

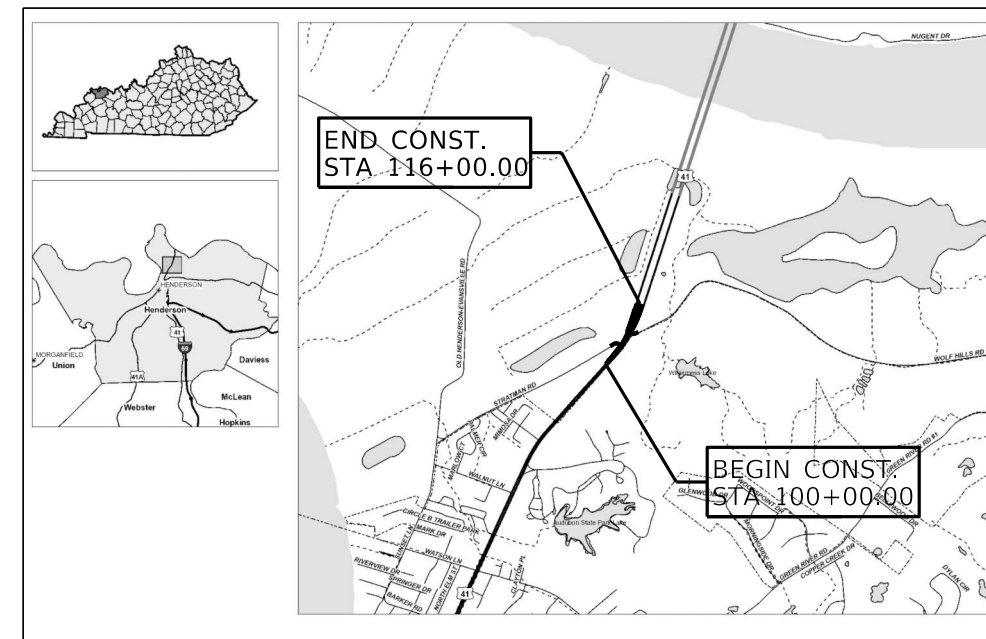
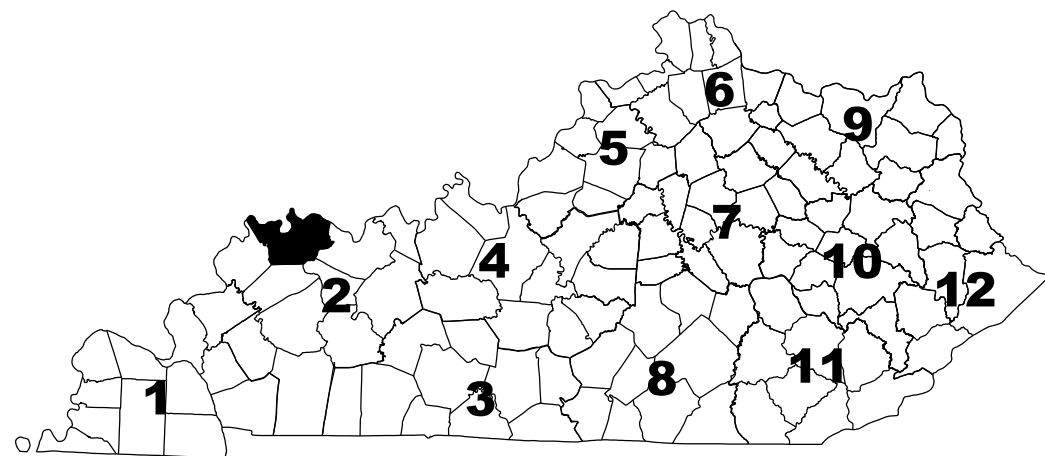


# COMMONWEALTH OF KENTUCKY

## DEPARTMENT OF HIGHWAYS

### PLANS OF PROPOSED PROJECT

## HENDERSON COUNTY US 41



**BEFORE YOU DIG**

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utilities companies have facilities in the area.

LAYOUT MAP

#### DESIGN CRITERIA

CLASS OF HIGHWAY STATE PRIMARY  
 TYPE OF TERRAIN LEVEL  
 DESIGN SPEED 55 MPH  
 REQUIRED NPSD N/A  
 REQUIRED PSD X  
 LEVEL OF SERVICE X  
 ADT PRESENT ( ) 41,375  
 ADT FUTURE ( X ) X  
 DHV X  
 D % X  
 T % X

#### GEOGRAPHIC COORDINATES

LATITUDE 37 DEGREES 53 MINUTES 23 SECONDS NORTH  
 LONGITUDE 87 DEGREES 33 MINUTES 25 SECONDS WEST

#### DESIGNED

% RESTRICTED SD X  
 LEVEL OF SERVICE X  
 MAX. DISTANCE W/O PASSING X

#### INDEX OF SHEETS

R001 LAYOUT SHEET  
 R002-R003 TYPICALS SECTIONS  
 R004-R007 SUMMARIES  
 R008-R010 PLAN SHEETS  
 R011 GEOMETRIC DATA SHEET  
 R012-R017 DETAIL SHEETS  
 R018-R024 SHEETING SIGNS DETAIL SHEETS  
 R025-R027 SIGNING PLAN SHEETS  
 R028-R030 STRIPING SHEETS  
 X0031-X040 CROSS SECTIONS

#### STANDARD DRAWINGS

RBI-001-12 RDB-100-05 RPM-001-04 RGX-005-06  
 RBI-002-07 RDB-101-05 RPM-010-06 RGX-065-03  
 RBI-004-06 RDB-110-08 RPM-100-11  
 RBI-006-07 RDB-280-06 RPM-115-05  
 RBR-001-13 RDB-281-03  
 RBR-005-11 RDB-282-04  
 RBR-015-06 RDB-283-04  
 RBR-020-07 RDI-001-10  
 RBR-055-01

LENGTH <u>1600.00</u> LIN. FT. <u>0.30</u> MILES ADDED <input type="checkbox"/> FOR EQUALITIES _____ LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED	LENGTH _____ LIN. FT. _____ MILES ADDED <input type="checkbox"/> FOR EQUALITIES _____ LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED	LENGTH _____ LIN. FT. _____ MILES ADDED <input type="checkbox"/> FOR EQUALITIES _____ LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED	LENGTH _____ LIN. FT. _____ MILES ADDED <input type="checkbox"/> FOR EQUALITIES _____ LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED
RAILROAD CROSSINGS NO. <u>0</u> LIN. FT. BRIDGES <u>0</u> LIN. FT.	RAILROAD CROSSINGS NO. _____ LIN. FT. BRIDGES _____ LIN. FT.	RAILROAD CROSSINGS NO. _____ LIN. FT. BRIDGES _____ LIN. FT.	RAILROAD CROSSINGS NO. _____ LIN. FT. BRIDGES _____ LIN. FT.

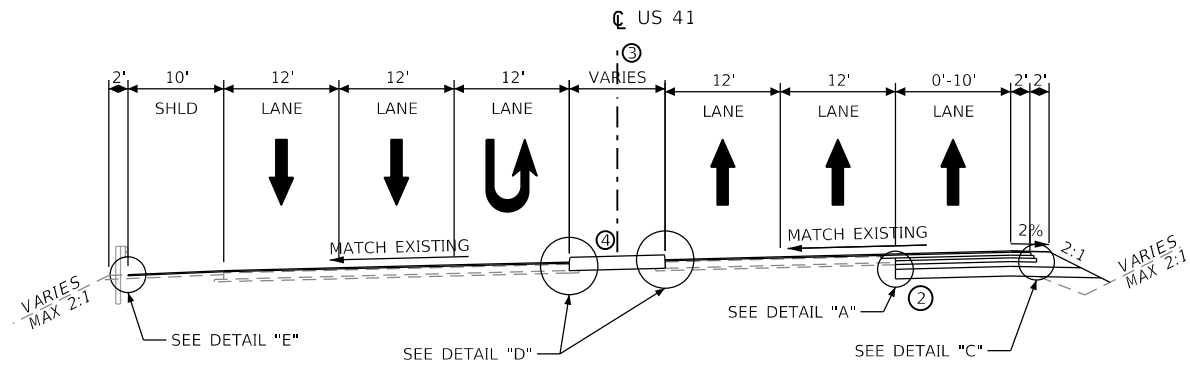
PROJECT NUMBER: FD52 051 0041 018-019

PROJECT DESCRIPTION: US 41 - WOLF HILLS ROAD INTERSECTION

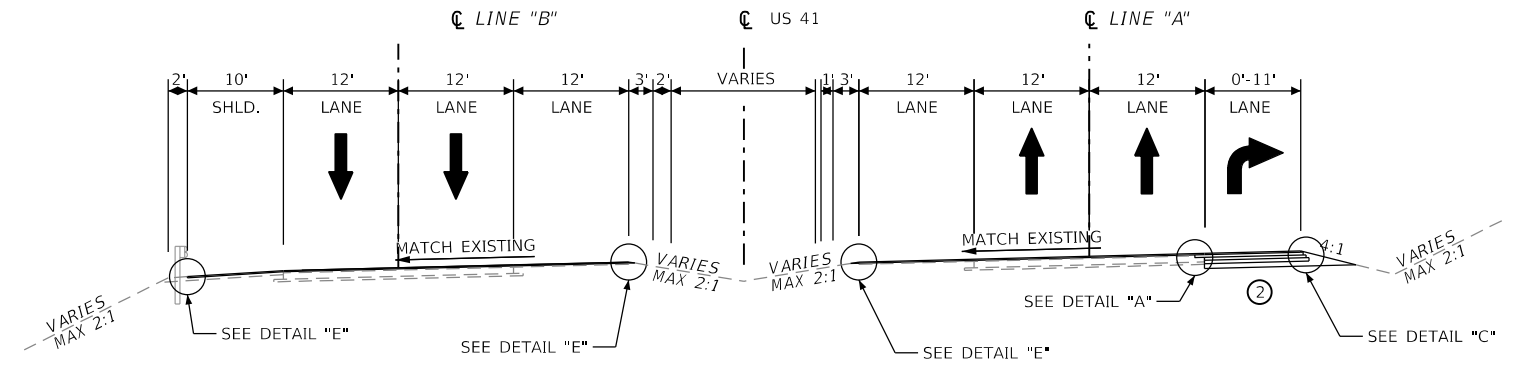
RECOMMENDED BY: \_\_\_\_\_ PROJECT MANAGER DATE: \_\_\_\_\_  
 PLAN APPROVED BY: \_\_\_\_\_ STATE HIGHWAY ENGINEER DATE: \_\_\_\_\_

<b>wsp</b>	WSP USA Inc. 1792 ALYSHEBA WAY SUITE 230 LEXINGTON, KY 40509 +1 859.272.5400	
	LETTING DATE:	X
	ITEM NO. 02-0935.00	COUNTY OF HENDERSON
	SHEET NO. R1	

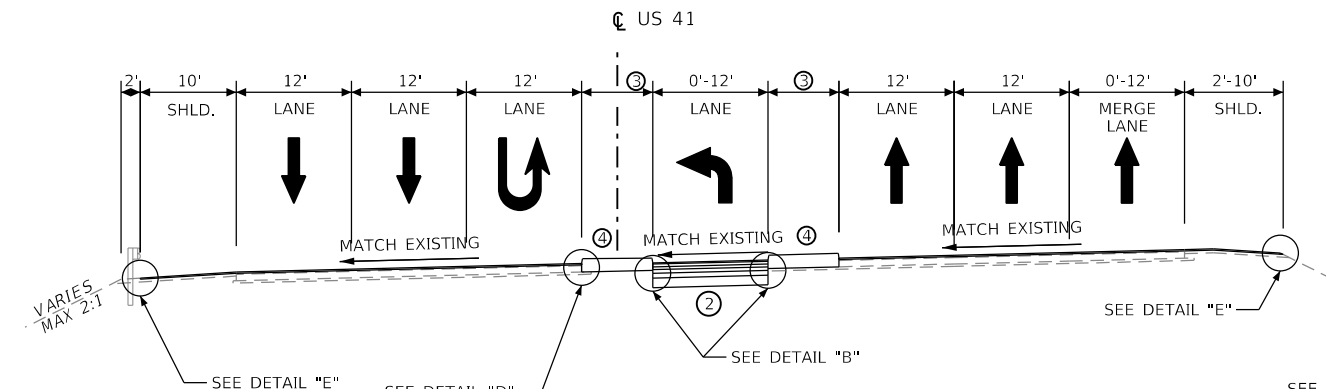
# TYPICAL SECTIONS



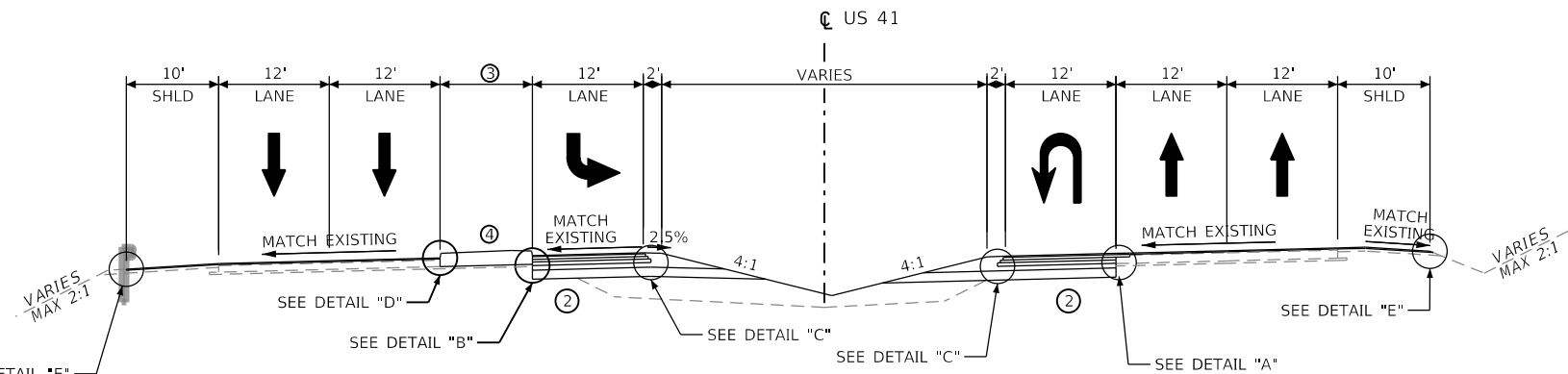
US 41  
STA 100+40 TO STA 101+85  
SUPERELEVATED SECTION



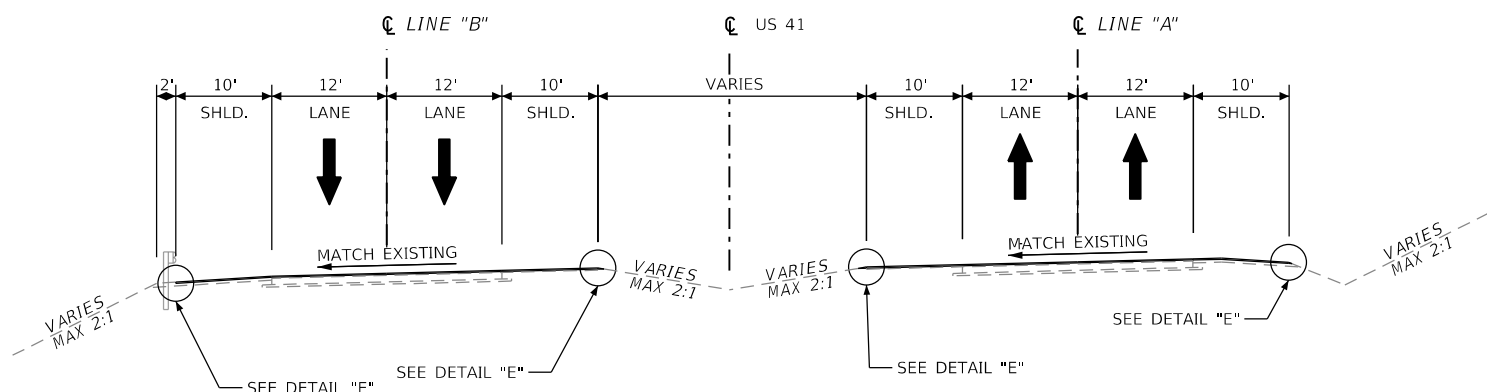
US 41  
STA 107+46 TO STA 108+67  
SUPERELEVATED SECTION



US 41  
STA 101+85 TO STA 105+78  
SUPERELEVATED SECTION



US 41  
STA 108+67 TO STA 110+92  
SUPERELEVATED SECTION



US 41  
STA 105+78 TO STA 107+46  
STA 115+03 TO STA 115+50  
SUPERELEVATED SECTION

## NOTES

- ① FOR FULL DEPTH PAVEMENT LONGITUDINAL JOINTS, PERFORM ASPHALT PAVE MILLING & TEXTURING A TOTAL DEPTH OF 5.00 INCHES (AN ADDITIONAL 3.5" REQUIRED FOR MILL AND OVERLAY) AND A WIDTH OF 18.00 INCHES FROM EXISTING EDGE OF PAVEMENT FOR PAVEMENT TIE IN. SEE DETAIL "A". WILL BE PAID BY MILLING AND PAVING BID ITEMS.
- ② FULL DEPTH PAVEMENT SHALL HAVE A ROADBED OF 12.00" CRUSHED AGGREGATE SIZE NO 2 UNDERLAIN WITH FABRIC - GEOTEXTILE CLASS 1A AND OVERLAIN WITH FABRIC - GEOTEXTILE CLASS 1.
- ③ GORE AREA - WIDTH VARIES
- ④ MOUNTABLE MEDIAN TYPE 3 OR STANDARD BARRIER MEDIAN TYPE 4 - SEE PLANS FOR LOCATIONS
- 5 CONTRACTOR SHALL DAYLIGHT CRUSHED STONE BASE SHOULDERS TO MEET EXISTING SLOPES.
- 6 AT LOCATIONS WHERE A RAISED CONCRETE MEDIAN IS TO BE INSTALLED WITH MILLING AND OVERLAY OF EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAWCUT TO A DEPTH OF 8.00 INCHES, OR THE FULL DEPTH OF EXISTING PAVEMENT, WHICHEVER IS LESS.
- 7 ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH LINE OR FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING:  
 ASPHALT SEAL COAT @ 2.40 LBS./SQ. YD.  
 ASPHALT SEAL AGGREGATE @ 20 LBS./SQ. YD.



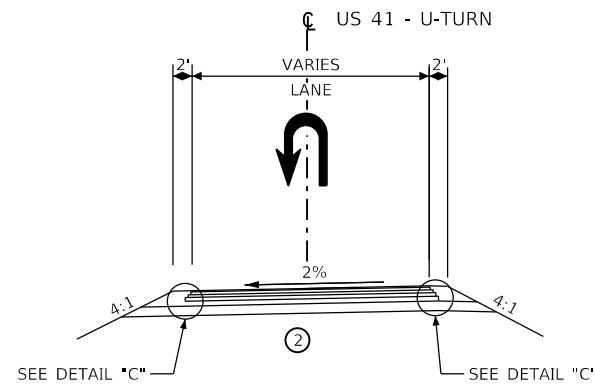
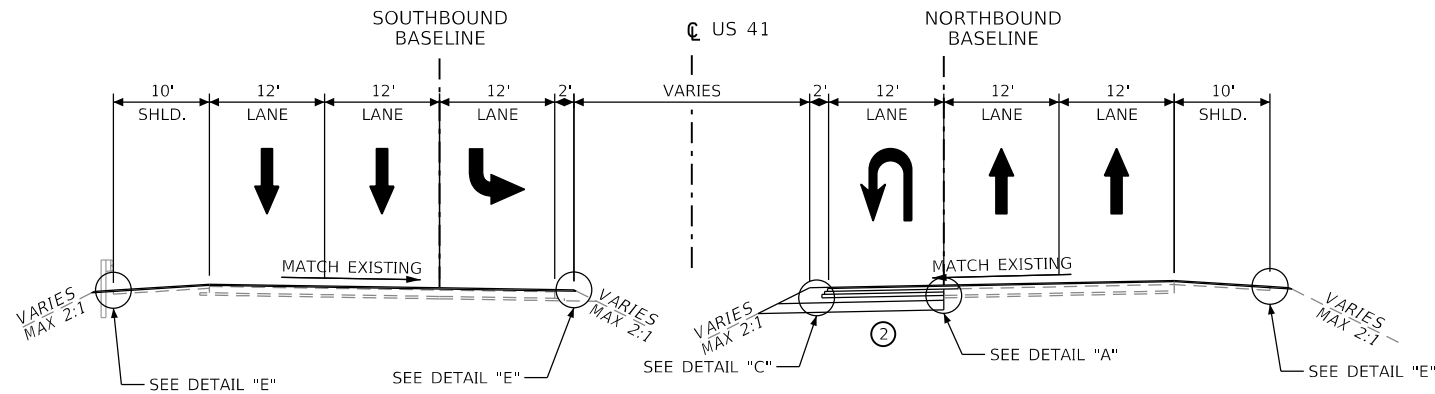
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



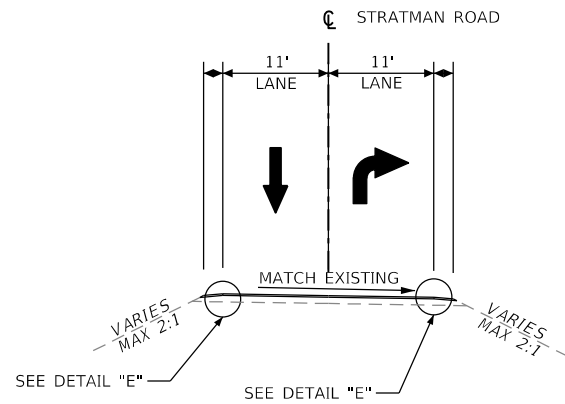
DRAWING TITLE: US 41 TYPICAL SECTIONS

ITEM NO.  
02-0935.00 COUNTY OF  
HENDERSON  
SHEET NO.  
R2

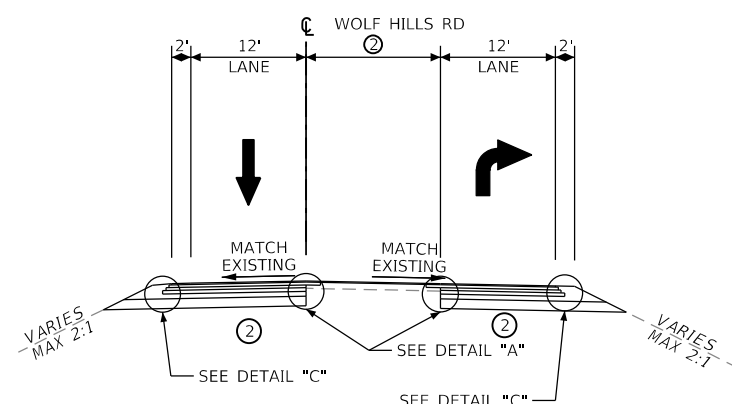
# TYPICAL SECTIONS



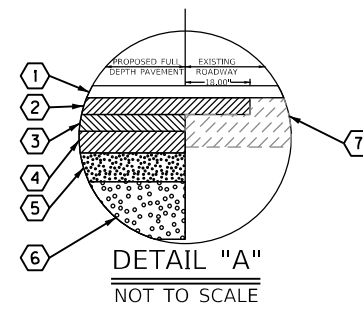
US 41 - U-TURN  
 STA 113+70 TO STA 114+50



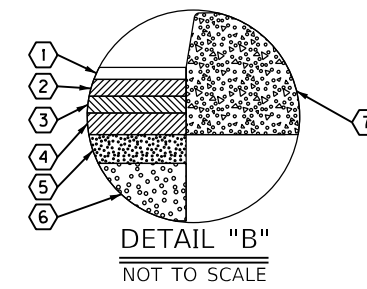
STRATMAN ROAD  
 STA 201+39 TO STA 202+84



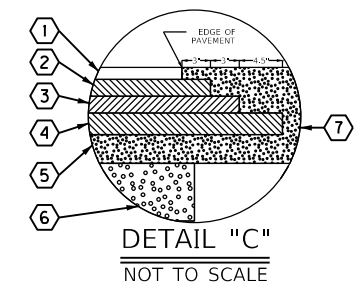
WOLF HILLS ROAD  
 STA 300+60 TO STA 301+80



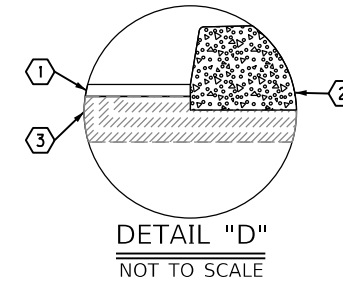
- ① 1.50" CL4 ASPH SURF 0.50A PG64-22 W/ FIBERS (PAID FOR BY FD05)
- ② 3.50" CL4 ASPH BASE 1.00D PG64-22
- ③ 3.50" CL4 ASPH BASE 1.00D PG64-22
- ④ 4.50" CL4 ASPH BASE 1.00D PG64-22
- ⑤ 6.00" CRUSHED STONE BASE
- ⑥ 12.00" CRUSHED AGGREGATE NO. 2
- ⑦ EXISTING PAVEMENT



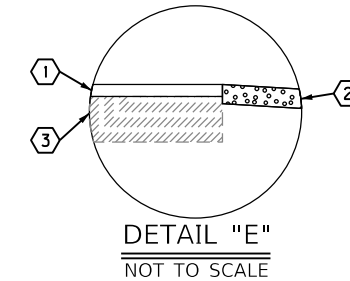
- ① 1.50" CL4 ASPH SURF 0.50A PG64-22 W/ FIBERS (PAID FOR BY FD05)
- ② 3.50" CL4 ASPH BASE 1.00D PG64-22
- ③ 3.50" CL4 ASPH BASE 1.00D PG64-22
- ④ 4.50" CL4 ASPH BASE 1.00D PG64-22
- ⑤ 6.00" CRUSHED STONE BASE
- ⑥ 12.00" CRUSHED AGGREGATE NO. 2
- ⑦ STANDARD BARRIER MEDIAN TYPE 4 OR MOUNTABLE MEDIAN TYPE 4



- ① 1.50" CL4 ASPH SURF 0.50A PG64-22 W/ FIBERS (PAID FOR BY FD05)
- ② 3.50" CL4 ASPH BASE 1.00D PG64-22
- ③ 3.50" CL4 ASPH BASE 1.00D PG64-22
- ④ 4.50" CL4 ASPH BASE 1.00D PG64-22
- ⑤ 6.00" CRUSHED STONE BASE
- ⑥ 12.00" CRUSHED AGGREGATE NO. 2
- ⑦ CRUSHED STONE BASE SHOULDER



- ① 1.50" CL4 ASPH SURF 0.50A PG64-22 W/ FIBERS (PAID FOR BY FD05)
- ② STANDARD BARRIER MEDIAN TYPE 4 OR MOUNTABLE MEDIAN TYPE 4
- ③ EXISTING PAVEMENT



- ① 1.50" CL4 ASPH SURF 0.50A PG64-22 W/ FIBERS (PAID FOR BY FD05)
- ② 2.00" CRUSHED STONE BASE
- ③ EXISTING PAVEMENT

## NOTES

- ① FOR FULL DEPTH PAVEMENT LONGITUDINAL JOINTS, PERFORM ASPHALT PAVE MILLING & TEXTURING A TOTAL DEPTH OF 5.00 INCHES (AN ADDITIONAL 3.5" REQUIRED FOR MILL AND OVERLAY) AND A WIDTH OF 18.00 INCHES FROM EXISTING EDGE OF PAVEMENT FOR PAVEMENT TIE IN. SEE DETAIL "A". WILL BE PAID BY MILLING AND PAVING BID ITEMS.
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- ③ GORE AREA - WIDTH VARIES
- ④ MOUNTABLE MEDIAN TYPE 3 OR STANDARD BARRIER MEDIAN TYPE 4 - SEE PLANS FOR LOCATIONS
- ⑤ CONTRACTOR SHALL DAYLIGHT CRUSHED STONE BASE SHOULDERS TO MEET EXISTING SLOPES.
- ⑥ AT LOCATIONS WHERE A RAISED CONCRETE MEDIAN IS TO BE INSTALLED WITH MILLING AND OVERLAY OF EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAWCUT TO A DEPTH OF 8.00 INCHES, OR THE FULL DEPTH OF EXISTING PAVEMENT, WHICHEVER IS LESS.
- ⑦ ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH LINE OR FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING:  
 ASPHALT SEAL COAT @ 2.40 LBS./SQ. YD.  
 ASPHALT SEAL AGGREGATE @ 20 LBS./SQ. YD.



ITEM	DESCRIPTION	NOTE(S)	UNIT	US 41	STRATMAN ROAD	WOLF HILLS ROAD	TOTAL PROJECT
00003	CRUSHED STONE BASE	1	TON	1491	5	256	1752
00078	CRUSHED AGGREGATE SIZE NO 2	1	TON	2015		376	2391
00100	ASPHALT SEAL AGGREGATE	1	TON	7		1	8
00103	ASPHALT SEAL COAT	1	TON	1		1	2
00217	CL4 ASPH BASE 1.00D PG64-22	1	TON	1972	383		2355
00461	CULVERT PIPE-15 IN	2	LF	88			88
00462	CULVERT PIPE-18 IN	2	LF	12		24	36
00464	CULVERT PIPE-24 IN	2	LF	75			75
01310	REMOVE PIPE		LF	30		4	34
01480	CURB BOX INLET TYPE B	2	EACH	2			2
01705	REMOVE CURB & GUTTER BOX INLET		EACH	2			2
01921	STANDARD BARRIER MEDIAN TYPE 4		SQYD	143			143
01939	MOUNTABLE MEDIAN TYPE 3		SQYD	544			544
01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE		EACH	4		4	8
01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW		EACH	16			16
02091	REMOVE PAVEMENT		SQYD			124	124
02200	ROADWAY EXCAVATION		CUYD	1482		99	1581
02351	GUARDRAIL-STEEL W BEAM-S FACE		LF	587.5		150	737.5
02367	GUARDRAIL END TREATMENT TYPE 1		EACH	1			1
02369	GUARDRAIL END TREATMENT TYPE 2A		EACH	1			1
02381	REMOVE GUARDRAIL		LF	218		163	381
02562	TEMPORARY SIGNS		SQFT	384	48	48	480
02569	DEMobilIZATION		LS	1			1
02602	FABRIC-GEOTEXTILE CLASS 1	1	SQYD	3533		633	4166
02604	FABRIC-GEOTEXTILE CLASS 1A	1	SQYD	3848		376	4224
02625	REMOVE HEADWALL		EACH	1		1	2
02650	MAINTAIN & CONTROL TRAFFIC		LS	1			1
02671	PORTABLE CHANGEABLE MESSAGE SIGN		EACH	6			6
02701	TEMP SILT FENCE		LF	2500			2500
02703	SILT TRAP TYPE A		EACH	5			5
02704	SILT TRAP TYPE B		EACH	5			5
02705	SILT TRAP TYPE C		EACH	5			5
02706	CLEAN SILT TRAP TYPE A		EACH	5			5
02707	CLEAN SILT TRAP TYPE B		EACH	5			5
02708	CLEAN SILT TRAP TYPE C		EACH	5			5
02726	STAKING		LS	1			1
02775	ARROW PANEL		EACH	2			2
03225	TUBULAR MARKERS		EACH	45			45
04701	POLE 40 FT MTG HT	5	EACH	5			5
04725	BRACKET 15 FT	5	EACH	5			5
04740	POLE BASE	5	EACH	5			5
04750	TRANSFORMER BASE	5	EACH	5			5
04761	LIGHTING CONTROL EQUIPMENT	5	EACH	1			1
04780	FUSED CONNECTOR KIT	5	EACH	10			10
04797	CONDUIT-3 IN	5	LF	1120			1120
04820	TRENCHING AND BACKFILLING	5	LF	4145			4145
04832	WIRE-NO. 12	5	LF	825			825
04860	CABLE-NO. 8/3C DUCTED	5	LF	3025			3025
05950	EROSION CONTROL BLANKET		SQYD	75			75
05952	TEMP MULCH		SQYD	1850			1850
05953	TEMP SEEDING AND PROTECTION		SQYD	1850			1850
05963	INITIAL FERTILIZER		TON	1			1
05964	MAINTENANCE FERTILIZER		TON	1			1
05985	SEEDING AND PROTECTION		SQYD	1850			1850

ITEM	DESCRIPTION	NOTE(S)	UNIT	US 41	STRATMAN ROAD	WOLF HILLS ROAD	TOTAL PROJECT
05992	AGRICULTURAL LIMESTONE		TON	1			1
06406	SBM ALUM SHEET SIGNS .080 IN	3	SQFT	344			344
06407	SBM ALUM SHEET SIGNS .125 IN	3	SQFT	175			175
06410	STEEL POST TYPE 1	3	LF	823			823
06490	CLASS A CONCRETE FOR SIGNS	3	CUYD	2			2
06568	PAVE MARKING-THERMO STOP BAR-24IN	4	LF		20	26	46
06569	PAVE MARKING-THERMO CROSS-HATCH	4	SQFT	3306	1129	2302	6737
06574	PAVE MARKING-THERMO CURV ARROW	4	EACH	13	2	2	17
06576	PAVE MARKING-THERMO ONLY	4	EACH	1	1	1	3
20191ED	OBJECT MARKER TY 3		EACH	1			1
20391NS835	ELECTRICAL JUNCTION BOX TYPE A	5	EACH	8			8
21289ED	LONGITUDINAL EDGE KEY		LF	1786		153	1939
21596ND	GMSS TYPE D	3	EACH	6			6
23839EC	REMOVE CONCRETE MEDIAN		SQYD	58.1		23.2	81.3
24589ED	LED LUMINAIRE	5	EACH	5			5
24631EC	BARCODE SIGN INVENTORY	3	EACH	91			91
24679ED	PAVE MARK THERMO CHEVRON	4	SQFT	745	157	324	1226
24969ED	LONGITUDINAL SAW CUT		LF	1786		153	1939
24889EC	PAVE MARKING-THERMO U-TURN	4	EACH	9			9
26130ED	SLOPED AND MITERED HEADWALL-15 IN	2	EACH	1			1
26131ED	SLOPED AND MITERED HEADWALL-18 IN	2	EACH			1	1
26132ED	SLOPED AND MITERED HEADWALL-24 IN	2	EACH	2			2
26132ED	SLOPED AND MITERED HEADWALL-24 IN	2	EACH	2			2

NOTES

- 1 CARRIED OVER FROM PAVING SUMMARY
- 2 CARRIED OVER FROM PIPE DRAINAGE SUMMARY
- 3 CARRIED OVER FROM SIGNAGE SUMMARY
- 4 CARRIED OVER FROM STRIPING SUMMARY
- 5 CARRIED OVER FROM LIGHTING PLANS
- 6 ITEMS TO BE PAID FOR BY FD05 ARE SHOWN IN TABLE BELOW

ITEM	DESCRIPTION	NOTE(S)	UNIT	US 41	STRATMAN ROAD	WOLF HILLS ROAD	TOTAL PROJECT
00190	LEVELING & WEDGING PG64-22	6	TON	131	4	8	143
00333	CL4 ASPH SURF 0.50A PG64-22	6	TON	1307	35	75	1417
00356	ASPHALT MATERIAL FOR TACK	6	TON	6	1	1	8
02676	MOBILIZATION FOR MILL & TEXT	6	LS	1			1
02677	ASPHALT PAVE MILLING & TEXTURING	6	TON	1056	35	26	1117
02696	SHOULDER RUMBLE STRIPS	6	LF	2600			2600
06542	PAVE STRIPING-THERMO-6 IN W	6	LF	7719	235	225	8179
06543	PAVE STRIPING-THERMO-6 IN Y	6	LF	2586	294	268	3148
20071EC	JOINT ADHESIVE	6	LF	1984	154	167	2305
24785EC	FIBER REINFORCEMENT FOR HMA	6	TON	1307	35	75	1417







PAVING AREAS

ITEM	NOTES	US 41	WOLF HILLS ROAD	STRATMAN ROAD	TOTAL PROJECT	SQUARE YARDS	
3.5" CL4 ASPH BASE 1.00D PG64-22		3067	599		3666		
3.5" CL4 ASPH BASE 1.00D PG64-22		3113	604		3717		
4.5" CL4 ASPH BASE 1.00D PG64-22		3159	609		3768		
6" CRUSHED STONE BASE		3218	616		3834		
FABRIC-GEOTEXTILE CLASS 1		3533	633		4166		
12" CRUSHED AGGREGATE SIZE NO 2		3533	623		4156		
FABRIC-GEOTEXTILE CLASS 1A		3848	669		4517		
CRUSHED STONE SHOULDERS		315	36		351		
CRUSHED STONE BASE WEDGES (CY)	1	17	1	2	20		
ASPHALT SEAL COAT		315	36		351		
ASPHALT SEAL AGGREGATE		315	36		351		
QUANTITY TO BE PAID FOR BY FD05							
1.5" CL4 ASPH SURF 0.50A PG64-22		15837	907	423	17167		
FIBER REINFORCEMENT FOR HMA		15837	907	423	17167		

1. DEPTH IS AVERAGE ACROSS WEDGE

\*ALL QUANTITIES CARRIED TO GENERAL SUMMARY

PAVING SUMMARY

ITEM CODE	ITEM	NOTES	UNIT	US 41	STRATMAN ROAD	WOLF HILLS ROAD	TOTAL PROJECT
00003	CRUSHED STONE BASE	1	TON	1491	5	256	1752
00078	CRUSHED AGGREGATE SIZE NO 2	2	TON	2015		376	2391
00100	ASPHALT SEAL AGGREGATE	4	TON	7		1	8
00103	ASPHALT SEAL COAT	5	TON	1		1	2
00217	CL4 ASPH BASE 1.00D PG64-22	3	TON	1972	383		2355
02602	FABRIC-GEOTEXTILE CLASS 1		SOYD	3533		633	4166
02604	FABRIC-GEOTEXTILE CLASS 1A		SOYD	3848		376	4224

\*ALL QUANTITIES CARRIED TO GENERAL SUMMARY

1. ESTIMATED AT 115 LBS PER SOYD PER INCH OF DEPTH
2. ESTIMATED AT 95 LBS PER SOYD PER INCH OF DEPTH
3. ESTIMATED AT 110 LBS PER SOYD PER INCH OF DEPTH
4. ESTIMATED AT 20 LBS PER SOYD (2 APPLICATIONS)
5. ESTIMATED AT 0.4 LBS PER SOYD (2 APPLICATIONS)

PAVING SUMMARY

ITEM CODE	ITEM	NOTES	UNIT	US 41	STRATMAN ROAD	WOLF HILLS ROAD	TOTAL PROJECT
00190	LEVELING & WEDGING PG64-22	7	TON	131	4	8	143
00333	CL4 ASPH SURF 0.50A PG64-22	7	TON	1382	35	75	1492
00356	ASPHALT MATERIAL FOR TACK	6,7	TON	6	1.0	1	8
02677	ASPHALT PAVE MILLING & TEXTURING	7	TON	1056	35	26	1117
20071EC	JOINT ADHESIVE	7	LF	1984	154	167	2305
24785EC	FIBER REINFORCEMENT FOR HMA	7	TON	1382	35	75	1492

6. ESTIMATED AT 0.84 LBS PER SOYD
7. ITEMS TO BE PAID FOR BY FD05 ARE SHOWN IN TABLE BELOW

PIPE DRAINAGE SUMMARY											
ITEM CODE	SKEW	COVER HEIGHT	DESIGN pH LEVEL	CULVERT PIPE -15 IN	CULVERT PIPE-18 IN	CULVERT PIPE-24 IN	CURB BOX INLET TY. B	SLOPED AND MITERED HEADWALL-15IN	SLOPED AND MITERED HEADWALL-18IN	SLOPED AND MITERED HEADWALL-24IN	REMARKS
UNIT TO BID		FT	LF	LF	LF	EACH	EACH	EACH	EACH		
<b>US 41</b>											
101+79	00°49'41"	6.4		12		1					
105+04	03°07'28"	4.6	4		75	1					
109+44	86°27'42"	3.8	10				1				
114+30	90°00'00"	6.0	74							2	
<b>WOLF HILLS ROAD</b>											
301+08	14°02'32"	3.7		24				1			
<b>TOTALS</b>				<b>88</b>	<b>36</b>	<b>75</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	

PROPOSED PIPE EXTENSIONS SHALL BE IN KIND MATERIAL. PIPE CONNECTIONS SHALL HAVE A CAST-IN-PLACE CONCRETE COLLAR AND WRAPPED IN FABRIC - GEOTEXTILE TYPE 2. ALTERNATE EXTENSION METHODS MAY BE APPROVED BY THE ENGINEER DURING CONSTRUCTION. PIPE COLLAR, FABRIC, AND ANY OTHER MATERIAL REQUIRED FOR PIPE CONNECTION SHALL BE INCIDENTAL TO THE COST OF PIPE BEING CONSTRUCTED.

\*ALL QUANTITIES CARRIED TO GENERAL SUMMARY



STRIPING TABLE							
ALIGNMENT	BEGIN STATION	BEGIN OFFSET	END STATION	END OFFSET	DESCRIPTION	UNIT	QUANTITY
US 41	100+40.00	14.42' RT	100+72.42	14.30	6" SOLID YELLOW	LF	32
US 41	101+01.41	14.20' RT	105+17.43	0.00	6" SOLID YELLOW	LF	434
US 41	105+02.23	18.56' RT	108+83.74	28.85	6" SOLID YELLOW	LF	385
US 41	109+06.71	0.00'	114+17.30	0.00	6" SOLID YELLOW	LF	576
US 41	114+05.75	61.09' RT	115+50	65.00	6" SOLID YELLOW	LF	239
US 41	100+40	14.71' LT	101+04	-15.53	6" SOLID YELLOW	LF	64
US 41	101+08.66	0.00'	105+42.72	-19.24	6" SOLID YELLOW	LF	467
US 41	105+59.91	19.78' LT	109+52.27	-44.25	6" SOLID YELLOW	LF	389
US 41	109+06.71	0.00'	114+17.54	0.00	6" SOLID YELLOW	LF	561
US 41	114+45.05	61.80' LT	115+50.00	-61.41	6" SOLID YELLOW	LF	105
<b>TOTAL</b>							2586
US 41	100+40.00	39.40' RT	108+72.59	69.87	6" SOLID WHITE	LF	852
US 41	103+04.44	15.09' RT	105+49.95	0.00	6" SOLID WHITE	LF	458
US 41	109+35.85	53.32' RT	115+50.00	88.00	6" SOLID WHITE	LF	678
US 41	108+83.32	0.00'	108+83.32	28.85	6" SOLID WHITE	LF	29
US 41	109+56.91	30.76' RT	114+05.75	61.09	6" SOLID WHITE	LF	456
US 41	100+40.00	37.71' LT	105+26.17	-60.00	6" SOLID WHITE	LF	487
US 41	100+76.91	0.00'	103+92.70	-17.40	6" SOLID WHITE	LF	320
US 41	105+76.86	73.11' LT	115+50.00	-84.10	6" SOLID WHITE	LF	976
US 41	108+83.08	0.00'	112+52.28	-61.77	6" SOLID WHITE	LF	383
US 41	114+42.85	1.65' LT	114+45.05	-61.80	6" SOLID WHITE	LF	60
WOLF HILLS RD	300+70.00	13.11' RT	301+78.45	40.25	6" SOLID WHITE	LF	116
WOLF HILLS RD	300+70.00	12.25' LT	301+64.71	-25.00	6" SOLID WHITE	LF	109
STRATMAN RD	201+39.10	12.00' RT	202+23.14	22.55	6" SOLID WHITE	LF	75
STRATMAN RD	201+39.10	12.00' LT	202+28.87	-24.31	6" SOLID WHITE	LF	160
<b>TOTAL</b>							4924
STRATMAN RD	201+39.10	0.00	202+35.18	0.00	6" DOUBLE SOLID YELLOW	LF	147
WOLF HILLS RD	300+70.00	0.00	301+80.83	0.00	6" DOUBLE SOLID YELLOW	LF	134
<b>TOTAL</b>							281
US 41	100+40.00	26.16' RT	115+50.00	77.00	6" DASHED WHITE 10X30	LF	1528
US 41	100+40.00	26.10' LT	115+50.00	-72.60	6" DASHED WHITE 10X30	LF	1491
<b>TOTAL</b>							3020

STRIPING SUMMARY				
ITEM CODE	DESCRIPTION	UNIT	QUANTITY	NOTES
06511	PAVE STRIPING-TEMP PAINT-6 IN	LF	10210	
06542	PAVE STRIPING-THERMO-6 IN W	LF	8179	PAID FOR BY FD05
06543	PAVE STRIPING-THERMO-6 IN Y	LF	3148	PAID FOR BY FD05
06568	PAVE MARKING-THERMO STOP BAR-24 IN	LF	46	
06569	PAVE MARKING-THERMO CROSS-HATCH	SQFT	6737	
06574	PAVE MARKING-THERMO CURV ARROW	EACH	17	
06576	PAVE MARKING-THERMO ONLY	EACH	3	
24889EC	PAVE MARKING-THERMO U-TURN	EACH	9	



ASPHALT PAVE  
MILLING & OVERLAY  
(PAID FOR BY FD05)

FULL DEPTH  
PAVEMENT

FLEXIBLE  
DELINEATORS

**MOUNTABLE MEDIAN TYPE 3**

RT. STA. 101+04 TO RT. STA. 104+40  
CONSTRUCT 255 SQYD MOUNTABLE  
MEDIAN TYPE 3.

LT. STA. 101+13 TO RT. STA. 104+40  
CONSTRUCT 165 SQYD MOUNTABLE  
MEDIAN TYPE 3.

RT. STA. 105+03 TO RT. STA. 105+79  
CONSTRUCT 69 SQYD MOUNTABLE  
MEDIAN TYPE 3.

LT. STA. 105+64 TO LT. STA. 105+79  
CONSTRUCT 20 SQYD MOUNTABLE  
MEDIAN TYPE 3.

**STANDARD BARRIER MEDIAN TYPE 4**

RT. STA. 104+40 TO RT. STA. 105+11  
CONSTRUCT 2 SQYD STANDARD BARRIER  
MEDIAN TYPE 4.

LT. STA. 104+40 TO LT. STA. 105+16  
CONSTRUCT 53 SQYD STANDARD BARRIER  
MEDIAN TYPE 4.

RT. STA. 105+03 TO RT. STA. 105+52  
CONSTRUCT 38 SQYD STANDARD BARRIER  
MEDIAN TYPE 4.

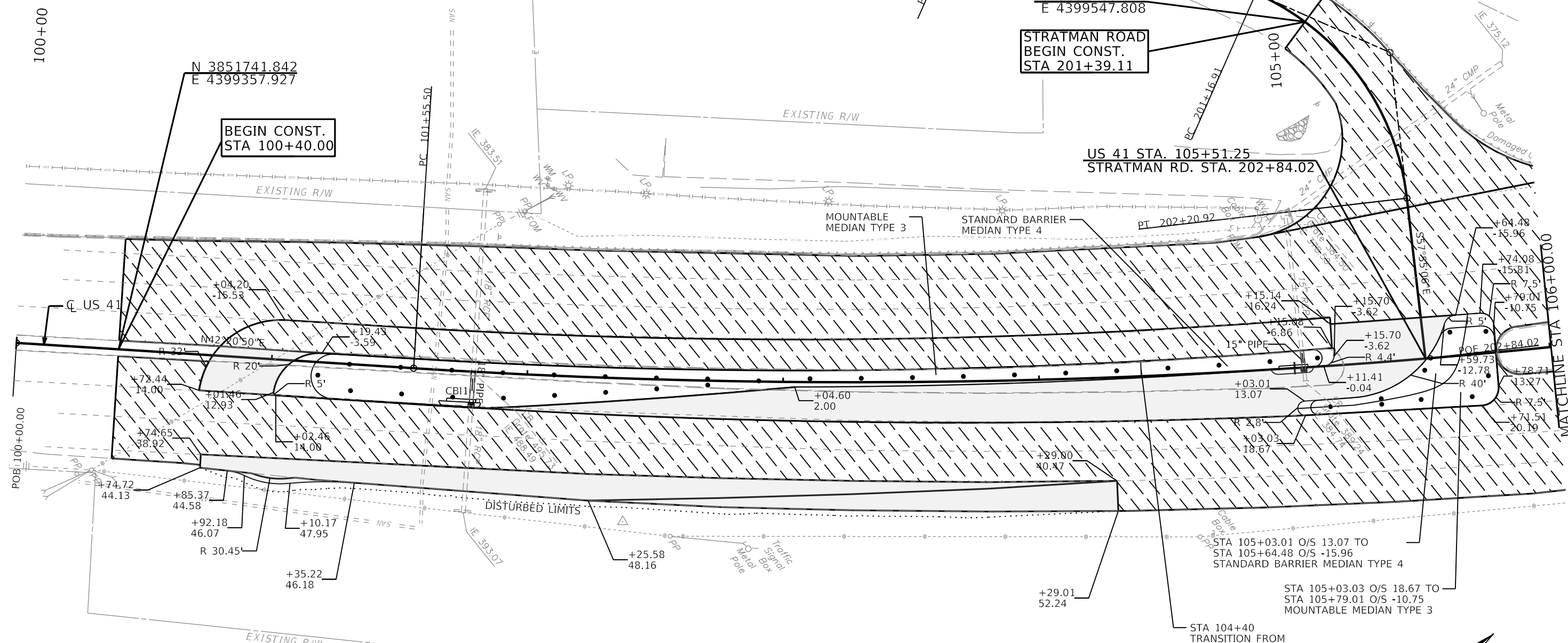
LT. STA. 105+52 TO LT. STA. 105+64  
CONSTRUCT 18 SQYD STANDARD BARRIER  
MEDIAN TYPE 4.

**REMOVE CURB BOX INLET & PIPE**

RT. STA. 101+79  
REMOVE EXISTING CBI AND 15 LF 18" RCP

RT. STA. 105+04  
REMOVE EXISTING CBI AND 11 LF 15" RCP

PI STA 201+74.17  
Δ = 59°35'51" RT  
T = 57.27'  
L = 104.02'  
R = 100.00'  
E = 15.24'  
e = MATCH EXIST.  
Runoff = MATCH EXIST.  
Runout = MATCH EXIST.



BEGIN CONST.  
STA 100+40.00

STRATMAN ROAD  
BEGIN CONST.  
STA 201+39.11

US 41 STA. 105+51.25  
STRATMAN RD. STA. 202+84.02

**LONGITUDINAL EDGE KEY**

US 41 RT. STA. 100+72 TO RT. STA. 101+02  
CONSTRUCT 30 LF.

US 41 RT. STA. 100+75 TO RT. STA. 104+29  
CONSTRUCT 359 LF.

US 41 RT. STA. 101+84 TO RT. STA. 105+01  
CONSTRUCT 320 LF

US 41 LT. STA. 105+13 TO RT. STA. 105+66  
CONSTRUCT 52 LF

**LONGITUDINAL SAW CUT**

US 41 RT. STA. 100+72 TO RT. STA. 101+02  
CONSTRUCT 30 LF.

US 41 RT. STA. 100+75 TO RT. STA. 104+29  
CONSTRUCT 359 LF.

US 41 RT. STA. 101+84 TO RT. STA. 105+01  
CONSTRUCT 320 LF

US 41 LT. STA. 105+13 TO RT. STA. 105+66  
CONSTRUCT 52 LF

**CONSTRUCT CURB BOX INLET & PIPE**

RT. STA. 101+79  
CONSTRUCT 12 LF 18" PIPE CULVERT, TIE INTO EXISTING PIPE  
CONSTRUCT CBI 1 - CBI TY. B (H=6.15')  
GRATE ELEV. 395.96, INLET ELEV. 389.97, OUTLET ELEV. 389.81

RT. STA. 105+04  
CONSTRUCT 4 LF 15" PIPE CULVERT, TIE INTO EXISTING PIPE  
CONSTRUCT CBI 2 - CBI TY. B (H=4.69')  
GRATE ELEV. 389.04, OUTLET ELEV. 384.23

ASPHALT PAVE  
MILLING & OVERLAY  
(PAID FOR BY FD05)

FULL DEPTH  
PAVEMENT

REMOVE PAVEMENT

REMOVE GUARDRAIL  
WOLF HILLS ROAD RT. STA. 300+41 TO  
US 41 RT. STA. 109+89 REMOVE 163 LF.

US 41 RT. STA. 109+85 TO STA. 112+00  
REMOVE 218 LF.

LONGITUDINAL EDGE KEY

US 41 RT. STA. 107+46 TO RT. STA. 108+96  
CONSTRUCT 154 LF.

US 41 RT. STA. 107+73 TO RT. STA. 112+00  
CONSTRUCT 285 LF.

US 41 RT. STA. 108+96 TO RT. STA. 109+91  
CONSTRUCT 68 LF.

US 41 RT. STA. 109+50 TO RT. STA. 110+91  
CONSTRUCT 140 LF.

WOLF HILLS ROAD RT. STA. 300+69 TO RT.  
STA. 301+81 CONSTRUCT 93 LF.

WOLF HILLS ROAD RT. STA. 301+22 TO RT.  
STA. 301+79 CONSTRUCT 60 LF.

GUARDRAIL  
US 41 RT. STA. 109+28 CONSTRUCT 264 LF  
GUARDRAIL - STEEL W BEAM - S FACE WITH  
1-GUARDRAIL END TREATMENT TYPE 1.

WOLF HILLS ROAD RT. STA. 300+28 TO  
US 41 RT. STA. 109+89 CONSTRUCT 150 LF  
GUARDRAIL - STEEL W BEAM. TIE INTO  
EXISTING GUARDRAIL.

LONGITUDINAL SAW CUT

US 41 RT. STA. 107+46 TO RT. STA. 108+96  
CONSTRUCT 154 LF.

US 41 RT. STA. 107+73 TO RT. STA. 112+00  
CONSTRUCT 285 LF.

US 41 RT. STA. 108+96 TO RT. STA. 109+91  
CONSTRUCT 68 LF.

US 41 RT. STA. 109+50 TO RT. STA. 110+91  
CONSTRUCT 140 LF.

WOLF HILLS ROAD RT. STA. 300+69 TO RT.  
STA. 301+81 CONSTRUCT 93 LF.

WOLF HILLS ROAD RT. STA. 301+22 TO RT.  
STA. 301+79 CONSTRUCT 60 LF.

REMOVE CONCRETE MEDIAN  
US 41 RT. STA. 108+43 TO RT. STA. 108+78  
REMOVE CONCRETE MEDIAN APPROX. 58.1 SY.

WOLF HILLS ROAD LT. STA. 301+22 TO LT.  
STA. 301+77 REMOVE CONCRETE MEDIAN.  
APPROX. 23.2 SY.

REMOVE PAVEMENT

WOLF HILLS ROAD LT. STA. 301+05 TO LT.  
STA. 301+80 REMOVE PAVEMENT.  
APPROX. 124 SY.

MOUNTABLE MEDIAN TYPE 3  
US 41 LT. STA. 108+71 TO LT. STA. 109+50.  
CONSTRUCT 31 SQYD MOUNTABLE MEDIAN  
TYPE 3.

US 41 RT. STA. 108+71 TO RT. STA. 108+81.  
CONSTRUCT 4 SQYD MOUNTABLE MEDIAN  
TYPE 3.

STANDARD BARRIER MEDIAN TYPE 4  
US 41 LT. STA. 108+69 TO LT. STA. 109+50.  
CONSTRUCT 28 SQYD STANDARD BARRIER  
MEDIAN TYPE 4.

US 41 RT. STA. 108+69 TO RT. STA. 108+69.  
CONSTRUCT 4 SQYD STANDARD BARRIER  
MEDIAN TYPE 4.

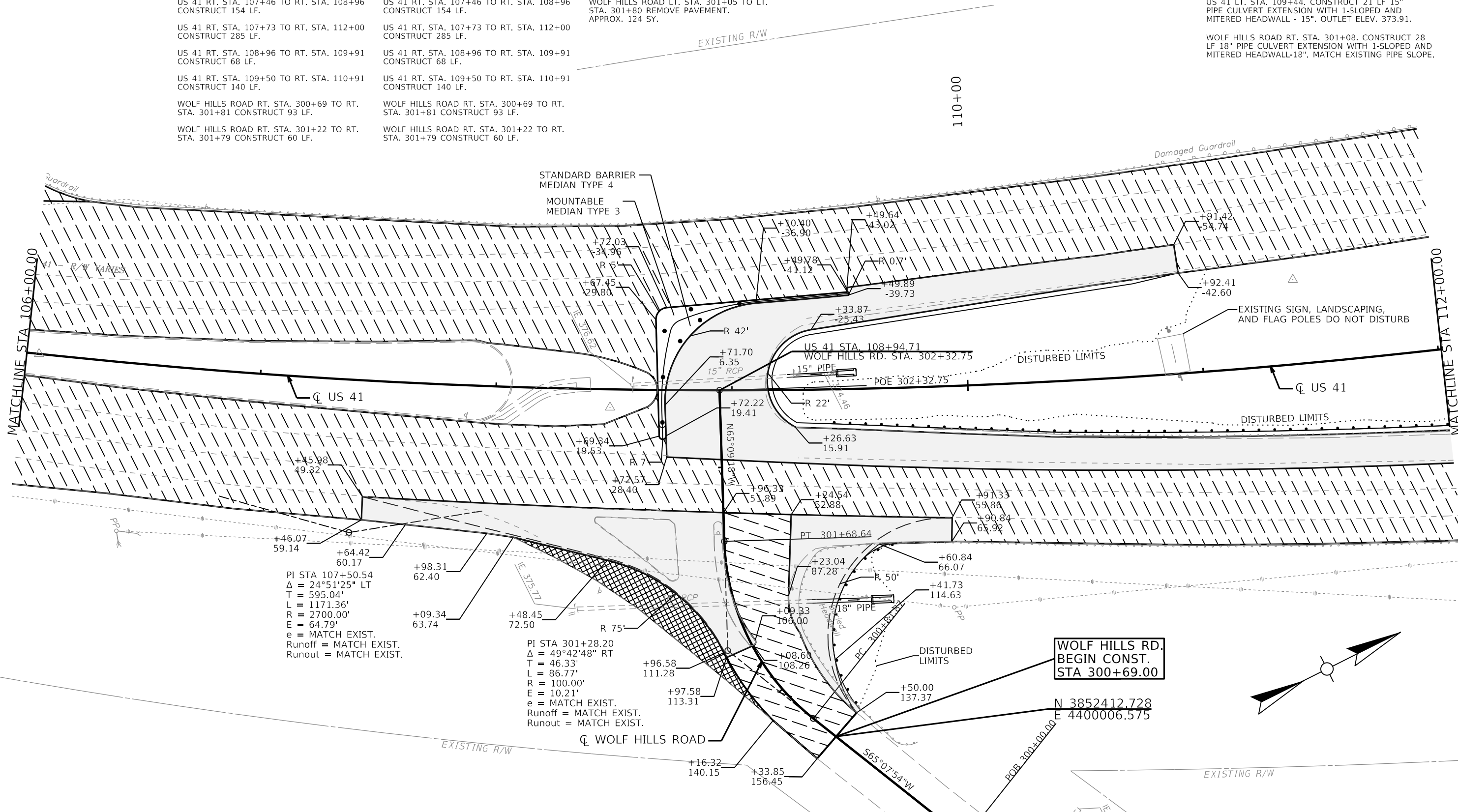
REMOVE HEADWALL AND PIPE  
US 41 LT. STA. 109+44. REMOVE EXISTING  
15" HEADWALL AND 4 LF OF EXISTING PIPE.

WOLF HILLS ROAD RT. STA. 301+08.  
REMOVE EXISTING 18" HEADWALL AND  
4 LF OF EXISTING PIPE.

CONSTRUCT HEADWALL AND PIPE CULVERT

US 41 LT. STA. 109+44. CONSTRUCT 21 LF 15"  
PIPE CULVERT EXTENSION WITH 1-SLOPED AND  
MITERED HEADWALL - 15". OUTLET ELEV. 373.91.

WOLF HILLS ROAD RT. STA. 301+08. CONSTRUCT 28  
LF 18" PIPE CULVERT EXTENSION WITH 1-SLOPED AND  
MITERED HEADWALL-18". MATCH EXISTING PIPE SLOPE.



PI STA 107+50.54  
Δ = 24°51'25" LT  
T = 595.04'  
L = 1171.36'  
R = 2700.00'  
E = 64.79'  
e = MATCH EXIST.  
Runoff = MATCH EXIST.  
Runout = MATCH EXIST.

PI STA 301+28.20  
Δ = 49°42'48" RT  
T = 46.33'  
L = 86.77'  
R = 100.00'  
E = 10.21'  
e = MATCH EXIST.  
Runoff = MATCH EXIST.  
Runout = MATCH EXIST.

WOLF HILLS RD.  
BEGIN CONST.  
STA 300+69.00

N 3852412.728  
E 4400006.575

ASPHALT PAVE  
MILLING & OVERLAY  
(PAID FOR BY FD05)

FULL DEPTH  
PAVEMENT

**GUARDRAIL**

US 41 RT. STA. 112+00 CONSTRUCT 173.5  
LF GUARDRAIL - STEEL W BEAM - S FACE  
WITH 1-GUARDRAIL END TREATMENT  
TYPE 1.

US 41 RT. STA. 114+45 CONSTRUCT 150  
LF GUARDRAIL - STEEL W BEAM - S FACE  
WITH 1-GUARDRAIL END TREATMENT TYPE  
2A. TIE INTO EXISTING GUARDRAIL.

**REMOVE GUARDRAIL**

US 41 RT. STA. 112+00 TO STA. 115+50  
REMOVE 358 LF.

**CONSTRUCT HEADWALL AND PIPE**

US 41 RT. STA. 114+32. CONSTRUCT 74 LF  
24" PIPE CULVERT AND 2 EA SLOPED AND  
MITERED HEADWALL - 24IN

**LONGITUDINAL EDGE KEY**

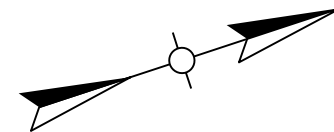
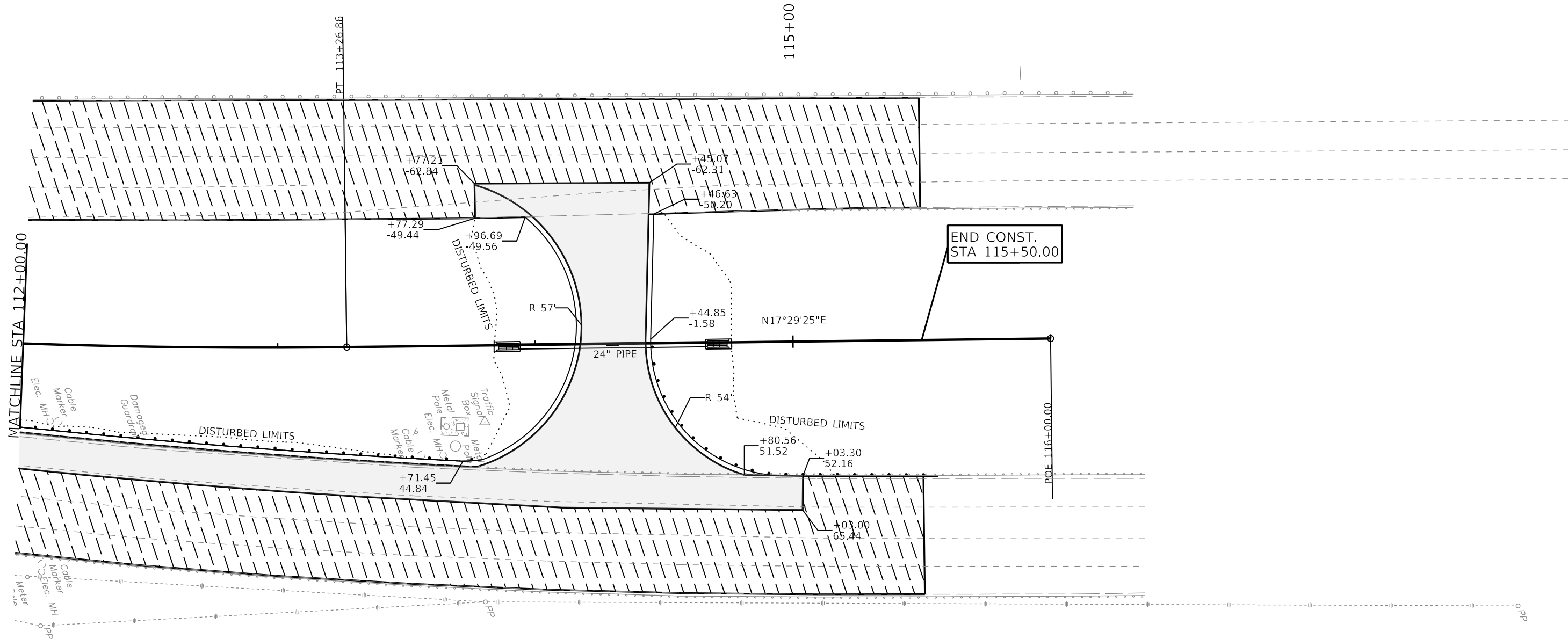
US 41 RT. STA. 112+00 TO RT. STA. 115+03.  
CONSTRUCT 310 LF .

US 41 LT. STA. 112+77 TO RT. STA. 114+45.  
CONSTRUCT 68 LF .

**LONGITUDINAL SAW CUT**

US 41 RT. STA. 112+00 TO RT. STA. 115+03.  
CONSTRUCT 310 LF .

US 41 LT. STA. 112+77 TO RT. STA. 114+45.  
CONSTRUCT 68 LF .



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: PLAN SHEET

HORIZONTAL SCALE  
SCALE: 1"=20'



STA 112+00 TO 115+50

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

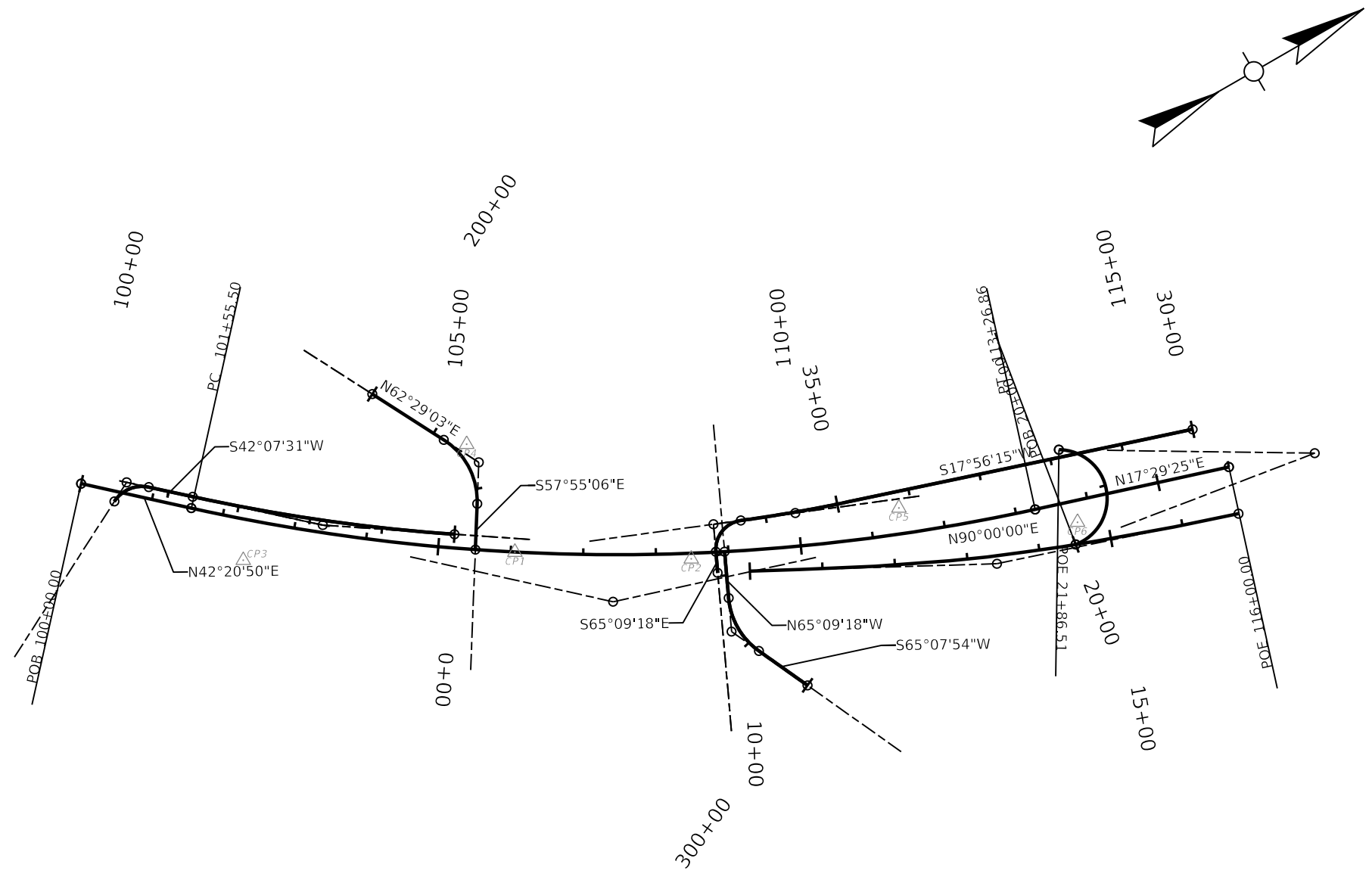
SHEET NO.  
R10

COORDINATE CONTROL POINTS						
POINT	DESCRIPTION	STATE PLANE COORDINATES			STATION	OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)		
CP1	CONTROL POINT 1	3852183.62	4399709.97	387.77	106+05.73	0.05 RT
CP2	CONTROL POINT 2	3852389.73	4399838.84	381.03	108+48.42	7.68 RT
CP3	CONTROL POINT 3	3851853.50	4399533.62	396.45	102+39.16	55.96 RT
CP4	CONTROL POINT 4	3852199.94	4399548.05	379.78	105+27.58	143.83 LT
CP6	CONTROL POINT 6	3852672.71	4399920.30	376.14	111+41.35	35.79 LT
CP7	CONTROL POINT 7	3852876.36	4400059.72	377.51	113+80.09	29.69 RT

GEOMETRIC DATA - US 41			
NAME	Station	Northing (Y)	EASTING (X)
POB	100+00.00	3851712.28	4399330.98
PC	101+55.50	3851827.21	4399435.73
PI	107+50.54	3852299.30	4399780.41
PT	113+26.86	3852834.52	4400015.40
POE	116+00.00	3853095.03	4400097.49

GEOMETRIC DATA - STRATMAN ROAD			
NAME	Station	Northing (Y)	EASTING (X)
POB	200+00.00	3852121.61	4399423.51
PC	201+16.91	3852175.62	4399527.20
PI	201+74.17	3852186.85	4399577.38
PT	202+20.92	3852171.66	4399626.51
POE	202+84.02	3852138.15	4399679.97

GEOMETRIC DATA - WOLF HILLS ROAD			
NAME	Station	Northing (Y)	EASTING (X)
POB	300+00.00	3852441.98	4400069.69
PC	300+81.87	3852407.56	4399995.42
PI	301+28.20	3852398.28	4399953.38
PT	301+68.64	3852407.54	4399911.35
POE	302+32.75	3852434.48	4399853.16



US 41  
 PI STA 107+50.54  
 $\Delta = 24^\circ 51' 25''$  LT  
 T = 595.04'  
 L = 1171.36'  
 R = 2700.00'  
 E = 64.79'  
 PC = 101+55.50  
 PT = 113+26.86

US 41 TO LOON  
 TURN LANE  
 PI STA 1+82.56  
 $\Delta = 08^\circ 21' 11''$  RT  
 T = 182.56'  
 L = 364.47'  
 R = 2500.00'  
 E = 6.66'  
 PC/POB = 0+00  
 PT = 3+64.47

US 41 TO LOON  
 TURN LANE  
 PI STA 4+59.13  
 $\Delta = 69^\circ 36' 22''$  LT  
 T = 31.28'  
 L = 54.67'  
 R = 45.00'  
 E = 9.80'  
 PC = 4+27.85  
 PT/POE = 4+82.52






STRATMAN ROAD  
 PI STA 201+74.17  
 $\Delta = 59^\circ 35' 51''$  RT  
 T = 57.27'  
 L = 104.02'  
 R = 100.00'  
 E = 15.24'  
 PC = 201+16.91  
 PT = 202+20.92

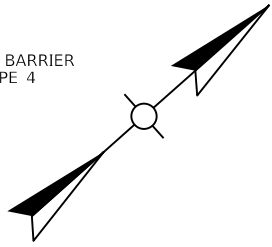
WOLF HILLS ROAD  
 PI STA 301+28.20  
 $\Delta = 49^\circ 42' 48''$  RT  
 T = 46.33'  
 L = 86.77'  
 R = 100.00'  
 E = 10.21'  
 PC = 300+81.87  
 PT = 301+68.64

US 41 TURN LANE  
 TO WOLF HILLS ROAD  
 PI STA 36+72.87  
 $\Delta = 87^\circ 10' 51''$  LT  
 T = 38.08'  
 L = 60.86'  
 R = 40.00'  
 E = 15.23'  
 PC = 36+34.79  
 PT = 36+95.66

US 41 U-TURN  
 PI STA 23+52.45  
 $\Delta = 158^\circ 18' 59''$  LT  
 T = 352.45'  
 L = 186.51'  
 R = 67.50'  
 E = 291.36'  
 PC/POB = 20+00  
 PT/POE = 21+86.51

US 41 NB U-TURN  
 TURN LANE  
 PI STA 13+40.95  
 $\Delta = 12^\circ 40' 11''$  LT  
 T = 340.95'  
 L = 679.11'  
 R = 3071.16'  
 E = 18.87'  
 PC/POB = 10+00.00  
 PT/POE = 16+78.99

-  ASPHALT PAVE MILLING & OVERLAY (PAID FOR BY FD05)
-  MOUNTABLE MEDIAN TYPE 3
-  FULL DEPTH PAVEMENT
-  STANDARD BARRIER MEDIAN TYPE 4
-  FLEXIBLE DELINEATORS



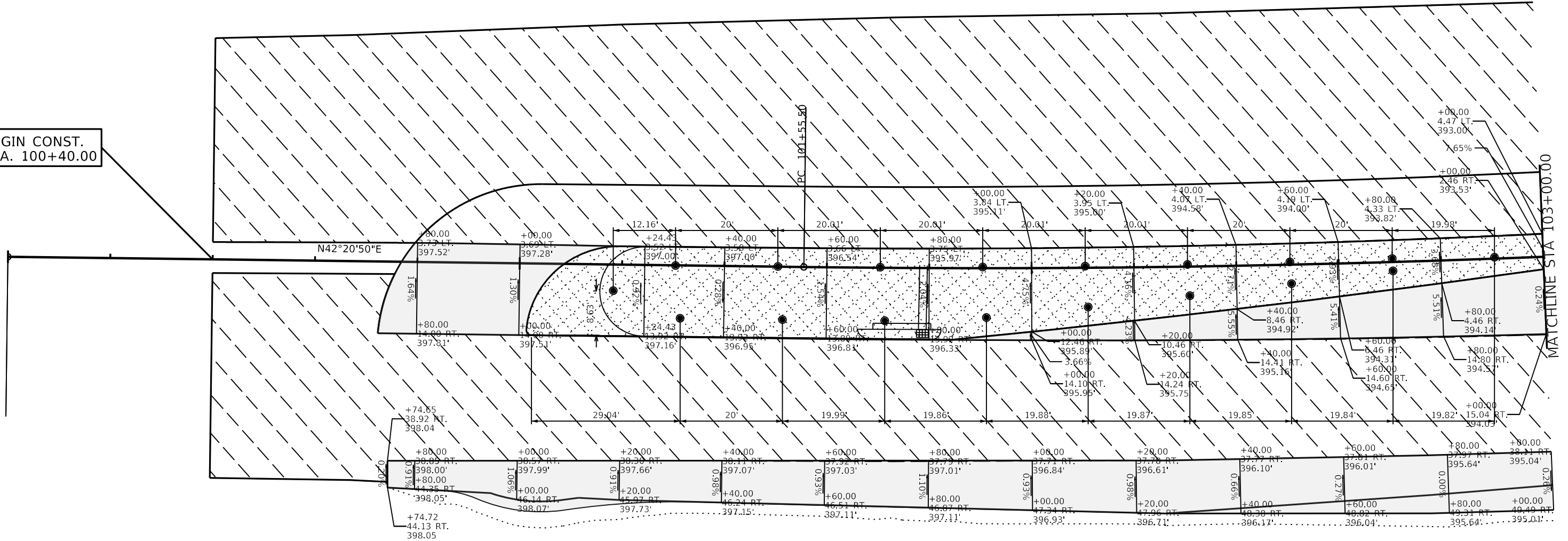
100+00

101+00






102+00

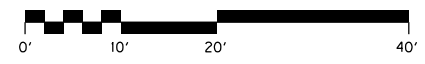
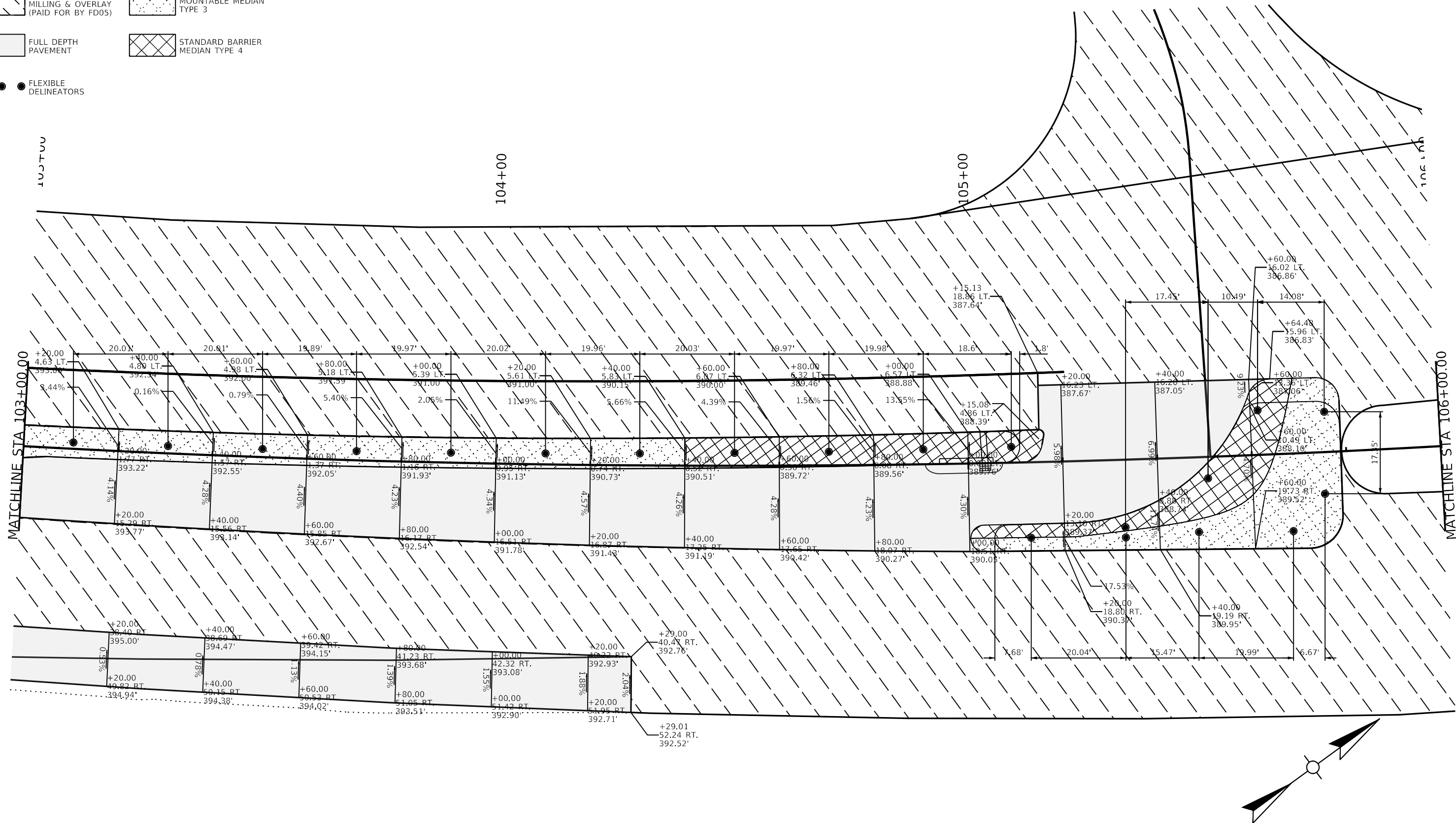
103+00






BEGIN CONST.  
STA. 100+40.00

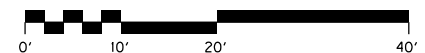
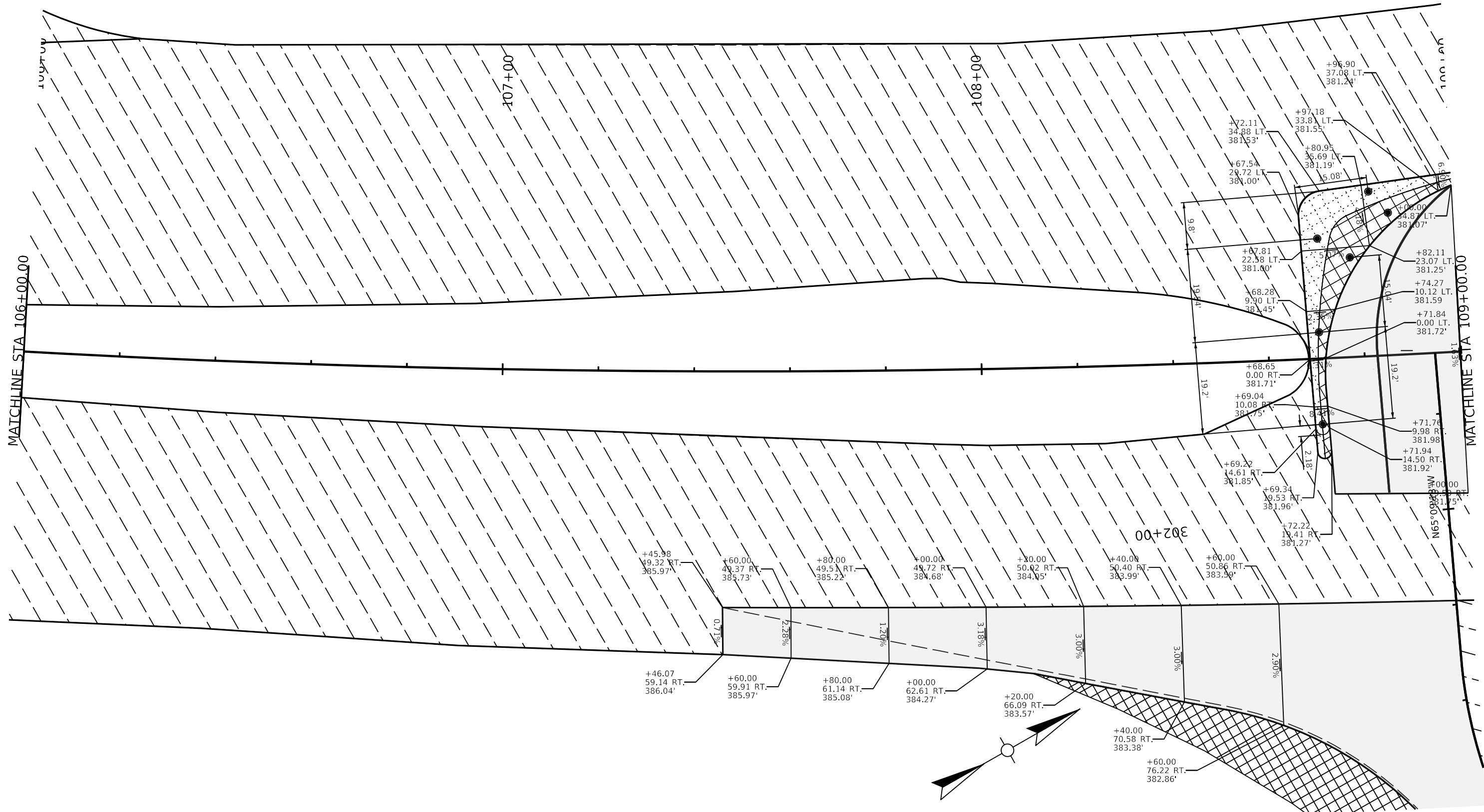









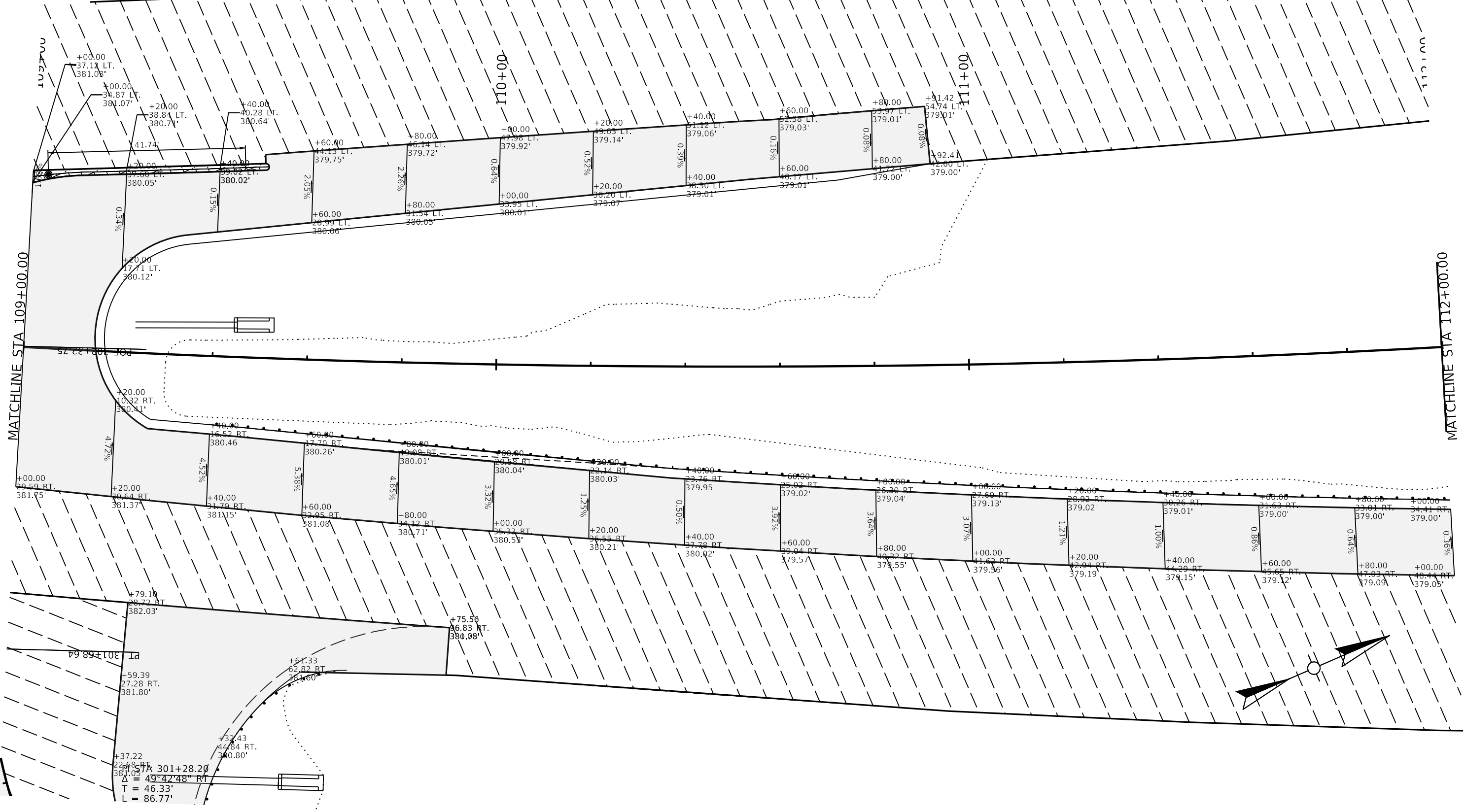
-  ASPHALT PAVE MILLING & OVERLAY (PAID FOR BY FD05)
-  MOUNTABLE MEDIAN TYPE 3
-  FULL DEPTH PAVEMENT
-  STANDARD BARRIER MEDIAN TYPE 4
-  FLEXIBLE DELINEATORS








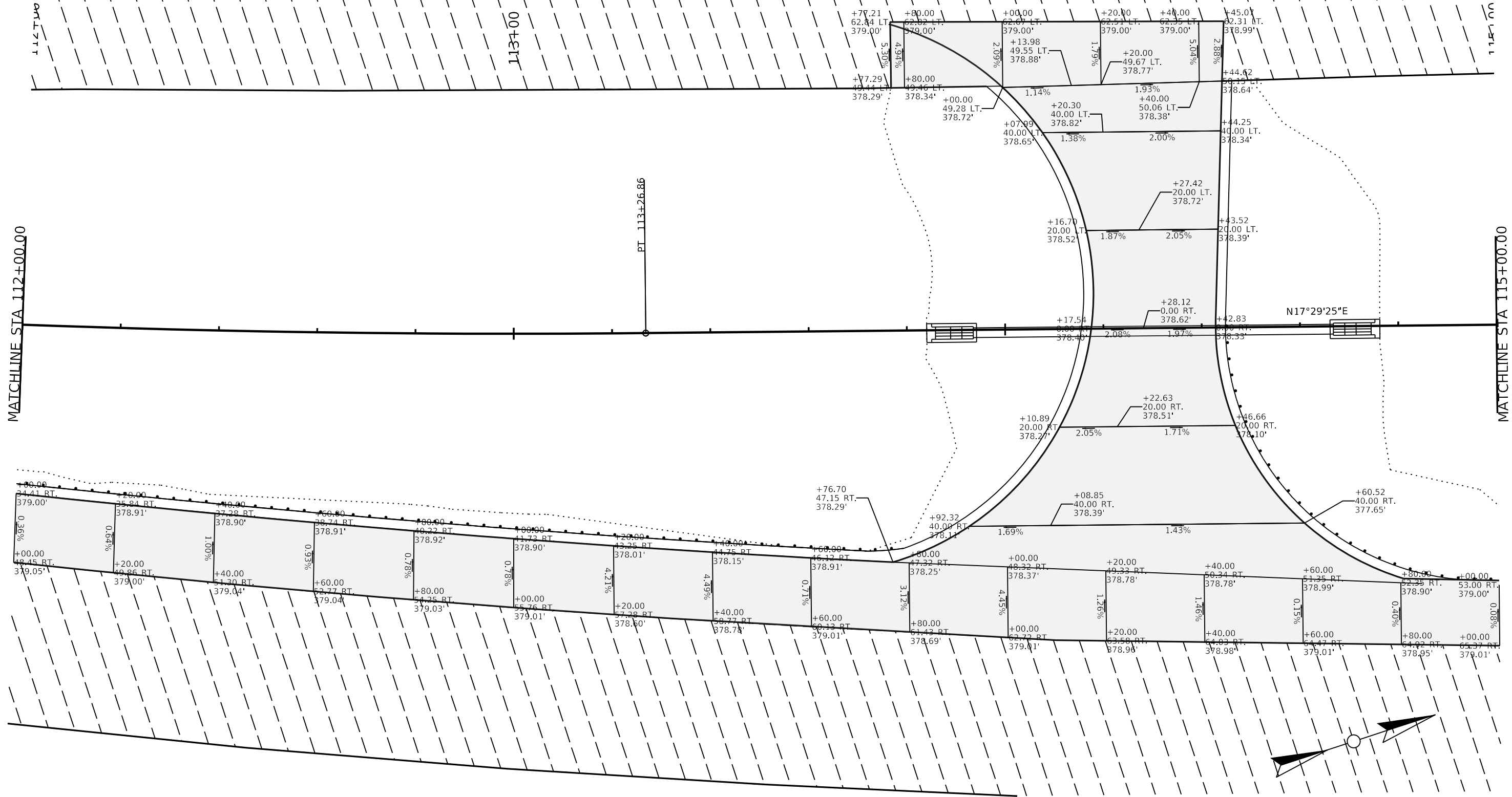
-  ASPHALT PAVE MILLING & OVERLAY (PAID FOR BY FD05)
-  MOUNTABLE MEDIAN TYPE 3
-  FULL DEPTH PAVEMENT
-  STANDARD BARRIER MEDIAN TYPE 4
-  FLEXIBLE DELINEATORS








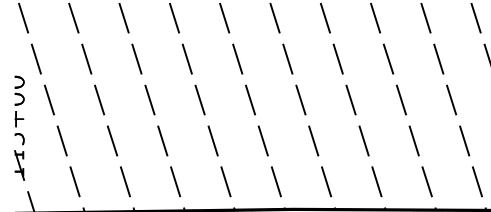
-  ASPHALT PAVE MILLING & OVERLAY (PAID FOR BY FD05)
-  MOUNTABLE MEDIAN TYPE 3
-  FULL DEPTH PAVEMENT
-  STANDARD BARRIER MEDIAN TYPE 4
-  FLEXIBLE DELINEATORS



-  ASPHALT PAVE MILLING & OVERLAY (PAID FOR BY FD05)
-  MOUNTABLE MEDIAN TYPE 3
-  FULL DEPTH PAVEMENT
-  STANDARD BARRIER MEDIAN TYPE 4
-  FLEXIBLE DELINEATORS



-  ASPHALT PAVE  
MILLING & OVERLAY  
(PAID FOR BY FD05)
-  MOUNTABLE MEDIAN  
TYPE 3
-  FULL DEPTH  
PAVEMENT
-  STANDARD BARRIER  
MEDIAN TYPE 4
-  FLEXIBLE  
DELINEATORS

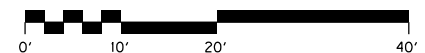
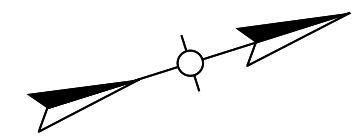
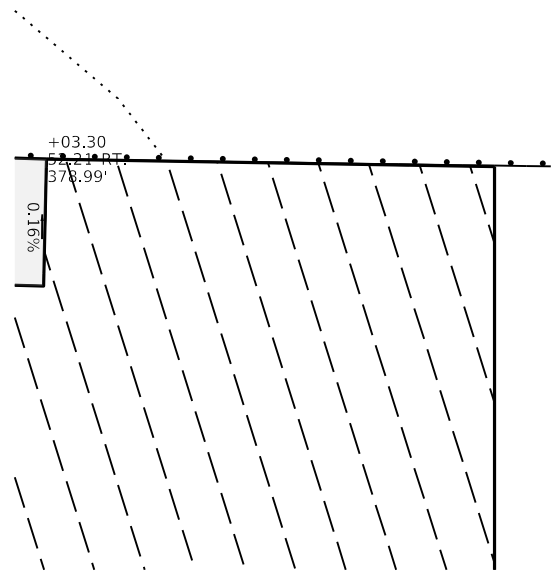


116+00

END CONST.  
STA 115+50.00

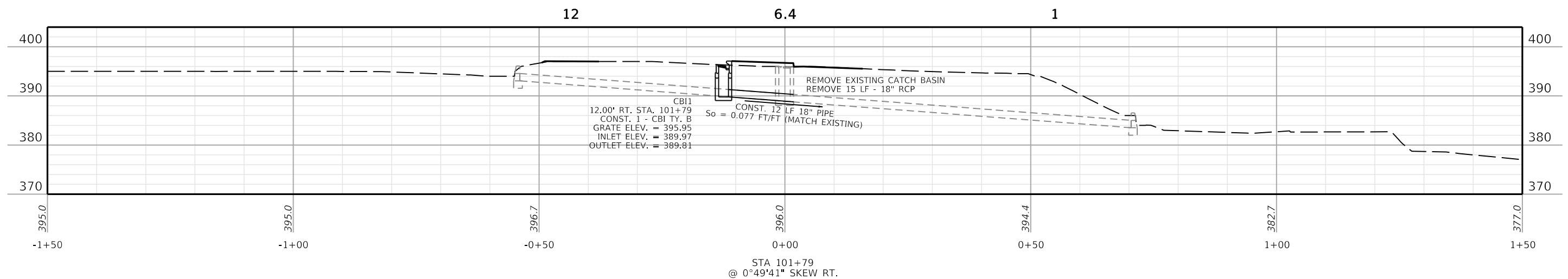
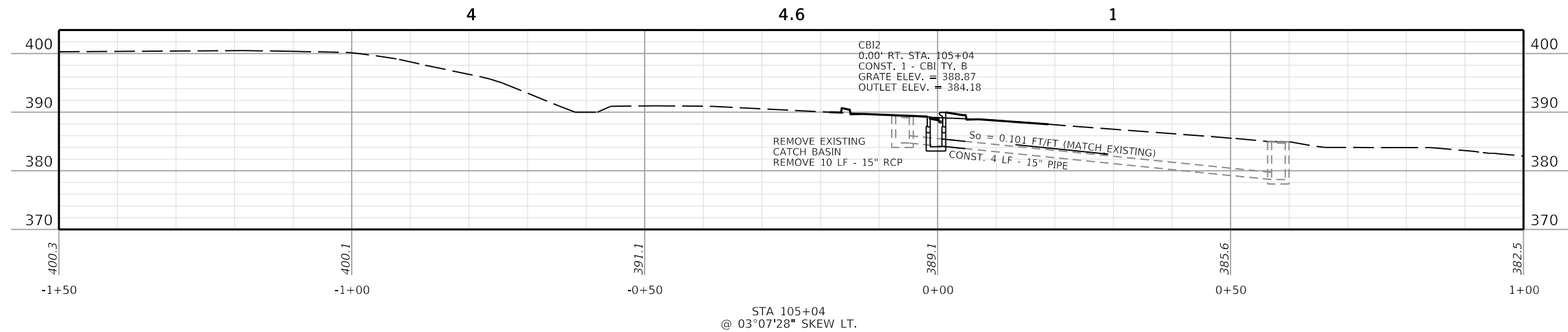
MATCHLINE STA 115+00.00

POE 116+00.00



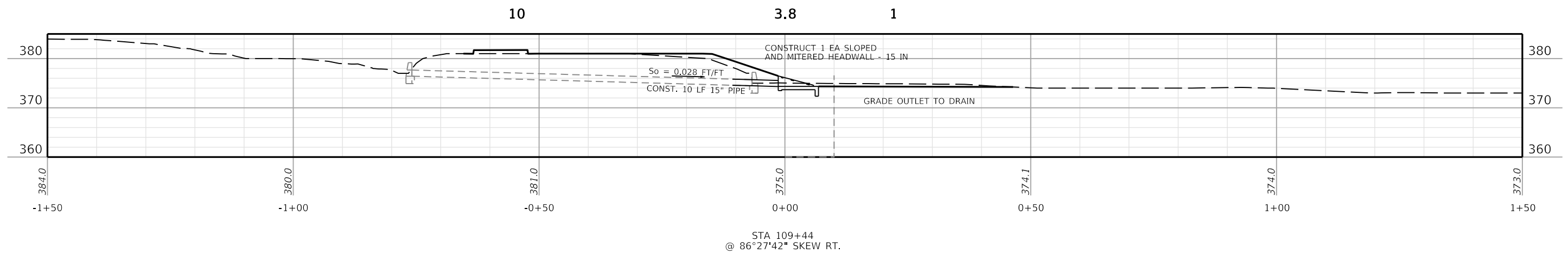
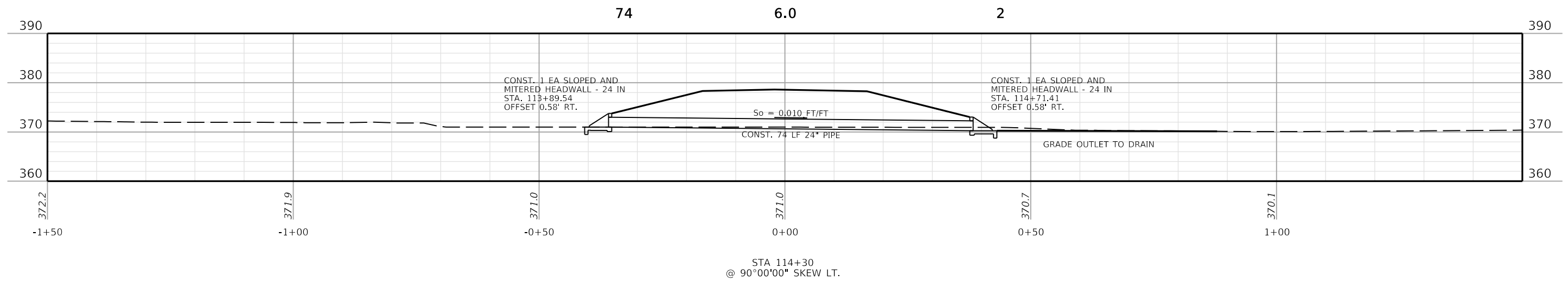
# PIPE DRAINAGE SHEET 1 of 3

CULVERT PIPE				MAX COVER HEIGHT	DESIGN PH LEVEL	SLOPED AND MITERED HEADWALL 15 IN	SLOPED AND MITERED HEADWALL 18 IN	SLOPED AND MITERED HEADWALL 24 IN	CURB BOX INLET TY. B
15"	18"	24"							
LINEAR FEET				FT		EACH	EACH	EACH	EACH

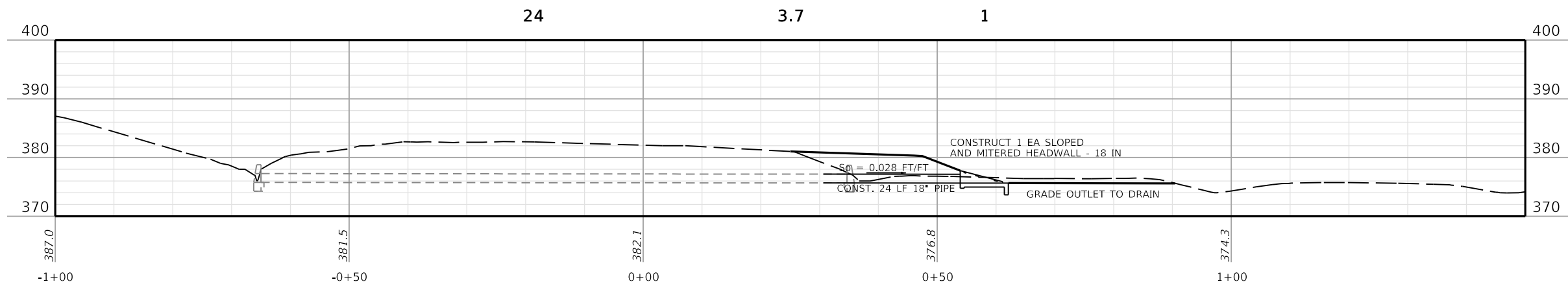


# PIPE DRAINAGE SHEET 2 of 3

CULVERT PIPE				MAX COVER HEIGHT	DESIGN PH LEVEL	SLOPED AND MITERED HEADWALL 15 IN	SLOPED AND MITERED HEADWALL 18 IN	SLOPED AND MITERED HEADWALL 24 IN	CURB BOX INLET TY. B
15"	18"	24"							
LINEAR FEET				FT		EACH	EACH	EACH	EACH



PIPE DRAINAGE SHEET 3 of 3										
CULVERT PIPE				MAX COVER HEIGHT	DESIGN PH LEVEL	SLOPED AND MITERED HEADWALL 15 IN	SLOPED AND MITERED HEADWALL 18 IN	SLOPED AND MITERED HEADWALL 24 IN	CURB BOX INLET TY. B	
15"	18"	24"								
LINEAR FEET				FT		EACH	EACH	EACH	EACH	



STA 301+08  
@ 13°58'43" SKEW RT.



Sign Summary Henderson County Route US-41																						
SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd ③	# of Sign Posts	Estimated Length of 2" Post ② (ft)	Estimated Length of 2-1/2" Post ② (ft)	2-1/4" Stiffener Req'd (includnt to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
S-1		0	100+13	18.300	SOUTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1
S-2	RT	46	100+13	18.300	SOUTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1
S-3		0	100+38	18.305	NORTH	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate		1	15			15	1
					SOUTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate							1
S-4	RT	46	100+38	18.305	SOUTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1
S-5	RT	61	101+00	18.316	SOUTH	R6-1L	One Way		48 x 18	Black	White	XI		6.00	Stnd w/ Soil Plate	Yes	2	12			24	1
S-6	RT	6	101+21	18.320	SOUTH	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	15			15	1
					SOUTH	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate							1
					SOUTH	X	U-Turn Arrow	U-Turn Arrow	21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate							1
S-7	RT	6	101+86	18.333	NORTH	D1-1d	Circular Intersection Destination (1 line)	Stratman Rd	72 x 18	White	Green	XI		9.00	Stnd w/ Soil Plate	Yes	2	15			30	1
S-8	RT	59	101+86	18.333	NORTH	D1-1d	Circular Intersection Destination (1 line)	Stratman Rd	72 x 18	White	Green	XI		9.00	Stnd w/ Soil Plate	Yes	2	15			30	1
S-9	LT	2	104+06	18.374	SOUTH	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	15			15	1
					SOUTH	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate							1
					SOUTH	M6-2L	Upward Left Diagonal Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate							1
					SOUTH	R3-XX	U-Turn Arrow/ Cars Only	U-Turn Arrow/ Cars Only	24 x 36	Black	White	XI	6.00		Stnd w/ Soil Plate							1
S-10	LT	2	104+56	18.384	SOUTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1
					NORTH	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate							1
S-11	RT	**	**	**	EAST	M2-1	Junction		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate		1	14			14	1
					EAST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate							1
S-12	RT	**	**	**	EAST	M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes	1	18			18	1
					EAST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes						1
					EAST	M5-1R	Advance Right Turn Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes						1
					EAST	M4-5	To		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes						1
					EAST	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes						1
					EAST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes						
S-13	RT	**	**	**	EAST	W3-1	Stop Ahead		36 x 36	Red & Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	13			13	1

\*\* SEE PLANS/DETAILS FOR LOCATION

Summary of Items (Sheet 1 of 3)		
SBM Alum Sheet Signs 0.080 INCH	98.19	SQ FT
SBM Alum Sheet Signs 0.125 INCH	41.50	SQ FT
Barcode Sign Inventory	27	EACH
Remove & Relocate Sheet Signs		EACH
Remove & Relocate Sign Assemblies		EACH

Summary of Items (Sheet 1 of 3)		
Steel Post - Type 1	226	LF
GMSS Type D	0	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	0	CU YD

NOTES:

- ① WITH PERMISSION OF THE ENGINEER, SHEETING SIGNS ON THE RAMPS AND SIDE ROADS MAY BE MOVED TO BE COMPATIBLE WITH THE EXISTING SIGNS.
- ② QUANTITY IS ESTIMATED. THE EXACT LENGTH SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- ③ WHERE REQUIRED, BRACING FOR SHEETING SIGNS SHALL BE INCIDENTAL TO STEEL POST. SEE SHEETING SIGN DETAIL SHEET.



Sign Summary Henderson County Route US-41																									
SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs ① 0.080 IN (SQ FT)	SBM Alum Sheet Signs ① 0.125 IN (SQ FT)	Installation Type	Bracing Req'd ③	# of Sign Posts	Estimated Length of 2" Post ② (ft)	Estimated Length of 2-1/2" Post ② (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)			
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type													
S-14	RT	**	**	**	EAST	R3-5R	Right Turn ONLY		30 x 36	Black	White	XI	7.50		Stnd w/ Soil Plate		1	13			13	1			
P-1	RT	**	**	**	EAST		R Cut	R Cut	72 x 36	Blk/White	Green	XI		18.00	Type D ④	Yes	3		15		45	1			
S-15	LT	70	105+05	18.393	EAST	R6-1R	One Way		36 x 12	Black	White	XI	3.00		Stnd w/ Soil Plate		1	14			14	1			
					EAST	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate								1		
S-16	LT	3	104+96	18.391	EAST	M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes	1	17			17	1			
					EAST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes							1		
					EAST	M6-1R	Right Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes								1	
					EAST	M4-5	To		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes								1	
					EAST	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes									1
					EAST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes									1
					EAST	M6-1R	Right Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes									
S-17	LT	7	105+68	18.405	SOUTH	R3-2	No Left Turn		36 x 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
S-18	LT	7	106+45	18.420	NORTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
S-19	LT	76	106+45	18.420	NORTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
S-20	LT	73	107+45	18.439	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1			
S-21	LT	11	107+45	18.439	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1			
S-22	RT	9	107+45	18.439	SOUTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1			
S-23	RT	70	107+45	18.439	SOUTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1			
S-24	RT	11	108+44	18.457	SOUTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
S-25	RT	82	108+44	18.457	SOUTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
S-26	RT	16	108+65	18.461	NORTH	R3-2	No Left Turn		36 x 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
S-27	LT	19	109+30	18.474	SOUTH	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate		1	16			16	1			
					NORTH	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate								1		
S-28	RT	9	109+38	18.475	WEST	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes	1	17			17	1			
					WEST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes							1		
					WEST	M6-1R	Right Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes								1	
					WEST	M4-5	To		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes								1	
					WEST	M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes									1
					WEST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes									1
					WEST	M6-1R	Right Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes									
S-29	RT	72	109+60	18.479	WEST	R6-1R	One Way		36 x 12	Black	White	XI	3.00		Stnd w/ Soil Plate		1	14			14	1			
					WEST	R1-1	Stop		36 x 36	White	Red	XI	9.00		Stnd w/ Soil Plate									1	
P-2	RT	**	**	**	WEST		R Cut	R Cut	72 x 36	Blk/White	Green	XI		18.00	Type D ④	Yes	3		15		45	1			
S-30	RT	**	**	**	WEST	R3-5R	Right Turn ONLY		30 x 36	Black	White	XI	7.50		Stnd w/ Soil Plate		1	13			13	1			
S-31	RT	**	**	**	WEST	W3-1	Stop Ahead		36 x 36	Red & Black	Yellow	XI	9.00		Stnd w/ Soil Plate		1	13			13	1			
					WEST	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes	1	18					18	1	
S-32					WEST	M1-4	US Route Sign (1 or 2 digit)	41	24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes						1			
					WEST	M5-1R	Advance Right Turn Arrow		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes								1	

\*\* SEE PLANS/DETAILS FOR LOCATION

Summary of Items (Sheet 2 of 3)		
SBM Alum Sheet Signs 0.080 INCH	170.94	SQ FT
SBM Alum Sheet Signs 0.125 INCH	71.00	SQ FT
Barcode Sign Inventory	40	EACH
Remove & Relocate Sheet Signs		EACH
Remove & Relocate Sign Assemblies		EACH

Summary of Items (Sheet 2 of 3)		
Steel Post - Type 1	355	LF
GMSS Type D	6	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	1.5	CU YD

NOTES:

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- ② QUANTITY IS ESTIMATED. THE EXACT LENGTH SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

- ③ WHERE REQUIRED, BRACING FOR SHEETING SIGNS SHALL BE INCIDENTAL TO STEEL POST. SEE SHEETING SIGN DETAIL SHEET.

- ④ QUANTITY SHALL INCLUDE ALL MATERIAL NECESSARY TO FORM A COMPLETE BREAK-AWAY ASSEMBLY. TYPE 1 POSTS AND CONCRETE SHALL BE PAID SEPARATELY. SEE SIGN DETAIL SHEET.



Sign Summary Henderson County Route US-41																						
SIGN LOCATION						MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs ① 0.080 IN (SQ FT)	SBM Alum Sheet Signs ① 0.125 IN (SQ FT)	Installation Type	Bracing Req'd ③	# of Sign Posts	Estimated Length of 2" Post ② (ft)	Estimated Length of 2-1/2" Post ② (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
S-32 (CONT.)					WEST	M4-5	To		24 X 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes					1	
					WEST	M3-3	South		24 X 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes					1	
					WEST	M1-4	US Route Sign (1 or 2 digit)	41	24 X 24	Black	White	XI	4.00		Stnd w/ Soil Plate	Yes					1	
					WEST	M5-1R	Advance Right Turn Arrow		21 X 15	Black	White	XI	2.19		Stnd w/ Soil Plate	Yes					1	
S-33	RT	**	**	**	WEST	M2-1	Junction		21 X 15	Black	White	XI	2.19		Stnd w/ Soil Plate		1	14			14	1
					WEST	M1-4	US Route Sign (1 or 2 digit)	41	24 X 24	Black	White	XI	4.00		Stnd w/ Soil Plate							1
S-34	RT	18	110+80	18.502	NORTH	M3-3	South		24 X 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	15			15	1
					NORTH	M1-4	US Route Sign (1 or 2 digit)	41	24 X 24	Black	White	XI	4.00		Stnd w/ Soil Plate							1
					NORTH	M6-2L	Upward Left Diagonal Arrow		21 X 15	Black	White	XI	2.19		Stnd w/ Soil Plate							1
S-35	LT	42	112+89	18.542	SOUTH	D1-1d	Circular Intersection Destination (1 line)	Wolf Hills Rd	75 X 18	White	Green	XI		9.38	Stnd w/ Soil Plate	Yes	2	12			24	1
S-36	LT	105	112+89	18.542	SOUTH	D1-1d	Circular Intersection Destination (1 line)	Wolf Hills Rd	75 X 18	White	Green	XI		9.38	Stnd w/ Soil Plate	Yes	2	12			24	1
S-37	RT	37	113+59	18.555	NORTH	M3-3	South		24 X 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	15			15	1
					NORTH	M1-4	US Route Sign (1 or 2 digit)	41	24 X 24	Black	White	XI	4.00		Stnd w/ Soil Plate							1
					NORTH	X	U-Turn Arrow	U-Turn Arrow	21 X 15	Black	White	XI	2.19		Stnd w/ Soil Plate							1
S-38	LT	101	114+36	18.569	NORTH	R6-1L	One Way		48 X 18	Black	White	XI		6.00	Stnd w/ Soil Plate	Yes	2	12			24	1
S-39	LT	101	114+62	18.574	NORTH	R5-1	Do Not Enter		36 X 36	White	Red	XI	9.00		Stnd w/ Soil Plate		1	13			13	1
S-40	LT	47	114+70	18.576	SOUTH	R3-4	No U-Turn		36 X 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate		1	13			13	1
					NORTH	R5-1	Do Not Enter		36 X 36	White	Red	XI	9.00		Stnd w/ Soil Plate							1
S-41	LT	76	106+62	18.423	SOUTH	D1-1	Destination ( 1 line)	Stratman Rd	74 X 18	White	Green	XI		9.25	Stnd w/ Soil Plate	Yes	2	12			24	1
S-42	RT	80	108+25	18.454	NORTH	D1-1	Destination ( 1 line)	Wolf Hills Rd	77 X 18	White	Green	XI		9.63	Stnd w/ Soil Plate	Yes	2	12			24	1
S-43	RT	3	102+21	18.339	SOUTH	R3-XX	U-Turn Arrow/ Cars Only	U-Turn Arrow/ Cars Only	24 X 36	Black	White	XI	6.00		Stnd w/ Soil Plate		1	13			13	1
S-44	RT	11	108+65	18.461	SOUTH	R3-1	No Right Turn		36 x 36	Red & Black	White	XI	9.00		Stnd w/ Soil Plate		1	13			13	1
S-45	LT	47	115+70	18.595	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1
S-46	LT	100	115+70	18.595	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75	Stnd w/ Soil Plate		1	13			13	1

\*\* SEE PLANS/DETAILS FOR LOCATION

Summary of Items (Sheet 3 of 3)		
SBM Alum Sheet Signs 0.080 INCH	74.75	SQ FT
SBM Alum Sheet Signs 0.125 INCH	61.13	SQ FT
Barcode Sign Inventory	24	EACH
Remove & Relocate Sheet Signs		EACH
Remove & Relocate Sign Assemblies		EACH

Summary of Items (Sheet 3 of 3)		
Steel Post - Type 1	242	LF
GMSS Type D	0	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	0	CUYD

Total Summary of Items		
SBM Alum Sheet Signs 0.080 INCH	343.88	SQ FT
SBM Alum Sheet Signs 0.125 INCH	173.63	SQ FT
Barcode Sign Inventory	91	EACH
Remove & Relocate Sheet Signs		EACH
Remove & Relocate Sign Assemblies		EACH

Total Summary of Items		
Steel Post - Type 1	823	LF
GMSS Type D	6	EACH
GMSS Type D (Surface Mount)	0	EACH
Class A Concrete for Signs	1.5	CUYD

NOTES:

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- ② QUANTITY IS ESTIMATED. THE EXACT LENGTH SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- ③ WHERE REQUIRED, BRACING FOR SHEETING SIGNS SHALL BE INCIDENTAL TO STEEL POST. SEE SHEETING SIGN DETAIL SHEET.



# SIGNING SPECIFICATION NOTES

THE FOLLOWING PUBLICATIONS ARE APPLICABLE TO THE WORK DESCRIBED HEREIN:

KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION)  
STANDARD HIGHWAY SIGNS AND MARKINGS (CURRENT EDITION) - FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION) - FEDERAL HIGHWAY ADMINISTRATION

## SCOPE OF WORK

TO FURNISH, FABRICATE AND ERECT IN PLACE ALL MATERIALS NECESSARY TO FORM COMPLETED SIGNS AS INDICATED AT LOCATIONS DESCRIBED ELSEWHERE IN THESE PLANS. NEW SIGNS ARE TO BE INSTALLED AT EXISTING LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

## SIGN SUBSTRATES

SIGN SUBSTRATES SHALL CONFORM TO SECTION 833 OF KENTUCKY'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) AND THESE PLANS. PANEL SIGNS SHALL BE LABELED AS P-#. SHEETING SIGNS SHALL BE LABELED AS S-#.

## SIGN MATERIALS

### SIGN SHEETING:

SIGN SHEETING SHALL CONFORM TO SECTION 830 OF KENTUCKY'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) AND THESE PLANS. ONLY SHEETING ON THE DEPARTMENT'S LIST OF APPROVED MATERIALS SHALL BE USED.

ALL RETROREFLECTIVE MATERIALS SHALL BE FABRICATED AND ASSEMBLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND/OR RECOMMENDATIONS.

PERMANENT SIGNS AND SIGN COMPONENTS SHALL BE FABRICATED USING TYPE XI SHEETING:

THE FOLLOWING SIGNS SHALL BE FABRICATED USING TYPE XI FLUORESCENT YELLOW SHEETING:

- HORIZONTAL ALIGNMENT SIGNS AND PLAQUES
- ALL ADVISORY SPEED PLAQUES
- WARNING MESSAGES ON PANEL SIGNS

THE FOLLOWING SIGNS SHALL BE FABRICATED USING TYPE XI FLUORESCENT YELLOW-GREEN SHEETING:

- ALL SCHOOL AND SCHOOL BUS WARNING SIGNS.
- BICYCLE WARNING SIGNS AND 'SHARE THE ROAD' PLAQUES OR DIAGONAL DOWNWARD POINTING ARROW PLAQUES THAT SUPPLEMENT BICYCLE WARNING SIGNS.
- PEDESTRIAN WARNING SIGNS AND DIAGONAL DOWNWARD POINTING ARROW PLAQUES THAT SUPPLEMENT PEDESTRIAN WARNING SIGNS
- IN-STREET PEDESTRIAN CROSSING (R1-6) SIGNS AND OVERHEAD PEDESTRIAN CROSSING (R1-9) SIGNS
- SUPPLEMENTAL PLAQUES TO ANY OF THE PREVIOUSLY LISTED FLUORESCENT YELLOW-GREEN SIGNS LISTED ABOVE

ALL OTHER PERMANENT SIGNS (INCLUDING THE BACKGROUNDS OF PANEL SIGNS) SHALL BE FABRICATED USING TYPE XI SHEETING.

### LETTERS, SYMBOLS, AND BORDERS:

LETTERS, SYMBOLS AND BORDERS ARE TO BE APPLIED TO THE SIGN FACE USING THE "DIRECT APPLIED" METHOD.

PANEL OVERLAY SECTIONS SHALL BE AFFIXED WITH A "POP" RIVET WITH A MINIMUM DIAMETER OF 3/16 INCH, AND THE LENGTH SHALL BE AS NECESSARY TO PROPERLY APPLY COPY IN A WORKMANLIKE MANNER.

### HARDWARE:

ALL HARDWARE FOR THE ASSEMBLY OF PANEL SIGNS AND THE ATTACHMENT OF THESE SIGNS TO THEIR SUPPORTS SHALL BE AS RECOMMENDED BY THE PANEL MANUFACTURER. PLACEMENT OF POST CLIP SHALL BE AS SHOWN ON THE SIGNING MISCELLANEOUS DETAIL SHEET.

ALL HARDWARE FOR THE ERECTION OF SHEETING SIGNS SHALL BE CADMIUM PLATED STEEL IN ACCORDANCE WITH ASTM B-776 AND ASTM A-307.

### FONTS:

CLEARVIEW 5-W SHALL BE USED FOR PLACE NAMES AND DESTINATIONS COMPRISED OF A MIX OF UPPER AND LOWER CASE LETTERS. STANDARD ALPHABETS SHALL BE USED FOR ALL OTHER TEXT ON PANEL GUIDE SIGNS.

## GROUND-MOUNTED SIGN SUPPORTS

### GENERAL:

ALL SIGNS SHALL BE POSITIONED AS SHOWN ON THE POSITIONING DETAIL SHEET. ALL BEAMS AND POSTS SHALL BE OF SUFFICIENT LENGTHS TO EXTEND FROM THE TOP OF THE SIGN TO THE REQUIRED BASE EMBEDMENT. EXISTING I-BEAMS ON WHICH SHEETING SIGNS ARE ATTACHED SHALL BE REMOVED AND REPLACED WITH TYPE I OR TYPE II POSTS, UNLESS THEY ARE LOCATED BEHIND GUARDRAIL.

### BEAMS:

ALL BEAMS SHALL BE EITHER TYPE "A" (STANDARD BEAM INSTALLATION) OR TYPE "C" (BREAKAWAY SIGN POST SUPPORT SYSTEM INSTALLATION). TYPE "A" BEAMS ARE SHOWN ON THE PANEL SIGN DETAIL SHEET, AND THE TYPE "C" BEAMS ARE SHOWN ON THE BREAKAWAY SIGN SUPPORT SYSTEM FOR "C" BEAM SHEET. ONLY BREAKAWAY (TYPE "C") BEAM SUPPORT SYSTEMS ON THE DEPARTMENT'S LIST OF APPROVED MATERIALS SHALL BE USED. THE TYPE AND SIZE OF BEAM TO BE USED SHALL BE INDICATED FOR EACH PANEL SIGN ON THE SIGN DETAIL SHEETS. BEAM LENGTHS INCLUDED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AT EACH SIGN LOCATION AND CROSS SECTIONS SHALL BE DEVELOPED TO VERIFY BEAM LENGTHS, WITH ANY DISCREPANCIES BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

### STEEL POSTS:

TYPE I STEEL POSTS SHALL BE EITHER STANDARD INSTALLATION IN SOIL, WITH SOIL STABILIZER, OR TYPE "D" (BREAKAWAY SIGN POST SUPPORT SYSTEM INSTALLATION). ONLY BREAKAWAY TYPE "D" POST SYSTEMS ON THE DEPARTMENT'S LIST OF APPROVED MATERIALS SHALL BE USED. BRACING, IF REQUIRED, SHALL BE INCIDENTAL TO TYPE I POST.

TYPE II POST SHALL BE STANDARD INSTALLATION IN SOIL WITH A SOIL STABILIZER. INSTALLATION PROCEDURES AND BRACING REQUIREMENTS ARE DETAILED ON THE SHEETING SIGN DETAIL SHEET.

ALL STEEL POSTS SHALL MEET THE REQUIREMENTS OF SECTION 832 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

### MILEPOST MARKERS AND ENHANCED REFERENCE MARKERS

MILEPOST MARKERS AND ENHANCED REFERENCE LOCATION SIGNS SHALL CONFORM TO THE GENERAL REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). ADDITIONAL REQUIREMENTS ARE GIVEN ON THE SIGNING POSITIONING DETAIL SHEET AND ENHANCED REFERENCE LOCATION SIGNS DETAIL SHEET.

FOR THE LOUISVILLE AREA, FINAL LOCATION OF ENHANCED REFERENCE LOCATION SIGNS SHALL BE VERIFIED BY TRIMARC. NOTIFY A REPRESENTATIVE OF TRIMARC AT LEAST TWO WEEKS IN ADVANCE OF BEGINNING WORK ON THIS ITEM:

901 WEST MAIN STREET  
LOUISVILLE, KY 40202  
502-587-6624  
270-307-7456

### MEDIAN CROSSOVER SIGNS

THE CONTRACTOR SHALL INSTALL 48" X 48", "NO U TURN" SIGNS (R3-4) AT EACH MEDIAN CROSSOVER. THIS IS TO BE DONE WHETHER ALL NEEDED INSTALLATIONS ARE MENTIONED IN THE FOLLOWING SHEETS OR NOT. AT CROSSOVERS ON MEDIANS SIXTY FEET (60') WIDE OR LESS, THE SIGNS SHALL BE MOUNTED PERPENDICULAR TO THE ROADWAY ON THE SAME POSTS IN THE CENTER OF THE MEDIAN, ONE FACING TRAFFIC IN EACH DIRECTION. AT CROSSOVERS ON MEDIANS OVER SIXTY FEET (60') WIDE, THE SIGNS SHALL BE MOUNTED PERPENDICULAR TO THE ROADWAY ON SEPARATE POSTS AT THE MEDIAN SHOULDER ON THE FAR SIDE OF THE CROSSOVER, ONE FACING TRAFFIC IN EACH DIRECTION. FOR ADDITIONAL GUIDANCE, SEE SEPIA DRAWING FOR FLEXIBLE DELINEATOR POST ARRANGEMENT FOR INTERCHANGE RAMP AND CROSSOVERS.

### CONCRETE BASES

ALL CONCRETE BASES SHALL BE OF CLASS "A" CONCRETE FOR SIGNS AND SHALL BE AS SHOWN ELSEWHERE IN THESE PLANS. EXCAVATION NECESSARY TO CONSTRUCT BASES AND FOOTINGS IS INCIDENTAL TO THE COST OF CLASS "A" CONCRETE FOR SIGNS.

### CONCRETE BASES (CONTINUED)

WHERE THE REMOVAL OF OVERHEAD STRUCTURE CONCRETE BASE IS CALLED FOR, THE BASE IS TO BE REMOVED TO A MINIMUM OF ONE FOOT (1') BELOW THE GROUND LINE, BACKFILLED TO EXISTING GROUND LINE, AND THE DISTURBED AREAS RESEEDED.

WHERE THE REMOVAL OF BEAM SIGN SUPPORTS IS CALLED FOR, THE BEAM AND ANY CONCRETE PROJECTING ABOVE THE GROUND LINE ARE TO BE CUT OFF A MINIMUM OF ONE FOOT (1') BELOW EXISTING GROUND LINE OR THE ENTIRE BEAM AND CONCRETE BASE ARE TO BE REMOVED COMPLETELY AND BACKFILLED TO EXISTING GROUND LINE.

### SAMPLES, TESTING, ETC.

BEFORE BEGINNING INSTALLATION, THE CONTRACTOR SHALL FURNISH TO THE PROJECT ENGINEER DRAWINGS, DESCRIPTIONS, MANUFACTURER'S CUTS ETC. FOR WRITTEN APPROVAL OF ALL MATERIALS TO BE USED. MILL TEST REPORTS FOR BEAMS, STEEL PANELS, AND EACH DIFFERENT GAUGE OF ALUMINUM OR STEEL SHEETING USED MUST BE SUBMITTED TO THE DIVISION OF CONSTRUCTION AND APPROVED PRIOR TO ERECTION.

### MISCELLANEOUS

THE COST FOR REMOVING EXISTING PANEL SIGNS SHALL BE INCIDENTAL TO THE COST OF THE PROJECT.

ON SHEETING SIGNS WHERE THERE ARE MORE THAN ONE SIGN ASSEMBLY MOUNTED BESIDE EACH OTHER, THE POSTS SHALL BE SPACED TO PROVIDE APPROXIMATELY SIX INCHES (6") OF SPACING BETWEEN SIGNS.

CLEARING AND GRUBBING, AND TREE TRIMMING, WHEN REQUIRED FOR CONSTRUCTION OR VISIBILITY OF SIGNS, SHALL BE INCIDENTAL TO THE CONTRACT.

SIGN COVERING IS NOT RECOMMENDED. HOWEVER, IF IT IS ABSOLUTELY NECESSARY TO COVER THE SIGN FACE TEMPORARILY FOLLOWING ERECTION, USE CAUTION SINCE SOME COVERINGS MAY CAUSE PERMANENT DAMAGE TO THE SIGN FACE FOLLOWING EXPOSURE TO MOISTURE, SUNLIGHT, ETC. POROUS CLOTH OR GEOTEXTILE FABRIC COVERS WHICH ARE FOLDED OVER THE SIGN EDGES AND SECURED AT THE BACK OF THE SIGN HAVE BEEN USED SUCCESSFULLY FOR LIMITED PERIODS. DO NOT USE TAPE, PAPER, PLASTIC, OR SHEET METAL COVERS. ANY SIGNS THAT ARE DAMAGED AS A RESULT OF COVERING SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT.

TYPE I AND II STEEL POSTS IN SOIL SHALL BE DRIVEN 32" TO 34" BELOW THE GROUND LINE AS SHOWN. HOWEVER, IF SOLID ROCK IS ENCOUNTERED, THE CONTRACTOR SHALL DRILL HOLES OF THE REQUIRED DEPTH INTO THE ROCK AND BACKFILL WITH CONCRETE. THE COST SHALL BE INCIDENTAL TO STEEL POST, AND SOIL STABILIZERS WILL NOT BE REQUIRED.

ANY AREA DISTURBED SHALL BE SIDE GRADED TO THE EXISTING SLOPES AND RESEEDED AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE DEPARTMENT.

REMOVE AND DO NOT REPLACE THE WHITE ON BLUE GENERAL SERVICES SIGNS AT THE EXIT RAMP TERMINALS, "EMERGENCY STOPPING ONLY" SIGNS, AND THE ROUTE MARKER THAT IS LOCATED INSIDE THE INTERCHANGE PAST THE EXIT GORE AREA.

INSTALLATION OF ADVISORY EXIT AND RAMP SPEED SIGNS (W13-2 AND W13-3) SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

ALL EXISTING SHEETING SIGNS WITHIN THE LIMITS OF THIS PROJECT ARE TO BE REMOVED AND REPLACED WITH NEW SIGNS AND POSTS. SIGNS AND POSTS SHALL CONFORM TO CURRENT STANDARDS/SPECIFICATIONS. THE COST FOR REMOVING EXISTING SHEETING SIGNS AND POSTS, RELOCATING EXISTING SIGNS AND POSTS TO CONFORM TO THE SIGNING PLANS AND SPECIFICATIONS, AND ALL HARDWARE REQUIRED, SHALL BE INCIDENTAL TO THE PROJECT. IN ADDITION TO REPLACING ALL EXISTING SIGNS, ALL SIGNS SHOWN ON THE SIGNING PLANS MUST BE INSTALLED. FOR SIGN SIZES AND SPECIFICATIONS, SEE THE CURRENT PROJECT SIGNING PLAN DETAIL SHEETS.

THE COST FOR SIGN BRACKETS AND ANY OTHER HARDWARE REQUIRED TO ATTACH NEW SIGNS ON EXISTING TRUSSES AND CANTILEVERS SHALL BE INCLUDED IN THE UNIT PRICE OF SIGN BASE MATERIAL FOR PANEL SIGNS.

DUPLICATE SIGNS SHALL NOT BE DISPLAYED DURING THE CONSTRUCTION OF THIS PROJECT.

SHEETING SIGNS (D1-1, D1-2, D1-3) EQUAL TO OR LESS THAN 72" X 42" REQUIRE TWO TYPE I OR TYPE II POSTS.

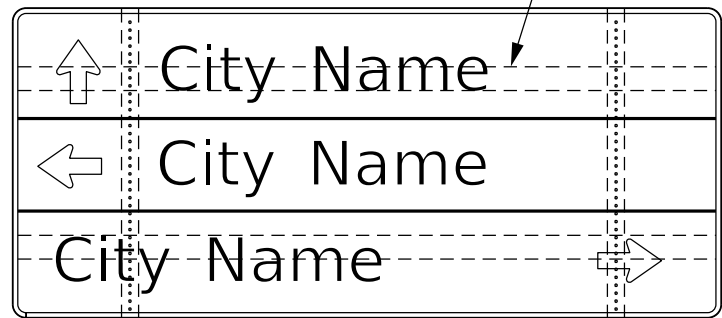
THE HORIZONTAL CLEARANCE "X" ON ALL THE SHEETING SIGNS SHOULD BE A MINIMUM OF 6' FROM THE EDGE OF THE SHOULDER TO THE EDGE OF THE SIGN OR A MINIMUM OF 12' FROM THE EDGE OF THE SIGN TO THE EDGE OF THE TRAVELLED WAY AS SHOWN IN THE SIGNING POSITIONING DETAIL SHEET.

IF ANY SIGN IS LOCATED NEAR A LUMINAIRE OR ANOTHER POLE, IT SHALL BE INSTALLED IN ADVANCE OF THE POLE SO THAT THE MOTORISTS VIEW OF THE SIGN WILL NOT BE OBSTRUCTED.

SIGNS THAT DO NOT COMPLY WITH THE MUTCD SHALL BE REMOVED BY THE CONTRACTOR AS APPROVED AND DIRECTED BY THE ENGINEER.



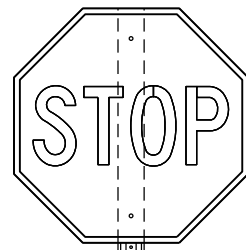
SEE SHEETING SIGN DETAIL SHEET 2 OF 2 FOR BRACING REQUIREMENTS



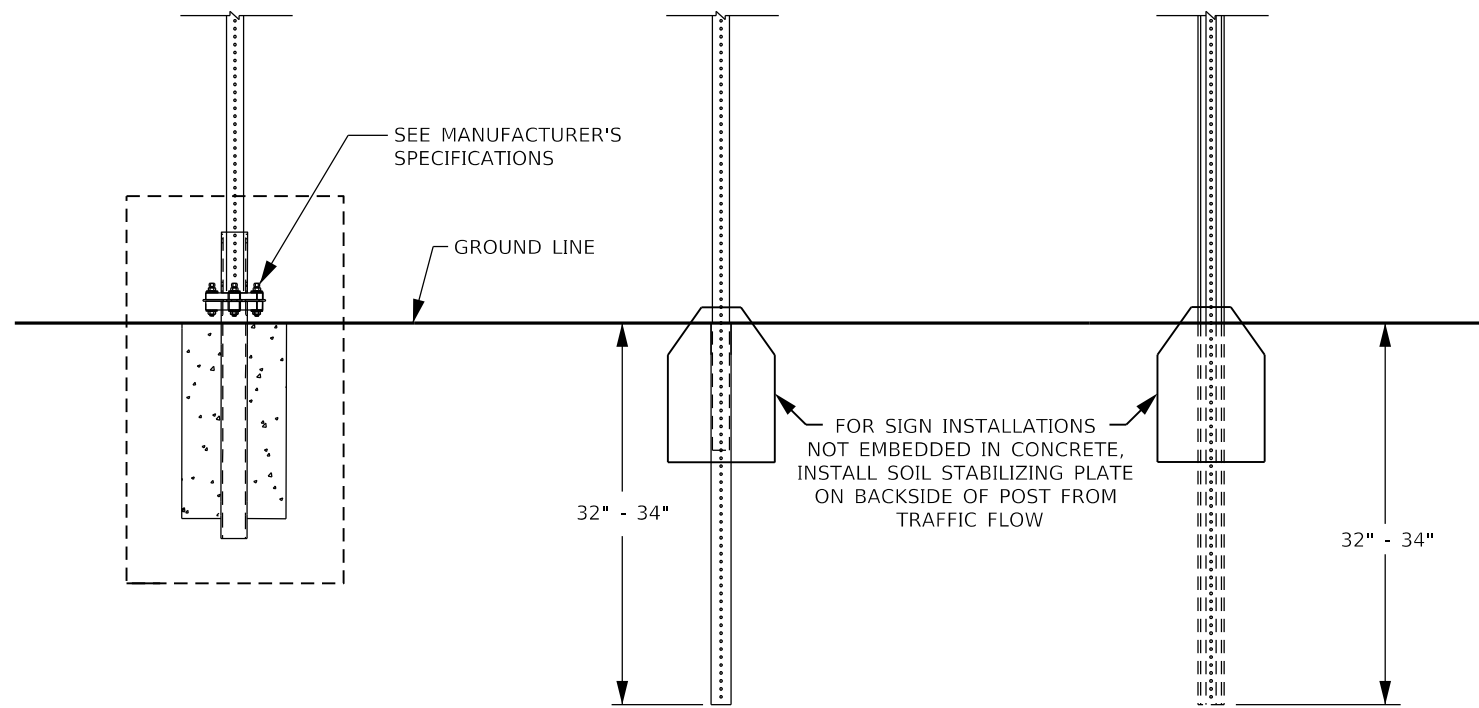
NOTE: SEE SIGN DETAIL SHEETS FOR QUANTITY, LENGTH, SIZE AND GAUGE OF TYPE I POSTS

PLAN VIEW  
NOT TO SCALE

PLAN VIEW  
NOT TO SCALE



PLAN VIEW  
NOT TO SCALE

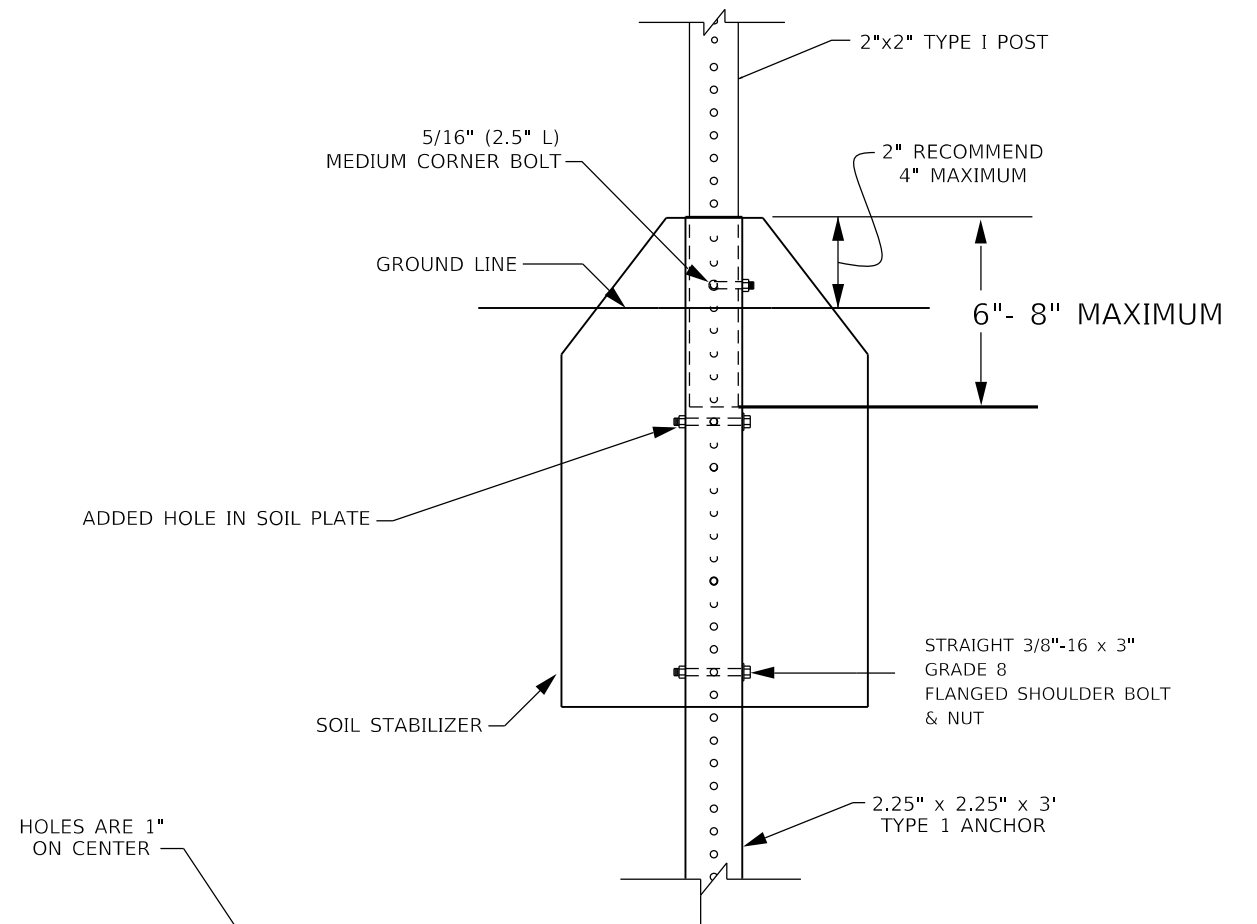


TYPE I  
SQUARE TUBING POST  
WITH TYPE "D" SUPPORT

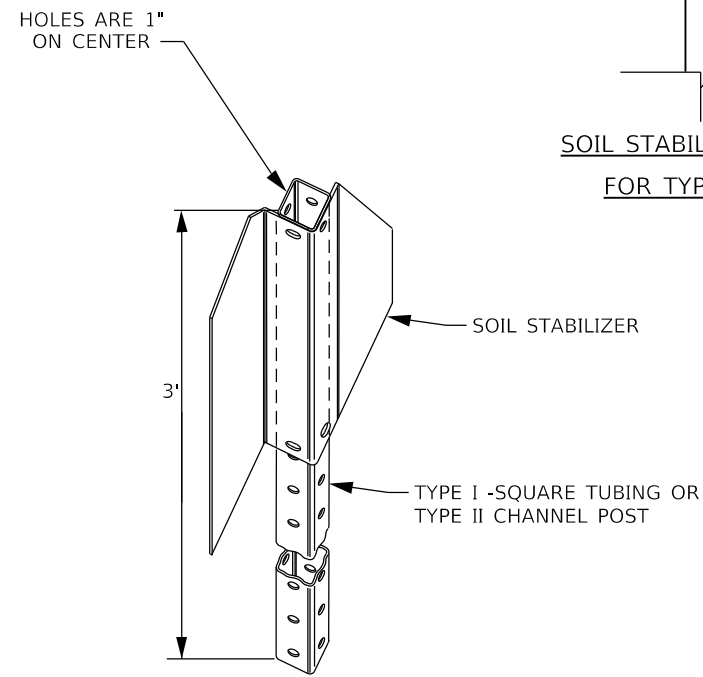
TYPE I  
SQUARE TUBING POST  
WITH SOIL STABILIZER

TYPE II  
CHANNEL POST  
WITH SOIL STABILIZER

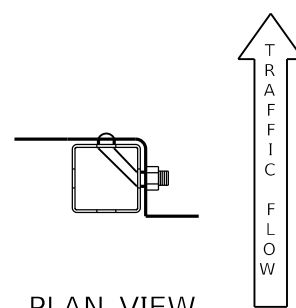
FOR SIGN INSTALLATIONS NOT EMBEDDED IN CONCRETE, INSTALL SOIL STABILIZING PLATE ON BACKSIDE OF POST FROM TRAFFIC FLOW



SOIL STABILIZER DETAIL  
FOR TYPE I POST



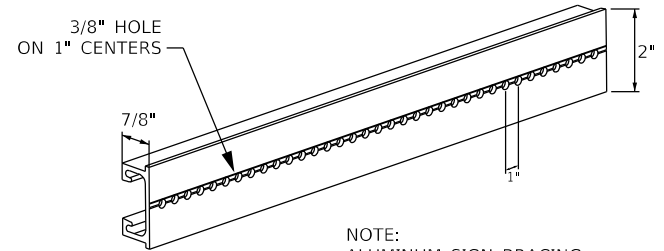
SOIL STABILIZER DETAIL



PLAN VIEW  
NOT TO SCALE



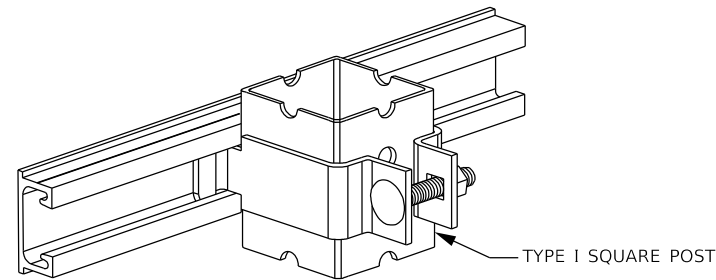
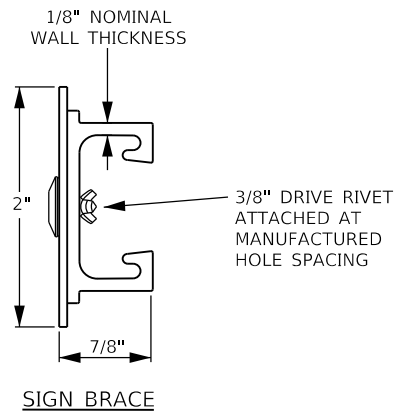
NOT TO SCALE



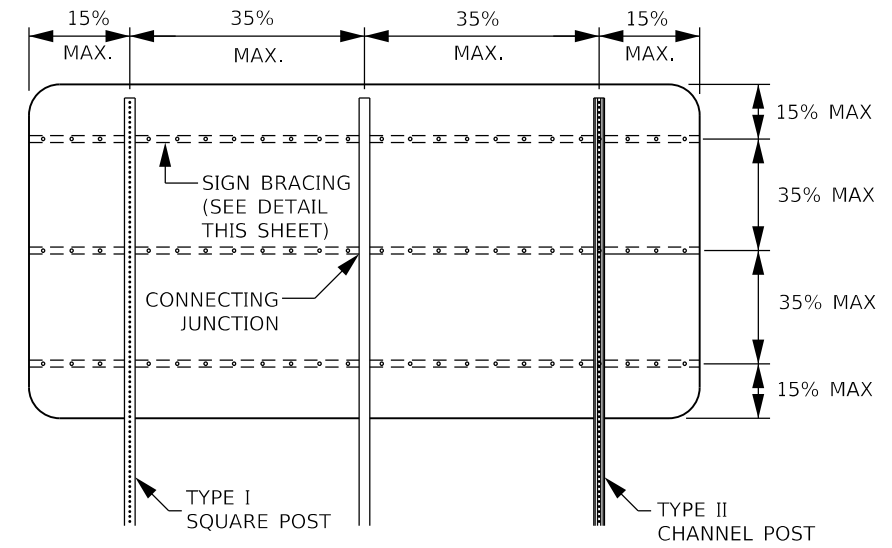
FOR ATTACHMENT OF SIGNS LESS THAN 72" IN WIDTH USING MANUFACTURED 3/8" HOLES ACCORDING TO 2004 STANDARD HIGHWAY SIGNS BLANK STANDARDS PGS 7-1 THRU 7-6

NOTE:  
ALUMINUM SIGN BRACING  
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS

6061-T6 ALUMINUM ALLOY, PUNCHED WITH 3/8" DIAMETER HOLES ON 1" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING 3/8" DRIVE RIVETS



SQUARE POST CLAMP & BRACE

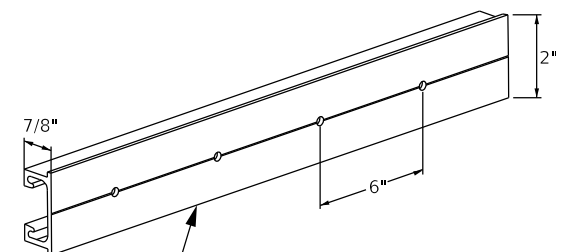


3 POST - BRACING DIAGRAM

NOTE:  
1. MAXIMUM AREA PER CONNECTING JUNCTION = 16 SQ. FT.  
2. BRACING SHOULD NOT BE SPLICED WITHIN 6" OF A BRACE TO POST JUNCTION.

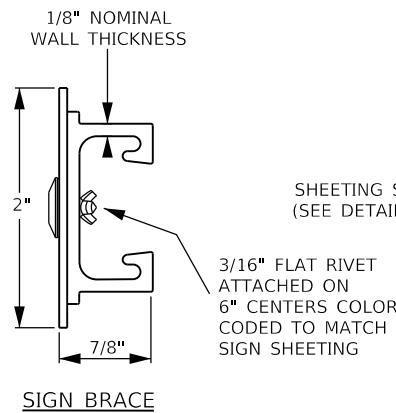
FOR ATTACHMENT OF SIGNS GREATER THAN, OR EQUAL TO, 72" IN WIDTH.

RIVETS SHALL BE COLOR CODED TO MATCH SHEETING IN ORDER TO MINIMIZE GLARE FROM RIVETS



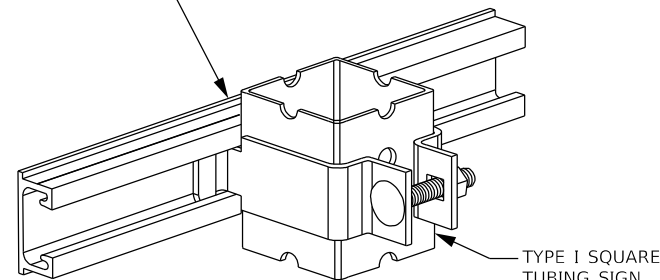
NOTE:  
ALUMINUM SIGN BRACING  
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS

6061-T6 ALUMINUM ALLOY, PUNCHED WITH 3/16" DIAMETER HOLES ON 6" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING RIVETS

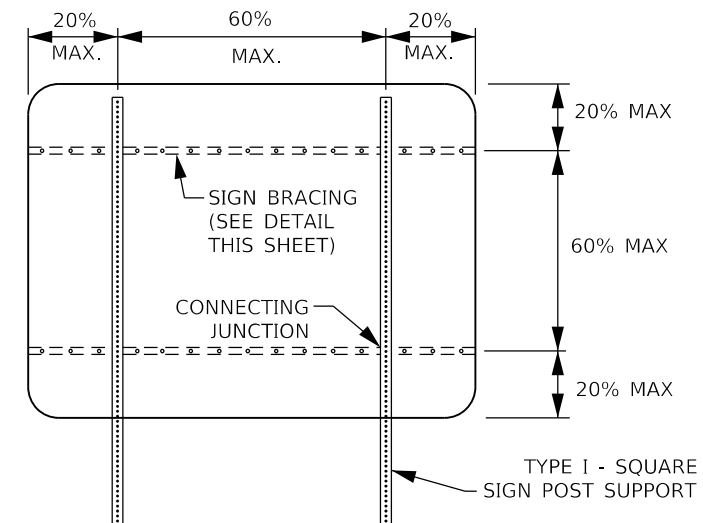


SHEETING SIGN BRACING (SEE DETAIL THIS SHEET)

3/16" FLAT RIVET ATTACHED ON 6" CENTERS COLOR CODED TO MATCH SIGN SHEETING



SQUARE POST CLAMP & BRACE



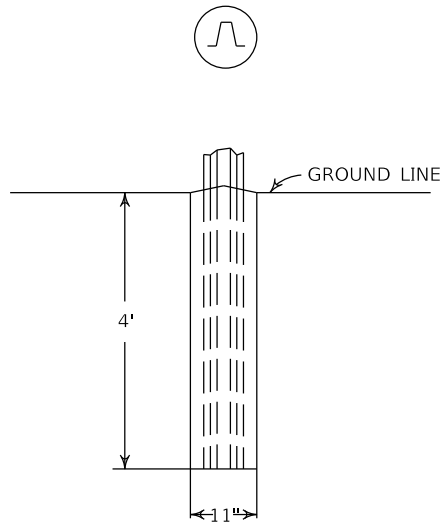
2 POST - BRACING DIAGRAM

NOTE:  
USE OF SIGN BRACING NOT SHOWN ON THIS SHEET MAY BE PERMITTED BY PROJECT ENGINEER AND/OR DISTRICT TRAFFIC ENGINEER.

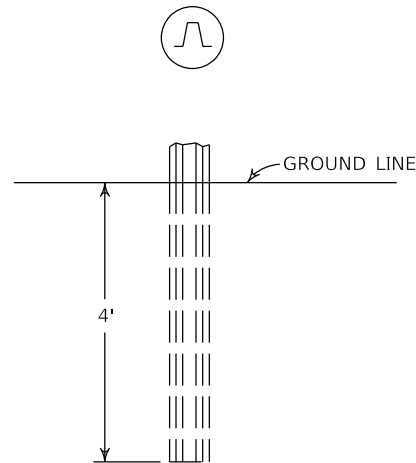
NOT TO SCALE

## CHANNEL POST DETAILS

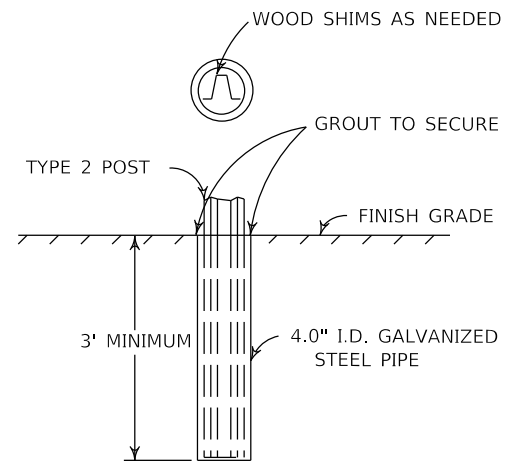
TYPE "B" CONCRETE BASE



TYPE "C" DRIVEN BASE

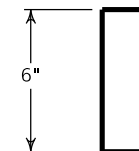


TYPE "D" PIPE BASE

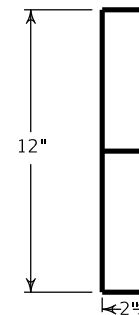


THE COST FOR 4.0" I.D. GALVANIZED STEEL PIPE FOR TYPE "D" BASE AND THE WORK FOR THE INSTALLATION SHALL BE INCLUDED IN THE BID ITEM FOR STEEL POST TYPE 2.

## PANEL DETAILS

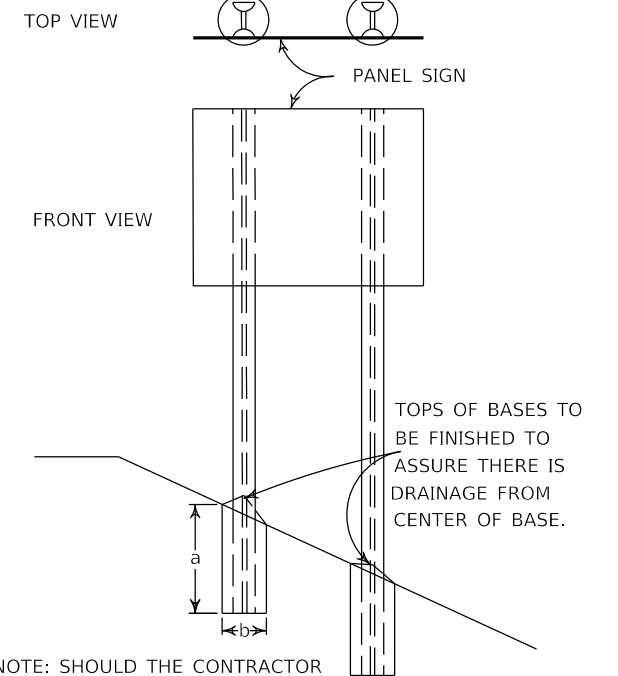


MINIMUM WEIGHT PER LINEAR FOOT  
6" PANEL - 1.115 LBS.  
12" PANEL - 2.485 LBS.

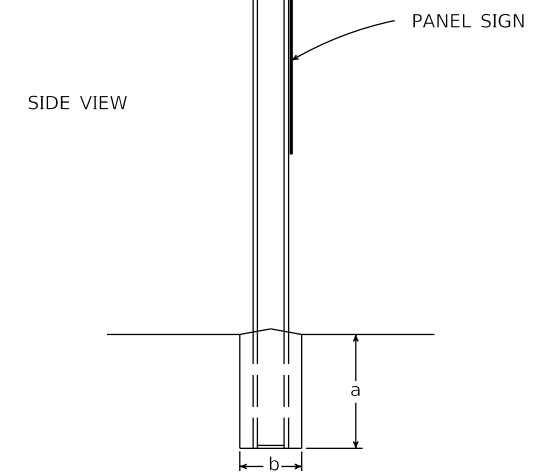


TYPICAL SECTIONS  
ALUMINUM SIGN PANEL EXTRUSIONS

## TYPICAL BEAM WITH TYPE "A" CONCRETE BASE DETAIL

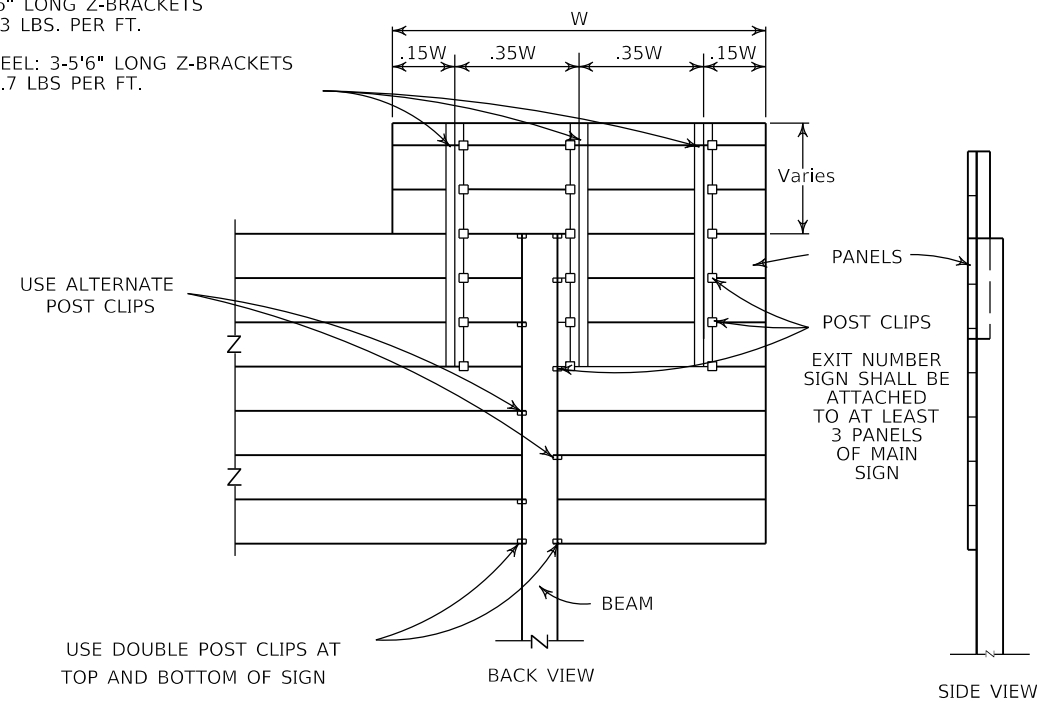


NOTE: SHOULD THE CONTRACTOR OVERDRILL THE HOLE, EXTRA CONCRETE WILL BE AT THE CONTRACTOR'S EXPENSE. PAYMENT WILL BE DETERMINED BY THE "a" DIMENSION.



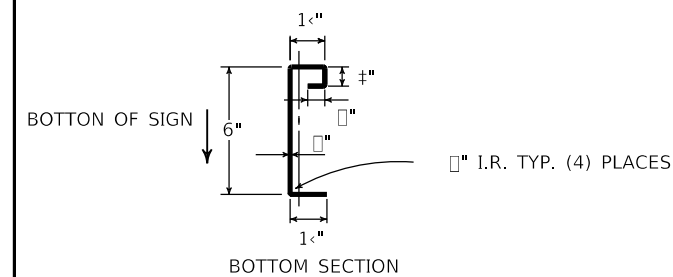
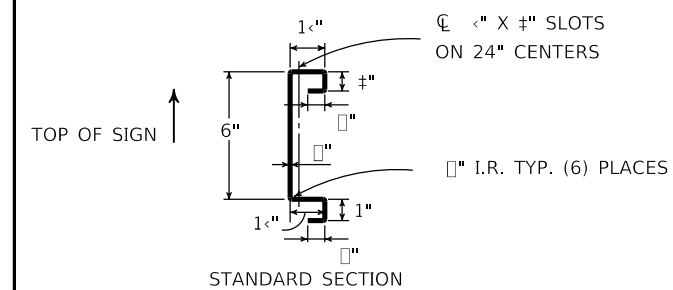
## DETAIL FOR EXIT NUMBER SIGN ATTACHMENT AND TYPICAL POST CLIP ARRANGEMENT

ALUMINUM: 3-5'6" LONG Z-BRACKETS  
3" X 2" @ 2.33 LBS. PER FT.  
OR  
GALVANIZED STEEL: 3-5'6" LONG Z-BRACKETS  
3" X 2 1/2" @ 6.7 LBS PER FT.



USE ALTERNATE POST CLIPS  
USE DOUBLE POST CLIPS AT TOP AND BOTTOM OF SIGN

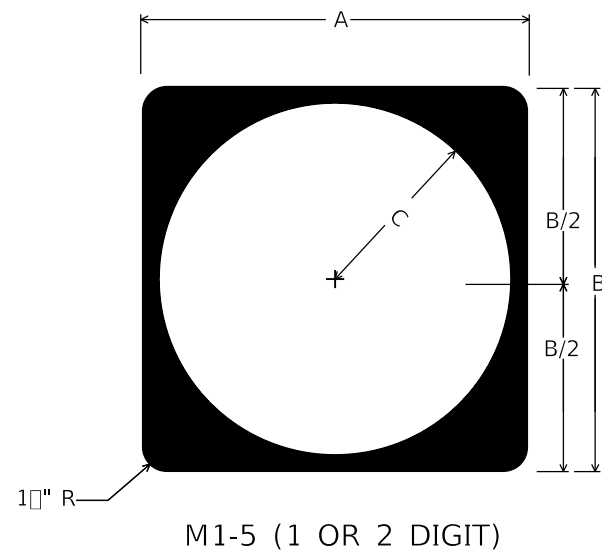
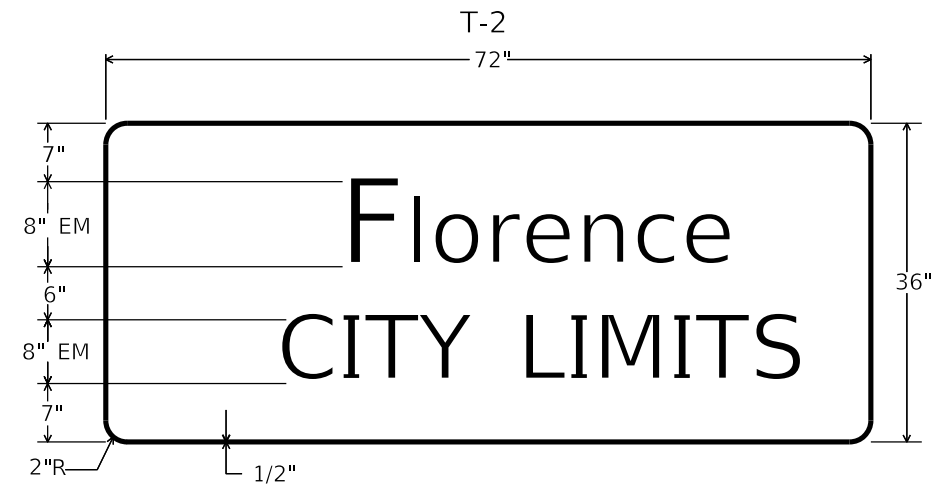
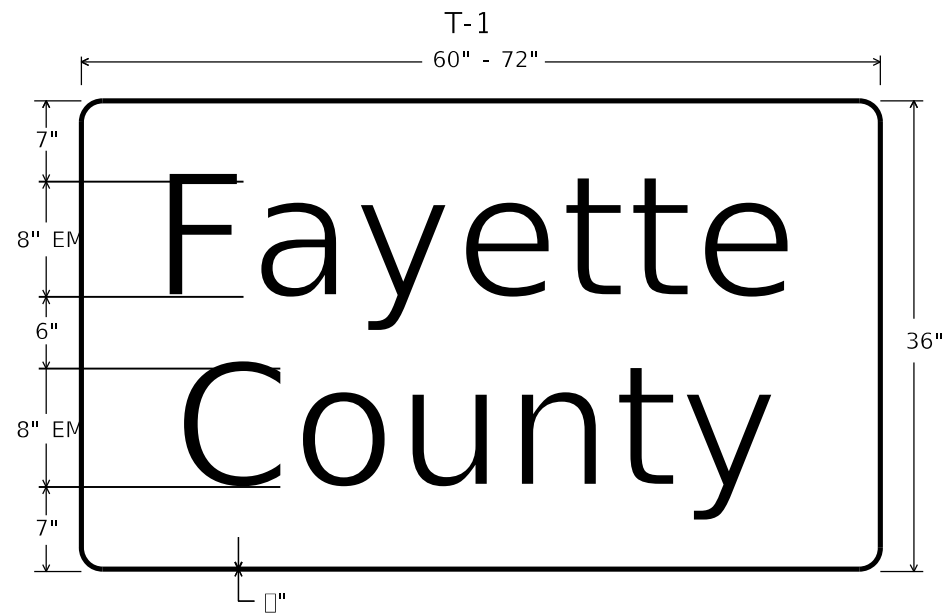
NOTE: THE COST FOR ATTACHING AN EXIT NUMBER SIGN SHALL BE INCLUDED IN THE BID ITEM FOR SIGN BASE MATERIAL FOR PANEL SIGNS AND SHALL INCLUDE ALL Z-BRACKETS AND HARDWARE. THE EXIT NUMBER SIGN SHALL BE INSTALLED OVER THE LEFT OR RIGHT SIDE OF THE SIGN AS SHOWN ON THE PLANS.



TYPICAL SECTIONS  
STEEL SIGN PANEL EXTRUSIONS

NOT TO SCALE

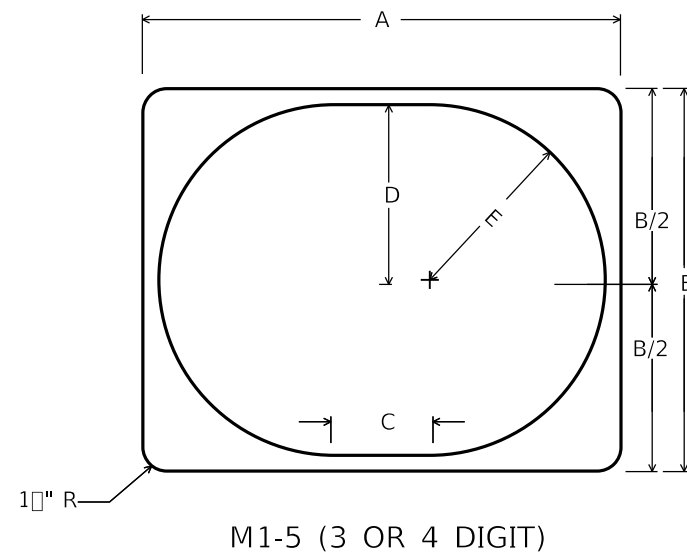




M1-5 (1 OR 2 DIGIT)

	A	B	C	FONT
CONVENTIONAL	24"	24"	11"	12D
EXPRESSWAY/ FREEWAY	36"	36"	17"	18D

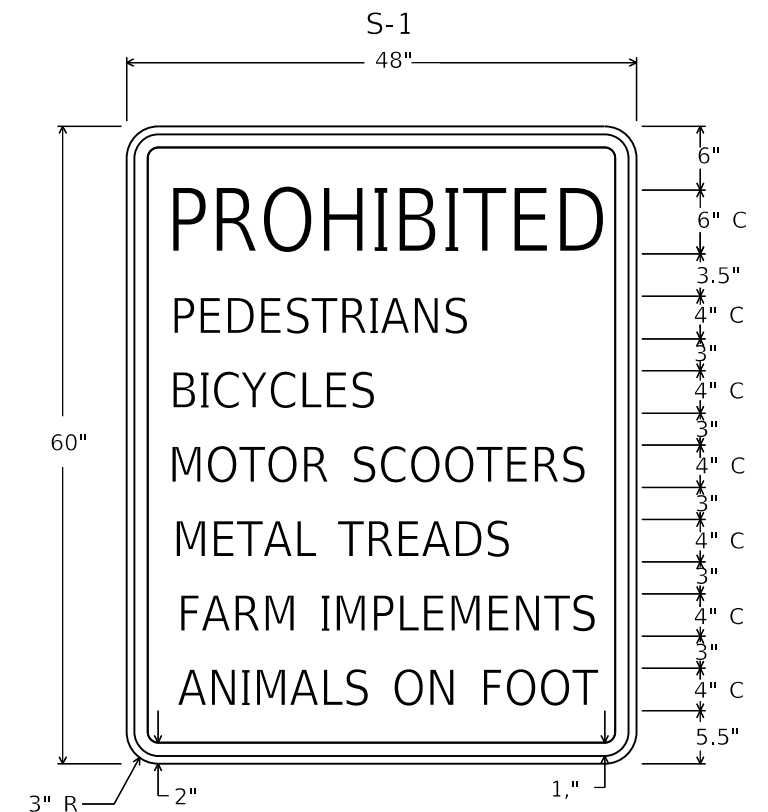
NOTE: FOR ROUTE MARKERS, IF NECESSARY, ADJUSTMENTS TO THE DIGIT LAYOUT AND/OR FONT TYPE MAY BE MADE TO ENSURE VISUAL ACUITY



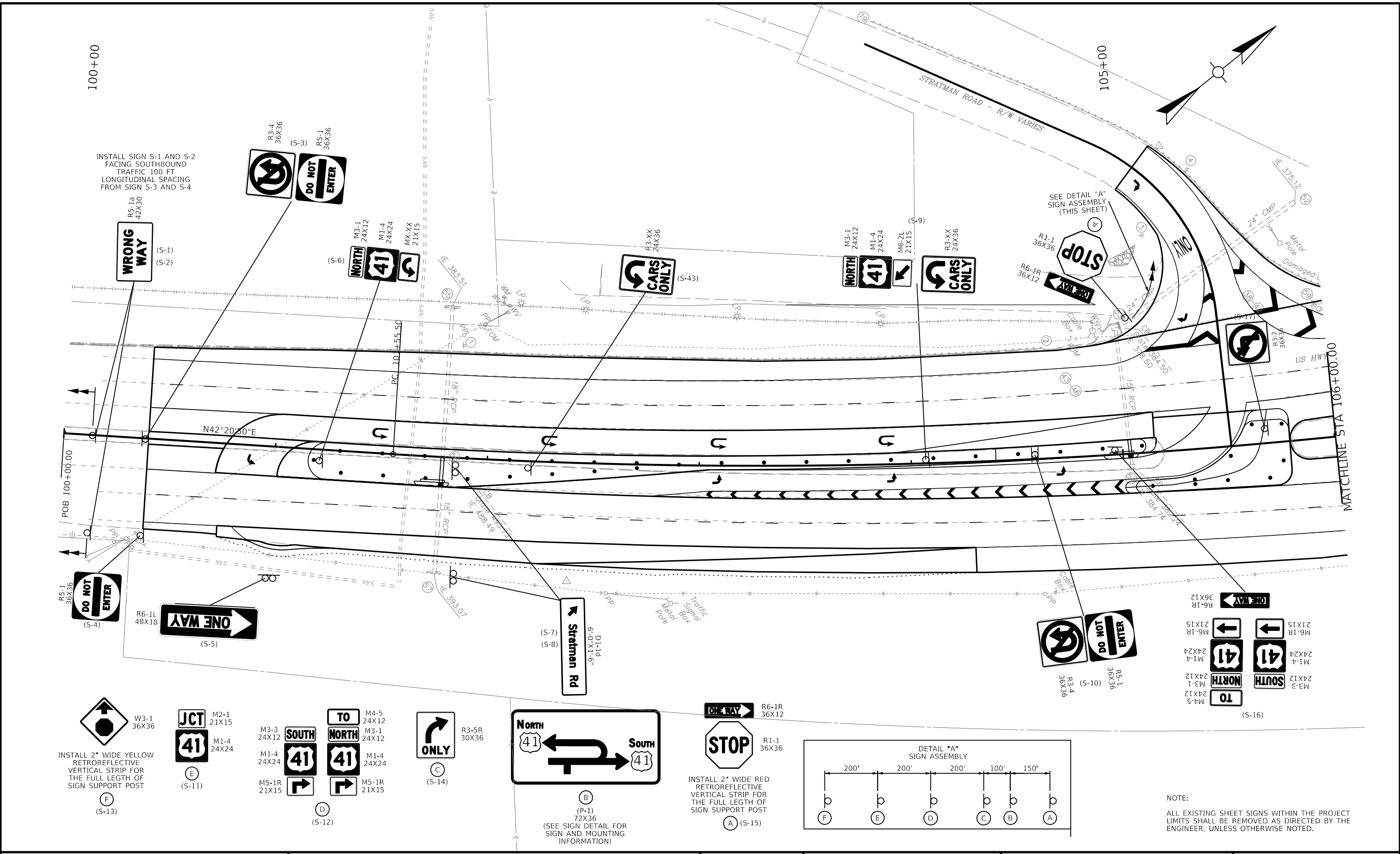
M1-5 (3 OR 4 DIGIT)

	A	B	C	D	E	FONT	
						3 DIGIT	4 DIGIT
CONVENTIONAL	30"	24"	6"	11"	11"	12D	12B
EXPRESSWAY/ FREEWAY	45"	36"	9"	16.5"	16.5"	18D	18B

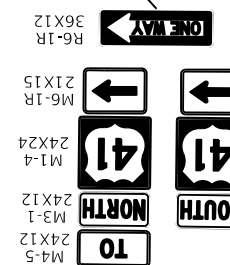
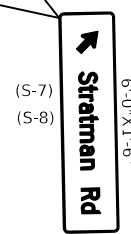
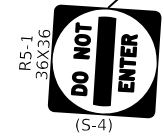
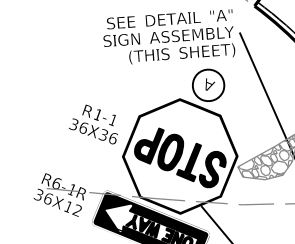
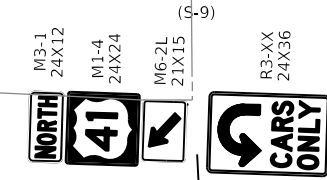
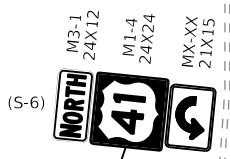
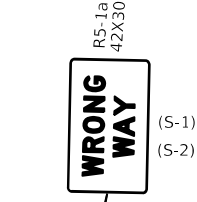
NOTE: EXPRESSWAY/FREEWAY DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL OR FULL CONTROL OF ACCESS



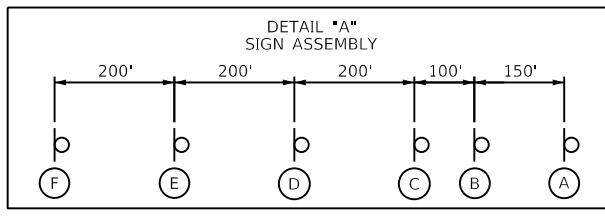
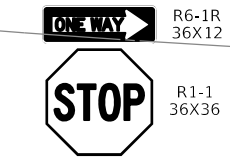
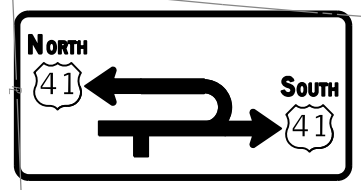
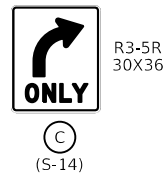
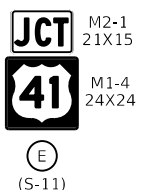
NOT TO SCALE



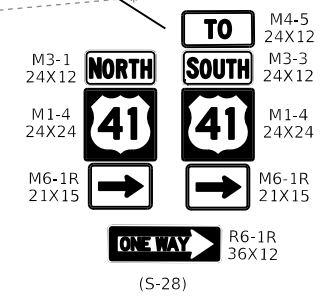
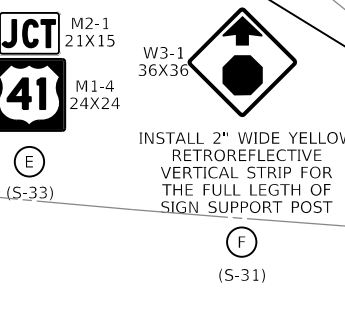
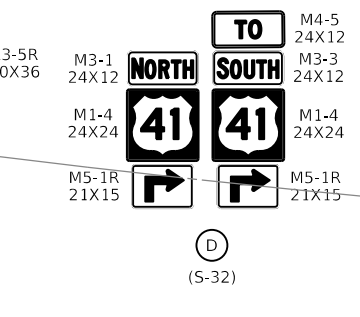
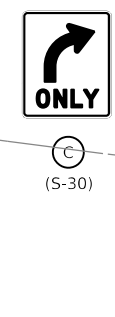
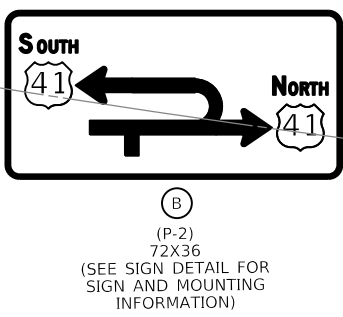
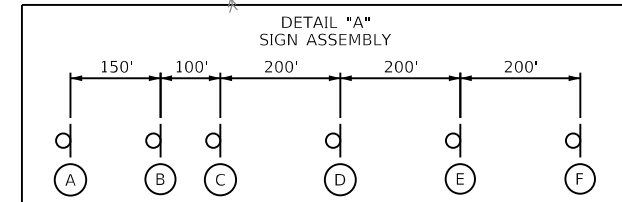
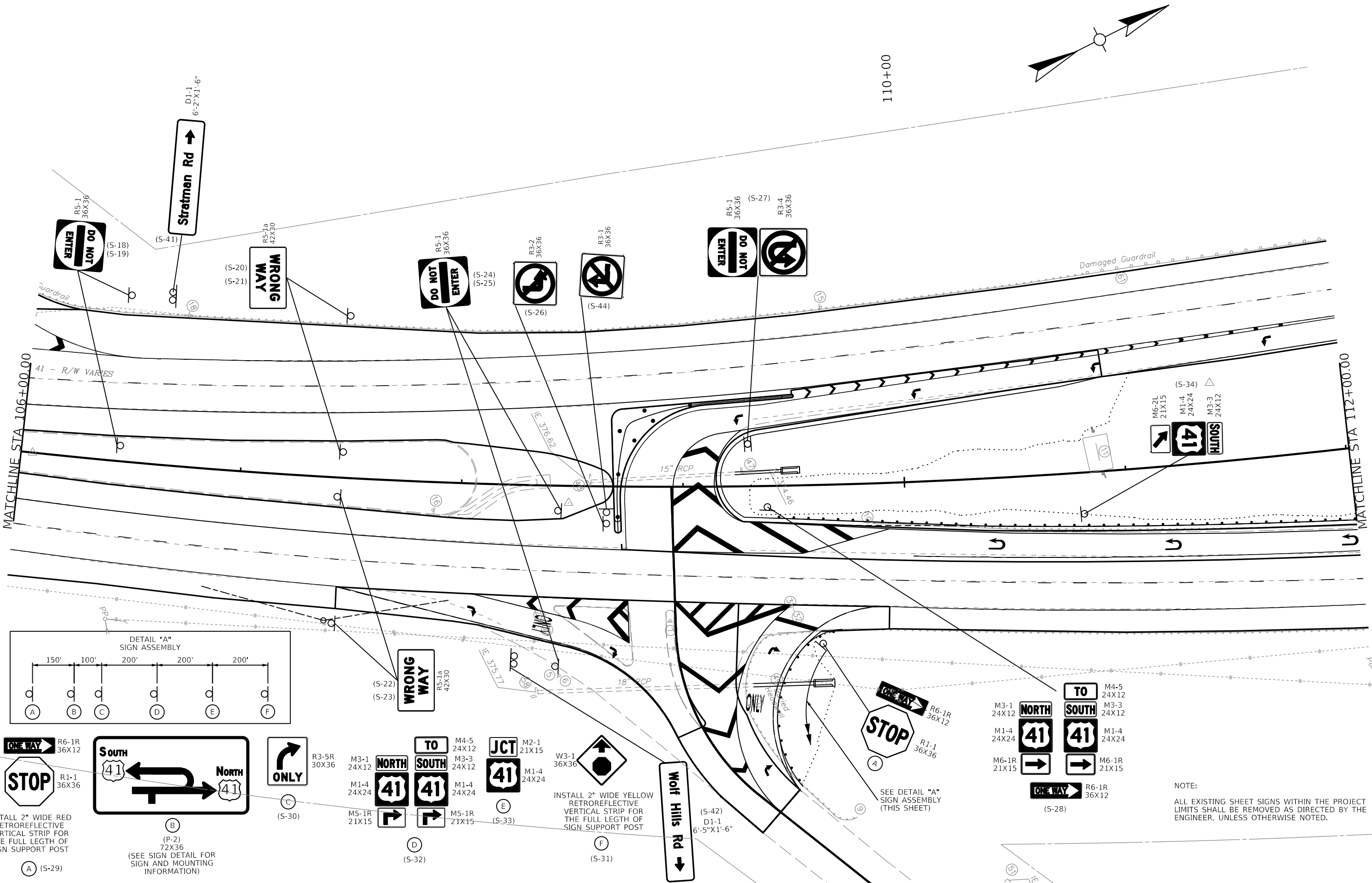
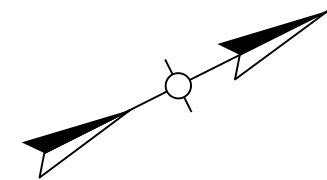
INSTALL SIGN S-1 AND S-2 FACING SOUTHBOUND TRAFFIC 100 FT LONGITUDINAL SPACING FROM SIGN S-3 AND S-4



INSTALL 2" WIDE YELLOW RETROREFLECTIVE VERTICAL STRIP FOR THE FULL LENGTH OF SIGN SUPPORT POST

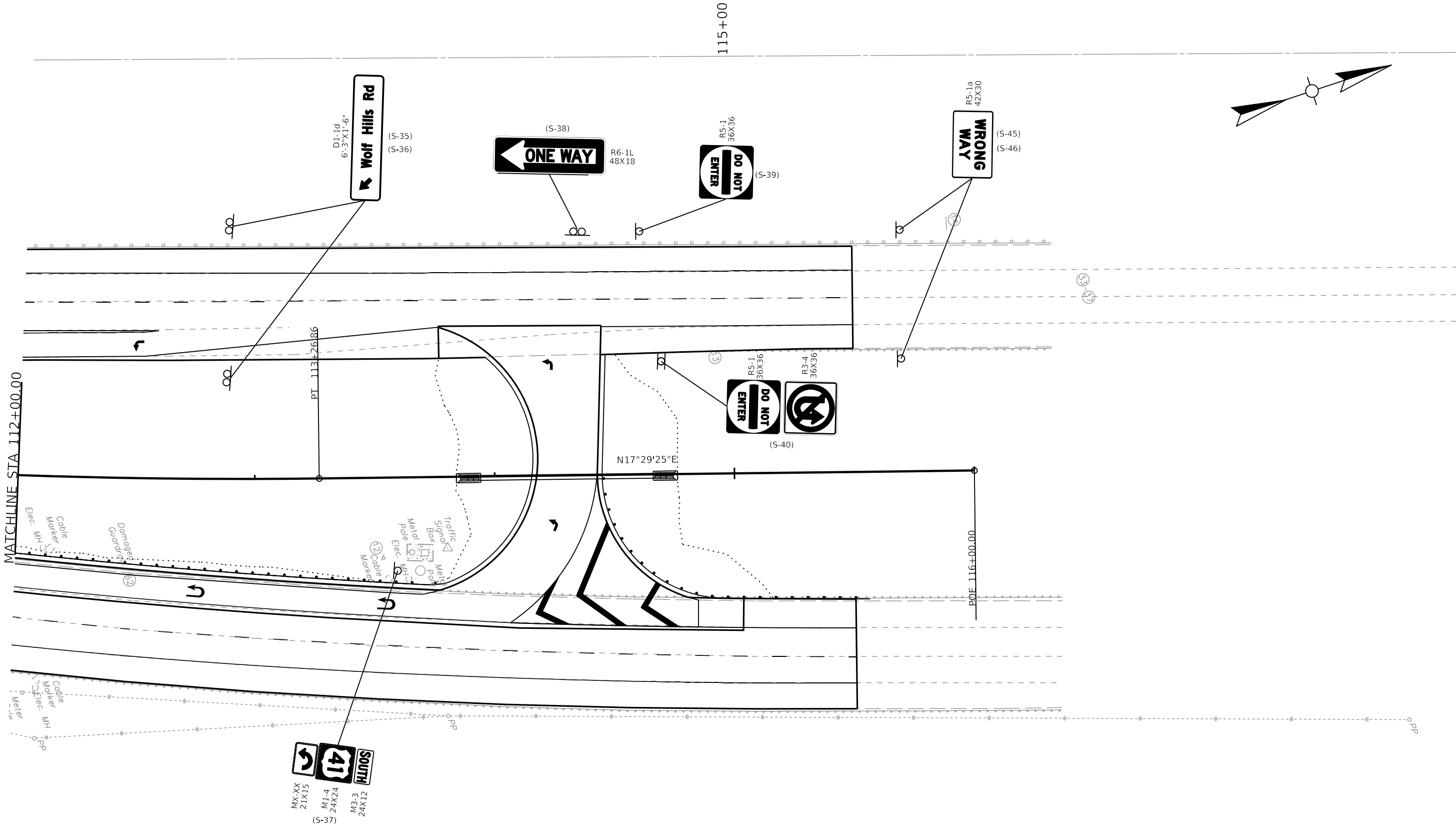


NOTE:  
ALL EXISTING SHEET SIGNS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, UNLESS OTHERWISE NOTED.



NOTE:  
ALL EXISTING SHEET SIGNS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, UNLESS OTHERWISE NOTED.









MATCHLINE STA 112+00.00















NOTE:  
 ALL EXISTING SHEET SIGNS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, UNLESS OTHERWISE NOTED.

# SHEETING SIGNS DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	02-0935.00	R33

SIGN/SIGN ASSEMBLY NUMBER	*SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION				
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)	
S-1	42	30		R5-1a	MEDIAN	SOUTHBOUND TURNING ONTO NORTHBOUND	US 41 NORTH	100+13.00	
S-2	42	30		R5-1a	RIGHT	SOUTHBOUND TURNING ONTO NORTHBOUND	US 41 NORTH	100+13.00	
S-3	36	36	 	R3-4	MEDIAN	NORTHBOUND	US 41 NORTH	100+38.00	
	36	36		R5-1	MEDIAN	SOUTHBOUND TURNING ONTO NORTHBOUND	US 41 SOUTH		
S-4	36	36		R5-1	RIGHT	SOUTHBOUND TURNING ONTO NORTHBOUND	US 41 SOUTH	100+38.00	
S-5	48	18		R6-1L	RIGHT	SOUTHBOUND TURNING ONTO NORTHBOUND	US 41 SOUTH	101+00.00	
S-6	24	12	 	M3-1	MEDIAN	SOUTHBOUND	US 41 SOUTH	101+21.00	
	24	24		M1-4	MEDIAN	SOUTHBOUND	US 41 SOUTH		
	21	15		MX-XX	MEDIAN	SOUTHBOUND	US 41 SOUTH		

SIGN/SIGN ASSEMBLY NUMBER	SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION				
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)	
S-7	6'-0"	1'-6"		D1-1d	MEDIAN	NORTHBOUND	US 41 NORTH	101+86.00	
S-8	6'-0"	1'-6"		D1-1d	RIGHT	NORTHBOUND	US 41 NORTH	101+86.00	
S-9	24	12	  	M3-1	MEDIAN	SOUTHBOUND	US 41 SOUTH	104+06.00	
	24	24		M1-4	MEDIAN	SOUTHBOUND	US 41 SOUTH		
	21	15		M6-2L	MEDIAN	SOUTHBOUND	US 41 SOUTH		
	24	36		R3-XX	MEDIAN	SOUTHBOUND	US 41 SOUTH		
S-10	36	36	 	R5-1	MEDIAN	SOUTHBOUND	US 41 SOUTH	104+56.00	
	36	36		R3-4	MEDIAN	NORTHBOUND	US 41 NORTH		
S-11	21	15		M2-1	RIGHT	EASTBOUND	STRATMAN RD	SEE SIGNING PLANS FOR LOCATION	
	24	24		M1-4	RIGHT	EASTBOUND	STRATMAN RD		
S-12	24	12	   	M3-3	RIGHT	EASTBOUND	STRATMAN RD	SEE SIGNING PLANS FOR LOCATION	
	24	24		M1-4	RIGHT	EASTBOUND	STRATMAN RD		
	21	15		M5-1R	RIGHT	EASTBOUND	STRATMAN RD		
	24	12		M4-5	RIGHT	EASTBOUND	STRATMAN RD		
	24	12		M3-1	RIGHT	EASTBOUND	STRATMAN RD		
	24	24		M1-4	RIGHT	EASTBOUND	STRATMAN RD		
	21	15		M5-1R	RIGHT	EASTBOUND	STRATMAN RD		







SPECIAL NOTES:  
 1. COLORS FOR SIGN ASSEMBLIES ARE DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS"  
 2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES), OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.







\* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

FILE NAME: C:\BMS\WSP-PB-US-PW-02\WSP\_MAC.RICE\0833597\AR33 - R38 - SIGNING DETAILS.DGN  
 USER: RiceM  
 DATE PLOTTED: September 7, 2005  
 OpenRoads Designer v10.16.2.267

# SHEETING SIGNS DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	02-0935.00	R34

SIGN/SIGN ASSEMBLY NUMBER	*SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION			
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)
S-13	36	36		W3-1	RIGHT	EASTBOUND	STRATMAN RD	SEE SIGNING PLANS FOR LOCATION
S-14	30	36		R3-5R	RIGHT	EASTBOUND	STRATMAN RD	SEE SIGNING PLANS FOR LOCATION
S-15	36	12		R6-1R	RIGHT	EASTBOUND	STRATMAN RD	105+05.00
	36	36		R1-1	RIGHT	EASTBOUND	STRATMAN RD	
S-16	24	12		M3-3	US 41 MEDIAN	EASTBOUND	STRATMAN RD	104+96.00
	24	24		M1-4				
	21	15		M6-1R				
	24	12		M4-5				
	24	12		M3-1				
	24	24		M1-4				
	21	15		M6-1R				
	36	12		R6-1R				
S-17	36	36		R3-2	MEDIAN	SOUTHBOUND	US 41 SOUTH	105+68.00
S-18	36	36		R5-1	MEDIAN	-NB/TURN LEFT -EASTBOUND	-US 41 NORTH -STRATMAN RD	106+45.00

SIGN/SIGN ASSEMBLY NUMBER	SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION			
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)
S-19	36	36		R5-1	LEFT	-NB/TURN LEFT -EASTBOUND	-US 41 NORTH -STRATMAN RD	106+45.00
S-20	42	30		R5-1a	LEFT	-NB/TURN LEFT -EASTBOUND	-US 41 NORTH -STRATMAN RD	107+45.00
S-21	42	30		R5-1a	MEDIAN	-NB/TURN LEFT -EASTBOUND	-US 41 NORTH -STRATMAN RD	107+45.00
S-22	42	30		R5-1a	MEDIAN	-SB/TURN LEFT -WESTBOUND	-US 41 SOUTH -WOLF HILLS RD	107+45.00
S-23	42	30		R5-1a	RIGHT	-SB/TURN LEFT -WESTBOUND	-US 41 SOUTH -WOLF HILLS RD	107+45.00
S-24	36	36		R5-1	MEDIAN	-SB/TURN LEFT -WESTBOUND	-US 41 SOUTH -WOLF HILLS RD	108+44.00








SPECIAL NOTES:  
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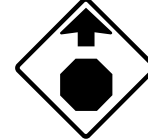





\* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

FILE NAME: C:\BMS\WSP-PB-US-PW-02\WSP\_MAC.RICE\083597\AR33 - R38 - SIGNING DETAILS.DGN  
 USER: RiceM  
 DATE PLOTTED: September 7, 2005  
 OpenRoads Designer v10.16.2.267

# SHEETING SIGNS DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	02-0935.00	R35

SIGN/SIGN ASSEMBLY NUMBER	*SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION				
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)	
S-25	36	36		R5-1	RIGHT	-SB/TURN LEFT -WESTBOUND	-US 41 SOUTH -WOLF HILLS RD	108+44.00	
S-26	36	36		R3-2	MEDIAN	NORTHBOUND	US 41 NORTH	108+65.00	
S-27	36	36		R3-4	MEDIAN	SOUTHBOUND	US 41 SOUTH	109+30.00	
	36	36		R5-1	MEDIAN	NORTHBOUND	US 41 NORTH		
S-28	24	12		M3-1	US 41 MEDIAN	WESTBOUND	WOLF HILLS RD	109+38.00	
	24	24		M1-4					
	21	15		M6-1R					
	24	12		M4-5					
	24	12		M3-3					
	24	24		M1-4					
	21	15		M6-1R					
	36	12			R6-1R				
S-29	36	12		R6-1R	RIGHT	WESTBOUND	WOLF HILLS RD	109+60.00	
	36	36		R1-1	RIGHT	WESTBOUND	WOLF HILLS RD		
S-30	30	36		R3-5R	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION	

SIGN/SIGN ASSEMBLY NUMBER	SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION				
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)	
S-31	36	36		W3-1	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION	
S-32	24	12		M3-1	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION	
	24	24		M1-4	RIGHT	WESTBOUND	WOLF HILLS RD		
	21	15		M5-1R	RIGHT	WESTBOUND	WOLF HILLS RD		
	24	12		M4-5	RIGHT	WESTBOUND	WOLF HILLS RD		
	24	12		M3-3	RIGHT	WESTBOUND	WOLF HILLS RD		
	24	24		M1-4	RIGHT	WESTBOUND	WOLF HILLS RD		
	21	15		M5-1R	RIGHT	WESTBOUND	WOLF HILLS RD		
S-33	21	15		M2-1	RIGHT	WESTBOUND	WOLF HILLS RD		
	24	24		M1-4	RIGHT	WESTBOUND	WOLF HILLS RD	SEE SIGNING PLANS FOR LOCATION	
S-34	24	12		M3-3	MEDIAN	NORTHBOUND	US 41 NORTH	110+80.00	
	24	24		M1-4	MEDIAN	NORTHBOUND	US 41 NORTH		
	21	15		M6-2L	MEDIAN	NORTHBOUND	US 41 NORTH		
S-35	6'-3"	1'-6"		D1-1d	MEDIAN	SOUTHBOUND	US 41 SOUTH	112+89.00	
S-36	6'-3"	1'-6"		D1-1d	LEFT	SOUTHBOUND	US 41 SOUTH	112+89.00	








SPECIAL NOTES:  
 1. COLORS FOR SIGN ASSEMBLIES ARE DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS"  
 2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES), OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.


\* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

FILE NAME: C:\BMS\WSP-PB-US-PW-02\WSP\_MAC.RICE\0833597\R33 - R38 - SIGNING DETAILS.DGN  
 USER: RiceM  
 DATE PLOTTED: September 7, 2005  
 OpenRoads Designer v10.16.2.267

# SHEETING SIGNS DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	02-0935.00	R36

SIGN/SIGN ASSEMBLY NUMBER	*SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION			
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)
S-37	24	12		M3-3	MEDIAN	NORTHBOUND	US 41 NORTH	113+59.00
	24	24		M1-4	MEDIAN	NORTHBOUND	US 41 NORTH	
	21	15		MX-XX	MEDIAN	NORTHBOUND	US 41 NORTH	
S-38	48	18		R6-1L	LEFT	NORTHBOUND TURNING ONTO SOUTHBOUND	US 41 NORTH	114+36.00
S-39	36	36		R5-1	LEFT	NORTHBOUND TURNING ONTO SOUTHBOUND	US 41 NORTH	114+62.00
S-40	36	36	 	R3-4	MEDIAN	SOUTHBOUND	US 41 SOUTH	114+70.00
	36	36		R5-1	MEDIAN	NORTHBOUND TURNING ONTO SOUTHBOUND	US 41 NORTH	
S-41	6'-2"	1'-6"		D1-1	LEFT	SOUTHBOUND	US 41 SOUTH	106+62.00
S-42	6'-5"	1'-6"		D1-1	RIGHT	NORTHBOUND	US 41 NORTH	108+25.00

SIGN/SIGN ASSEMBLY NUMBER	SIZES IN INCHES		MESSAGES ①	SPECIFICATION	SIGN LOCATION			
	HORIZ.	VERT.			SIDE OF ROAD	FACING TRAFFIC TRAVELING	ON ROAD	AT STATION (APPROXIMATE)
S-43	24	36		R3-XX	MEDIAN	SOUTHBOUND	US 41 SOUTH	102+21.00
S-44	36	36		R3-1	MEDIAN	SOUTHBOUND TURNING ONTO EASTBOUND	US 41 SOUTH	108+65.00
S-45	42	30		R5-1a	LEFT	NORTHBOUND TURNING ONTO SOUTHBOUND	US 41 NORTH	115+70.00
S-46	42	30		R5-1a	MEDIAN	NORTHBOUND TURNING ONTO SOUTHBOUND	US 41 NORTH	115+70.00
S-X								
S-X								

SPECIAL NOTES:  
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 2. SHEETING SIGNS SHALL BE FABRICATED FROM 0.125 GAUGE MATERIAL IF ANY DIMENSION IS GREATER THAN 36" (THIRTY-SIX INCHES), OTHERWISE 0.080 GAUGE MATERIAL SHALL BE USED.

\* D1-1 AND D1-1d SIGN SIZES SHOWN IN FEET AND INCHES.

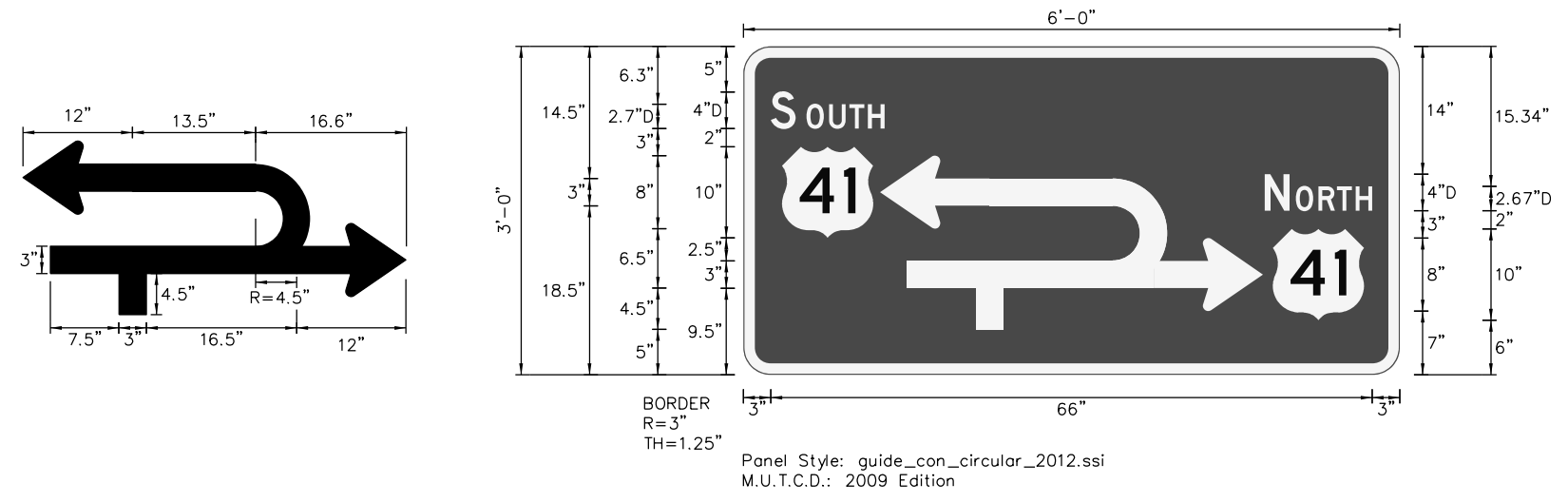
FILE NAME: C:\BMS\WSP-PB-US-PW-02\WSP\_MAC.RICE\083597\AR33 - R38 - SIGNING DETAILS.DGN  
 USER: RiceM  
 DATE PLOTTED: September 7, 2005  
 OpenRoads Designer v10.16.2.267





**SIGN DETAIL**

N.T.S.



SIGN LOCATION & MOUNTING INFORMATION			
SIDE OF ROAD	TRAFFIC DIRECTION	ON ROAD	MILE POINT
RIGHT	WESTBOUND	WOLF HILLS DRIVE	**
MOUNTING STYLE		GROUND	
POST TYPE		TYPE 1 POST	
POST 1 LENGTH =	15'	HORIZONTAL CLEARANCE ' LT.   12' RT.	
POST 2 LENGTH =	15'		
POST 3 LENGTH =	15'		
TYPE "D" BREAKAWAY SIGN SUPPORT		3 EACH	
CONCRETE BASE DIMENSIONS			
a = 1'-6" DIA.	b = 3'-6"	0.25 Cu. Yds./Post	

SIGN NUMBER	P-2
WIDTH x HGHT.	6'-0" x 3'-0"
BORDER WIDTH	1.25"
CORNER RADIUS	3"
MOUNTING	GROUND
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

\*\*NOTE: SEE SIGNING PLANS FOR LOCATION

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	90	15	16	8	12
Mt_4	0	4.2	15	10	10
AR_Type D	270	45	7	8	12
Mt_4	0	58.1	6	10	10

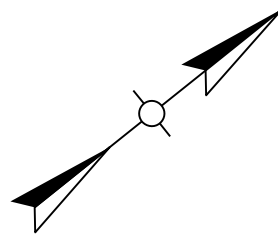
Panel Style: guide\_con\_circular\_2012.ssi  
 Dimensions are in inches,tenths

Letter locations are panel edge to lower left corner

**LETTER POSITIONS (X)**

LETTER POSITIONS (X)																				LENGTH	SERIES/SIZE
S	O	U	T	H																12.5	D 2000 4.2.7
3	6.9	9.4	11.6	13.7																11.8	D 2000 4.2.7
N	O	R	T	H																	
57.2	60.6	63.1	65.1	67.2																	

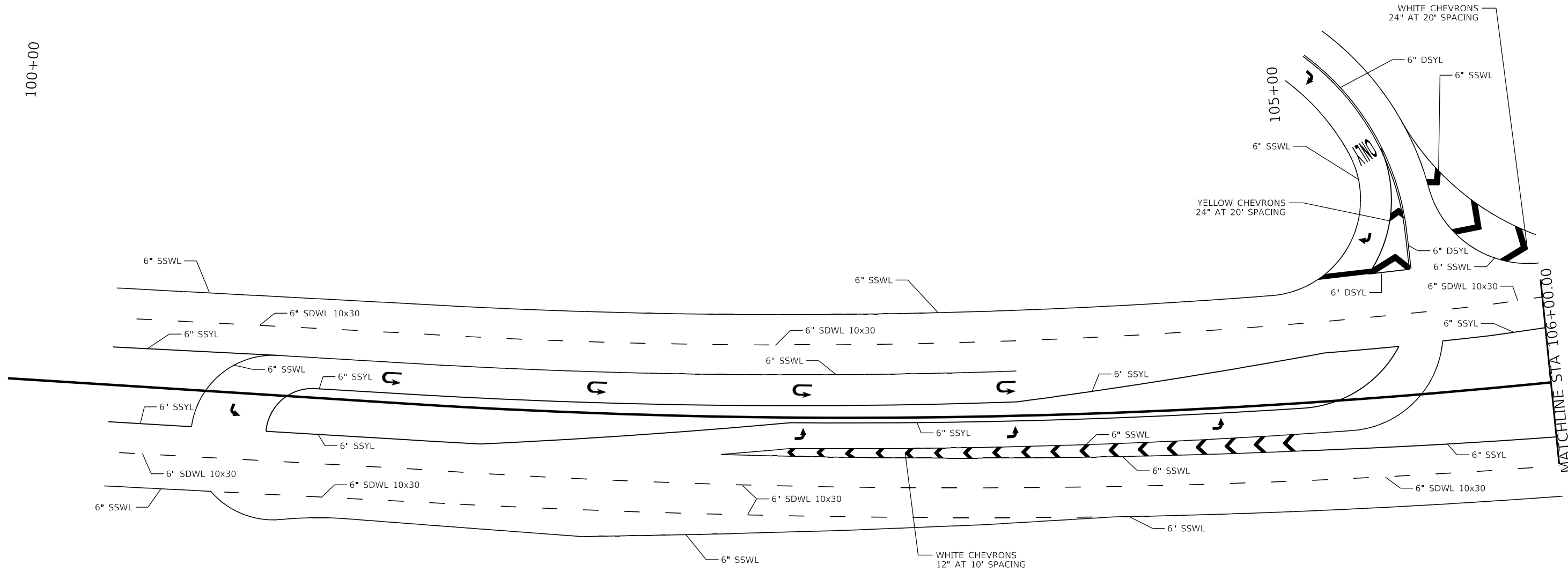
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 USER: RiceM  
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 OpenRoads Designer v10.16.2.267



100+00

105+00

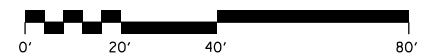
MATCHLINE STA 106+00.00

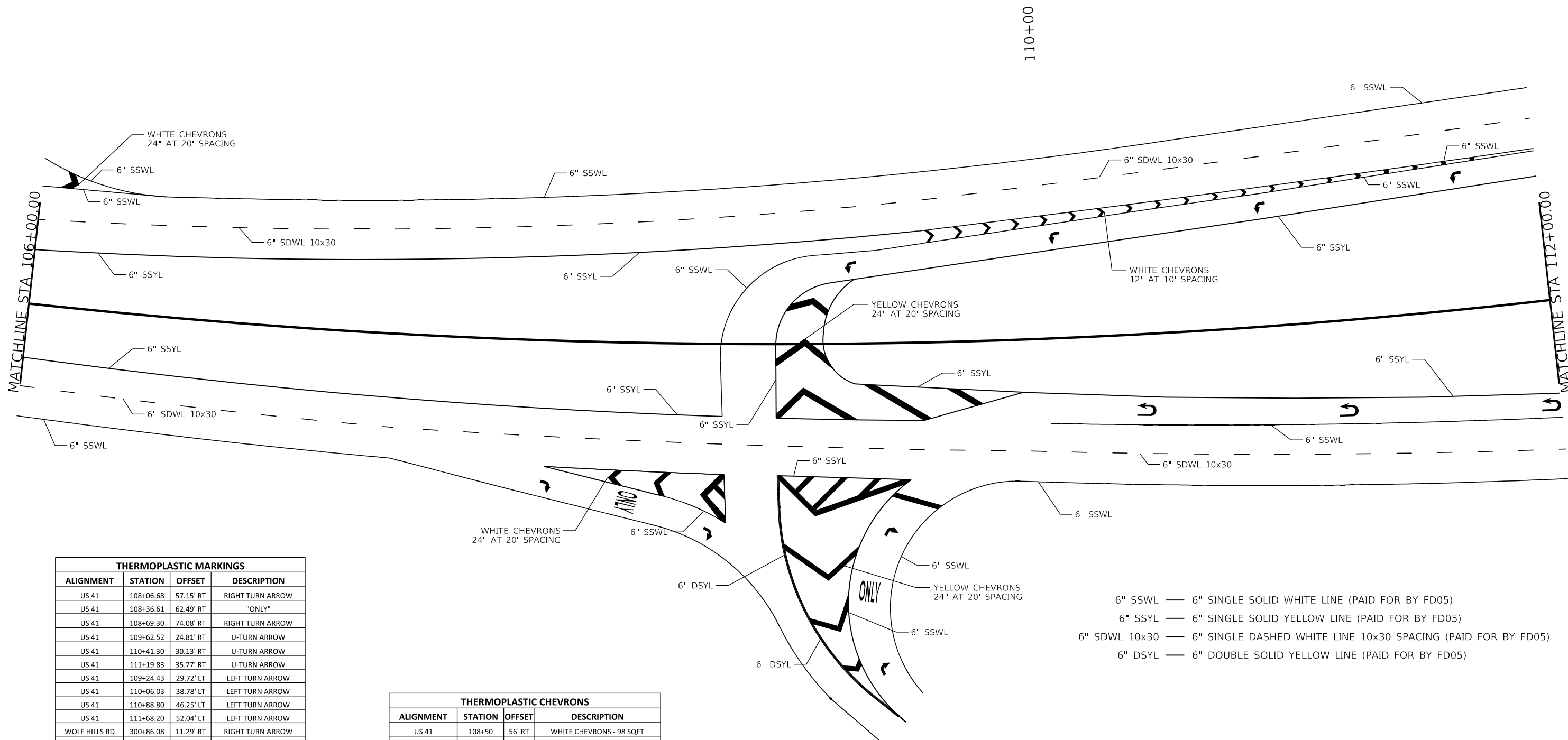
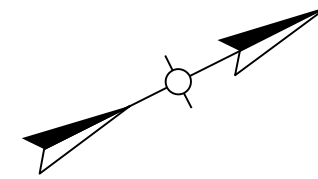


THERMOPLASTIC MARKINGS			
ALIGNMENT	STATION	OFFSET	DESCRIPTION
US 41	100+88.18	6.56' RT	LEFT TURN ARROW
US 41	103+11.91	8.06' RT	LEFT TURN ARROW
US 41	103+91.67	7.23' RT	LEFT TURN ARROW
US 41	104+71.47	6.65' RT	LEFT TURN ARROW
US 41	101+53.02	9.72' LT	U-TURN ARROW
US 41	102+33.12	10.11' LT	U-TURN ARROW
US 41	103+13.23	10.67' LT	U-TURN ARROW
US 41	103+92.77	11.40' LT	U-TURN ARROW
STRATMAN RD	201+47.21	5.35' RT	LEFT TURN ARROW
STRATMAN RD	201+80.55	6.67' RT	"ONLY"
STRATMAN RD	202+22.10	16.05' RT	LEFT TURN ARROW
STRATMAN RD	202+34.19	15.42' RT	24" STOP BAR - 19 LF

- 6" SSWL — 6" SINGLE SOLID WHITE LINE (PAID FOR BY FD05)
- 6" SSYL — 6" SINGLE SOLID YELLOW LINE (PAID FOR BY FD05)
- 6" SDWL 10x30 — 6" SINGLE DASHED WHITE LINE 10x30 SPACING (PAID FOR BY FD05)
- 6" DSYL — 6" DOUBLE SOLID YELLOW LINE (PAID FOR BY FD05)

THERMOPLASTIC CHEVRONS			
ALIGNMENT	STATION	OFFSET	DESCRIPTION
US 41	104+04	13' RT	WHITE CHEVRONS - 118 SQFT
STRATMAN RD	202+12	5' RT	YELLOW CHEVRONS - 49 SQFT
STRATMAN RD	202+23	31' LT	WHITE CHEVRONS - 108 SQFT





THERMOPLASTIC MARKINGS			
ALIGNMENT	STATION	OFFSET	DESCRIPTION
US 41	108+06.68	57.15' RT	RIGHT TURN ARROW
US 41	108+36.61	62.49' RT	"ONLY"
US 41	108+69.30	74.08' RT	RIGHT TURN ARROW
US 41	109+62.52	24.81' RT	U-TURN ARROW
US 41	110+41.30	30.13' RT	U-TURN ARROW
US 41	111+19.83	35.77' RT	U-TURN ARROW
US 41	109+24.43	29.72' LT	LEFT TURN ARROW
US 41	110+06.03	38.78' LT	LEFT TURN ARROW
US 41	110+88.80	46.25' LT	LEFT TURN ARROW
US 41	111+68.20	52.04' LT	LEFT TURN ARROW
WOLF HILLS RD	300+86.08	11.29' RT	RIGHT TURN ARROW
WOLF HILLS RD	301+18.80	25.27' RT	"ONLY"
WOLF HILLS RD	301+48.43	42.57' RT	RIGHT TURN ARROW
WOLF HILLS RD	301+69.89	55.35' RT	24" STOP BAR - 19 LF

THERMOPLASTIC CHEVRONS			
ALIGNMENT	STATION	OFFSET	DESCRIPTION
US 41	108+50	56' RT	WHITE CHEVRONS - 98 SQFT
US 41	109+24	13' RT	YELLOW CHEVRONS - 240 SQFT
US 41	110+97	53' LT	WHITE CHEVRONS - 80 SQFT
WOLF HILLS RD	301+29.56	43.05' RT	YELLOW CHEVRONS - 324 SQFT

- 6" SSWL — 6" SINGLE SOLID WHITE LINE (PAID FOR BY FD05)
- 6" SSYL — 6" SINGLE SOLID YELLOW LINE (PAID FOR BY FD05)
- 6" SDWL 10x30 — 6" SINGLE DASHED WHITE LINE 10x30 SPACING (PAID FOR BY FD05)
- 6" DSYL — 6" DOUBLE SOLID YELLOW LINE (PAID FOR BY FD05)

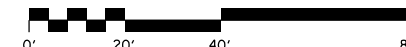


COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: STRIPING PLANS

HORIZONTAL SCALE  
SCALE: 1"=20'

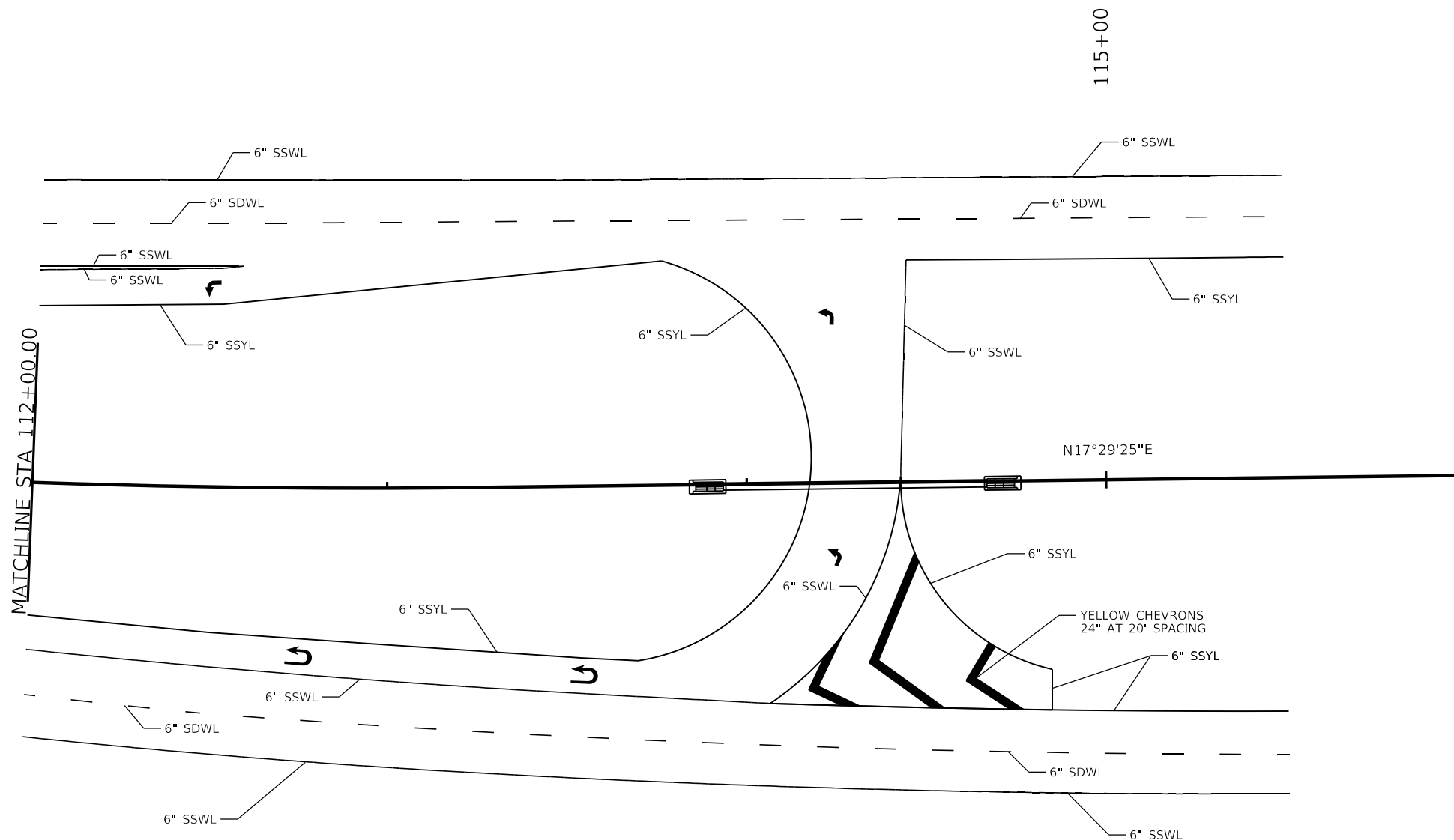
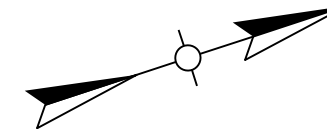


STA 106+00 TO 112+00

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
R40



MATCHLINE STA 112+00.00

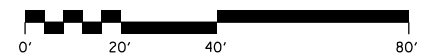
115+00

N17°29'25"E

THERMOPLASTIC MARKINGS			
ALIGNMENT	STATION	OFFSET	DESCRIPTION
US 41	112+76.64	47.21' RT	U-TURN ARROW
US 41	113+55.28	52.82' RT	U-TURN ARROW
US 41	114+24.35	20.61' RT	LEFT TURN ARROW

- 6" SSWL — 6" SINGLE SOLID WHITE LINE (PAID FOR BY FD05)
- 6" SSYL — 6" SINGLE SOLID YELLOW LINE (PAID FOR BY FD05)
- 6" SDWL 10x30 — 6" SINGLE DASHED WHITE LINE 10x30 SPACING (PAID FOR BY FD05)
- 6" DSYL — 6" DOUBLE SOLID YELLOW LINE (PAID FOR BY FD05)

THERMOPLASTIC CHEVRONS			
ALIGNMENT	STATION	OFFSET	DESCRIPTION
US 41	114+42	46' RT	YELLOW CHEVRONS - 209 SQFT



# ROADWAY LIGHTING ESTIMATE OF QUANTITIES

TOTAL	UNITS	CODE	ITEM DESCRIPTION
5	EACH	4701	POLE 40' MTG HT
5	EACH	4725	BRACKET 15'
5	EACH	4740	POLE BASE
5	EACH	4750	TRANSFORMER BASE
1	EACH	4761	LIGHTING CONTROL EQUIPMENT
10	EACH	4780	FUSED CONNECTOR KIT
1120	LIN FT	4797	CONDUIT 3 INCH
2	EACH	4800	MARKER
4145	LIN FT	4820	TRENCHING AND BACKFILLING
825	LIN FT	4832	WIRE - NO. 12
3025	LIN FT	4860	CABLE - NO. 8/3C DUCTED
8	EACH	20391NS835	ELECTRICAL JUNCTION BOX TYPE A
5	EACH	24589ED	LED LUMINAIRE

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

ADD SENTENCE TO SECTION 834.06: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : " PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

ADD SENTENCE TO SECTION 834.09: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: " PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 716 AND 834

SUBSECTION: 716.03.03 TRENCHING.  
REMOVE: REMOVE SENTENCE UNDER B); NO PAYMENT FOR ADDITIONAL JUNCTION BOXES FOR GREATER DEPTHS WILL BE ALLOWED.

SUBSECTION: 716.03.04 CONDUIT INSTALLATION  
REVISION: ADD TO SECOND SENTENCE WITH THE FOLLOWING: BASES WITH BREAKWAY DEVICES INSTALLED.

SUBSECTION: 716.03.04 (K) BORE AND JACK.  
REVISION: REPLACE TITLE WITH THE FOLLOWING: BORE AND JACK/OPEN CUT ROADWAY  
ADD SENTENCES AFTER LAST SENTENCE: WITH PERMISSION OF THE ENGINEER, ROADWAY MAY BE OPEN CUT IF CONDUIT IS UNDER PAVEMENT. THE CONDUIT IN OPEN CUT CAN BE EITHER 2" RIDID STEEL OR SCHEDULE 80 PVC UNDER ALL PAVEMENTS AREAS. IF IT IS THE LOOP TRANSITION FROM THE SAW SLOT, IT SHALL BE RIGID STEEL.

SUBSECTION: 834.15.03 TRANSFORMER BASES.  
REMOVE: REMOVE SENTENCE: CONSTRUCT THE DOOR OF A HIGH DENSITY POLYETHYLENE MATERIAL IN COLOR THAT MATCHES THE BASE.  
REVISION: REPLACE THE FOLLOWING SENTENCE WITH THE FOLLOWING:  
CONSTRUCT THE DOOR OF AN ALUMINUM MATERIAL IN A COLOR THAT MATCHES THE BASE. THE DOOR SHOULD HAVE A THEFT DETERRENT DEVICE THAT IS EQUAL TO THE LOCKDOWN LIGHTLOCK DOOR ASSEMBLY. THE DOOR LOCK WILL HAVE A LOCKING DEVICE WITH A KYTC CUSTOM KEY THAT WILL BE SEND TO CENTRAL OFFICE TRAFFIC OPERATIONS FROM THE MANUFACTURER AND BE ISSUED TO THE CONTRACTOR FOR THE INSTALLATION OF THE FINAL DOOR DEVICE. THE KEY FOR THE DOOR SHALL BE RETURNED TO CENTRAL OFFICE TRAFFIC OPERATIONS AFTER THE CLOSURE OF THE CONTRACT. THERE SHALL BE A 4" BY 6" ARC FLASH WARNING STICKER INSTALLED CENTER TOP OF EACH DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBINATE MATERIAL, AND WITH MC53FL PRESSURE SENSITIVE ADHESIVE. THE STICKER SHALL HAVE TWO COLORS OF BLACK AND CUSTOM COLOR ORANGE. THE WORDING FOR THE ARC FLASH STICKER SHALL BE THE FOLLOWING: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70E."

SECTION: 834.15 LIGHTING POLES.  
REVISION: ADD THE FOLLOWING TO THE FIRST PARAGRAPH:  
THE CABINET WILL WAIVE THE REQUIREMENT STATED IN THE FIRST SENTENCE OF SECTION 5.14.6.2 - REINFORCED HOLES AND CUTOUT FOR HIGH MAST POLES (ONLY).

SECTION: 834.33 WARNING TAPE.  
REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING:  
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL)THICK.

MEASUREMENT NOTE THAT ARE IN ADDITION TO SECTION 716:

WIRE OR CABLE SHALL INCLUDE INSTALLING SPECIFIED WIRE OR CABLE WITHIN CONDUIT AS INDICATED ON THE PLAN SHEETS. INCIDENTAL TO THIS ITEM SHALL BE THE FURNISHING AND INSTALLING OF SPLICE BOOTS OR ANY OTHER HARDWARE REQUIRED FOR INSTALLING CABLE. THE CONTRACTOR SHALL INSTALL ALL CABLE OR WIRE RUNS SPLICE-FREE FROM THE CONTROLLER TO EACH POLE THE CABLE OR WIRE IS FEEDING. EXCEPTIONS TO THIS MUST BE APPROVED BY THE ENGINEER OR AS SPECIFIED ON THE PLANS.

7-25-2022



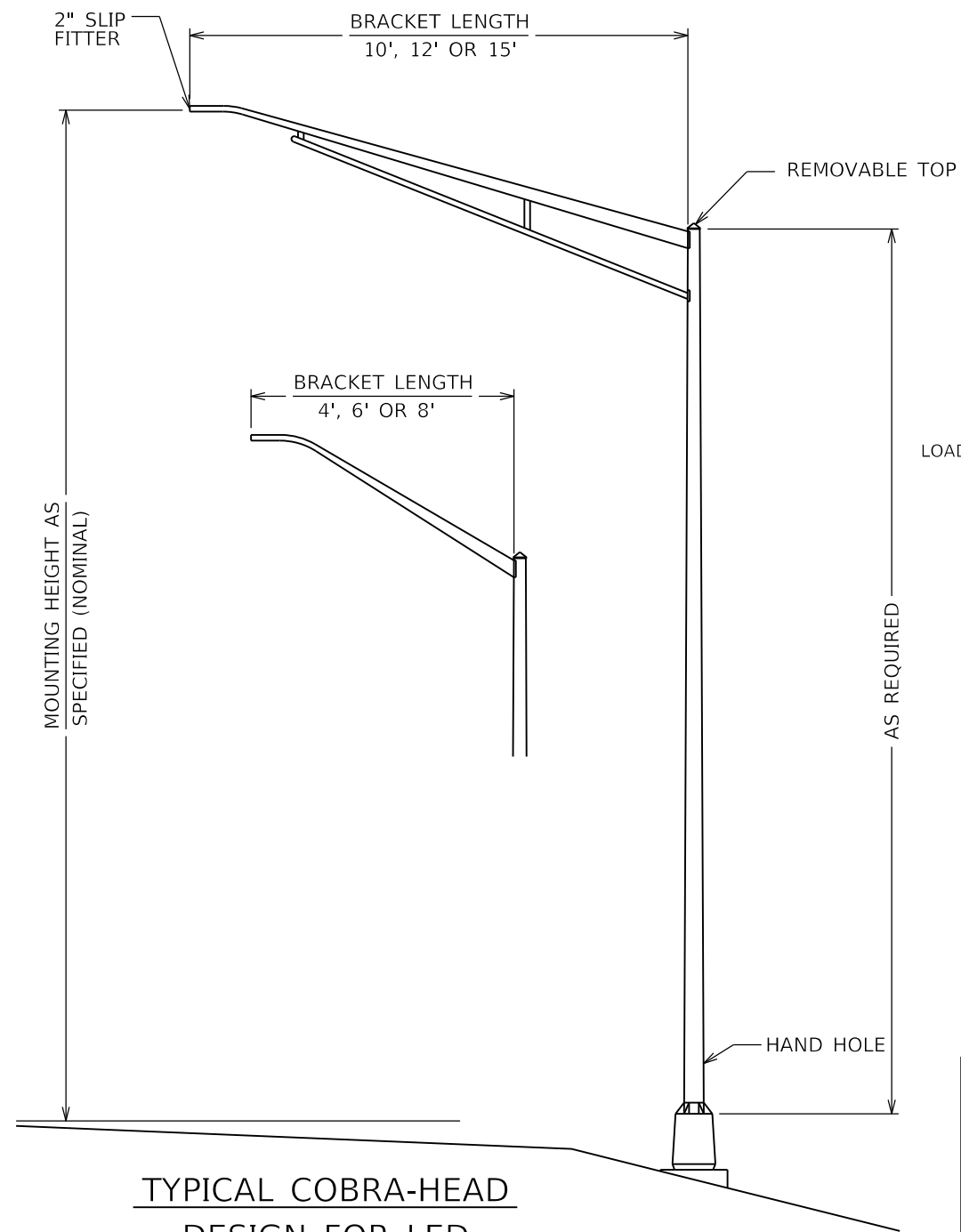
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: ROADWAY LIGHTING ESTIMATE OF  
QUANTITIES AND NOTES

HORIZONTAL SCALE  
SCALE: N/A

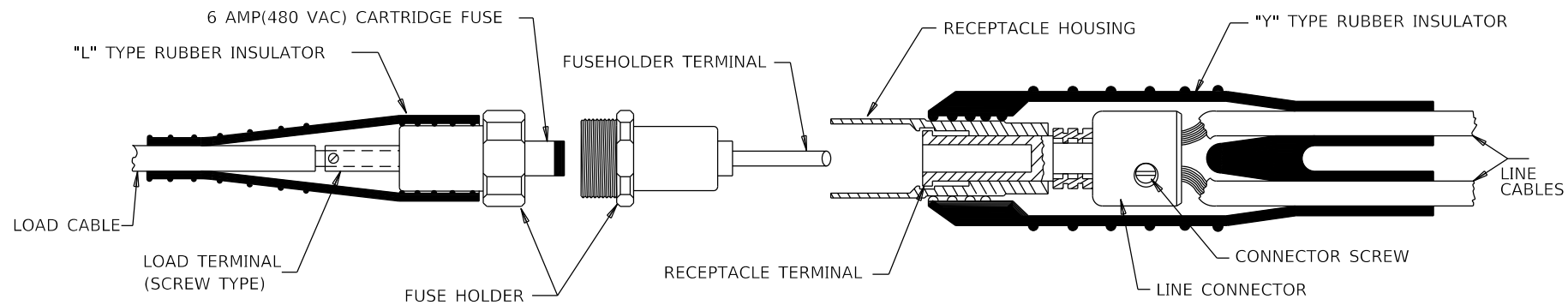
ITEM NO. 02-0935.00 COUNTY OF HENDERSON  
SHEET NO. T1



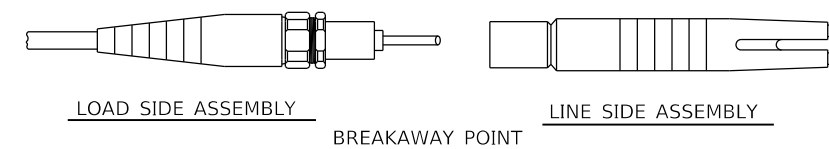
**TYPICAL COBRA-HEAD  
DESIGN FOR LED  
LUMINAIRES**

SPECIAL NOTE:  
ALL LUMINAIRES SHALL HAVE THE NEMA LABEL  
INSTALL ON THE BOTTOM OF THE FIXTURE TO  
VERIFY THE WATTAGE.

**BREAKAWAY FUSE CONNECTOR KIT**

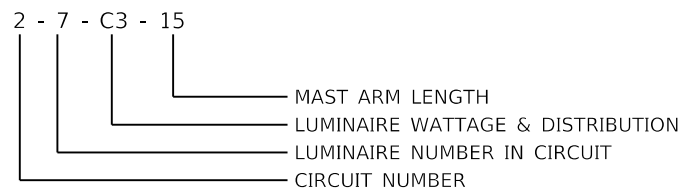


**DETAILS OF TYPE HEB-JW-RYC CONNECTOR**



**TYPE HEB-JW-RYC CONNECTOR SHOWN**

**LUMINAIRE DESIGNATION EXAMPLE**



NOTE: IF NO SETBACK DIMENSION IS INDICATED, THE MAST ARM LENGTH DENOTES THE DISTANCE FROM THE RIGHT EDGE OF PAVEMENT TO CENTER OF POLE BASE.

NOTE:

ALL TYPE C LUMINAIRES ARE MOUNTED AT 40' (NOMINAL) LED EQUIVALENT TO 250 WATTS HPS.  
ALL TYPE C LUMINAIRES HAVE A ROADWAY TYPE 3 LIGHT DISTRIBUTION.

4-24-2017



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



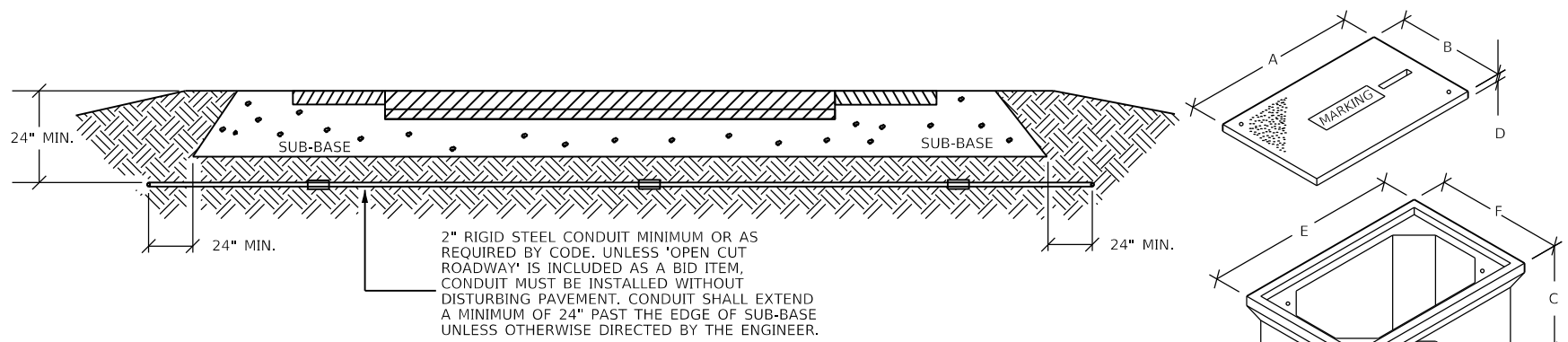
DRAWING TITLE: COBRAHEAD MOUNTING AND FUSE  
CONNECTOR DETAILS

HORIZONTAL SCALE  
SCALE: N/A

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
T2

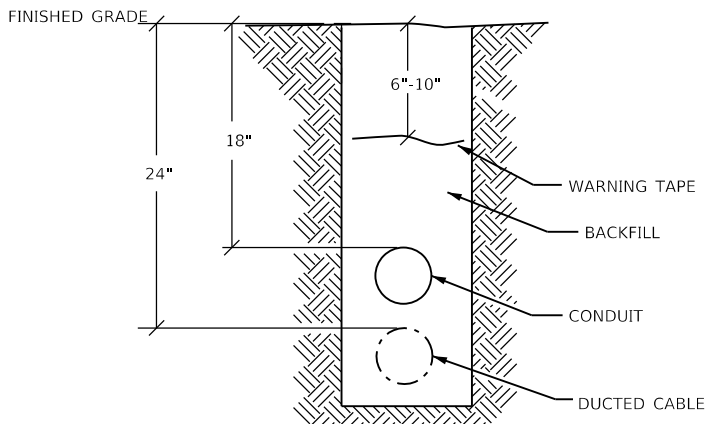


**CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL**

2" RIGID STEEL CONDUIT MINIMUM OR AS REQUIRED BY CODE. UNLESS 'OPEN CUT ROADWAY' IS INCLUDED AS A BID ITEM, CONDUIT MUST BE INSTALLED WITHOUT DISTURBING PAVEMENT. CONDUIT SHALL EXTEND A MINIMUM OF 24" PAST THE EDGE OF SUB-BASE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

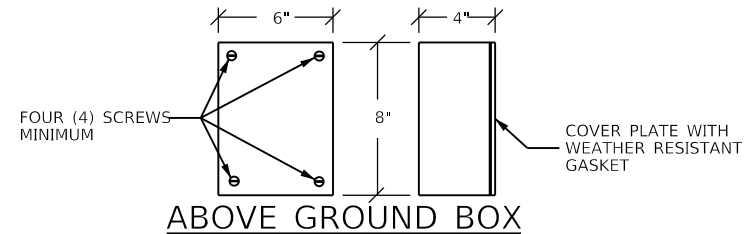
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 1/2" *	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

\* MINIMUM NOTE: STACKABLE BOXES ARE PERMITTED

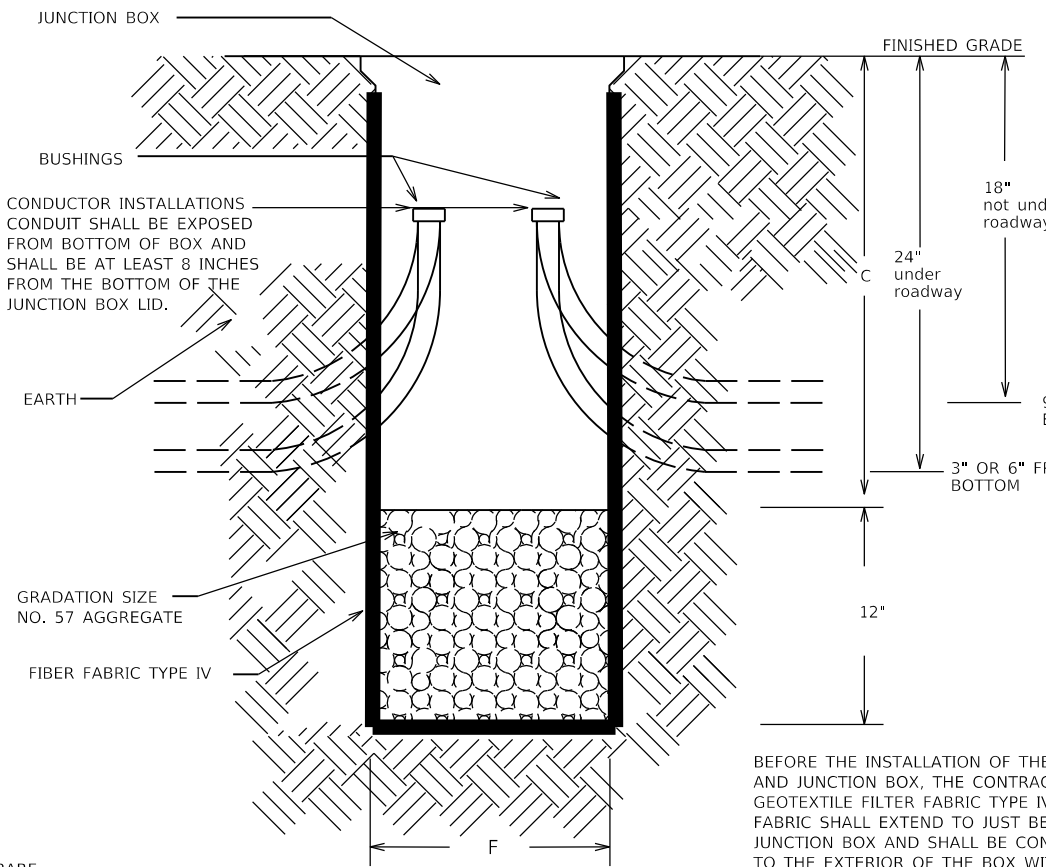


**CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH**

ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 12 GAUGE STEEL AND GALVANIZED AFTER FABRICATION. BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A PLATE COVER WITH A WEATHER RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING THE PLATE COVER TO THE BOX. CABLE CLAMPS SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.

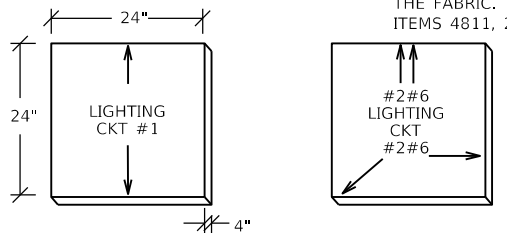


DEPTHS SHOWN FOR CONDUIT AND DUCTED CABLE ARE MINIMUMS. CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN 9" MAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

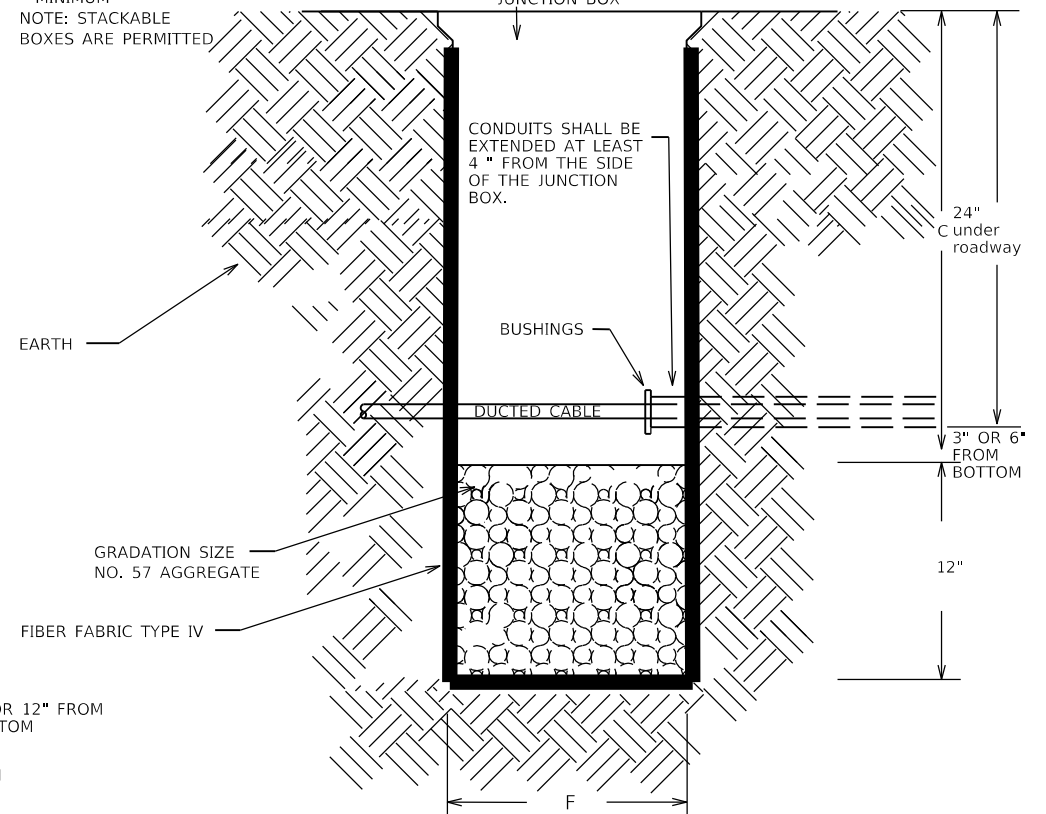


**JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING**

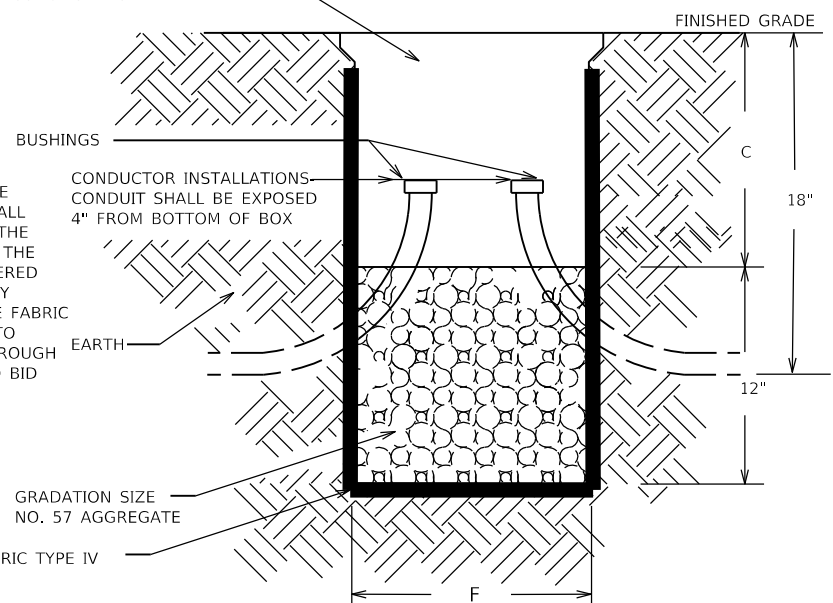
BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE "X CUT" ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 4811, 20391NS835, OR 20392NS835.



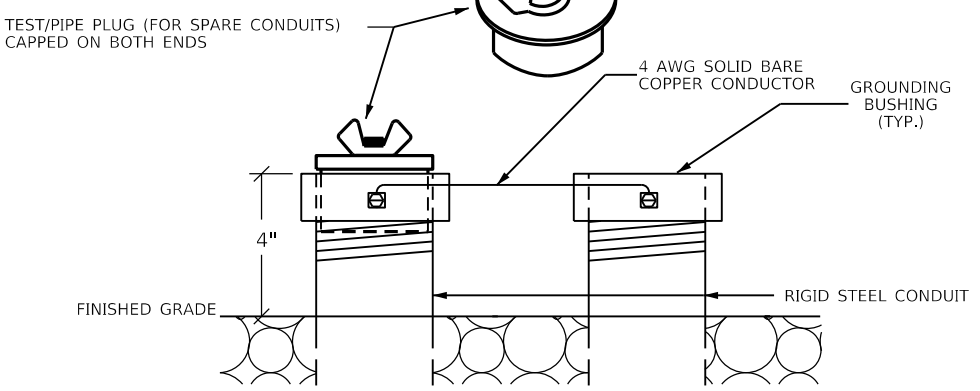
**CONCRETE CABLE MARKERS**



**JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING**



**JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS**



**TEST/PIPE PLUG (FOR SPARE CONDUITS) AND GROUNDING DETAIL**



## DESIGN CRITERIA FOR LED MONGOOSE STYLE LUMINAIRE

LIGHTING CRITERIA FOR SOUTHERN U-TURN CONFLICT AREA  
ILLUMINANCE:  
AVERAGE: NOT LESS THAN .57 FOOTCANDLES AND MORE THAN .85 FOOTCANDLES  
MINIMUM: NOT LESS THAN .20 FOOTCANDLES  
AVERAGE/MINIMUM: NOT MORE THAN 3.5:1

ALL POLE LOCATIONS, ARM LENGTHS, AND ORIENTATION OF LUMINAIRE (TO CURVE/ROAD) SHOULD BE MAINTAINED DUE TO UTILITIES/DRAINAGE/RIGHT-OF-WAY.

LIGHTING CRITERIA FOR SOUTHERN U-TURN CONFLICT AREA  
ILLUMINANCE:  
AVERAGE: NOT LESS THAN .57 FOOTCANDLES AND MORE THAN .85 FOOTCANDLES  
MINIMUM: NOT LESS THAN .20 FOOTCANDLES  
AVERAGE/MINIMUM: NOT MORE THAN 3.5:1

ALL POLE LOCATIONS, ARM LENGTHS, AND ORIENTATION OF LUMINAIRE (TO CURVE/ROAD) SHOULD BE MAINTAINED DUE TO UTILITIES/DRAINAGE/RIGHT-OF-WAY.

### LUMINAIRE DESIGN:

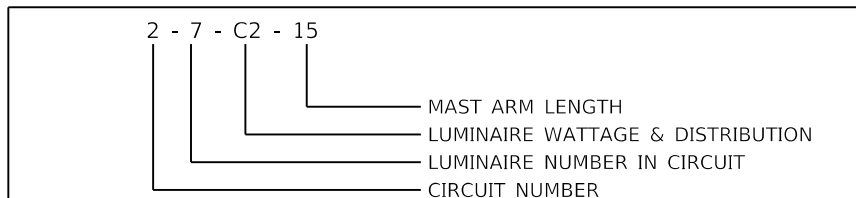
#### MONGOOSE LUMINAIRES

DRIVER: NOT TO EXCEED 700 mA  
DISTRIBUTION: MEDIUM ROADWAY  
LAMP WATTAGE: CAN NOT EXCEED 120 WATTS

#### COBRAHEAD LUMINAIRES

DRIVER: NOT TO EXCEED 700 mA  
DISTRIBUTION: ROADWAY TYPE 2  
LAMP WATTAGE: CAN NOT EXCEED 120 WATTS

#### LUMINAIRE DESIGNATION EXAMPLE



NOTE: IF NO SETBACK DIMENSION IS INDICATED, THE MAST ARM LENGTH DENOTES THE DISTANCE FROM THE RIGHT EDGE OF PAVEMENT TO CENTER OF POLE BASE.

NOTE:

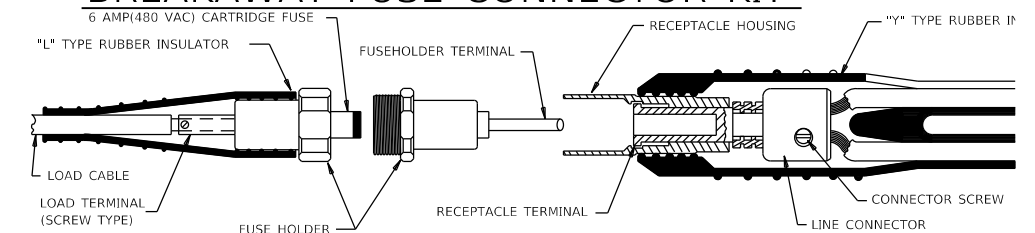
ALL MONGOOSE LUMINAIRES ARE MOUNTED AT 40' (NOMINAL) LED EQUIVALENT TO 250 WATTS HPS.  
ALL MONGOOSE LUMINAIRES HAVE A MEDIUM ROADWAY (TYPE 2) LIGHT DISTRIBUTION.

The following are the required Specifications for the LED Fixture:

- The Luminaire shall be listed by a National Recognized Testing Laboratory (NRTL) as defined by the U.S. Department of Labor. The testing laboratory must be listed by OSHA in its scope of recognition for the applicable tests being conducted as required by this specification. A list of recognized testing labs for products sold in the United States may be found on the U.S. Department of Labor's web site: <http://www.osha.gov/>
- The Luminaire shall be listed and labeled by a NRTL or CSA as being in compliance with UL 1598 and suitable for use in wet locations.
- Key components including LED drivers, LED light sources, and surge protection devices shall be RoHS compliant.
- The housing shall have an International Electrotechnical Commission (IEC) 529 Ingress Protection (IP) rating of IP 65 or greater.
- Shall be in compliance with Electro Magnetic Interference (EMI) requirements as defined by FCC 47 Sub Part 15; CISPR15, CISPR22 Class A (120Vmin), EN61000-3-2, -3-3, -4-4, -4-5.
- Shall be tested according to the most current version of Illuminating Engineering Society of North America (IESNA) LM-79.
- Shall have lumen maintenance measured in accordance the most current version of Illuminating Engineering Society of North America (IESNA) LM-80.
- Shall have long term lumen maintenance documented according to the most current version of Illuminating Engineering Society of North America (IESNA) TM-21.
- The fixture shall have a diecast aluminum housing.
- The luminaire finish shall be corrosion resistant with a polyester powdercoat of 2.5 mil nominal thickness. Finish shall pass per ASTM D1654 after 3000 hours of testing per ASTM B117.
- All hardware on the exterior of the housing including cover and latch shall be stainless steel, zinc or steel with zinc alloy electroplate and chromate top coat.
- The luminaire shall be easy to open when properly mounted and shall have readily accessible internal parts. Access to all internal parts requiring replacement shall not require tools (i.e. "tool-less entry").
- The luminaire shall have a vibration rating of 3G per the American National Standard (ANSI) IEEE C136.31, Table 2 Roadway Lighting Equipment -Luminaire Vibration for both normal applications and bridge and overpass applications.
- The luminaire shall be designed to allow water shedding.
- The luminaire shall have a passive cooling method shall be employed to manage thermal output of LED light engine and power supply.
- The luminaire shall have a label per ANSI C136.22 that states operating voltage and current range. The label must be clearly visible on the inside of the housing.
- The luminaire shall fully operate in a temperature range of -40 degrees C up to 40 degrees C (-40 degrees F to 104 degrees F).
- In retrofit applications, the LED luminaire shall not be more wattage than the original HPS fixture if you are replacing one for one. For the optimized proposal, we will allow the wattage to be greater than the original proposed luminaire.
- The luminaire shall have an integral power supply (electronic driver). The power supply shall not have a manual, field-adjustable setting for current output.
- The luminaire shall have a power supply (electronic driver) that will operate on a 480 volt single phase at 60 hertz.
- The luminaire shall have a power supply (electronic driver) that has a power factor of .90 or greater at full load.
- The luminaire shall have a power supply (electronic driver) that has total harmonic distortion of 20% or less at full load.
- The luminaire shall have power supply (electronic driver) output ripple of less than 15%.
- The luminaire shall have power supply (electronic driver) with a rated life of 100,000 hours with a luminaire operated at an ambient temperature of 25°C (77°F).
- The luminaire shall have an isolated power supply (electronic driver) output.
- The luminaire shall have a power supply (electronic driver) that has thermal overload protection.
- The luminaire shall have a power supply (electronic driver) that is self-limited short circuit protected and over load protected.
- The luminaire shall not use any active thermal cutback, such as in order to achieve a higher thermal performance.
- The luminaire shall have a power supply (electronic driver) that is terminated with quick disconnect wire harnesses for easy maintenance. Wire nut termination is not acceptable.
- The luminaire shall have a terminal block for terminating wiring to the luminaire. The terminal block shall be a 3 station, tunnel lug terminal board that will accommodate #6 thru #18 AWG pole wire.
- Fixture shall have a surge protection that meets 10KV/5KA per ANSI/IEEE C62.41.
- The luminaire shall have life rating on all electrical components of 100,000 hours or greater when operated at full lumen output at 25 degrees C.
- All LED components shall be L70 rated when operated in a luminaire at 25 degrees C (77 degrees F) at 100,000 hours.

- The LED shall have a rated life of 100,000 hours when operated at 40 °C.
- The LED shall have a minimum Luminaire efficacy of 120 lumens/watt.
- The Correlated Color Temperature (CCT) shall be 4000K with a variance of 250K, white, that conforms to LM-79. The Correlated Color Temperature (CCT) shall be 5000K with a variance of 250K, white, that conforms to LM-79 (HIGH MAST ONLY).
- The minimum color rendering index (CRI) shall not be less than 70.
- The optics shall have a completely sealed optical system.
- The optical system shall have a (IEC) (IP) rating of 66 or greater.
- The optics shall have an Illuminating Engineering Society of North America (IESNA) Backlight, Uplight and Glare (BUG) rating as follows:
  - Backlight rating shall not exceed 3;(highmast fixture backlight rating shall not exceed 5)
  - Uplight rating shall not exceed 0;
  - Glare rating shall not exceed 3/4
- The Light Loss Factor (LLF) shall be calculated for each fixture as follows:  
LLF = LLD X LDD  
Lamp Lumen Depreciation Factor (LLD) shall be the specified percentage of LED lumen maintenance at 70,000 hours at 25°C (77°F) from the TM-21 report. This LLD should be according to LM -80 and TM -21 reports. This report shall be submitted for verification.  
Luminaire Dirt Depreciation (LDD)= .9
- The TM-21 Report must show the drive current used for the submitted luminaire. The report can show a larger drive current to represent a worst case scenario.
- The Lumen Maintenance Life L80 from the TM-21 Report must not be below 80% at 70,000 hours at 25°C (77°F).
- The manufacturer shall provide certified test laboratories IES photometrics which verify light levels. Product submittal shall be accompanied by IES TM-21 compliant test reports from a CALIPER qualified or NVLAP accredited testing laboratory for the specific model being submitted.
- The luminaire shall be equipped with a shorting cap and a 7-pin photocontrol receptacle that meets ANSI 2013 standard C136.41
- The luminaire shall have an exterior label the identifies the fixture type (A,B,C,D) and the distribution type. This label shall be submitted and approved by the project engineer.
- The luminaire shall have a QR code label that can be scanned and identify the model number and serial number for each individual fixture. This label shall be submitted and approved by the project engineer.
- WARRANTY: The Manufacturer shall ensure that the LED Luminaires have a minimum standard warranty of 10 years for all parts, materials, paint finish, and shipping (both ways) required to repair or replace the luminaire. The warranty shall begin upon the date the luminaire is received. The warranty shall be transferable. Technical Support. During the warranty period, technical support shall be available from the manufacturer via telephone within 24 hours of the time the call is made from KYTC, and this support shall be made available from factory certified personnel or factory certified installers at no additional charge to the Department.
- MINIMUM REQUIRED SUBMITTALS:  
Luminaire specification sheet.  
LED driver specification sheet.  
LM-79 Luminaire photometric report.  
The vendor must submit LM-79 in-situ test data to confirm thermal operating temperatures of the luminaire.  
LM-80 Lumen maintenance report.  
TM-21 calculations as defined.  
Backlight, Uplight, Glare (BUG) rating of the luminaire.  
Written product warranty.  
Certified test lab IES photometric reports.  
Including IES electronic file.  
Including intensity and chromaticity data.  
Instructions for installation and maintenance.

### BREAKAWAY FUSE CONNECTOR KIT



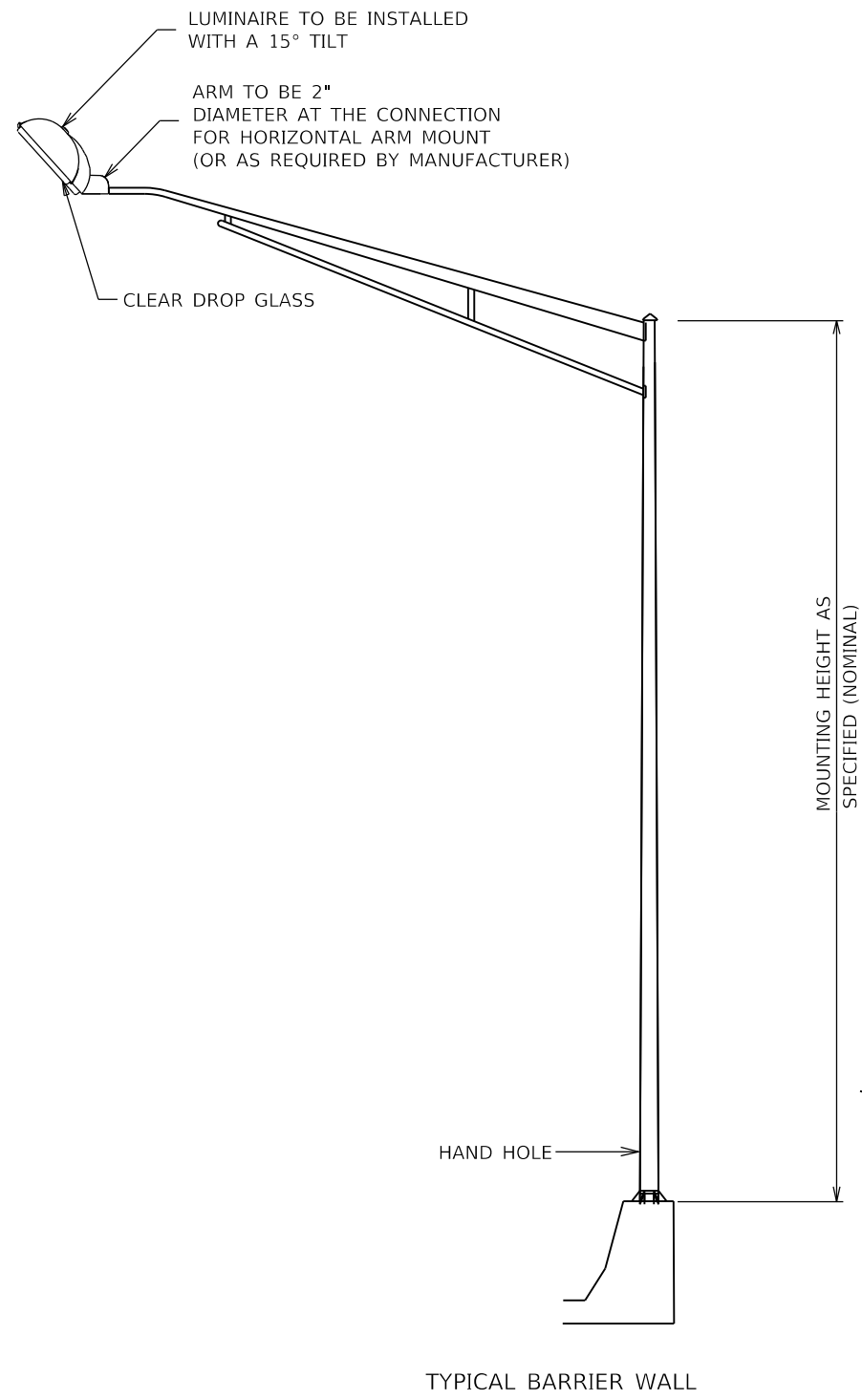
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: HIGH MAST LUMINAIRE DETAILS

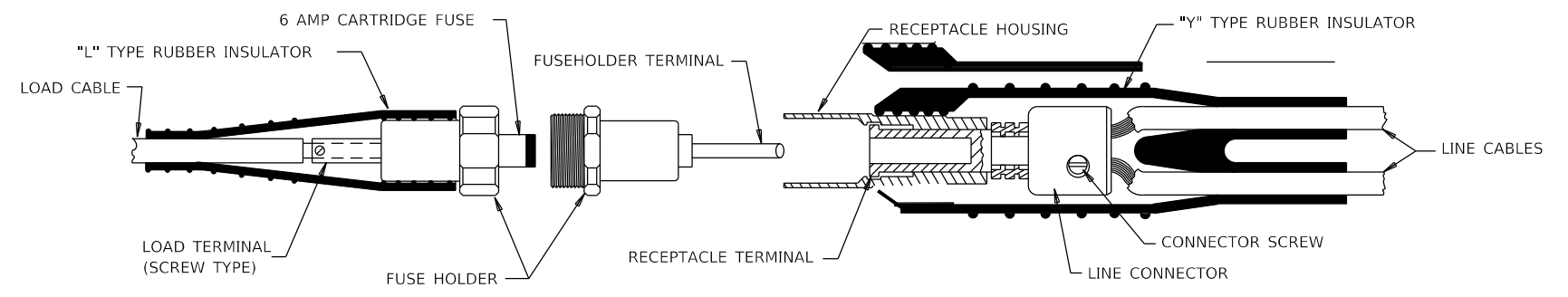
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SCALE: N/A

ITEM NO.  
02-0935.00  
COUNTY OF  
HENDERSON  
SHEET NO.  
T4

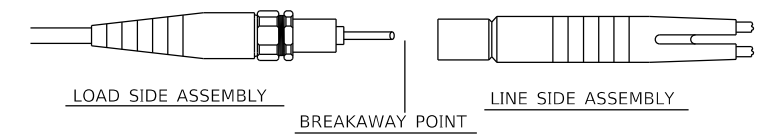


**DESIGN FOR LED MONGOOSE  
LUMINAIRES**

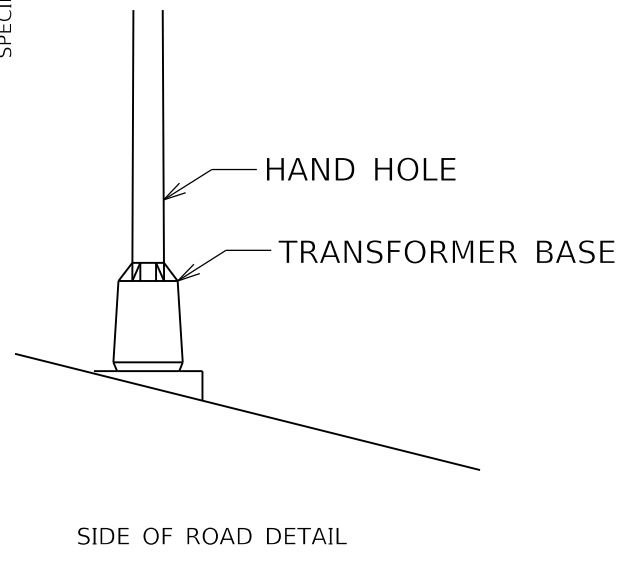
**BREAKAWAY FUSE CONNECTOR KIT**



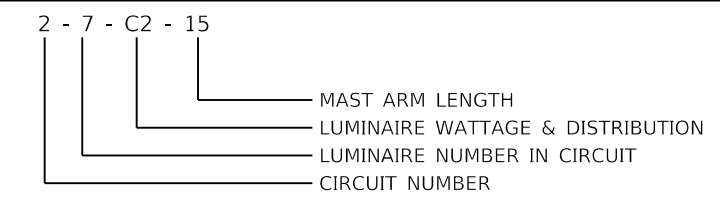
**DETAILS OF TYPE HEB-JW-RYC CONNECTOR**



**TYPE HEB-JW-RYC CONNECTOR SHOWN**



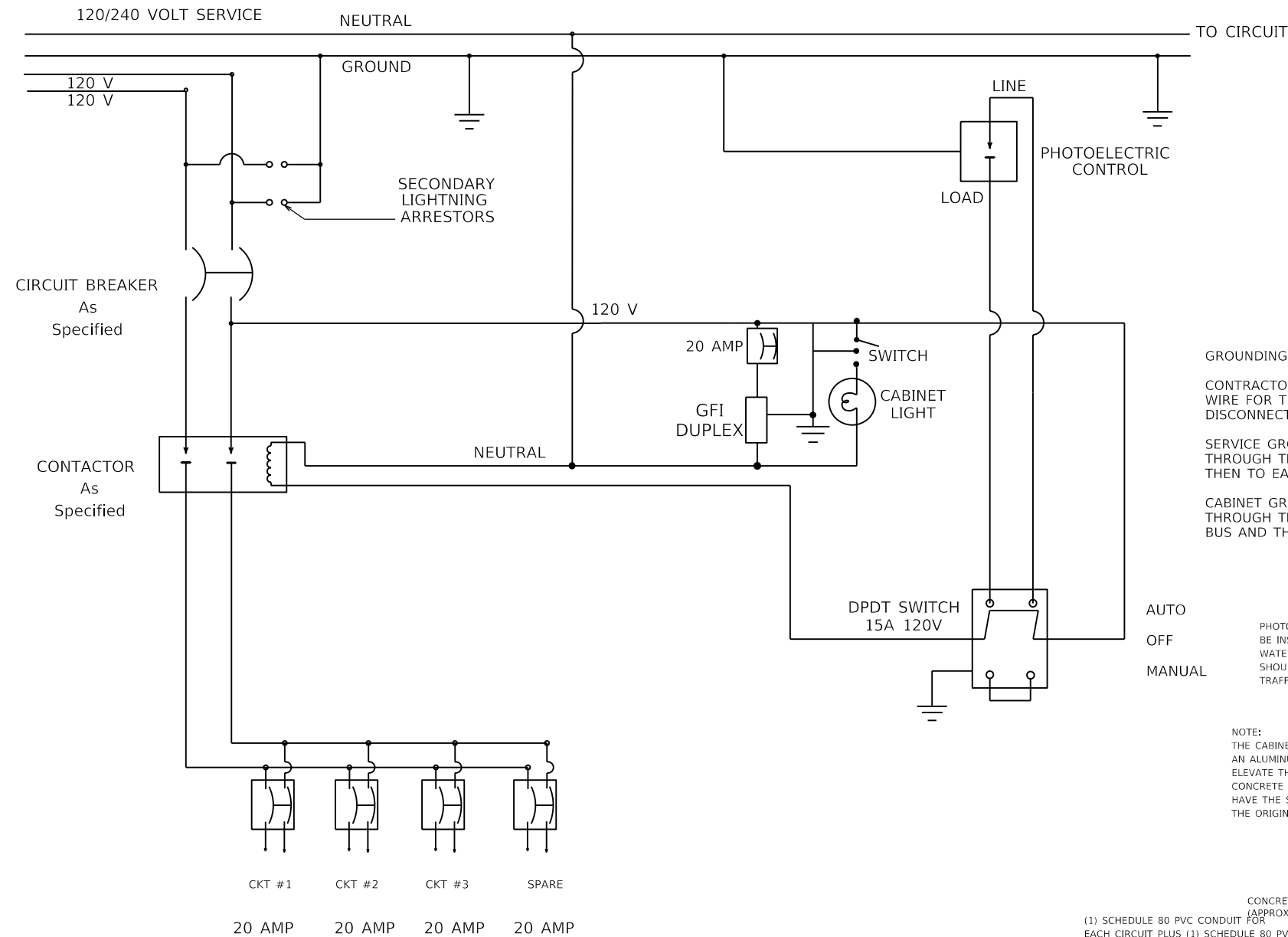
**LUMINAIRE DESIGNATION EXAMPLE**



NOTE: IF NO SETBACK DIMENSION IS INDICATED, THE MAST ARM LENGTH DENOTES THE DISTANCE FROM THE RIGHT EDGE OF PAVEMENT TO CENTER OF POLE BASE.

NOTE:  
ALL MONGOOSE LUMINAIRES ARE MOUNTED AT 40' (NOMINAL) LED EQUIVALENT TO 250 WATTS HPS.  
ALL MONGOOSE LUMINAIRES HAVE A MEDIUM ROADWAY (TYPE 2) LIGHT DISTRIBUTION.

11/7/2012



**NOTES:**

CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.

CONCRETE SHALL BE CLASS A. CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.

PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.

CONCRETE SHALL BE SLOPED 1/8" PER FOOT TO PREVENT STANDING WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.

#4 REBAR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.

ALL CONSTRUCTION (TO INCLUDE EXCAVATION WORK) AND MATERIALS (CONCRETE, STEEL REINFORCEMENT, ETC.) FOR THE CONCRETE PAD SHALL BE INCIDENTAL TO THE POLE FOR THE LIGHTING CONTROL EQUIPMENT BID ITEM.

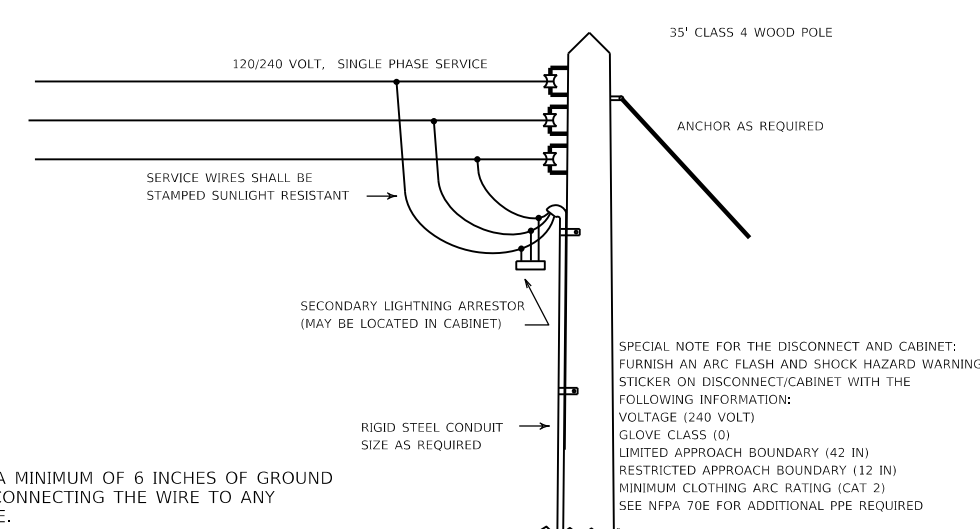
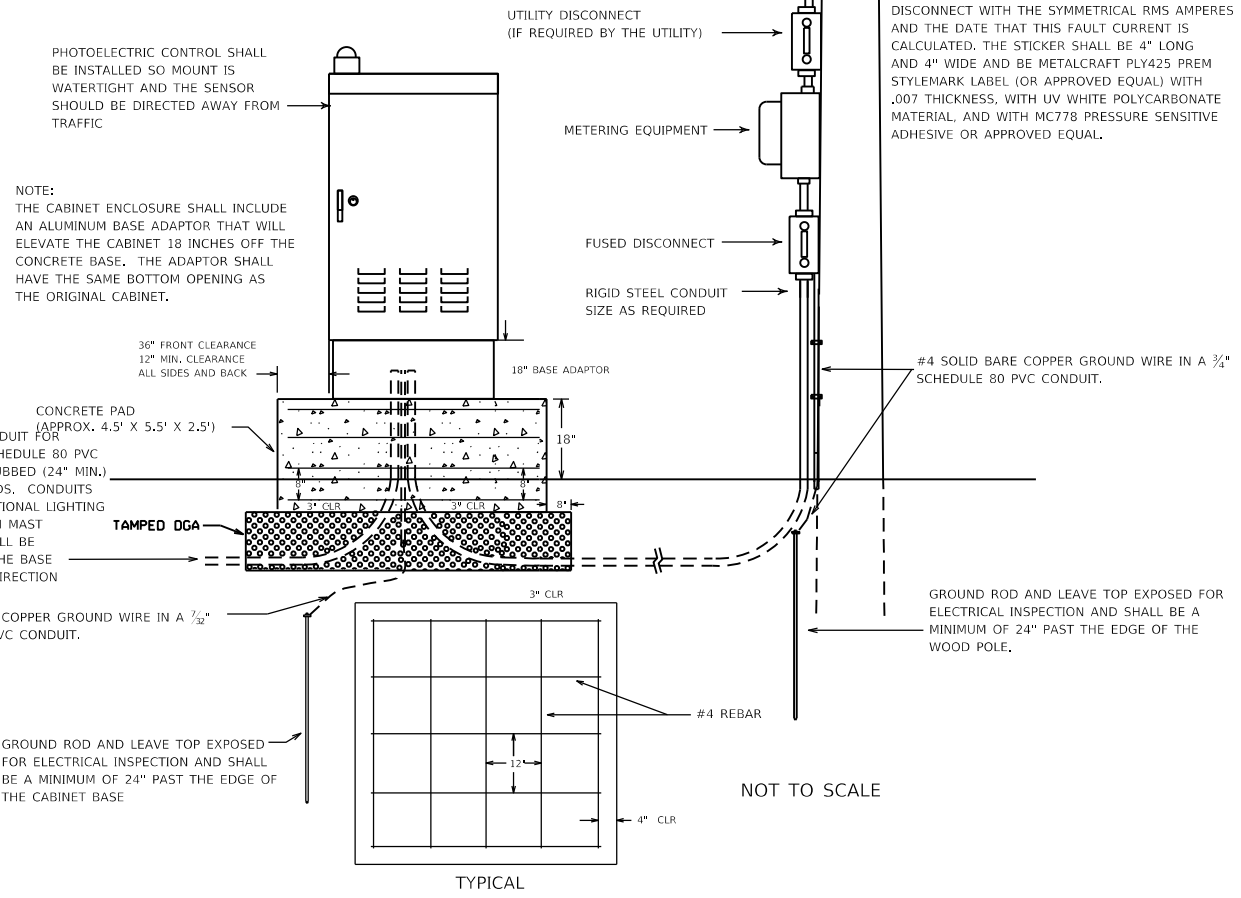
ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM "4761". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

**GROUNDING REQUIREMENTS:**

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R/S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R/S GROUNDING BUSHING.

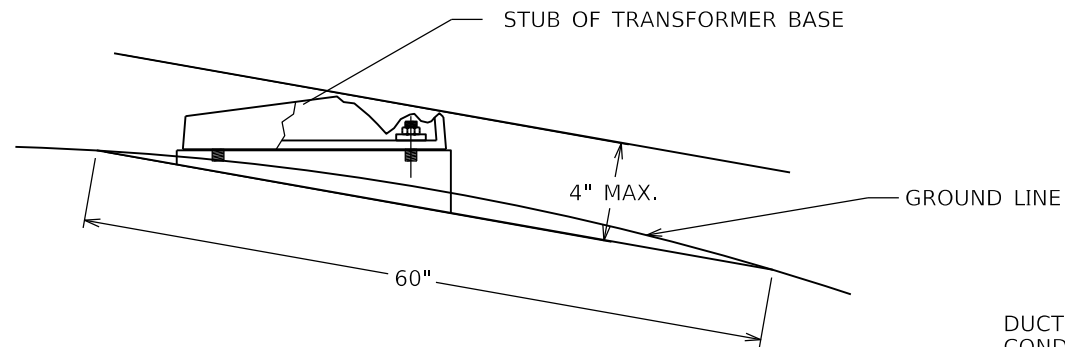


**SPECIAL NOTE FOR THE DISCONNECT AND CABINET:**  
FURNISH AN ARC FLASH AND SHOCK HAZARD WARNING STICKER ON DISCONNECT/CABINET WITH THE FOLLOWING INFORMATION:  
VOLTAGE (240 VOLT)  
GLOVE CLASS (0)  
LIMITED APPROACH BOUNDARY (42 IN)  
RESTRICTED APPROACH BOUNDARY (12 IN)  
MINIMUM CLOTHING ARC RATING (CAT 2)  
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

**SPECIAL NOTE:**  
DISCONNECTS (SAFETY SWITCH) AND METER BASE SHALL BE UL RATED FOR COMMERCIAL USE. DISCONNECTS (SAFETY SWITCH) AND METER BASE SHALL BE STAINLESS STEEL ENCLOSURE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE MAXIMUM AVAILABLE FAULT CURRENT FOR THE SERVICE EQUIPMENT THAT IS INSTALLED. THE CONTRACTOR SHALL SUPPLY A STICKER THAT WILL BE INSTALLED IN THE DISCONNECT WITH THE SYMMETRICAL RMS AMPERES AND THE DATE THAT THIS FAULT CURRENT IS CALCULATED. THE STICKER SHALL BE 4" LONG AND 4" WIDE AND BE METALCRAFT PLY425 PREM STYLEMARK LABEL (OR APPROVED EQUAL) WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC778 PRESSURE SENSITIVE ADHESIVE OR APPROVED EQUAL.

NOT TO SCALE

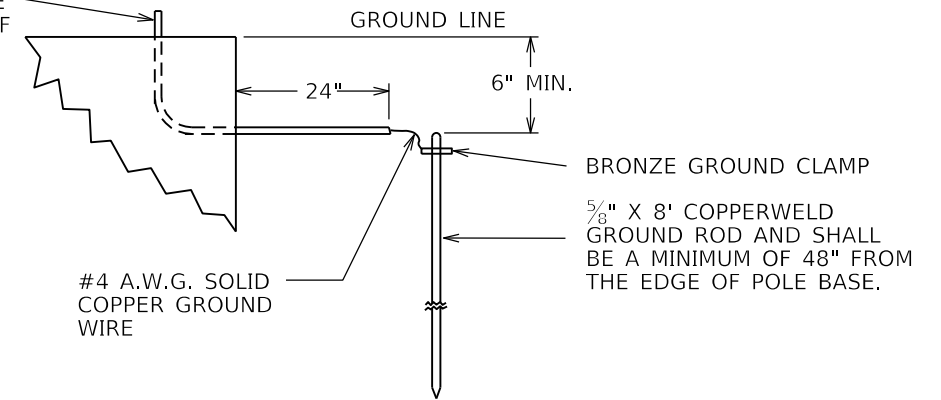
1/24/2020



THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE.

### BREAKAWAY SUPPORT STUB HEIGHT MEASUREMENT

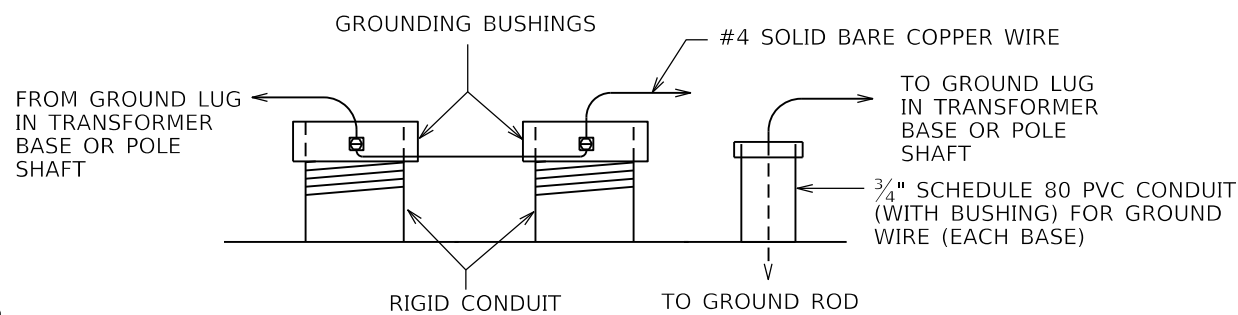
3/4" SCHEDULE 80 PVC CONDUIT (WITH BUSHING) FOR GROUND WIRE (EACH BASE) AND SHALL BE A MIN OF 24" FROM THE EDGE OF THE POLE BASE.



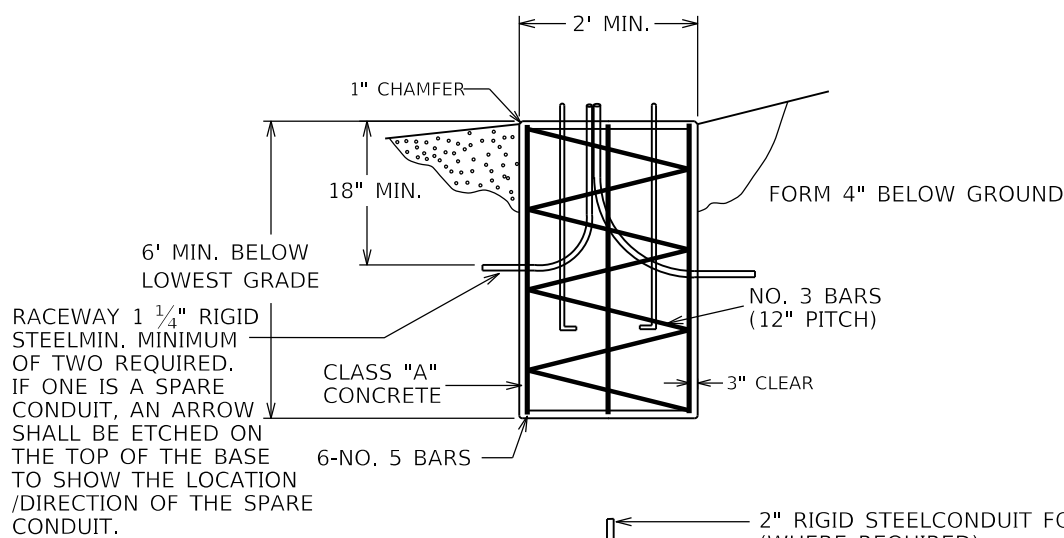
### GROUNDING DETAIL

DUCTED CABLE INSTALLED THROUGH 3" CONDUIT CROSSINGS TO LUMINAIRE POLE BASE: INSTALL DUCTED CABLE INTO THE POLE BASE. THE DUCT SHOULD BE EXTENDED 1" ABOVE THE CONDUIT. THE CONDUIT SWEEP SHOULD BE INSTALL ACCORDING TO THE MANUFACTURER OF THE DUCTED CABLE TO PREVENT THE DUCTED CABLE FROM CRIMPING.

IF DUCTED CABLE INSTALLED BETWEEN POLE BASES: INSTALL RIGID STEEL/DUCTED CABLE COUPLING. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO DUCTED CABLE. RACEWAYS SHALL BE THE SAME SIZE AS THE DUCTED CABLE WHICH ATTACHES TO THE RIGID STEEL CONDUIT. ALTERNATELY IF DUCTED CABLE IS USED, THE CONTRACTOR CAN INSTALL RIGID STEEL CONDUIT TWO TIMES THE SIZE OF THE DUCT AND RUN THE DUCT INSIDE THIS CONDUIT. THE SWEEP FOR THE CONDUIT SHALL BE INCREASED TO ADHERE TO THE BENDING RADIUS RECOMMENDED BY THE MANUFACTURER OF THE DUCT.



### TYPICAL GROUNDING DETAIL



ALL POLE BASES SHALL HAVE A MINIMUM OF TWO CONDUITS (NOT INCLUDING GROUND CONDUIT). THE SPARE CONDUIT SHALL BE 180 DEGREE FROM THE CONDUIT FOR THE CONDUCTORS.

### FOUNDATION DETAIL

### GROUNDING REQUIREMENTS:

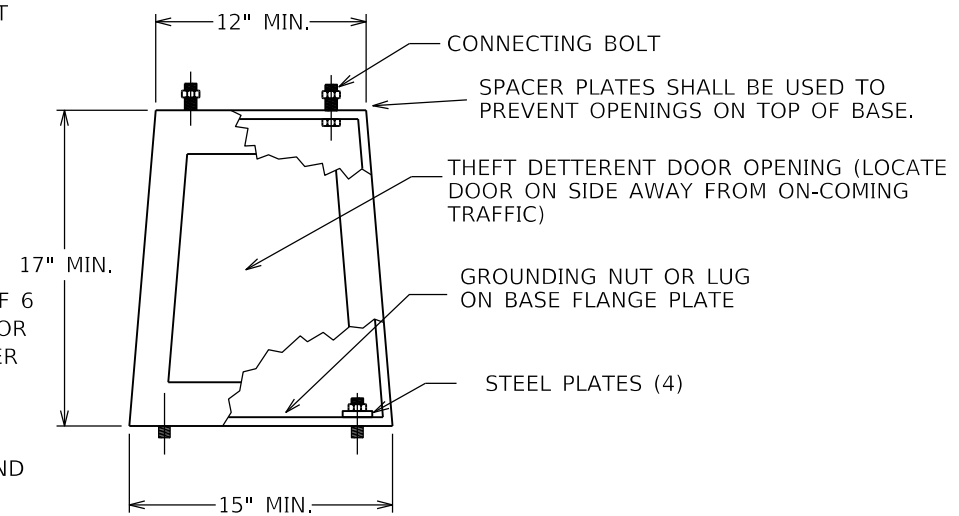
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO TRANSFORMER BASE.

POLE/TRANSFORMER BASE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE TRANSFORMER BASE/POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

### NOTES:

ALL CONDUITS USED FOR THE GROUNDING, SPARES AND CONDUCTORS THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "4740". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE POLE BASE.

NOTE: PRECAST CONCRETE BASES ARE NOT ACCEPTABLE



CONCRETE BASES SHALL BE POURED LEVEL. NO MORE THAN A .375" GAP SHALL EXIST BETWEEN CONCRETE BASE AND TRANSFORMER BASE WHEN THE POLE IS PLUMBED.

### TYPICAL

### CAST ALUMINUM TRANSFORMER BASE

NOTE: THE TRANSFORMER BASE DOOR SHALL HAVE A 4" BY 6" ARC FLASH WARNING STICKER INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC53FL PRESSURE SENSITIVE ADHESIVE OR APPROVAL EQUAL. THIS SHALL BE INCIDENTAL TO PROJECT.

SPECIAL NOTE FOR TRANSFORMER BASES: FURNISH AN ARC FLASH AND SHOCK HAZARD WARNING STICKER ON TRANSFORMER BASE WITH THE FOLLOWING INFORMATION: VOLTAGE (480 VOLT) GLOVE CLASS (0) LIMITED APPROACH BOUNDARY (42 IN) RESTRICTED APPROACH BOUNDARY (12 IN) MINIMUM CLOTHING ARC RATING (CAT 2) SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

1/30/2020



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: TRANSFORMER BASE DETAILS

HORIZONTAL SCALE  
SCALE: N/A

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
T7

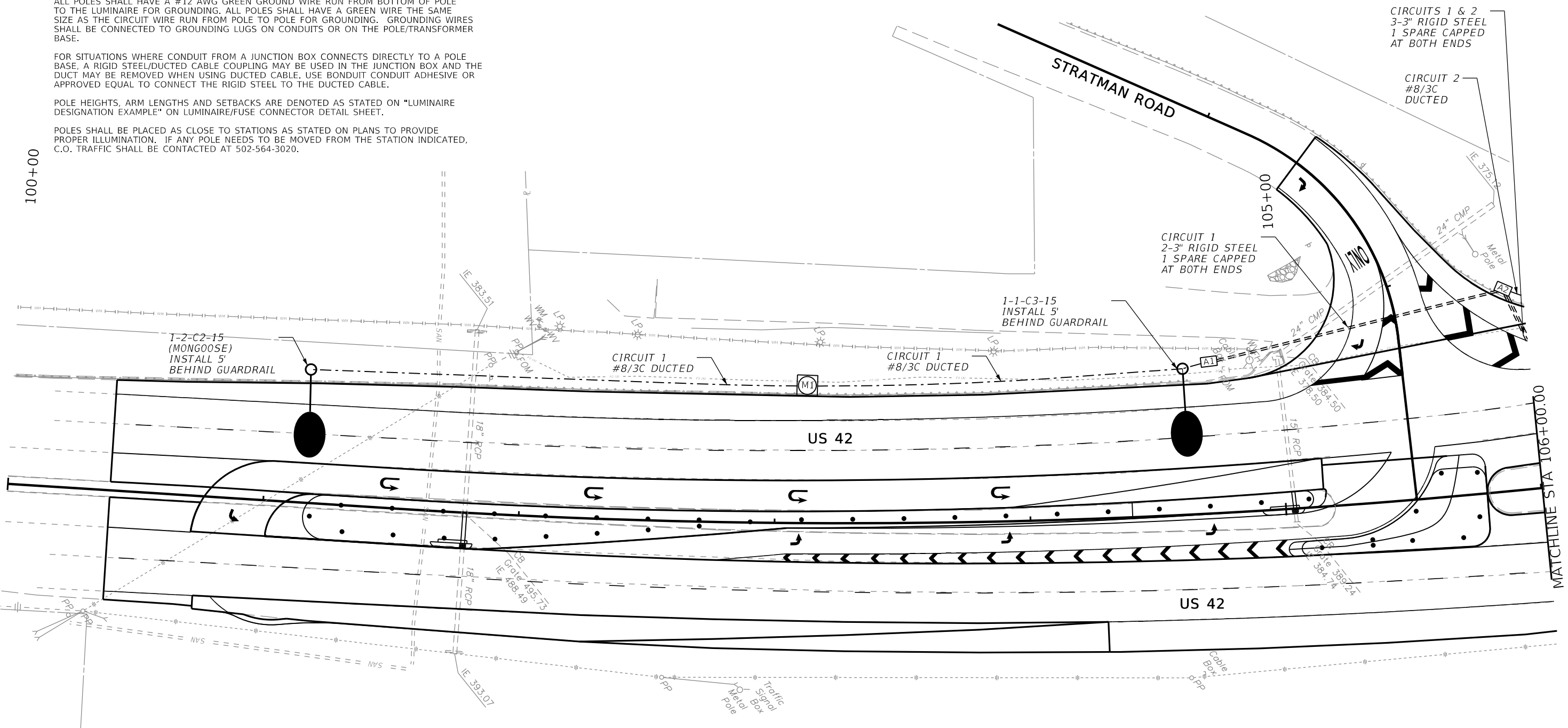
CONVENTIONAL LIGHTING:

ALL POLES SHALL HAVE A #12 AWG GREEN GROUND WIRE RUN FROM BOTTOM OF POLE TO THE LUMINAIRE FOR GROUNDING. ALL POLES SHALL HAVE A GREEN WIRE THE SAME SIZE AS THE CIRCUIT WIRE RUN FROM POLE TO POLE FOR GROUNDING. GROUNDING WIRES SHALL BE CONNECTED TO GROUNDING LUGS ON CONDUITS OR ON THE POLE/TRANSFORMER BASE.

FOR SITUATIONS WHERE CONDUIT FROM A JUNCTION BOX CONNECTS DIRECTLY TO A POLE BASE, A RIGID STEEL/DUCTED CABLE COUPLING MAY BE USED IN THE JUNCTION BOX AND THE DUCT MAY BE REMOVED WHEN USING DUCTED CABLE. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO THE DUCTED CABLE.

POLE HEIGHTS, ARM LENGTHS AND SETBACKS ARE DENOTED AS STATED ON "LUMINAIRE DESIGNATION EXAMPLE" ON LUMINAIRE/FUSE CONNECTOR DETAIL SHEET.

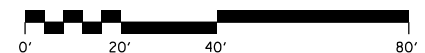
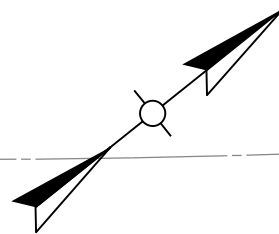
POLES SHALL BE PLACED AS CLOSE TO STATIONS AS STATED ON PLANS TO PROVIDE PROPER ILLUMINATION. IF ANY POLE NEEDS TO BE MOVED FROM THE STATION INDICATED, C.O. TRAFFIC SHALL BE CONTACTED AT 502-564-3020.



LEGEND

- CONCRETE CABLE MARKER
- JUNCTION BOXES - TYPES A
- DUCTED CABLE  
NO. 8 AWG / 3C
- 2 INCH RIGID STEEL CONDUIT  
(UNLESS OTHERWISE NOTED)
- LUMINAIRE POLE

LUMINAIRES	STATIONS/ COORDINATES	ALIGNMENT
1-1-C3-15	Sta 101+15.4, 52' LT	US 41
1-2-C2-15	Sta 104+62.3, 58' LT	US 41



CONVENTIONAL LIGHTING:

ALL POLES SHALL HAVE A #12 AWG GREEN GROUND WIRE RUN FROM BOTTOM OF POLE TO THE LUMINAIRE FOR GROUNDING. ALL POLES SHALL HAVE A GREEN WIRE THE SAME SIZE AS THE CIRCUIT WIRE RUN FROM POLE TO POLE FOR GROUNDING. GROUNDING WIRES SHALL BE CONNECTED TO GROUNDING LUGS ON CONDUITS OR ON THE POLE/TRANSFORMER BASE.

FOR SITUATIONS WHERE CONDUIT FROM A JUNCTION BOX CONNECTS DIRECTLY TO A POLE BASE, A RIGID STEEL/DUCTED CABLE COUPLING MAY BE USED IN THE JUNCTION BOX AND THE DUCT MAY BE REMOVED WHEN USING DUCTED CABLE. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO THE DUCTED CABLE.

POLE HEIGHTS, ARM LENGTHS AND SETBACKS ARE DENOTED AS STATED ON "LUMINAIRE DESIGNATION EXAMPLE" ON LUMINAIRE/FUSE CONNECTOR DETAIL SHEET.

POLES SHALL BE PLACED AS CLOSE TO STATIONS AS STATED ON PLANS TO PROVIDE PROPER ILLUMINATION. IF ANY POLE NEEDS TO BE MOVED FROM THE STATION INDICATED, C.O. TRAFFIC SHALL BE CONTACTED AT 502-564-3020.

CIRCUIT 2  
2-#8/3C DUCTED

2-2-C3-15  
INSTALL 5'  
BEHIND GUARDRAIL

110+00

MATCHLINE STA 106+00.00

MATCHLINE STA 112+00.00

CIRCUITS 1 & 2  
3-3" RIGID STEEL  
1 SPARE CAPPED  
AT BOTH ENDS

CIRCUITS 1 & 2  
2-#8/3C DUCTED



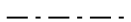


2-1-C3-15  
INSTALL 5'  
BEHIND GUARDRAIL

CIRCUITS 1 & 2  
2-#8/3C DUCTED

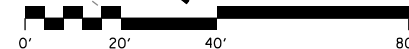
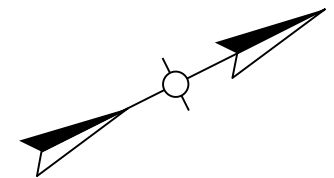
CIRCUITS 1 & 2  
3-3" RIGID STEEL  
1 SPARE CAPPED  
AT BOTH ENDS

CIRCUITS 1 & 2  
3-3" RIGID STEEL  
1 SPARE CAPPED  
AT BOTH ENDS

LEGEND

-  CONCRETE CABLE MARKER
-  JUNCTION BOXES - TYPES A (AS DESIGNATED)
-  DUCTED CABLE NO. 8 AWG / 3C
-  2 INCH RIGID STEEL CONDUIT (UNLESS OTHERWISE NOTED)
-  LUMINAIRE POLE

LUMINAIRES	STATIONS/ COORDINATES	ALIGNMENT
2-2-C3-15	Sta 106+41.4, 72' LT	US 41
2-1-C3-15	Sta 109+51.3, 9' RT	US 41



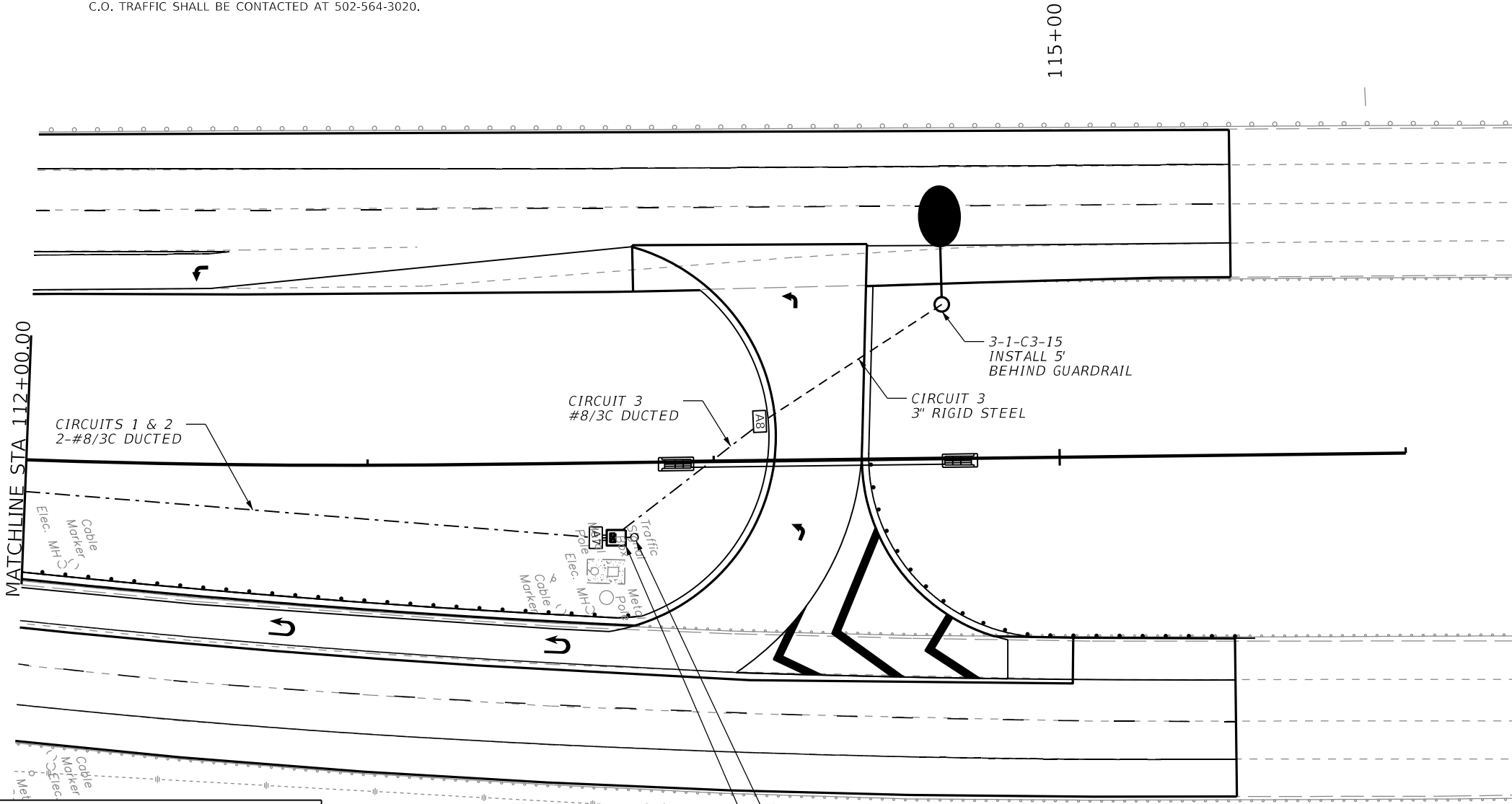
CONVENTIONAL LIGHTING:

ALL POLES SHALL HAVE A #12 AWG GREEN GROUND WIRE RUN FROM BOTTOM OF POLE TO THE LUMINAIRE FOR GROUNDING. ALL POLES SHALL HAVE A GREEN WIRE THE SAME SIZE AS THE CIRCUIT WIRE RUN FROM POLE TO POLE FOR GROUNDING. GROUNDING WIRES SHALL BE CONNECTED TO GROUNDING LUGS ON CONDUITS OR ON THE POLE/TRANSFORMER BASE.

FOR SITUATIONS WHERE CONDUIT FROM A JUNCTION BOX CONNECTS DIRECTLY TO A POLE BASE, A RIGID STEEL/DUCTED CABLE COUPLING MAY BE USED IN THE JUNCTION BOX AND THE DUCT MAY BE REMOVED WHEN USING DUCTED CABLE. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO DUCTED CABLE.

POLE HEIGHTS, ARM LENGTHS AND SETBACKS ARE DENOTED AS STATED ON "LUMINAIRE DESIGNATION EXAMPLE" ON LUMINAIRE/FUSE CONNECTOR DETAIL SHEET.






POLES SHALL BE PLACED AS CLOSE TO STATIONS AS STATED ON PLANS TO PROVIDE PROPER ILLUMINATION. IF ANY POLE NEEDS TO BE MOVED FROM THE STATION INDICATED, C.O. TRAFFIC SHALL BE CONTACTED AT 502-564-3020.



WIRING SCHEDULE

	FROM	TO	DUCTED CABLE
CKT #1	CONTROLLER	JB A7	3" RS
	JBA7	JBA6	#8/3C DUCTED
	JBA6	JBA5	3" RS
	JBA5	JBA4	3" RS
	JBA4	JBA3	#8/3C DUCTED
	JBA3	JBA2	3" RS
	JB A2	JBA1	3" RS
	JBA1	1-1-C3-15	#8/3C DUCTED
	1-1-C3-15	1-2-C2-15	#8/3C DUCTED
CKT #2	CONTROLLER	JB A7	3" RS
	JBA7	2-1-C3-15	#8/3C DUCTED
	2-1-C3-15	JBA6	#8/3C DUCTED
	JBA6	JBA5	3" RS
	JBA5	JBA4	3" RS
	JBA4	JBA3	#8/3C DUCTED
	JBA3	JBA2	3" RS
JBA2	2-2-C3-15	#8/3C DUCTED	
CKT #3	CONTROLLER	JB A8	#8/3C DUCTED
	JBA8	3-1-C3-15	3" RS

LEGEND

-  BASE MOUNTED CABINET
-  JUNCTION BOXES - TYPES A (AS DESIGNATED)
-  DUCTED CABLE NO. 8 AWG / 3C
-  2 INCH RIGID STEEL CONDUIT (UNLESS OTHERWISE NOTED)
-  LUMINAIRE POLE

NOTES:

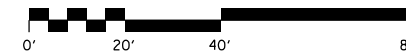
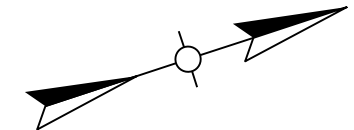
GRADE AROUND PROPOSED CABINET BASE AS NEEDED TO PROVIDE A LEVEL GROUND 12" AROUND THE SIDES AND BACK OF THE CABINET AND 36" IN FRONT OF THE CABINET BASE. MATERIALS AND LABOR FOR GRADING IS INCIDENTAL TO BID ITEM, "LIGHTING CONTROL EQUIPMENT."

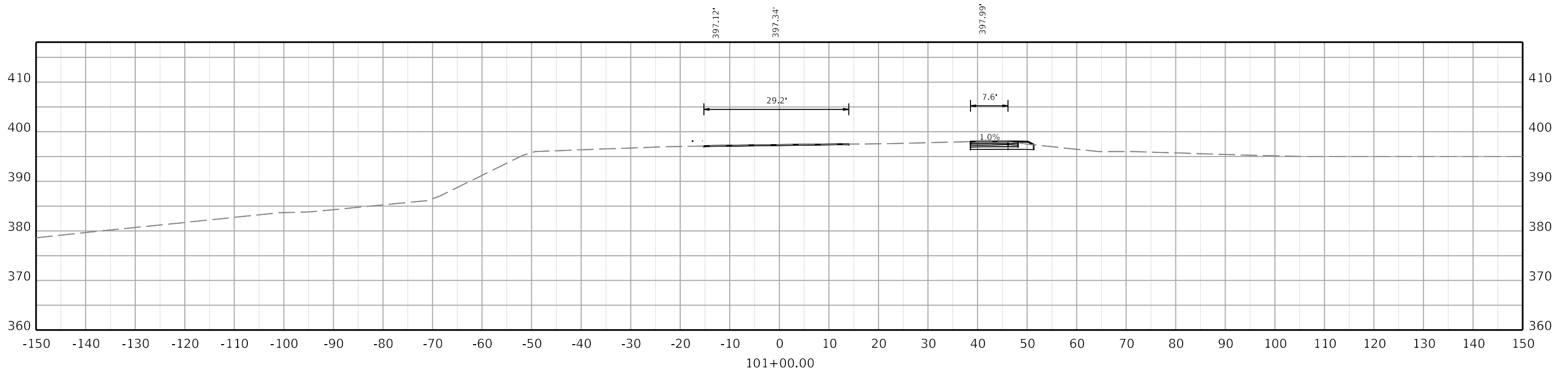
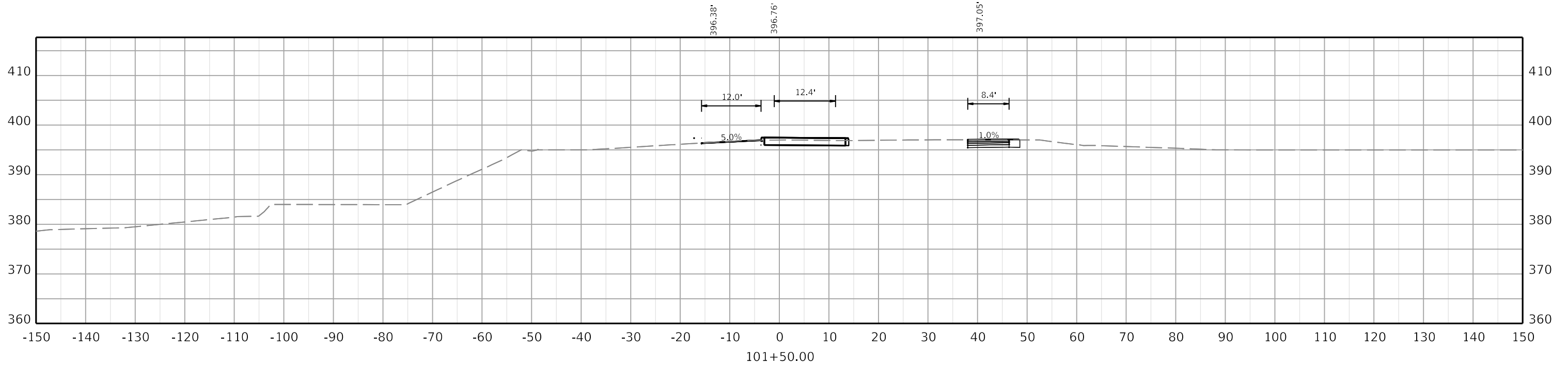
PROPOSED SERVICE POLE

SERVICE AREA #1  
CIRCUITS 1, 2, & 3  
120V, 1-PHASE  
(1) WOOD SERVICE POLE  
(1) DISCONNECT AFTER METER  
(1) BASE MOUNTED LIGHTING CONTROL CABINET

3-3" RIGID STEEL CONDUITS FROM CABINET TO JUNCTION BOX A7  
1 - CIRCUIT 1, #8/3C DUCTED  
1 - CIRCUIT 2, #8/3C DUCTED  
1 - SPARE, CAPPED AT BOTH ENDS

LUMINAIRES	STATIONS/ COORDINATES	ALIGNMENT
3-1-C3-15	Sta 114+66.5, 45' LT	US 41



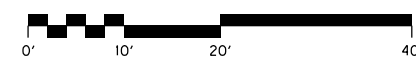


COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



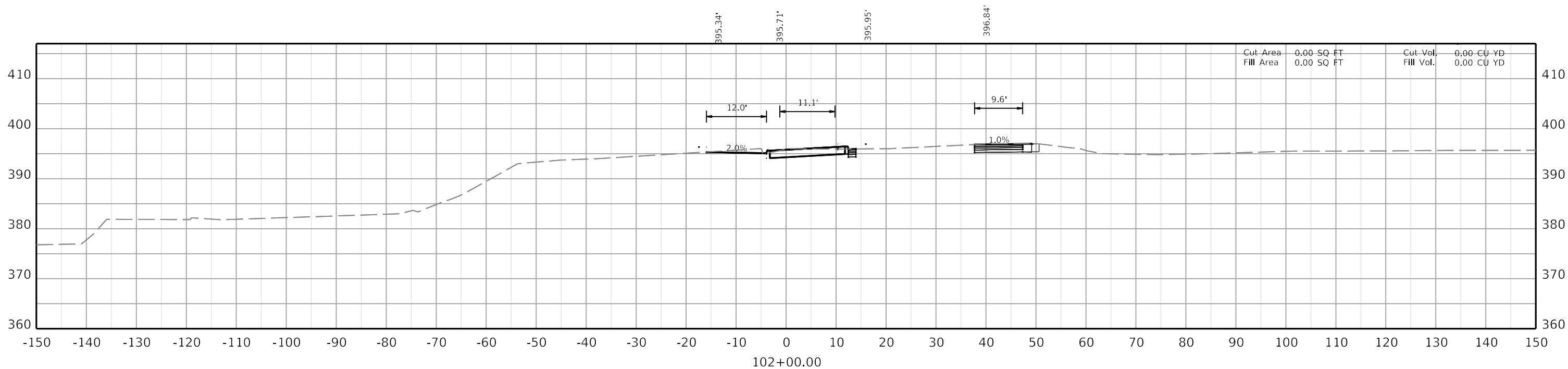
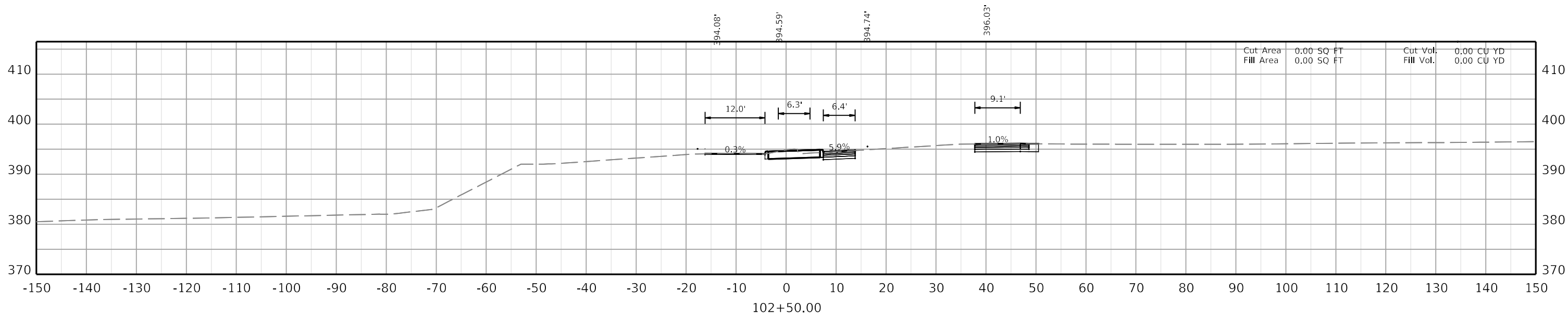
STA 101+00 TO 101+50

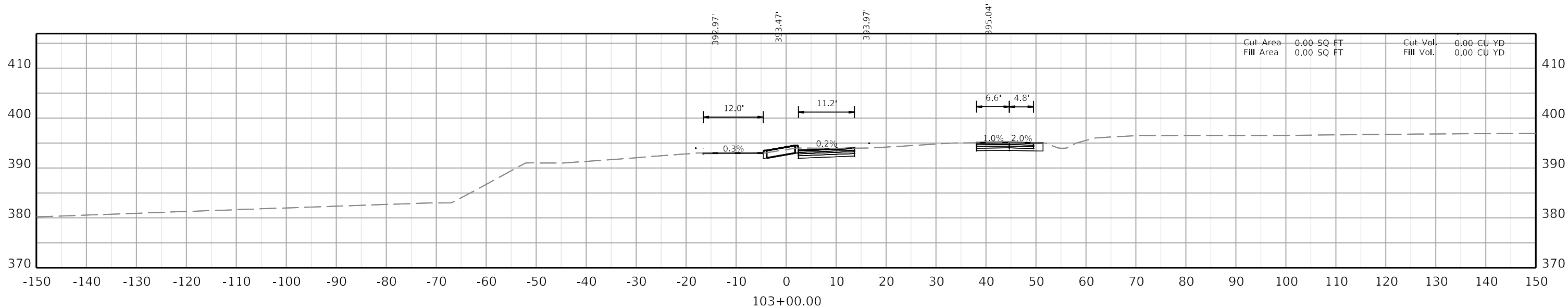
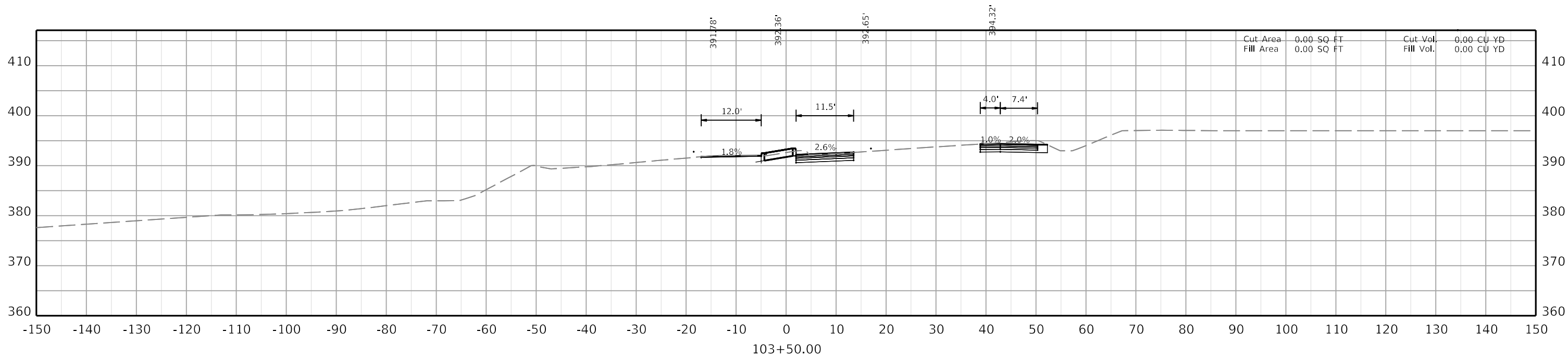
ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
X1







COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'

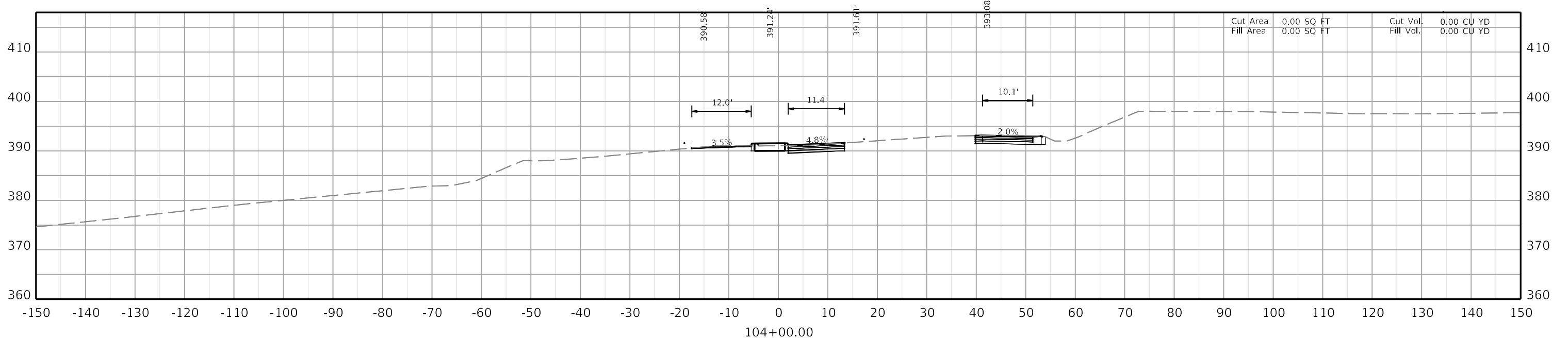
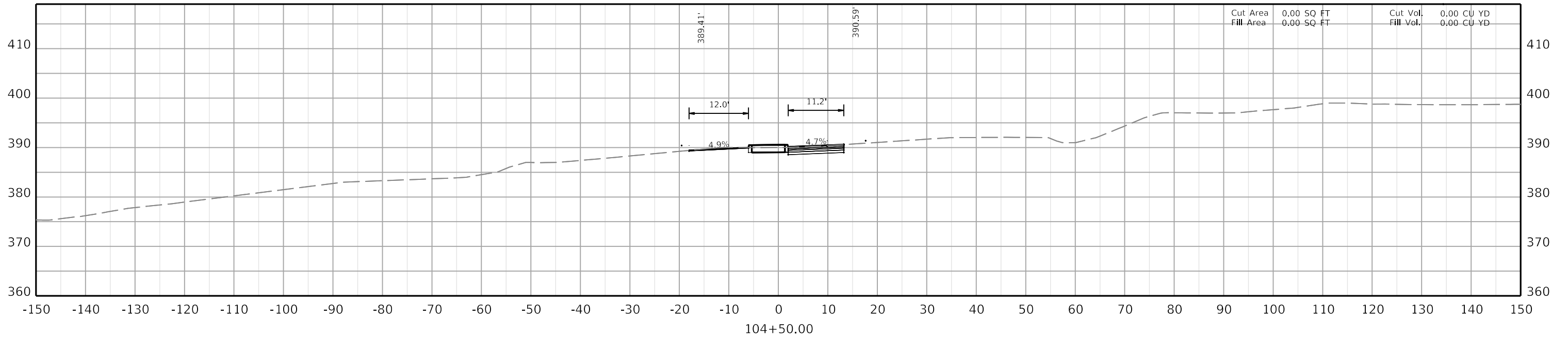


STA 103+00 TO 103+50

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
X3



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'

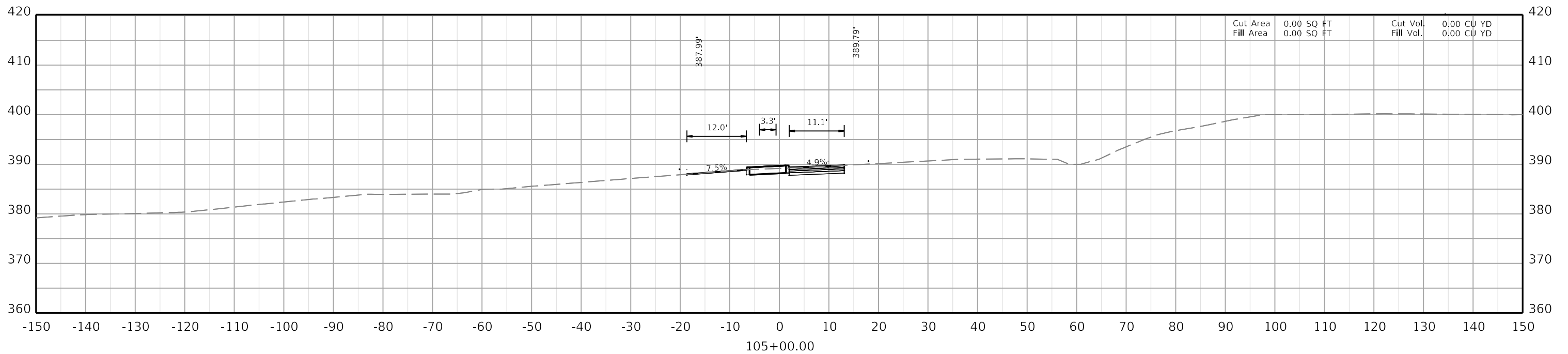
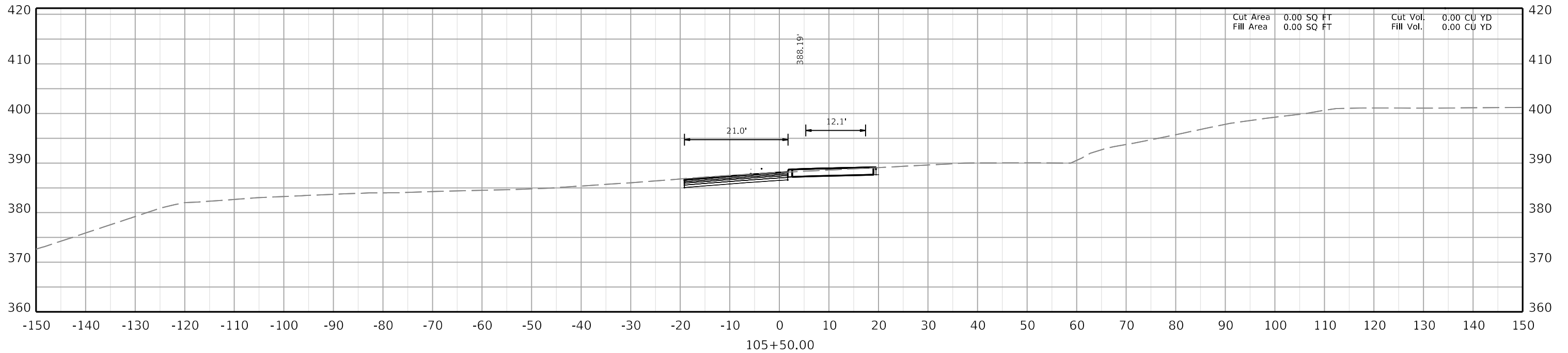


STA 104+00 TO 104+50

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
X4



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



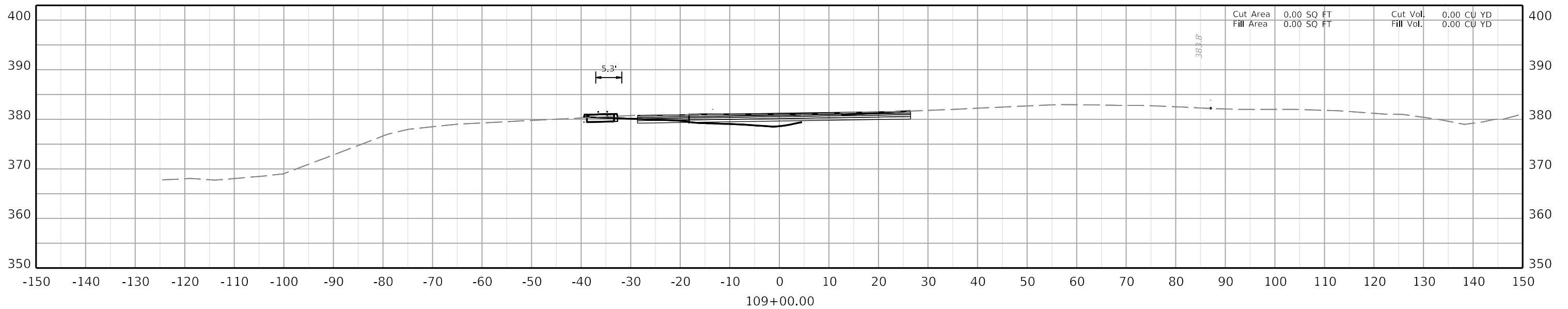
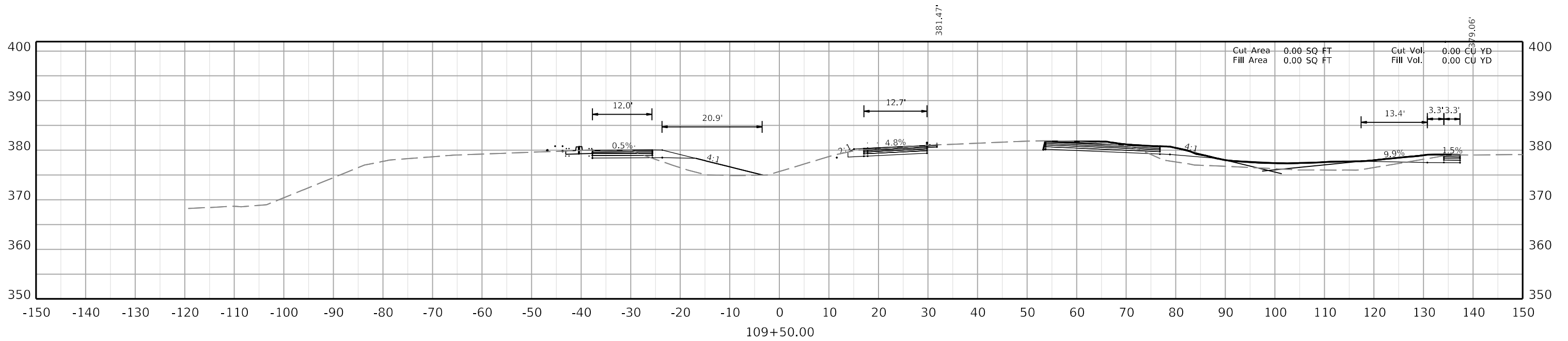
DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 105+00 TO 105+50

ITEM NO.  
02-0935.00 COUNTY OF  
HENDERSON  
SHEET NO.  
X5



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'

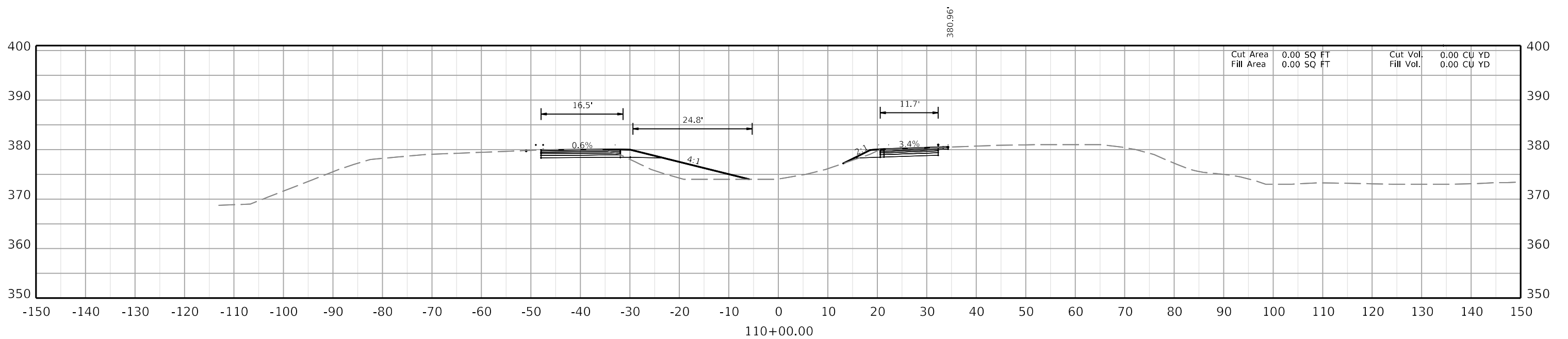
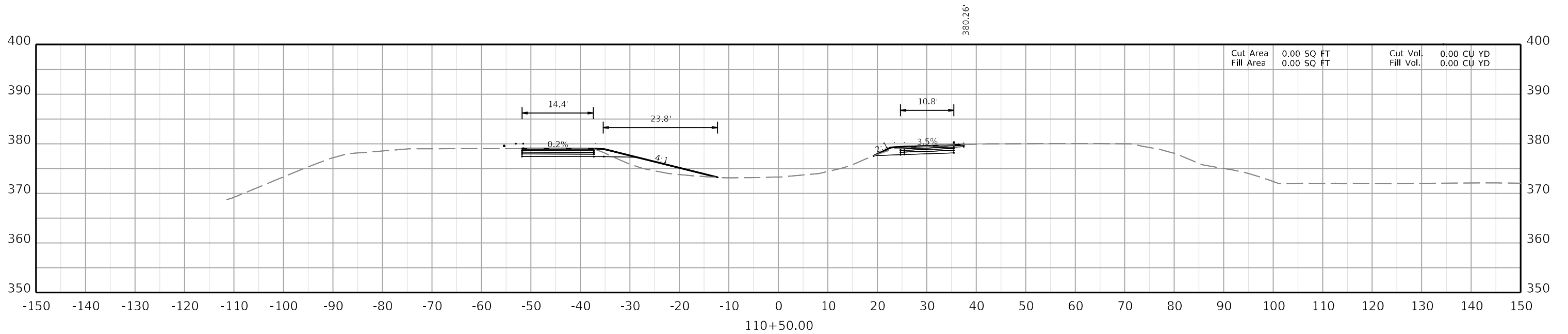


STA 109+00 TO 109+50

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
X6

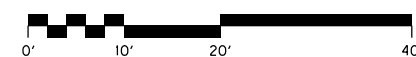


COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'

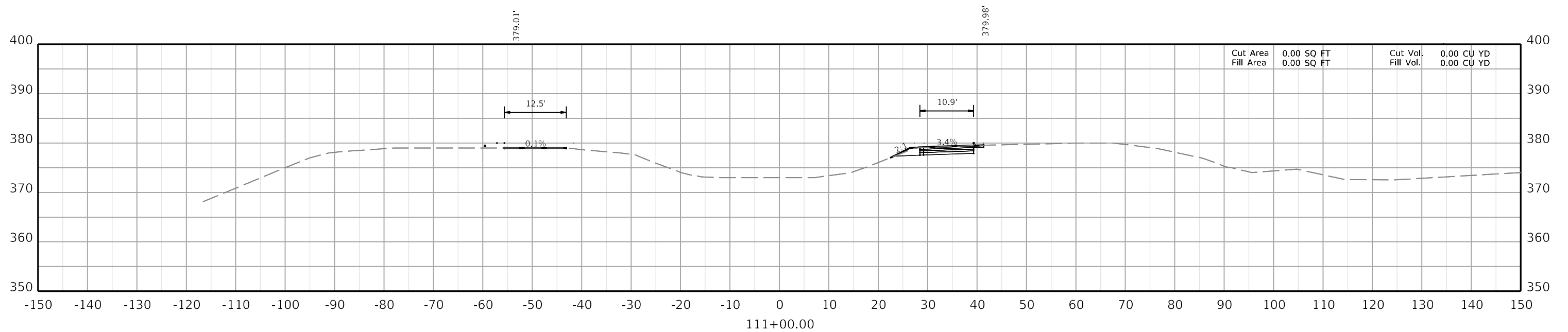
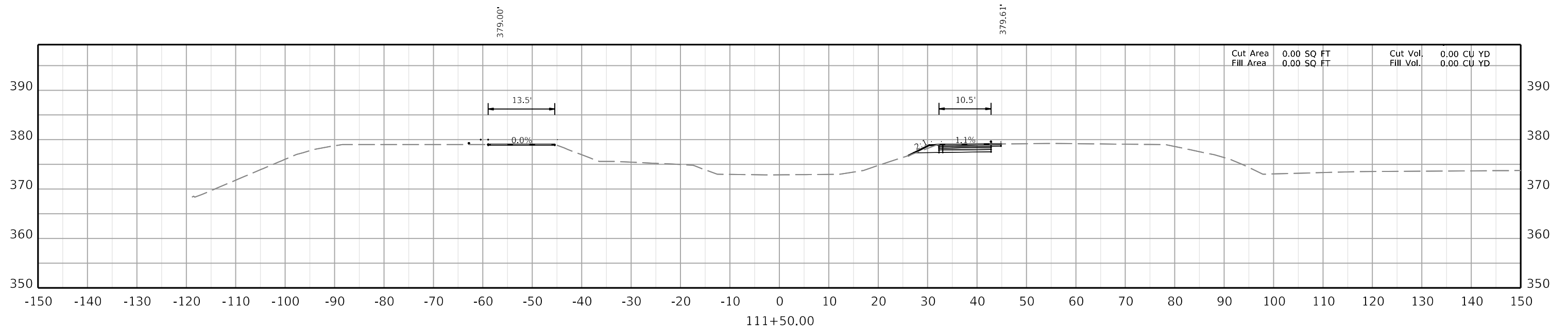


STA 110+00 TO 110+50

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
X7



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

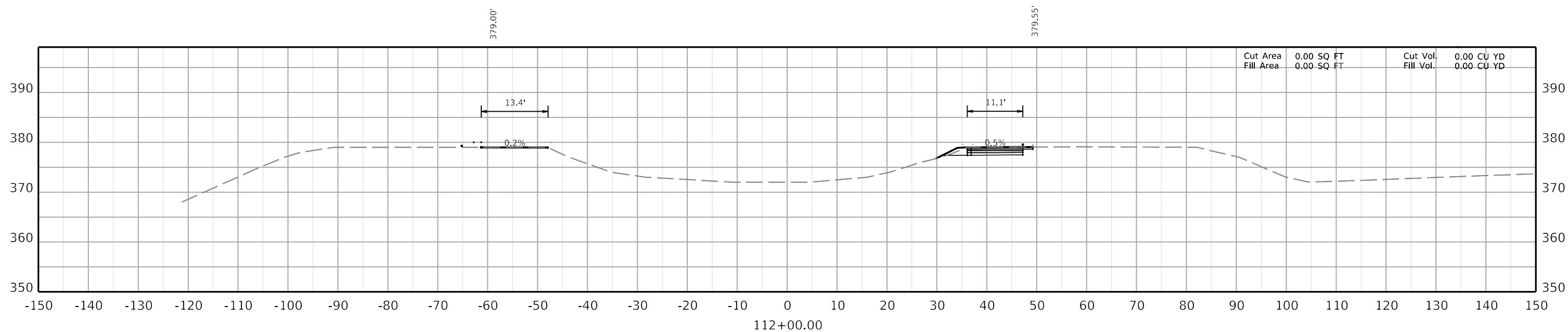
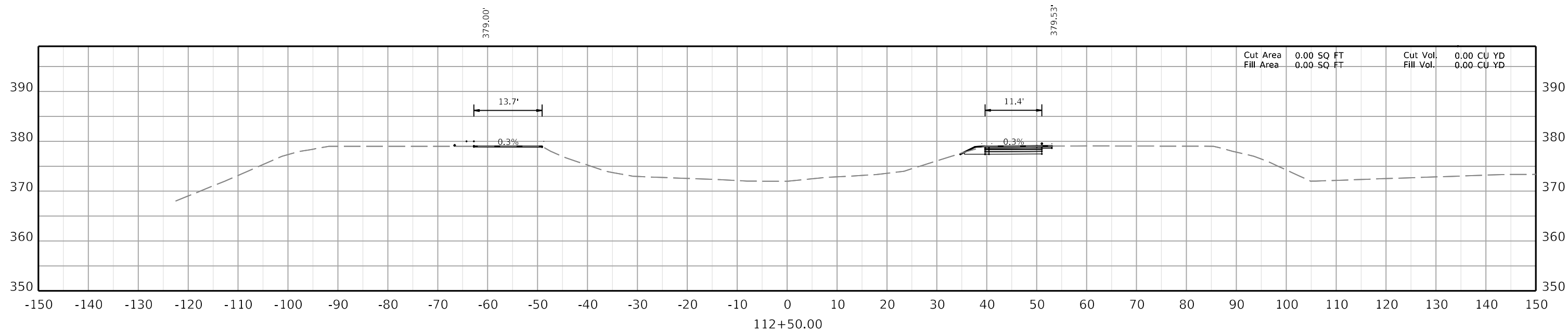
HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 111+00 TO 111+50

ITEM NO. 02-0935.00 COUNTY OF HENDERSON

SHEET NO. X8



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



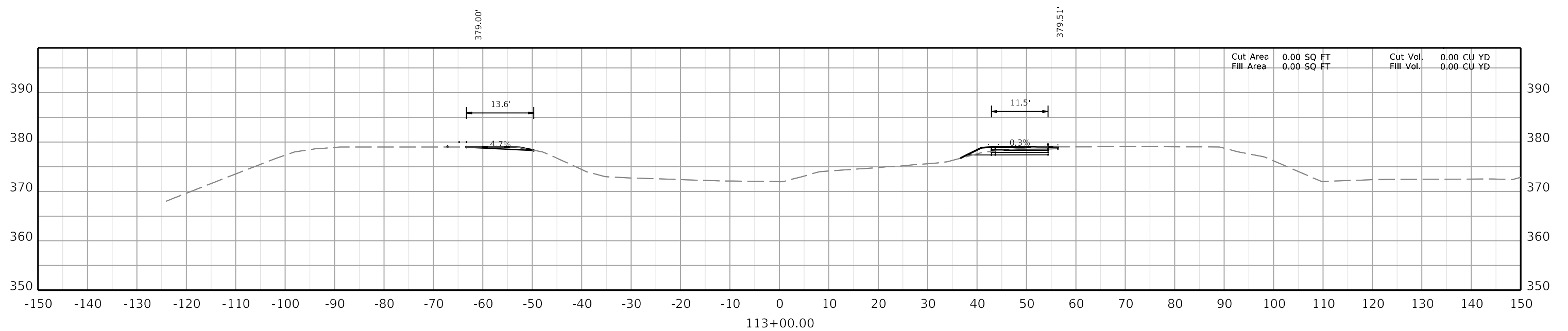
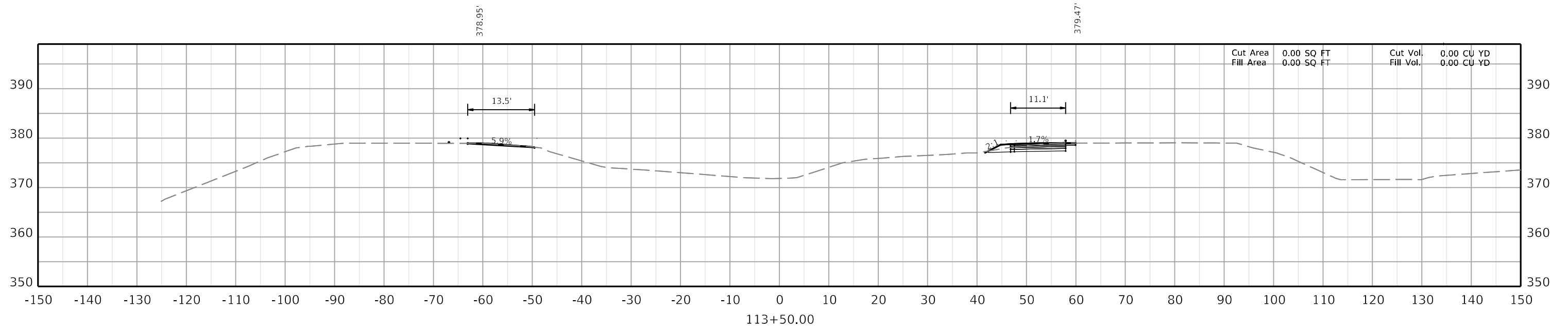
STA 112+00 TO 112+50

ITEM NO.  
02-0935.00

COUNTY OF  
HENDERSON

SHEET NO.  
X9





COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



DRAWING TITLE: US 41 CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 113+00 TO 113+50

ITEM NO. 02-0935.00 COUNTY OF HENDERSON

SHEET NO. X10