTAL	3320
				SAY	3325

PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-4/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS

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.



NAD 83
MARK BRASWELL
DB 1468 PG 622
STEVEN GARNER
DB Z-53 PG 99
-L-
PI Sta 63+35.51
Δ = 21° 45' 00.0" (LT)
D = 0° 30' 00.0"
L = 4,350.00'
T = 2,201.50'
R = 11,459.16'
24 x 10 x 3
4 ft. weir
ID 4.2CG
28 x 14 x 3
5 ft. weir
ID 4.3CG
38 x 18 x 3
6 ft. weir
ID 4.6CG
32 x 15 x 3
5 ft. weir
ID 4.7CG
70 x 12 x 3
ID 4.8CG
58 x 12 x 3
ID 4.9CG
PIs Sta 40+67.34
Θs = 0° 30' 00.0"
Ls = 200.00'
LT = 133.33'
ST = 66.67'
PI Sta 66+63.42
Δ = 6° 48' 10.9" (RT)
D = 0° 31' 41.1"
L = 1,288.28'
T = 644.90'
R = 10,850.00'
SE = 0.02 FT/FT
PIs Sta 16+09.03
Θs = 49° 49' 20.7"
Ls = 200.00'
LT = 139.03'
ST = 71.87'
REMOVE EXISTING GUARDRAIL
-L- STA. 35+56.35 TO 45+59 LT
GRADE TO DRAIN
END SHOULDER GUTTER
STA. 45+62-L-(LT)
FALSE SUMP
SEE DETAIL F
REMOVE
REMOVE EXIST. 2GI
1400' ACCELERATION LANE
EXISTING R/W
I-73/74 US 220 BYPASS 38' BST SBL
I-73/74 US 220 BYPASS 38' BST NBL
MATCHLINE -L3- STA.64+25.00
SEE SHEET 5
MATCHLINE -L1- STA.15+75.00
SEE SHEET 8
REMOVE EXISTING GUARDRAIL
-L- STA. 38+89.00 TO 47+52.30 RT
TIE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL
END PROPOSED GUARDRAIL
-L- STA. 38+89.00
END SHOULDER BERM GUTTER
STA. 14+00 -L1-(RT.)
LATERAL BASE DITCH
CLASS I RIP RAP
SEE DETAIL A
600' DECELERATION LANE
95 x 35 x 3
4 inch Skimmer
with 3.875 inch
Orifice Diameter
12 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 4.10CG
Modified Silt Basin
Type 'B'
95 x 35 x 3
(See Tiered Skimmer
Basin Detail)
ID 4.10CG
STANDARD BASE DITCH
PSRM LINED
SEE DETAIL C
119'@5.30%
DDE=122 CU YDS
STANDARD BASE DITCH
GRASS LINED
SEE DETAIL D
82'@4.2%
DDE=74 CU YDS
MONTGOMERY COUNTY
RANDOLPH COUNTY

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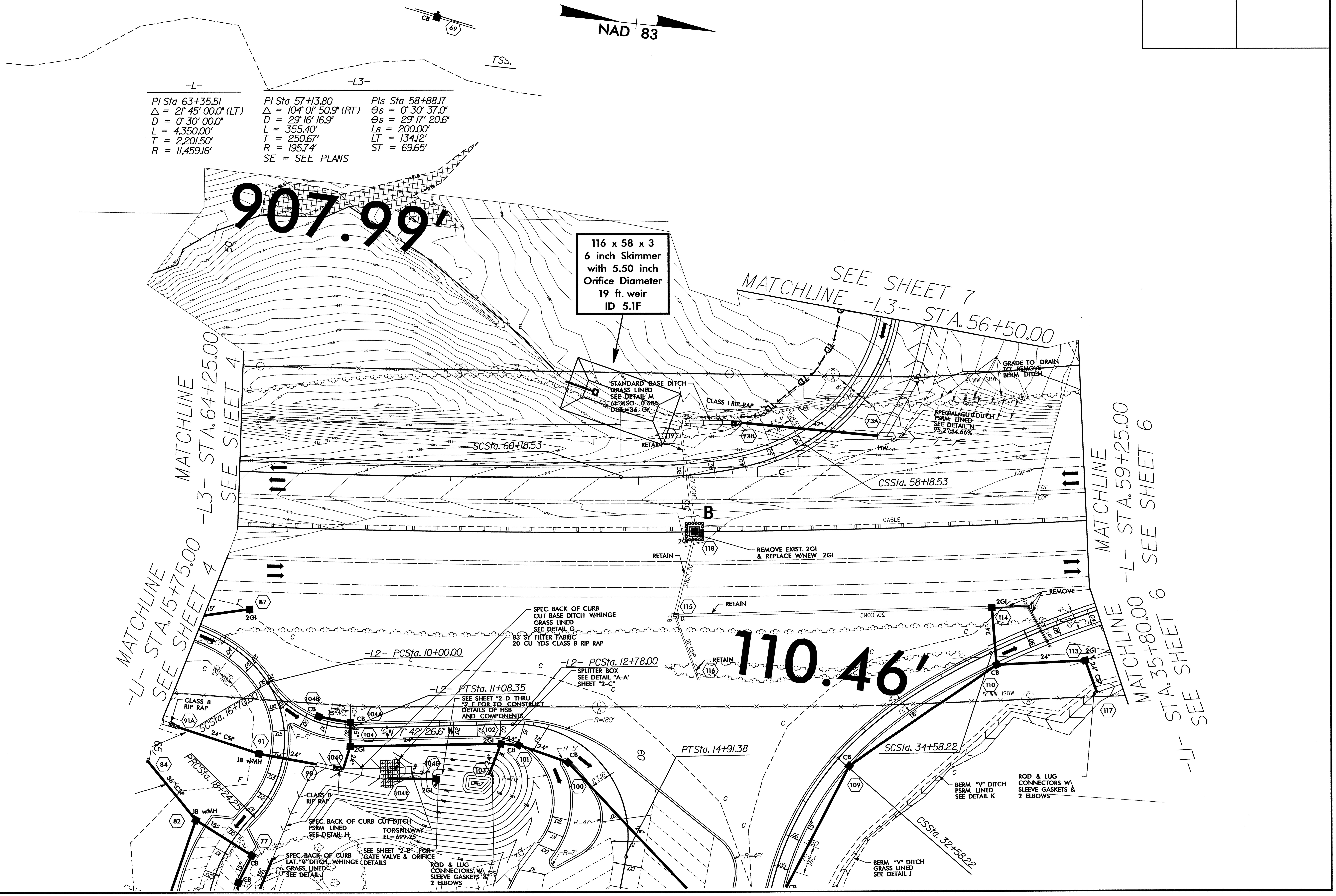
PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-5/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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



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PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-6/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.

NAD 83

-L-
PI Sta 83+35.51
Δ = 21° 45' 00.0" (LT)
D = 0° 30' 00.0"
L = 4,350.00'
T = 2,201.50'
R = 11,459.16'

-L1-
PIs Sta 33+42.48
Θs = 5° 14' 23.7"
Θs = 11° 51' 28.8"
Ls = 200.00'
LT = 118.45'
ST = 84.27'

PIs Sta 37+79.98
Θs = 5° 45' 09.3"
Ls = 200.00'
LT = 133.40'
ST = 66.73'

-L3-
PIs Sta 15+84.20
Θs = 20° 06' 13.6"
Ls = 200.00'
LT = 134.20'
ST = 67.46'

PI Sta 19+11.15
Δ = 85° 00' 00.0" (RT)
D = 20° 06' 13.6"
L = 422.81'
T = 261.15'
R = 285.00'
SE = 0.06 FT/FT

DARIN R. CROTTS
DB 1664 PG 295

MARK BRASWELL
DB 1468 PG 622

K.D. HARMON HEIRS
DB 135 PG 219

22 x 10 x 3
4 ft. weir
ID 6.2CG

CSSta. 14+50.00

-L3- POTISta. 10+00.00

±12.25 -L-
EX. R/W

±80.03 -L-
EX. R/W

MATCHLINE
-L3- STA. 18+50.00
SEE SHEET 7

MATCHLINE
-L- STA. 59+25.00
SEE SHEET 5

MATCHLINE
-L1- STA. 35+80.00
SEE SHEET 8

REMOVE EXISTING GUARDRAIL
-L- STA. 67+04.00 TO 68+00.00 LT

SPECIAL CUT DITCH W/HINGE
GRASS LINED
SEE DETAIL S

BEGIN SHOULDER BERM GUTTER
STA 67+00 (-L- LT)

600' DECELERATION LANE

600' TAPER

BEGIN SLOPE PAVING
SEE DETAIL K

REMOVE

RETAIN

BEGIN EXISTING GUARDRAIL -L- STA. 68+00.00
TIE PROPOSED ANCHOR UNIT TO EXISTING GUARDRAIL

I-73/74 US 220 BYPASS 38' BST SBL

I-73/74 US 220 BYPASS 38' BST NBL

150' TAPER

SCSta. 16+50.00

CSSta. 37+13.25

SPEC. CUT DITCH W/HINGE
GRASS LINED
SEE DETAIL L

SPECIAL CUT DITCH W/HINGE
GRASS LINED
SEE DETAIL L

BERM "V" DITCH
PSRM LINED
SEE DETAIL K

BERM "V" DITCH
PSRM LINED
SEE DETAIL K

GRADE TO DRAIN

COLLAR AND EXTEND
REMOVE
EXIST. 2GI

REMOVE

ROD & LUG
CONNECTORS W/
SLEEVE GASKETS &
2 ELBOWS

END SHOULDER BERM GUTTER
STA 69+54 -L- (LT)

CLASS I RIP-RAP

100 x 18 x 3
ID 6.1CG

±67.91 -L-
EX. R/W

SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS

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pamirzaish AT RENZ1545

SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS

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.

PROJECT REFERENCE NO.	SHEET NO.
K-3801	EC-7/CONST 7
RW SHEET NO.	
RAMMOND GIBSON ENGINEER	HYDRAULICS ENGINEER

75 x 25 x 3
2.5 inch Skimmer
with 2.25 inch
Orifice Diameter
8 ft. weir
ID 7.9CG

40 x 10 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
4 ft. weir
ID 7.10CG

54 x 26 x 3
9 ft. weir
ID 7.11CG

60 x 30 x 3
10 ft. weir
ID 7.12CG

26 x 12 x 3
4 ft. weir
ID 7.13CG

35 x 17 x 3
6 ft. weir
ID 7.14CG

40 x 20 x 3
7 ft. weir
ID 7.15CG

36 x 18 x 3
6 ft. weir
ID 7.16CG

40 x 18 x 3
6 ft. weir
ID 7.17CG

60 x 30 x 3
10 ft. weir
ID 7.8CG

100 x 48 x 3
16 ft. weir
ID 7.7CG

45 x 20 x 3
7 ft. weir
ID 7.6CG

28 x 14 x 3
5 ft. weir
ID 7.5CG

92 x 46 x 3
15 ft. weir
ID 7.4CG

72 x 36 x 3
12 ft. weir
ID 7.3CG

57 x 23 x 3
2 inch Skimmer
with 2 inch
Orifice Diameter
8 ft. weir
ID 7.2CG

86 x 45 x 3
15 ft. weir
ID 7.1CG

54 x 26 x 3
9 ft. weir
ID 7.18CG

35 x 17 x 3
6 ft. weir
ID 7.19CG

582.43'

32.28'

358.53'

907.99'

DARIN R. CROTTS
DB 1664 PG 295

PEARL KING
DB. 174 PG 573

MARK BRASWELL
DB 1468 PG 622

MARK BRASWELL
DB 1468 PG 622

NAD 83

MATCHLINE
-L3- STA 56+50.00
SEE SHEET 5

MATCHLINE
-L3- STA 18+50.00
SEE SHEET 6

GRAPHIC SCALE
50 25 0 50 100
PLANS

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY:
CHECKED BY: DATE:

PROJECT REFERENCE NO.
K-3807
SHEET NO.
EC-8/CONST.8
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
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.
50 x 10 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
4 ft. weir
ID 8.7CG
36 x 18 x 3
6 ft. weir
ID 8.3CG
22 x 8 x 3
4 ft. weir
ID 8.4CG
50 x 11 x 3
ID 8.6CG
40 x 14 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
5 ft. weir
ID 8.2CH
55 x 14 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
12 ft. weir
ID 8.1CG
MATCHLINE -L1- STA.15+75.00 SEE SHEET 4
MATCHLINE -L1- STA.35+80.00 SEE SHEET 6
NAD 83
MARK BRASWELL
DB 1468 PG 622
INSTALL PROPOSED DRAINAGE SYSTEM AS SOON AS WORK ALLOWS.
SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS
TEMPORARY EARTH BERM
(Not to Scale)
Natural Ground
D = 1Ft.
B = 1Ft.
•STABILIZE EARTH BERM•
-L2- PCSta. 10+00.00
-L2- PCSta. 12+78.00
-L2- PTSta. 11+08.35
PTSta. 14+91.38
SCSta. 34+58.22
CSSta. 32+58.22
PCSta. 29+94.16
-L2- PTSta. 20+38.68
PTSta. 28+05.34
PCCSta. 27+14.27
-L2- PCSta. 16+91.38
-L2- PCCSta. 18+84.59
PCCSta. 20+25.20
SPEC. BACK OF CURB CUT BASE DITCH W/HINGE GRASS LINED SEE DETAIL G
83 SY FILTER FABRIC
20 CU YDS CLASS B RIP RAP
SPLITTER BOX SEE DETAIL "A-A" SHEET "2-C"
SEE SHEET "2-D THRU 2-F" FOR TO CONSTRUCT DETAILS OF HSB AND COMPONENTS
CLASS B RIP RAP
CLASS I RIP RAP
SPEC. BACK OF CURB CUT DITCH PSRM LINED SEE DETAIL H
TOP SPILLWAY EL=699.25
SPEC. BACK OF CURB LAT. "V" DITCH W/HINGE GRASS LINED SEE DETAIL
SEE SHEET "2-E" FOR GATE VALVE & ORIFICE DETAILS
ROD & LUG CONNECTORS W/ SLEEVE GASKETS & 2 ELBOWS
SPEC. BACK OF CURB LAT. "V" DITCH W/HINGE GRASS LINED SEE DETAIL I
FALSE SUMP SEE DETAIL R
SPECIAL BACK OF CURB CUT DITCH W/HINGE GRASS LINED SEE DETAIL T
BERM "V" DITCH PSRM LINED SEE DETAIL K
BERM "V" DITCH GRASS LINED SEE DETAIL J
BERM BASE DITCH PSRM LINED SEE DETAIL W
BERM BASE DITCH GRASS LINED SEE DETAIL X
BERM BASE DITCH PSRM LINED SEE DETAIL W
SPECIAL BACK OF CURB LATERIAL BASE DITCH GRASS LINED SEE DETAIL V
STANDARD BASE DITCH PSRM LINED SEE DETAIL U
95' @ So=6.0%
DDE=103 CU YDS
RETAIN
REMOVE
N83°41'30"W
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PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-9/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS

NAD 83
MARK BRASWELL
DB 1468 PG 622
S88°21'18"E
632.28'
-L-
PI Sta 63+35.51
Δ = 21° 45' 00.0" (LT)
D = 0° 30' 00.0"
L = 4,350.00'
T = 2,201.50'
R = 11,459.16'
24 x 10 x 3
4 ft. weir
ID 4.2CG
28 x 14 x 3
5 ft. weir
ID 4.3CG
38 x 18 x 3
6 ft. weir
ID 4.6CG
+49.00 -L-
PL
32 x 15 x 3
5 ft. weir
ID 4.7CG
POT Sta. 77+34.59
PT Sta. 73+06.81
STEVEN GARNER
DB Z-53 PG 99
-L-
PIs Sta 40+67.34
Θs = 0° 30' 00.0"
Ls = 200.00'
LT = 133.33'
ST = 66.67'
PI Sta 63+35.51
Δ = 21° 45' 00.0" (LT)
D = 0° 30' 00.0"
L = 4,350.00'
T = 2,201.50'
R = 11,459.16'
-L1-
PIs Sta 16+09.03
Θs = 49° 49' 20.7"
Ls = 200.00'
LT = 139.03'
ST = 71.87'
-L3-
PI Sta 66+63.42
Δ = 6° 48' 10.9" (RT)
D = 0° 31' 41.1"
L = 1,288.28'
T = 644.90'
R = 10,850.00'
SE = 0.02 FT/FT
100 x 15 x 3
ID 4.2F
REMOVE EXISTING GUARDRAIL
-L- STA. 35+56.35 TO 45+59 LT
GRADE TO DRAIN
ROD & LUG CONNECTORS W/ SLEEVE GASKETS & 2 ELBOWS
CLASS B RIP RAP
+49.00 -L-
PL
EXISTING R/W
END SHOULDER GUTTER STA. 45+62-L-(LT)
FALSE SUMP SEE DETAIL F
REMOVE
REMOVE EXIST. 2GI
1400' ACCELERATION LANE
BEG. SHOULDER GUTTER
RETAIN
TSD
S 0°15' 36.8" W
I-73/74 US 220 BYPASS 38' BST SBL
I-73/74 US 220 BYPASS 38' BST NBL
MATCHLINE -L3- STA. 64+25.00 SEE SHEET 5
US HWY 220
TSSta. 14+70.00
150' TAPER
N 1° 35' 40.3" E
REMOVE EXISTING GUARDRAIL
-L- STA. 38+89.00 TO 47+52.30 RT
TIE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL
END PROPOSED GUARDRAIL
-L- STA. 38+89.00
TSSta. 39+34.01
SCSta.
CLASS B RIP RAP
LATERAL BASE DITCH CLASS I RIP RAP SEE DETAIL A
END SHOULDER BERM GUTTER STA. 14+00 -L1-(RT.)
LATERAL BASE DITCH W/CLASS I RIP RAP SEE DETAIL A
LATERAL BASE DITCH PSRM LINED SEE DETAIL B
REMOVE EXIST. 2GI
7 ST FILTER FABRIC
2 TONS CLASS B RIP RAP
STANDARD BASE DITCH PSRM LINED SEE DETAIL C 119'@5.30% DDE=122 CU YDS
STANDARD BASE DITCH GRASS LINED SEE DETAIL D 82'@4.2% DDE=74 CU YDS
STANDARD BASE DITCH GRASS LINED SEE DETAIL E 19'@5.0% DDE=21 CU YDS
MATCHLINE -L1- STA. 15+75.00 SEE SHEET 8
RM GUTTER
95 x 35 x 3
4 inch Skimmer
with 3.875 inch
Orifice Diameter
12 ft. weir
(See Tiered Skimmer Basin Detail)
ID 4.10CG
Modified Silt Basin
Type 'B'
95 x 35 x 3
(See Tiered Skimmer Basin Detail)
ID 4.10CG
24 x 4 x 3
ID 4.10CGFa
24 x 4 x 3
ID 4.10CGFb
24 x 4 x 3
ID 4.10CGFc
24 x 4 x 3
ID 4.10CGFd
STEVEN
DB Z-53
RANDOLPH COUNTY
MONTGOMERY COUNTY
-L1- POTSta. 10+00.00
MARK BRASWELL
DB 1468 PG 622
600' DECELERATION LANE
EXISTING R/W

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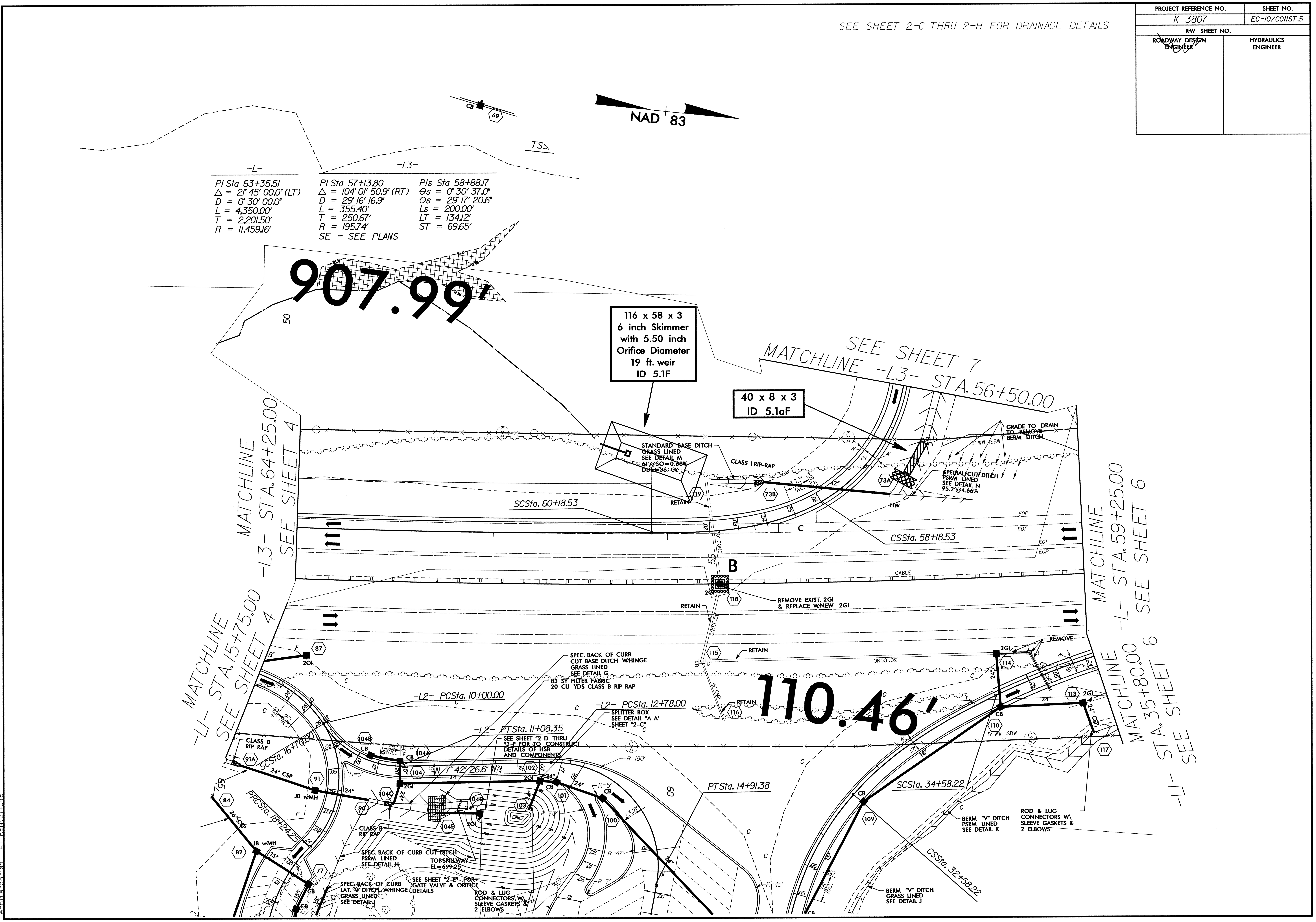
PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-10/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS
NAD 83
-L-
PI Sta 63+35.51
Δ = 21° 45' 00.0" (LT)
D = 0° 30' 00.0"
L = 4,350.00'
T = 2,201.50'
R = 11,459.16'
-L3-
PI Sta 57+13.80
Δ = 104° 01' 50.9" (RT)
D = 29° 16' 16.9"
L = 355.40'
T = 250.67'
R = 195.74'
SE = SEE PLANS
PIs Sta 58+88.17
Θs = 0° 30' 37.0"
Θs = 29° 17' 20.6"
Ls = 200.00'
LT = 134.12'
ST = 69.65'
907.99'
116 x 58 x 3
6 inch Skimmer
with 5.50 inch
Orifice Diameter
19 ft. weir
ID 5.1F
40 x 8 x 3
ID 5.1aF
SEE SHEET 7
MATCHLINE -L3- STA.56+50.00
MATCHLINE -L3- STA.64+25.00 SEE SHEET 4
MATCHLINE -L- STA.59+25.00 SEE SHEET 6
MATCHLINE -L1- STA.15+75.00 SEE SHEET 4
MATCHLINE -L1- STA.35+80.00 SEE SHEET 6
STANDARD BASE DITCH GRASS LINED SEE DETAIL M
CLASS I RIP-RAP
GRADE TO DRAIN TO REMOVE BERM DITCH
SPECIAL CUT DITCH PSRM LINED SEE DETAIL N 95.2'@4.66%
SCSta. 60+18.53
CSSta. 58+18.53
REMOVE EXIST. 2GI & REPLACE W/NEW 2GI
RETAIN
REMOVE
SPEC. BACK OF CURB CUT BASE DITCH W/HINGE GRASS LINED SEE DETAIL G
83 SY FILTER FABRIC 20 CU YDS CLASS B RIP RAP
-L2- PCSta. 10+00.00
-L2- PCSta. 12+78.00
-L2- PTSta. 11+08.35
SPLITTER BOX SEE DETAIL "A-A" SHEET "2-C"
SEE SHEET "2-D THRU "2-F FOR TO CONSTRUCT DETAILS OF HSB AND COMPONENTS
110.46'
N 7° 42' 26.6" W
PTSta. 14+91.38
SCSta. 34+58.22
CSSta. 32+58.22
SCSta. 16+70.00
PRCSta. 18+24.25
CLASS B RIP RAP
SPEC. BACK OF CURB CUT DITCH PSRM LINED SEE DETAIL H
TOP SPILLWAY EL = 699.25
SPEC. BACK OF CURB LAT. "V" DITCH W/HINGE GRASS LINED SEE DETAIL I
SEE SHEET "2-E" FOR GATE VALVE & ORIFICE DETAILS
ROD & LUG CONNECTORS W\ SLEEVE GASKETS & 2 ELBOWS
BERM "V" DITCH PSRM LINED SEE DETAIL K
BERM "V" DITCH GRASS LINED SEE DETAIL J
ROD & LUG CONNECTORS W\ SLEEVE GASKETS & 2 ELBOWS

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PROJECT REFERENCE NO. K-3807
SHEET NO. EC-II/CONST.6
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
-L-
PI Sta 63+35.51
△ = 21° 45' 00.0" (LT)
D = 0° 30' 00.0"
L = 4,350.00'
T = 2,201.50'
R = 11,459.16'
-LI-
PIs Sta 33+42.48
Θs = 5° 41' 23.7"
Θs = 17° 51' 22.8"
Ls = 200.00'
LT = 118.45'
ST = 84.27'
PIs Sta 37+79.98
Θs = 5° 45' 09.3"
Ls = 200.00'
LT = 133.40'
ST = 66.73'
-L3-
PIs Sta 15+84.20
Θs = 20° 06' 13.6"
Ls = 200.00'
LT = 134.20'
ST = 67.46'
PI Sta 19+11.15
△ = 85° 00' 00.0" (RT)
D = 20° 06' 13.6"
L = 422.81'
T = 261.15'
R = 285.00'
SE = 0.06 FT/FT
NAD 83
DARIN R. CROTTS
DB 1664 PG 295
MARK BRASWELL
DB 1468 PG 622
K.D. HARMON HEIRS
DB 135 PG 219
MATCHLINE -L3- STA.18+50.00 SEE SHEET 7
MATCHLINE -L- STA.59+25.00 SEE SHEET 5
MATCHLINE -LI- STA.35+80.00 SEE SHEET 8
48 x 10 x 3 ID 6.1F
44 x 12 x 3 ID 6.2F
20 x 8 x 3 ID 6.3F
100 x 18 x 3 ID 6.4F
TSSta. 14+50.00
-L3- POT Sta. 10+00.00
+12.25 -L- EX. R/W
+80.03 -L- EX. R/W
+67.91 -L- EX. R/W
SPECIAL CUT DITCH W/HINGE GRASS LINED SEE DETAIL S
REMOVE EXISTING GUARDRAIL -L- STA. 67+04.00 TO 68+00.00 LT
BEGIN SHOULDER BERM GUTTER STA 67+00 -L- (LT)
FALSE SUMP SEE DETAIL R
ROD & LUG CONNECTORS W/ SLEEVE GASKETS & 2 ELBOWS
END SHOULDER BERM GUTTER STA 69+54 -L- (LT.)
CLASS I RIP-RAP
EXISTING R/W
600' DECELERATION LANE
100' TAPER
150' TAPER
-L3- S 10° 04' 51.5" E
I-73/74 US 220 BYPASS 38' BST SBL
I-73/74 US 220 BYPASS 38' BST NBL
RETAIN
BEGIN EXISTING GUARDRAIL -L- STA. 68+00.00
TIE PROPOSED ANCHOR UNIT TO EXISTING GUARDRAIL
SCSta. 16+50.00
CSSta. 37+13.25
GRADE TO DRAIN
COLLAR AND EXTEND
REMOVE EXIST. 2GI
REMOVE
300' TAPER
500' ACCELERATION LANE
SPECIAL CUT DITCH W/HINGE GRASS LINED SEE DETAIL L
SPEC. CUT DITCH W/HINGE GRASS LINED SEE DETAIL L
BERM "V" DITCH PSRM LINED SEE DETAIL K
BERM 'V' DITCH PSRM LINED SEE DETAIL K
SRSSta. 39+13.25
SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS
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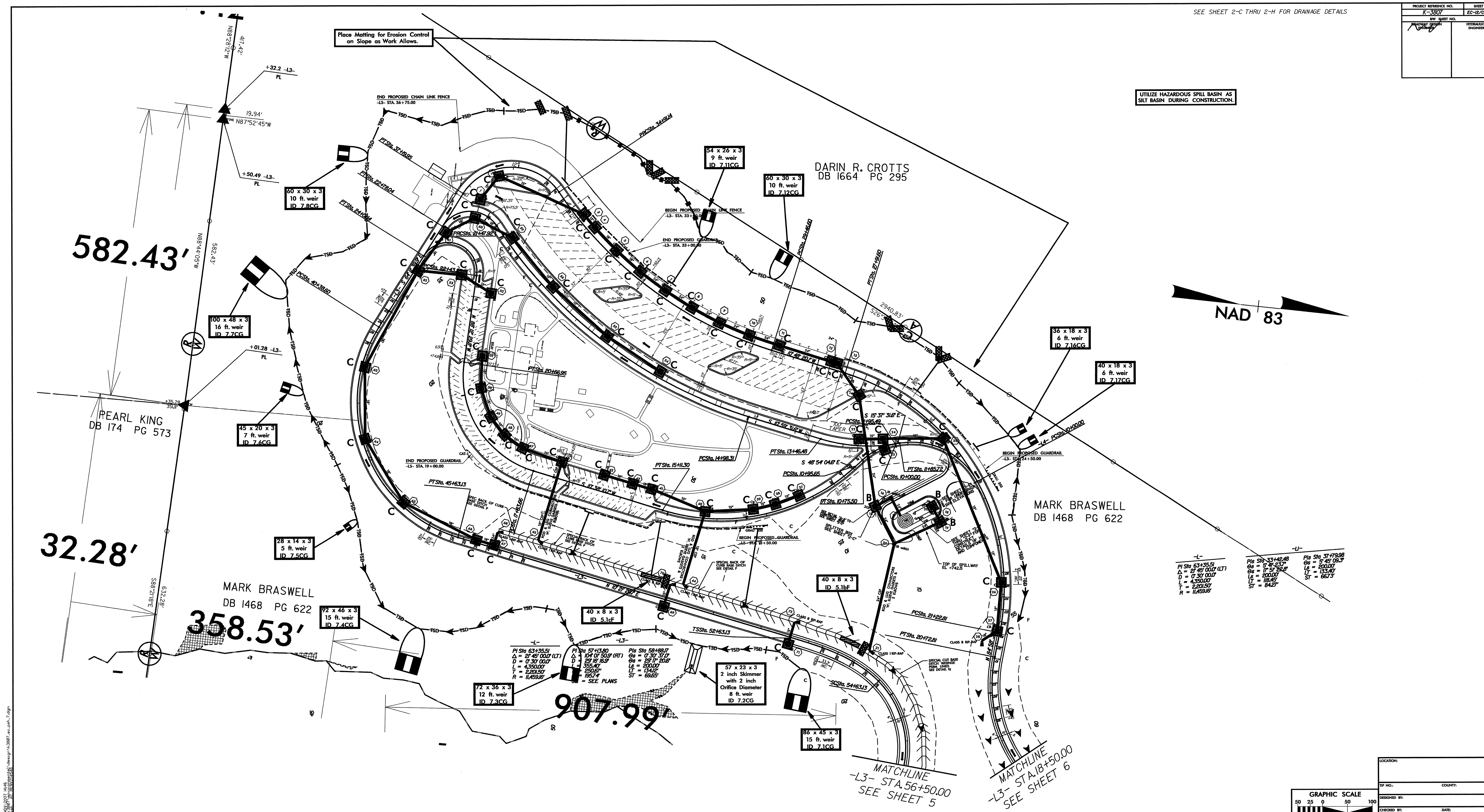

SEE SHEET 2-C THRU 2-H FOR DRAINAGE DETAILS
Place Matting for Erosion Control on Slope as Work Allows.
UTILIZE HAZARDOUS SPILL BASIN AS SILT BASIN DURING CONSTRUCTION.
DARIN R. CROTTS
DB 1664 PG 295
PEARL KING
DB 174 PG 573
MARK BRASWELL
DB 1468 PG 622
MARK BRASWELL
DB 1468 PG 622
NAD 83
582.43'
32.28'
358.53'
907.99'
END PROPOSED CHAIN LINK FENCE
BEGIN PROPOSED CHAIN LINK FENCE
END PROPOSED GUARDRAIL
BEGIN PROPOSED GUARDRAIL
60 x 30 x 3
10 ft. weir
ID 7.8CG
100 x 48 x 3
16 ft. weir
ID 7.7CG
45 x 20 x 3
7 ft. weir
ID 7.6CG
28 x 14 x 3
5 ft. weir
ID 7.5CG
92 x 46 x 3
15 ft. weir
ID 7.4CG
72 x 36 x 3
12 ft. weir
ID 7.3CG
57 x 23 x 3
2 inch Skimmer
with 2 inch
Orifice Diameter
8 ft. weir
ID 7.2CG
86 x 45 x 3
15 ft. weir
ID 7.1CG
40 x 8 x 3
ID 5.1cF
40 x 8 x 3
ID 5.1bF
54 x 26 x 3
9 ft. weir
ID 7.11CG
60 x 30 x 3
10 ft. weir
ID 7.12CG
36 x 18 x 3
6 ft. weir
ID 7.16CG
40 x 18 x 3
6 ft. weir
ID 7.17CG
MATCHLINE
-L3- STA.56+50.00
SEE SHEET 5
MATCHLINE
-L3- STA.18+50.00
SEE SHEET 6
GRAPHIC SCALE
50 25 0 50 100
PLANS
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

PROJECT REFERENCE NO.	SHEET NO.
K-3807	EC-13/CONST.B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER