MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED STATE HIGHWAY

COLE COUNTY

SEC 23, 26, 25, 30, 29. &32
T44-R11

DESIGN DESIGNATION

A.A.D.T. - 2017 = 16,560
A.A.D.T. - 2037 = 17,440
T = 10%
V = 65 M.P.H.

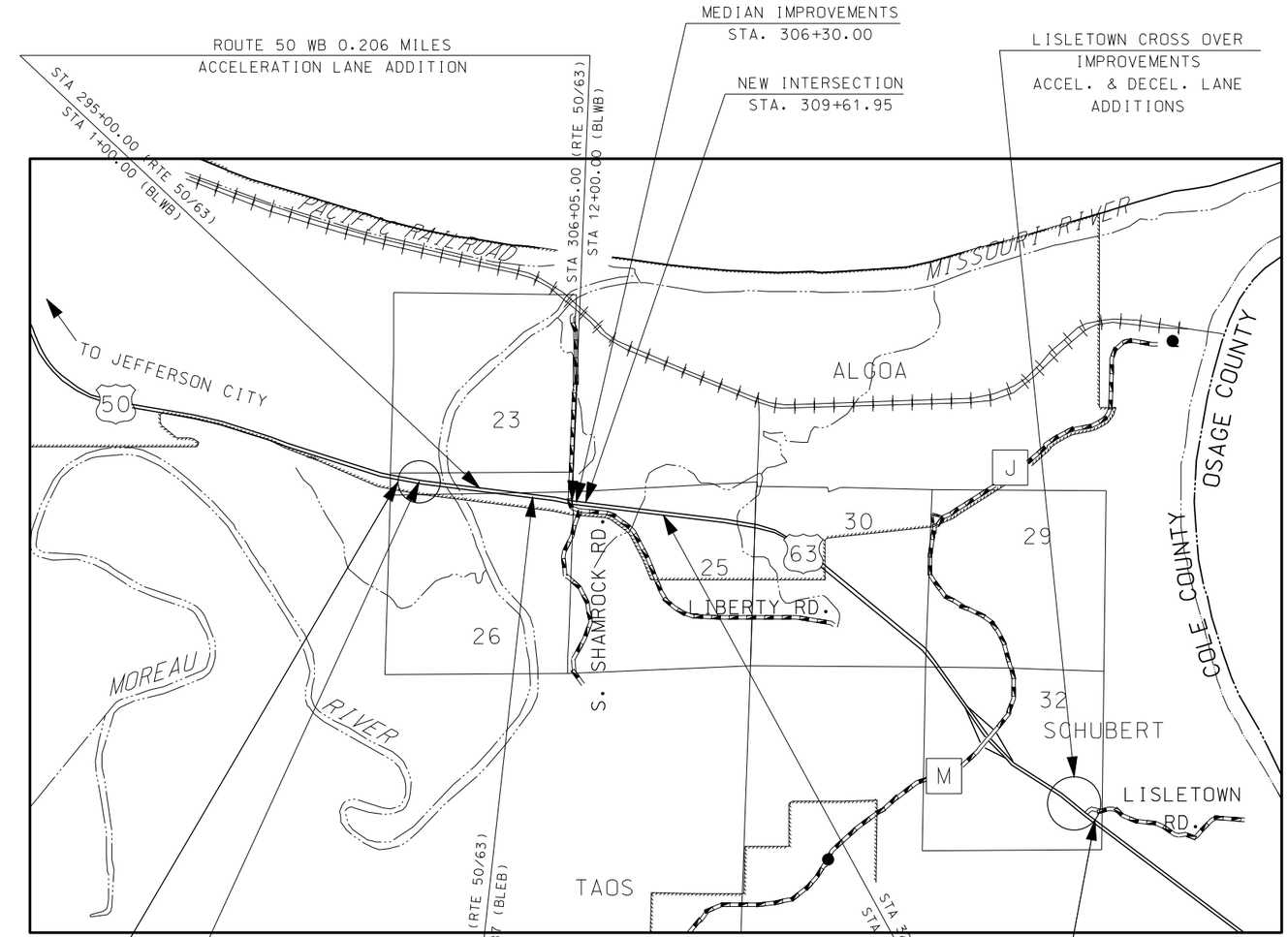
FUNCTIONAL CLASSIFICATION-FREEWAY

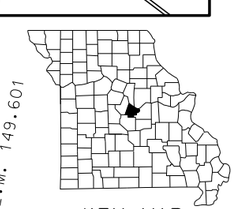
NO NEW R/W

CONVENTIONAL SYMBOLS
(USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	—FO—	—FO—
OVERHEAD TELEPHONE	—○—	—●—
UNDERGROUND TELEPHONE	—T—	—T—
OVERHEAD POWER	—□—	—■—
UNDERGROUND POWER	—P—	—P—
GAS	—G—	—G—
WATER	—W—	—W—
MANHOLE	SAN	
FIRE HYDRANT	HYD	
WATER VALVE	WV	
WATER METER	WM	
DROP INLET	DI	
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN	
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	PED	
FENCE		
CHAIN LINK	—V—	
WOVEN WIRE	—X—	
GATE POST		
BENCHMARK	BM	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES





KEY MAP
SHOWING LOCATION OF COLE COUNTY

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (2 SHEETS)	2
QUANTITIES (QU) (5 SHEETS)	3
PLAN-PROFILE (PP)	4-8
REFERENCE/COORDINATE PTS (RP/CP)	9
SPECIAL SHEETS (SS)	10-13
TRAFFIC CONTROL SHEETS (TC)	14-15
EROSION CONTROL SHEETS (EC)	16-17
CULVERT SECTIONS (CS)	18
CROSS SECTIONS (XS)	01-78

LENGTH OF PROJECT
(EASTBOUND LOG MILES)

BEGINNING OF PROJECT	LOG MILE: 145.108
END OF PROJECT	LOG MILE: 149.601
APPARENT LENGTH	4.493 MILES
EXCEPTIONS	
TOTAL EXCEPTIONS	0.000 MILES
NET LENGTH OF PROJECT	4.493 MILES
STATE LENGTH	4.493 MILES

TOTAL LENGTH OF PROJECT

NET LENGTH OF PROJECT	4.493 MILES
STATE LENGTH	4.493 MILES

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/3/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	1
COUNTY	COLE
JOB NO.	J5P3056
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

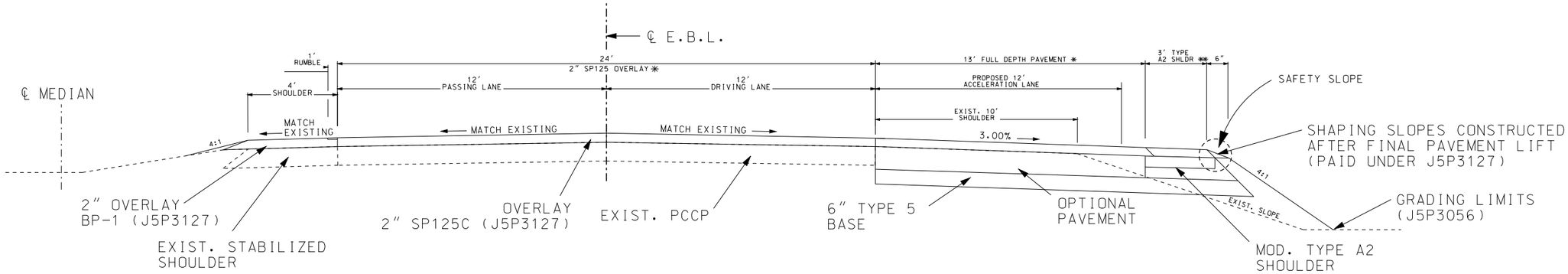
DESCRIPTION
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

✳ WIDTH VARIES THRU TAPERS AND RADIUS AREAS, SEE PLANS FOR MORE INFORMATION.



SECTION ON TANGENT

PROPOSED EASTBOUND DECELERATION AND ACCELERATION LANES

(SOME GUARDRAIL WORK OUTSIDE PAVEMENT LIMITS)

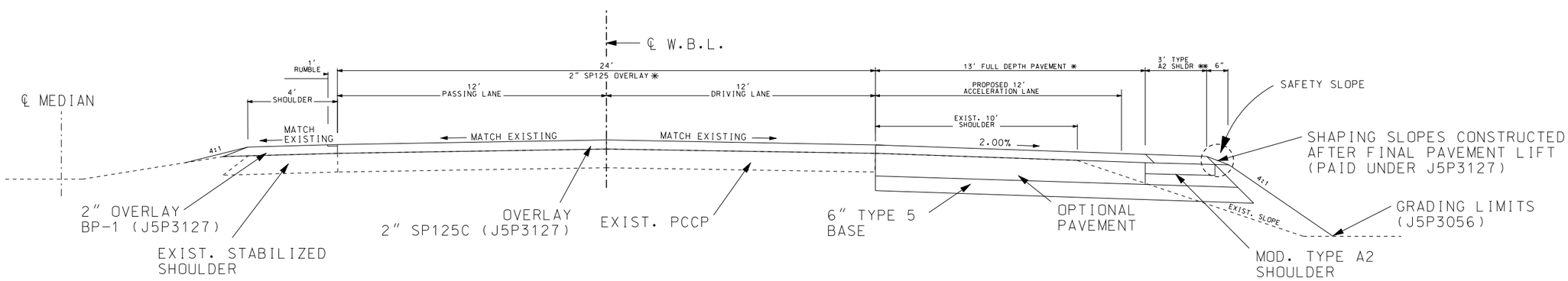
ROUTE 50/63 - STA. 305+34.46- STA. 322+15.00

US 50 E BASELINE - STA. 8+91.87 - STA. 25+75.00

OPTIONAL PAVEMENT DESIGNS			
PCCP DESIGN	HMA DESIGN	MODIFIED TYPE A2 SHOULDER	
8" PCCP 15' JOINTS WITH 1 1/4" DOWELS WITH 2" SP125C (PG 70-22) OVERLAY	10 1/4" HMA 2" SP125C (PG 70-22) 3" SP190C (PG 70-22) 5 1/4" SP190C (PG 64-22)	6" HMA 2" SP125C (PG 70-22) 4" SP190C (PG 70-22)	6" PCCP 4" PCCP W/ 2" BP-1 OVERLAY (PG 70-22)

✳✳ SHOULDER BASE COURSE WIDTH SHALL BE CONSTRUCTED TO ACCOMMODATE TAPER OF FINAL OVERLAY.

✳ WIDTH VARIES THROUGH TAPERS AND RADIUS AREAS, SEE PLANS FOR MORE INFORMATION.



SECTION ON TANGENT

PROPOSED WESTBOUND ACCELERATION LANE

ROUTE 50/63 - STA. 295+00.00 - STA. 306+05.00

US 50 W BASELINE - STA. 1+00.00 - STA. 12+00.00

OPTIONAL PAVEMENT DESIGNS			
PCCP DESIGN	HMA DESIGN	MODIFIED TYPE A2 SHOULDER	
8 1/2" PCCP 15' JOINTS WITH 1 1/4" DOWELS WITH 2" SP125C (PG 70-22) OVERLAY	10 3/4" HMA 2" SP125C (PG 70-22) 3" SP190C (PG 70-22) 5 3/4" SP190C (PG 64-22)	6" HMA 2" SP125C (PG 70-22) 4" SP190C (PG 70-22)	6" PCCP 4" PCCP W/ 2" BP-1 OVERLAY (PG 70-22)

✳✳ SHOULDER BASE COURSE WIDTH SHALL BE CONSTRUCTED TO ACCOMMODATE TAPER OF FINAL OVERLAY.

TYPICAL SECTIONS
ROUTE 50
SHEET 1 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/25/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

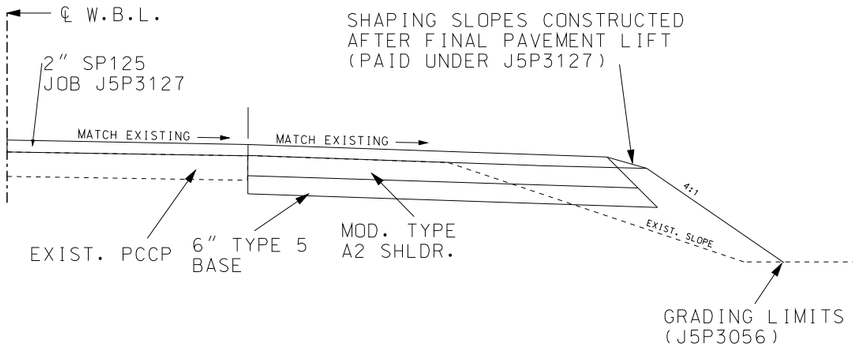
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

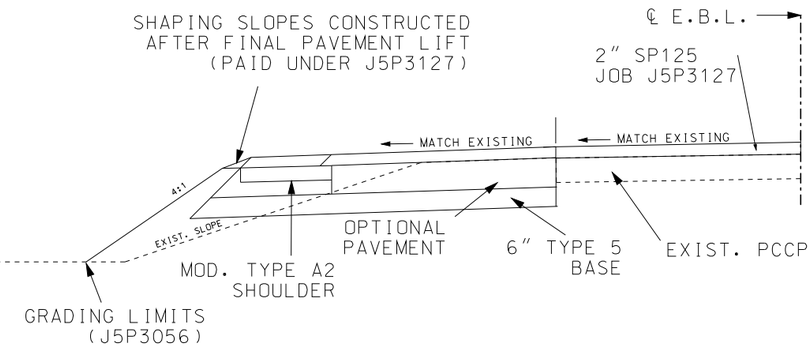
TYPICAL SECTIONS
EASTBOUND DECEL. & ACCEL. LANE
WESTBOUND ACCEL. LANE
ROUTE 50
SHHET 1 OF 2

REV.



SECTION ON TANGENT

PROPOSED WESTBOUND DECELERATION AND ACCELERATION LANES
LISLETOWN

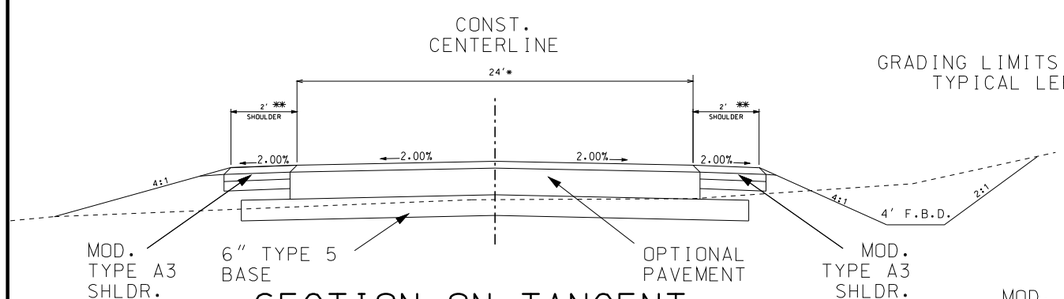


SECTION ON TANGENT

PROPOSED EASTBOUND DECELERATION AND ACCELERATION LANES
LISLETOWN

MOD. TYPE A2 SHLDR.	OPTIONAL PAVEMENT DESIGNS	
HMA DESIGN	PCCP DESIGN	HMA DESIGN
5 3/4" HMA 2" SP125C (PG 70-22) 3 3/4" SP190C (PG 70-22)	8" PCCP 15' JOINTS WITH 1 1/4" DOWELS WITH 2" SP125C (PG 70-22) OVERLAY	10 1/4" HMA 2" SP125C (PG 70-22) 3" SP190C (PG 70-22) 5 1/4" SP190C (PG 64-22)

MODIFIED TYPE A3 SHLDR.		OPTIONAL PAVEMENT DESIGNS	
PCCP DESIGN	HMA DESIGN	PCCP DESIGN	HMA DESIGN
6" PCCP 4" PCCP W/ 2" BP-1 OVERLAY (PG 70-22)	6" HMA 2" SP125C (PG 70-22) 4" SP190C (PG 70-22)	8" PCCP 15' JOINTS WITH 1 1/4" DOWELS WITH 2" SP125C (PG 70-22) OVERLAY	10 1/4" HMA 2" SP125C (PG 70-22) 3" SP190C (PG 70-22) 5 1/4" SP190C (PG 64-22)

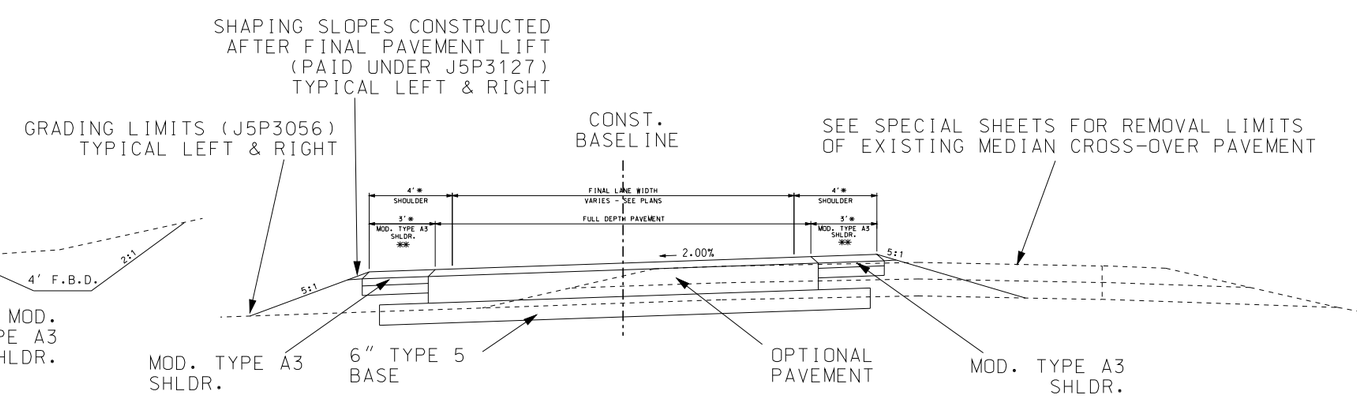


SECTION ON TANGENT

LIBERTY ROAD - SHAMROCK ROAD
INTERSECTION

SHAMROCK RD. STA. 0+00.00 - 4+18.37

LIBERTY RD. STA. 14+81.47 - 16+50.00



SECTION ON TANGENT

EASTBOUND OFFSET LEFT

BASELINE STA. 0+48.58 - STA. 2+02.00

✳ WIDTH VARIES THRU TAPERS AND RADIUS AREAS,
SEE PLANS FOR MORE INFORMATION.

✳✳ SHOULDER BASE COURSE WIDTH SHALL BE CONSTRUCTED TO ACCOMMODATE TAPER OF FINAL OVERLAY.

TYPICAL SECTIONS
MEDIANS & SIDEROADS
SHEET 2 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/25/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	2
COUNTY	COLE
JOB NO.	J5P3056
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TYPICAL SECTIONS
LISLETOWN, LIBERTY RD/SHAMROCK
EASTBOUND OFFSET LEFT

SHHET 2 OF 2

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

REMOVAL OF IMPROVEMENTS						
FROM	TO	LOCATION	DESCRIPTION	QUANTITY	UNITS	REMARKS
112.325		US 50 W Lt.	FULL-DEPTH SAW CUT	55	FT	MED CROSSOVER AT LISLETOWN RD.
112.325		US 50 W Lt.	5'X2' FRAME	1	EA	MED CROSSOVER AT LISLETOWN RD. - CONTRACTOR RETAIN
112.325		US 50 W Lt.	5'X2' GRATE	1	EA	MED CROSSOVER AT LISLETOWN RD. - CONTRACTOR RETAIN
112.325	112.328	US 50 W Lt.	FULL-DEPTH SAW CUT	40	FT	MED CROSSOVER AT LISLETOWN RD.
149.490	149.528	US 50 E Lt.	6" PVM'T MARKING	200	FT	EX. EDGE LINE FOR DECEL. LANE OPENING
112.510	112.605	US 50 W Lt.	6" PVM'T MARKING	500	FT	EX. EDGE LINE FOR ACCEL. LANE OPENING
116.791		US 50 W Lt.	FULL-DEPTH SAW CUT	360	FT	MED. CROSSOVER WEST OF MOREAU R.
145.123		US 50 E Lt.	FULL-DEPTH SAW CUT	80	FT	MED. CROSSOVER WEST OF MOREAU R.
295+00.00		US 50 W Rt.	FULL-DEPTH SAW CUT	10	FT	SAWCUT AT END OF ACCEL. LANE
304+90.71	309+41.28	US 50 MED	8" PCCP REMOVAL	669	SY	MED. CROSSOVER AT N. SHAMROCK
305+70.00		US 50 MED Lt.	FULL-DEPTH SAW CUT	2	FT	MED. CROSSOVER AT N. SHAMROCK
305+70.00	305+92.04	US 50 MED Lt.	FULL-DEPTH SAW CUT	22	FT	MED. CROSSOVER AT N. SHAMROCK
305+92.04		US 50 MED Lt.	FULL-DEPTH SAW CUT	4	FT	MED. CROSSOVER AT N. SHAMROCK
306+35.25		US 50 MED Lt.	FULL-DEPTH SAW CUT	4	FT	MED. CROSSOVER AT N. SHAMROCK
306+35.25	309+41.28	US 50 MED Lt.	FULL-DEPTH SAW CUT	306	FT	MED. CROSSOVER AT N. SHAMROCK
309+41.28		US 50 MED Lt.	FULL-DEPTH SAW CUT	4	FT	MED. CROSSOVER AT N. SHAMROCK
304+90.71		US 50 MED Rt.	FULL-DEPTH SAW CUT	19	FT	MED. LEFT TURN DECEL LANE AT N. SHAMROCK
304+90.71	305+37.14	US 50 MED Rt.	FULL-DEPTH SAW CUT	46	FT	MED. LEFT TURN DECEL LANE AT N. SHAMROCK
305+37.14		US 50 MED Rt.	FULL-DEPTH SAW CUT	4	FT	MED. LEFT TURN DECEL LANE AT N. SHAMROCK
305+37.14	307+11.10	US 50 MED Rt.	FULL-DEPTH SAW CUT	174	FT	MED. CROSSOVER AT N. SHAMROCK
307+11.10		US 50 MED Rt.	FULL-DEPTH SAW CUT	6	FT	MED. CROSSOVER AT N. SHAMROCK
149.488	149.585	US 50 E Lt.	FULL-DEPTH SAW CUT	522	FT	MED CROSSOVER AT LISLETOWN RD.
149.585		US 50 E Lt.	FULL-DEPTH SAW CUT	66	FT	MED CROSSOVER AT LISLETOWN RD.
10+67.80	14+63.61	LIBERTY RD.	PAVEMENT REMOVAL	11526	SF	EXISTING LIBERTY RD. CONNECTION
310+36.00		US 50 E Rt.	DELINEATOR	1	EA	EASTBOUND ROUTE 50
315+36.00		US 50 E Rt.	DELINEATOR	1	EA	EASTBOUND ROUTE 50
320+36.00		US 50 E Rt.	DELINEATOR	1	EA	EASTBOUND ROUTE 50
297+36.00		US 50 E Lt.	DELINEATOR	1	EA	WESTBOUND ROUTE 50
302+36.00		US 50 W Lt.	DELINEATOR	1	EA	WESTBOUND ROUTE 50
322+15.0		US 50 E Rt.	FULL-DEPTH SAW CUT	10	FT	SAWCUT AT END OF ACCEL. LANE
316+75.00	321+75.00	US 50 E Rt.	6" PVM'T MARKING	500	FT	EX. LANE LINE FOR ACCEL. LANE OPENING
295+00.00	300+00.00	US 50 W Rt.	6" PVM'T MARKING	500	FT	EX. LANE LINE FOR ACCEL. LANE OPENING
8+91.87		US 50 E Rt.	FULL-DEPTH SAW CUT	10	FT	AT BEGIN. RT. TURN LANE (BASELINE EB STATION)
2+20.00		S. SHAMROCK RD.	FULL DEPTH SAW CUT	27	FT	S. SHAMROCK RD.
16+50.00		LIBERTY RD.	FULL DEPTH SAW CUT	24	FT	LIBERTY RD.
306+05.00		US 50 W Rt.	FULL DEPTH SAW CUT	88	FT	N. SHAMROCK RD.
			TOTAL	1 LUMP SUM		

MOBILIZATION
1 LUMP SUM

CONRACTOR FURNISHED SURVEYING AND STAKING
1 LUMP SUM

WATER POLLUTION CONTROL MANAGER
67 WEEKS

ADDITIONAL MOBILIZATION FOR SEEDING
4 EACH

7 FT. CHANNEL POST DELINEATOR, DOUBLE STACKED					
STATION	STATION	LOCATION	WHITE (EACH)	YELLOW (EACH)	COMMENT
8+91.87	12+34.36	RTE 50 EB RT	4		RT. TURN LANE
13+69.24	15+94.94	RTE 50 EB RT.	13		ACCELERATION LANE FROM LIBERTY RD.
0+00.00	12+00.00	RTE 50 WB LT.	12		WB ACCELERATION LANE
NOTE: LOG MILES ARE USED FOR LISLETOWN RD. INTESECTION					
149.480	149.585	RTE 50 EB LT.		6	DECELERATION LANE AT LISLETOWN CROSS OVER
112.321	112.624	RTE 50 WB LT.		15	ACCELERATION LANE FROM LISLETOWN CROSS OVER
		TOTAL	29	21	
		USE	29	21	

MODIFIED TYPE A2 SHOULDER						
LOGMILE FROM	TO	LOCATION	LENGTH (FT)	WIDTH (FT)	QUANTITY (SY)	REMARKS
112.320	112.330	US 50 W Lt.	53.50	VAR.	239.21	LISLETOWN RD. INT. ACCEL LANE
112.330	112.356	US 50 W Lt.	135.50	22.78	342.97	LISLETOWN RD. INT. ACCEL LANE
112.356	112.548	US 50 W Lt.	1013.76	16.00	1802.24	LISLETOWN RD. INT. ACCEL LANE
112.548	112.595	US 50 W Lt.	250.00	11.00	305.56	LISLETOWN RD. INT. ACCEL LANE
112.595	112.604	US 50 W Lt.	50.00	6.00	33.33	LISLETOWN RD. INT. ACCEL LANE
				TOTAL	2723.31	
				PAY	2723.3	

SUMMARY SHEET
SHEET 1 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/24/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE

JOB NO.: J5P3056

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

QUANTITY SHEETS
SHEET 1 OF 5

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

6" TYPE 5 AGGREGATE BASE

FROM	TO	LOCATION	LENGTH (FT)	WIDTH (FT)	QUANTITY (SY)	REMARKS
1+00.00	2+76.18	US 50 W BASELINE Lt.	176.18	10.00	195.76	ACCEL LANE TAPER FROM N. SHAMROCK RD.
2+76.18	4+25.00	US 50 W BASELINE Lt.	148.82	13.00	214.96	ACCEL LANE TAPER FROM N. SHAMROCK RD. (AVG. WIDTH)
4+25.00	10+00.00	US 50 W BASELINE Lt.	575.00	16.00	1022.22	ACCEL LANE FROM N. SHAMROCK RD.
10+00.00	10+89.41	US 50 W BASELINE Lt.	89.41	18.56	184.38	ACCEL LANE TAPER FROM N. SHAMROCK RD. (AVG. WIDTH)
10+89.41	12+00.00	US 50 W BASELINE Lt.	110.59	VAR.	449.47	ACCEL LANE RADIUS FROM N. SHAMROCK RD.
0+49.48	1+99.44	US 50 MED BASELINE	149.96	VAR.	395.65	MEDIAN LEFT TURN AT N. SHAMROCK RD.
8+91.83	9+44.23	US 50 E BASELINE Rt.	52.40	10.00	58.22	RT TURN TO SHAMROCK
9+44.23	12+41.70	US 50 E BASELINE Rt.	297.47	16.00	528.84	RT TURN TO SHAMROCK
15+95.00	24+39.75	US 50 E BASELINE Rt.	844.75	16.00	1501.78	ACCEL LANE AT SHAMROCK RD.
24+39.75	25+74.88	US 50 E BASELINE Rt.	135.13	10.00	150.14	ACCEL LANE AT SHAMROCK RD.
0+67.06	2+20.00	SHAMROCK RD.	152.94	VAR.	984.55	NEW PAVEMENT
0+66.94	1+45.37	SHAMROCK RD. Lt.	78.43	VAR.	353.71	TRUCK APRON
15+35.97	16+50.00	LIBERTY RD.	114.03	27.20	344.62	NEW PAVEMENT
NOTE: LOGMILES ARE USED FOR LISLETOWN RD. INTERSECTION						
149.488	149.491	US 50 E Lt.	15.00	6.00	10.00	LISLETOWN RD. INT. DECEL LANE
149.491	149.519	US 50 E Lt.	150.00	11.00	183.33	LISLETOWN RD. INT. DECEL LANE
149.519	149.575	US 50 E Lt.	295.68	16.00	525.65	LISLETOWN RD. INT. DECEL LANE
149.575	150.645	US 50 E Lt.	56.50	VAR.	187.32	LISLETOWN RD. INT. DECEL LANE
112.320	112.330	US 50 W Lt.	53.50	VAR.	238.23	LISLETOWN RD. INT. ACCEL LANE
112.330	112.356	US 50 W Lt.	135.50	22.78	342.97	LISLETOWN RD. INT. ACCEL LANE
112.356	112.548	US 50 W Lt.	1013.76	16.00	1802.24	LISLETOWN RD. INT. ACCEL LANE
112.548	112.595	US 50 W Lt.	250.00	11.00	305.56	LISLETOWN RD. INT. ACCEL LANE
112.595	112.604	US 50 W Lt.	50.00	6.00	33.33	LISLETOWN RD. INT. ACCEL LANE
				TOTAL	10012.93	
				USE	10013	

9-3/4 IN. OPTIONAL PAVEMENT

FROM	TO	LOCATION	LENGTH (FT)	WIDTH (FT)	QUANTITY (SY)	REMARKS
1+50.00	4+25.00	US 50 W BASELINE Rt.	275.00	7.50	229.17	ACCEL LANE TAPER FROM N. SHAMROCK RD. - AVG. WIDTH
4+25.00	10+00.00	US 50 W BASELINE Rt.	575.00	13.00	830.56	ACCEL LANE FROM N. SHAMROCK RD.
10+00.00	10+89.41	US 50 W BASELINE Rt.	89.41	15.56	154.58	ACCEL LANE TAPER FROM N. SHAMROCK RD.
10+89.41	12+00.00	US 50 W BASELINE Rt.	110.59	VAR.	401.08	ACCEL LANE RADIUS FROM N. SHAMROCK RD.
0+49.48	1+99.44	US 50 MED. BASELINE	149.96	VAR.	280.39	MEDIAN LEFT TURN LANE AT N. SHAMROCK RD.
				TOTAL	1895.78	
				USE	1895.8	

9-1/4 IN. OPTIONAL PAVEMENT

FROM	TO	LOCATION	LENGTH (FT)	WIDTH (FT)	QUANTITY (SY)	REMARKS
8+91.87	9+91.20	US 50 E BASELINE Rt.	99.33	25.00	275.92	RIGHT TURN LANE INTO LIBERTY RD. - TAPER PORTION - AVG. WIDTH
9+91.20	12+34.36	US 50 E BASELINE Rt.	243.16	13.00	351.23	RIGHT TURN LANE INTO LIBERTY RD.
13+69.24	15+94.94	US 50 E BASELINE Rt.	225.70	21.28	533.66	ACCEL LANE TAPER FROM LIBERTY RD. - TAPER PORTION - AVG. WIDTH
15+94.94	23+23.92	US 50 E BASELINE Rt.	728.98	13.00	1052.97	ACCEL LANE FROM LIBERTY RD.
23+23.92	25+74.88	US 50 E BASELINE Rt.	250.96	7.50	209.13	ACCEL LANE FROM LIBERTY RD - TAPER PORTION - AVG. WIDTH
0+67.06	2+20.00	S. SHAMROCK RD.	152.94	VAR.	926.29	NEW INTERSECTION
0+67.06	1+45.37	S. SHAMROCK RD. Rt.	78.31	VAR.	353.72	TRUCK APRON
15+35.97	16+50.00	LIBERTY RD.	114.03	23.20	293.94	NEW PAVEMENT
NOTE: LOG MILES ARE USED FOR LISLETOWN RD. INTERESECTION						
149.488	149.519	US 50 E Lt.	165.00	7.50	137.50	LISLETOWN RD. INT. DECEL LANE
149.519	149.575	US 50 E Lt.	295.68	13.00	427.09	LISLETOWN RD. INT. DECEL LANE
149.575	149.586	US 50 E Lt.	56.50	VAR.	160.15	LISLETOWN RD. INT. DECEL LANE
				TOTAL	4721.60	
				USE	4721.6	

SUMMARY SHEET
SHEET 2 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE
JOB NO.: J5P3056
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

QUANTITY SHEETS
SHEET 2 OF 5

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

MODIFIED TYPE A3 SHOULDER						
STA	STA	LOCATION	LENGTH (FT)	WIDTH (FT)	QUANTITY (SY)	REMARKS
1+00.00	2+76.18	US 50 W BASELINE R+.	176.18	6.50	127.24	ACCEL LANE FROM N. SHAMROCK RD. (AVG. WIDTH)
2+76.18	12+00.00	US 50 W BASELINE R+.	956.38	3.00	318.79	ACCEL LANE FROM N. SHAMROCK RD. (INCLUDES RADIUS)
0+50.21	1+43.21	US 50 MED. LEFT TURN BASELINE	93.00	3.00	31.00	LEFT SHOULDER
1+43.21	1+99.44	US 50 MED. LEFT TURN BASELINE	56.23	VAR.	25.85	LEFT SHOULDER
0+94.36	1+99.44	US 50 MED. LEFT TURN BASELINE	114.29	3.00	38.10	RIGHT SHOULDER - SKEWED SECTION (LENGTH VARIES)
1+99.44	2+01.17	US 50 MED. LEFT TURN BASELINE	1.73	VAR.	1.59	RIGHT SHOULDER
8+91.83	9+44.83	US 50 E BASELINE R+.	53.00	6.50	38.28	RT TURN TO SHAMROCK - AVG. WIDTH
9+44.23	12+41.70	US 50 E BASELINE R+.	297.47	3.00	99.16	RT TURN TO SHAMROCK - AVG. WIDTH
15+95.00	24+39.75	US 50 E BASELINE R+.	844.75	3.00	281.58	ACCEL LANE
24+39.75	25+74.88	US 50 E BASELINE R+.	135.13	6.50	97.59	ACCEL LANE - AVG. WIDTH
0+68.00	0+70.93	SHAMROCK RD.	2.93	VAR.	2.00	RIGHT SHOULDER
0+70.93	2+20.00	SHAMROCK RD.	188.48	2.00	41.88	RIGHT SHOULDER
1+68.54	2+20.00	SHAMROCK RD.	75.29	2.00	16.73	LEFT SHOULDER
15+35.97	16+50.00	LIBERTY RD.	114.03	2.00	25.34	RIGHT SHOULDER
15+49.04	16+50.00	LIBERTY RD.	100.96	2.00	22.44	LEFT SHOULDER
NOTE: LOG MILES ARE USED FOR LISLETOWN INTERSECTION						
149.488	149.491	US 50 E L+.	15.00	3.50	5.83	LISLETOWN RD. INT. DECEL LANE - AVG. WIDTH
149.491	149.519	US 50 E L+.	150.00	3.00	50.00	LISLETOWN RD. INT. DECEL LANE
149.519	149.575	US 50 E L+.	295.68	3.00	98.56	LISLETOWN RD. INT. DECEL LANE
149.575	149.586	US 50 E L+.	67.20	3.00	22.40	LISLETOWN RD. INT. DECEL LANE
149.586	149.588	US 50 W L+.	9.70	3.50	3.77	LISLETOWN RD. INT. DECEL LANE - TIE INTO X-OVER SHLDR
				TOTAL	1348.13	
				USE	1348.1	

PAVEMENT EDGE TREATMENT				
STATION	STATION	LOCATION	PAVEMENT EDGE TREATMENT (FT)	COMMENT
305+05	321+75	RTE 50 EB RT	1683	RT. TURN/SHAMROCK/ACCELERATION LANE
304+91	307+11	RTE 50 EB LT.	220	MEDIAN X-OVER
305+69	309+41	RTE 50 WB LT.	371	MEDIAN X-OVER
295+00	306+05	RTE 50 WB RT.	1188	ACCELERATION LANE/N. SHAMROCK
NOTE: LOG MILES ARE USED FOR LISLETOWN RD. INTESECTION				
149.480	149.585	RTE 50 EB LT.	588	DECELERATION LANE AT LISLETOWN X-OVER
112.321	112.624	RTE 50 WB LT.	1600	ACCELERATION LANE FROM LISLETOWN X-OVER
		TOTAL	5650	
		USE	5650	

NOTE: PAVEMENT EDGE TREATMENT - NO DIRECT PAYMENT WILL BE MADE FOR MORE THAN ONE APPLICATION AT ANY LOCATION

TEMPORARY PAVEMENT MARKING						
			WATERBORNE, TYPE P BEADS			
APPROX. STATION	APPROX. STATION	LOCATION	4" SOLID WHITE FT.	4" SOLID YELLOW FT.	PREFORMED SHORT TERM MARKING TAPE 24 IN. WHITE	REMARKS
8+91.87	12+34.36	EB RT. TURN LANE	470			TEMP EDGELINE
0+70.00	2+20.00	SHAMROCK RD.		186	12	ISLAND & DOUBLE C/L, STOP BAR
15+35.00	16+50.00	LIBERTY RD.		272	12	DOUBLE C/L, STOP BAR
13+70.00	15+95.00	EB ACCEL LANE	1937			EDGELINE & LANE LINE
0+00.00	12+00.00	WB ACCEL LANE	1688			EDGELINE & LANE LINE
		LISLETOWN X-OVER	1323	1675		EDGELINE & LANE LINE
		TOTAL	5418	2133	24	
		PAY	5418	2133	24	

SUMMARY SHEET
SHEET 3 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE

JOB NO.: J5P3056

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

QUANTITY SHEETS
SHEET 3 OF 5

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

GRADING

STATION	STATION	LOCATION	CLASS A EXCAVATION (CY)	UNCLASSIFIED EXCAVATION (CY)	COMPACTING EMBANKMENT (CY)	COMMENT
0+49.48	1+99.44	MED. LEFT TURN	124	0	18	N.SHAMROCK RD. INT.
306+49.00	309+41.28	US 50/63 MED.	78	0	35	N.SHAMROCK RD. INT.
0+80.00	2+30.00	SHAMROCK RD.	0	813	60	
15+35.00	16+50.00	LIBERTY RD.	0	360	0	
8+50.00	26+00.00	E.B. ACCEL. LANE	0	922	196	
0+50.00	12+20.00	W.B. ACCEL. LANE	0	580	200	
		TOTAL	202	2675	509	
		USE	202	2675	509	

LINEAR GRADING CLASS 2

FROM	TO	LOCATION	QUANTITY (ST)	REMARKS
149.488	149.519	US 50 E Lt.	1.65	LISLETOWN RD. INT. DECEL LANE
149.519	149.575	US 50 E Lt.	2.96	LISLETOWN RD. INT. DECEL LANE
149.575	149.586	US 50 E Lt.	0.57	LISLETOWN RD. INT. DECEL LANE
112.320	112.356	US 50 W Lt.	1.89	LISLETOWN RD. INT. ACCEL LANE
112.356	112.548	US 50 W Lt.	10.14	LISLETOWN RD. INT. ACCEL LANE
112.548	112.605	US 50 W Lt.	3.00	LISLETOWN RD. INT. ACCEL LANE
145.116	145.131	US 50 E Lt.	0.80	MEDIAN CROSSOVER REMOVAL
116.734	116.802	US 50 W Lt.	3.60	MEDIAN CROSSOVER REMOVAL
		TOTAL	24.61	
		USE	24.6	

SEEDING

FROM	TO	LOCATION	COOL SEASON (AC)	TEMP (AC)	REMARKS
145.116	145.131	US 50 E Lt.	0.09	0.009	MEDIAN CROSSOVER WEST OF MOREAU R. REMOVAL
149.488	149.586	US 50 E Lt.	0.11	0.011	LISLETOWN RD. INT. DECEL LANE
112.320	112.605	US 50 W Lt.	0.43	0.043	LISLETOWN RD. INT. ACCEL LANE
112.356		US 50 W Lt.	0.05	0.005	MEDIAN 8' FBD
116.734	116.802	US 50 W Lt.	0.17	0.017	MEDIAN CROSSOVER WEST OF MOREAU R. REMOVAL
0+49.48	1+62.85	MED. LEFT TURN	0.02	0.002	MEDIAN LEFT TURN AT SHAMROCK
0+94.36	1+98.96	MED. LEFT TURN	0.06	0.006	MEDIAN LEFT TURN AT SHAMROCK
306+49.00	309+41.28	US 50 MED	0.14	0.014	MEDIAN LEFT TURN AT SHAMROCK
305+00.00	322+15.00	US 50 EB Rt.	1.16	0.116	EX. LIBERTY (OBLIT.)/RT TURN/SHAMROCK/ACCEL.
0+00.00	12+20.00	US 50 WB Rt.	0.29	0.029	ACCELERATION LANE
		TOTAL	2.52	0.252	
		USE	2.5	0.3	

DRAINAGE STRUCTURES

STRUCTURE	LOCATION	STATION	OFFSET	GROUP B CULV. L.F. 18"	GROUP B FES EA. 18"	CLASS 3 EXC. C.Y.	REMARKS
P1	S. SHAMROCK RD.	1+47.25		82	2	25.9	42* 37' 07" L.A.
			TOTAL	82	2	25.9	
			USE	82	2	26	

TEMPORARY EROSION CONTROL

FROM	TO	LOCATION	DITCH CHECK ALTERNATE (LF)	DITCH CHECK ROCK (LF)	SILT FENCE (LF)	SEDIMENT TRAP (CY)	SEDIMENT REMOVAL (CY)	REMARKS
145.116	145.131	US 50 E Lt.	50				4	MEDIAN X-OVER WEST OF MOREAU R. REMOVAL
149.488	149.586	US 50 E Lt.		200		60	12	LISLETOWN RD. INT. DECEL LANE
112.320	112.605	US 50 W Lt.	25	50			5	LISLETOWN RD. INT. ACCEL LANE
112.413	112.508	US 50 MED		100			5	(WBL LOG) PLACE 5 IN MEDIAN
112.478		US 50 MED		50			4	(WBL LOG) PLACE 4 AROUND EX. DI
112.508	112.622	US 50 MED		54			2	(WBL LOG) PLACE 2 IN MEDIAN
116.796		US 50 MED	50				4	(WBL LOG) PLACE 4 AROUND EX. DI
116.768		US 50 MED	34				1	(WBL LOG) PLACE IN MEDIAN
116.740		US 50 MED	34				1	(WBL LOG) PLACE IN MEDIAN
116.712		US 50 MED	34				1	(WBL LOG) PLACE IN MEDIAN
295+00.00	305+45.00	US 50 LT.			1200			PLACE ALONG ACCEL LANE
304+80.00		US 50 MED	15				1	PLACE IN MEDIAN
305+05.00	309+30.00	US 50 Rt.			500		5	PLACE ALONG EXCAVATED LIBERTY RD.
305+45.00		US 50 Lt.		50			4	PLACE 4 AROUND EX. DI
306+70.00		US 50 Rt.		50			4	PLACE 4 AROUND EX. CULV. INLET
306+80.00		US 50 MED	50				4	PLACE 4 AROUND EX. DI
307+40.00	308+40.00	US 50 Rt.		50			2	PLACE 2 RIGHT
308+30.00		US 50 MED	21				1	PLACE IN MEDIAN
311+25.00	321+75.00	US 50 Rt.			1100		11	PLACE ALONG ACCEL LANE
15+30.00		LIBERTY RD. Lt.	30				4	PLACE 4 AROUND EX. CULV. INLET
		TOTAL	343	604	2800	60	75	
		USE	343	604	2800	60	75	

SUMMARY SHEET
SHEET 4 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY COLE

JOB NO. J5P3056

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

QUANTITY SHEETS
SHEET 4 OF 5

REV.

EFFECTIVE: 06-08-2016

SIGN	SIZE (IN.)	AREA (SQ. FT.)	QTY	TOTAL AREA	QTY RELOC	TOTAL RELOC AREA	DESCRIPTION
WARNING SIGNS							
W01-1L	48X48	16.00					TURN (SYMBOL LEFT ARROW)
W01-1R	48X48	16.00					TURN (SYMBOL RIGHT ARROW)
W01-2L	48X48	16.00					CURVE (SYMBOL LEFT ARROW)
W01-2R	48X48	16.00					CURVE (SYMBOL RIGHT ARROW)
W01-3L	48X48	16.00					REVERSE TURN (SYMBOL LEFT ARROW)
W01-3R	48X48	16.00					REVERSE TURN (SYMBOL RIGHT ARROW)
W01-4L	48X48	16.00					REVERSE CURVE (SYMBOL LEFT ARROW)
W01-4R	48X48	16.00					REVERSE CURVE (SYMBOL RIGHT ARROW)
W01-4bL	48X48	16.00					DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT ARROWS)
W01-4bR	48X48	16.00					DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT ARROWS)
W01-4cL	48X48	16.00					TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT ARROWS)
W01-4cR	48X48	16.00					TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT ARROWS)
W01-6	60X30	12.50					HORIZONTAL ARROW (SYMBOL)
W01-6a	72X36	18.00					HORIZONTAL ARROW (SYMBOL ON PERMANENT BARRICADE)
W01-7	60X30	12.50					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-7a	72X36	18.00					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL ON PERMANENT BARRICADE)
W01-8	18X24	3.00					CHEVRON (SYMBOL)
W01-8a	30X36	7.50					CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
W03-1	48X48	16.00					STOP AHEAD (SYMBOL)
W03-2	48X48	16.00					YIELD AHEAD (SYMBOL)
W03-3	48X48	16.00					SIGNAL AHEAD (SYMBOL)
W03-4	48X48	16.00					BE PREPARED TO STOP
W03-5	48X48	16.00					SPEED LIMIT AHEAD
W04-1L	48X48	16.00					MERGE (SYMBOL FROM LEFT)
W04-1aL	48X48	16.00					MERGE (LEFT ARROW AT LANE DROP)
W04-1R	48X48	16.00					MERGE (SYMBOL FROM RIGHT)
W04-1aR	48X48	16.00					MERGE (RIGHT ARROW AT LANE DROP)
W05-1	48X48	16.00					ROAD/BRIDGE/RAMP NARROWS
W05-3	48X48	16.00					ONE LANE BRIDGE
W05-5	48X48	16.00					NARROW LANES
W06-1	48X48	16.00					DIVIDED HIGHWAY (SYMBOL)
W06-2	48X48	16.00					DIVIDED HIGHWAY END (SYMBOL)
W06-3	48X48	16.00					TWO WAY TRAFFIC (SYMBOL)
W07-3a	30X24	5.00					NEXT XX MILES (PLAQUE)
W08-1	48X48	16.00					BUMP
W08-2	48X48	16.00					DIP
W08-3	48X48	16.00					PAVEMENT ENDS
W08-4	48X48	16.00					SOFT SHOULDER
W08-5	48X48	16.00					SLIPPERY WHEN WET (SYMBOL)
W08-6	48X48	16.00					TRUCK CROSSING WITH FLAGS
W08-6c	48X48	16.00					TRUCK ENTRANCE
W08-7	36X36	9.00					LOOSE GRAVEL
W08-9	48X48	16.00					LOW SHOULDER
W08-11	48X48	16.00					UNEVEN LANES
W08-12	48X48	16.00					NO CENTER LINE
W10-1	42 RND.	9.62					RAILROAD CROSSING
W012-1	24X24	4.00					DOUBLE DOWN ARROW (SYMBOL)
W012-2	48X48	16.00					LOW CLEARANCE (SYMBOL)
W012-2x	24X18	3.00					LOW CLEARANCE (PLAQUE)
W012-2a	84X24	14.00					OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W08-15	48X48	16.00					GROOVED PAVEMENT
W08-15p	30X24	5.00					MOTORCYCLE (PLAQUE)
W08-17	48X48	16.00					SHOULDER DROP-OFF (SYMBOL)
W08-17p	30X24	5.00					SHOULDER DROP-OFF (PLAQUE)
SPECIAL	120X60	50.00					LOW CLEARANCE XX FT XX IN XX MILES AHEAD
SPECIAL	120X60	50.00					WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
W013-1	30X30	6.25					ADVISORY SPEED (PLAQUE)
W016-2	30X24	5.00	2	10			XXX FEET (PLAQUE) (500)
W016-3	30X24	5.00					X MILE (PLAQUE)
W020-1	48X48	16.00	4	64			ROAD/BRIDGE/RAMP WORK AHEAD
W020-2	48X48	16.00					DETOUR AHEAD
W020-3	48X48	16.00	4	64			ROAD CLOSED AHEAD
W020-4	48X48	16.00					ONE LANE ROAD AHEAD
W020-5	48X48	16.00					RIGHT/CENTER/LEFT LANE CLOSED AHEAD
W020-5a	48X48	16.00					2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
W020-6a	48X48	16.00					RIGHT/CENTER/LEFT LANE CLOSED
W020-7a	48X48	16.00					FLAGGER (SYMBOL) WITH FLAGS
W021-2	36X36	9.00					FRESH OIL
W021-5	48X48	16.00					SHOULDER WORK AHEAD
W022-1	48X48	16.00					BLASTING ZONE AHEAD
W022-2	42X36	10.50					TURN OFF 2-WAY RADIO AND PHONE
W022-3	42X36	10.50					END BLASTING ZONE
W022-6e	21X15	2.19					WET PAINT (ARROW PIVOTS)
GUIDE SIGNS							
SPECIAL	36X36	9.00					FRESH OIL/LOOSE GRAVEL
E05-1	36X48	12.00					GORE EXIT
E05-2	48X36	12.00					EXIT OPEN
E05-2a	48X36	12.00					EXIT CLOSED
G020-1	60X24	10.00					ROAD WORK NEXT XX MILES
G020-2	48X24	8.00					END ROAD WORK
G020-4	36X18	4.50					PILOT CAR FOLLOW ME
SPECIAL	42X30	8.75					PLEASE WAIT FOR PILOT CAR
G020-5aP	36X24	6.00					WORK ZONE (PLAQUE)
M04-8a	24X18	3.00					END DETOUR
M04-9L	48X36	12.00					DETOUR (LEFT ARROW)
M04-9R	48X36	12.00					DETOUR (RIGHT ARROW)
M04-10L	48X18	6.00					DETOUR (ARROW LEFT)
M04-10R	48X18	6.00					DETOUR (ARROW RIGHT)
REGULATORY SIGNS							
R1-1	48X48	13.25	1	13.25			STOP
R1-2	48 TRI.	6.93	1	6.93			YIELD
R1-2a	36X36	9.00					TO ONCOMING TRAFFIC (PLAQUE)
R1-3	20X9	1.25					X-WAY (PLAQUE)
R2-1	36X48	12.00					SPEED LIMIT XX
R3-1	48X48	16.00					NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00					NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00					NO TURNS
R3-4	48X48	16.00					NO U-TURN (SYMBOL)
R3-7L	30X30	6.25					LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25					RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00					DO NOT PASS
R4-2	36X48	12.00					PASS WITH CARE
R4-7aL	36X48	12.00					KEEP LEFT (HORIZONTAL ARROW)
R4-7a	36X48	12.00					KEEP RIGHT (HORIZONTAL ARROW)
R5-1	30X30	6.25	1	6.25			DO NOT ENTER
R5-1a	36X24	6.00					WRONG WAY
R6-1L	48X18	6.00					ONE WAY ARROW (LEFT)
R6-1R	48X18	6.00					ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00					ONE WAY (LEFT)
R6-2R	24X30	5.00					ONE WAY (RIGHT)
R10-6	24X36	6.00					STOP HERE ON RED (45° ARROW)
R11-2	48X30	10.00	2	20			ROAD CLOSED
R11-3a	60X30	12.50					ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50					ROAD CLOSED TO THRU TRAFFIC
S4-4	36X15	3.75					WHEN FLASHING
CONST-3A	60X48	20.00					FINE SIGN
CONST-3X	56X12	4.67					SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS							
SPECIAL	36X48	12.00					POINT OF PRESENCE
SPECIAL	96X48	32.00					POINT OF PRESENCE
CONST-7-48	48X24	8.00					RATE OUR WORK ZONE
CONST-7-72	72X36	18.00					RATE OUR WORK ZONE
616-10.05 CONSTRUCTION SIGNS TOTAL				185			
616-10.10 RELOCATED SIGNS TOTAL							

ITEM NUMBER	TOTAL QTY	DESCRIPTION
6122008		IMPACT ATTENUATOR (8 SAND BARRELS)
6122009		IMPACT ATTENUATOR (9 SAND BARRELS)
6122010		IMPACT ATTENUATOR (10 SAND BARRELS)
6122012		IMPACT ATTENUATOR (12 SAND BARRELS)
6122014		IMPACT ATTENUATOR (14 SAND BARRELS)
6122017		IMPACT ATTENUATOR (17 SAND BARRELS)
6122019		IMPACT ATTENUATOR (19 SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6123000A		TRUCK OR TRAILER MOUNTED ATTENUATOR (TMA)
6161007		SPEED LIMIT AND STROBE LIGHT ASSEMBLY
6161008		ADVANCED WARNING RAIL SYSTEM
6161009	4	FLAG ASSEMBLY
6161020		CHANNELIZER (DRUM-LIKE)
6161022		CHANNELIZER (CONES)
6161024		CHANNELIZER (TRIM LINE) WITH LIGHT
6161025	25	CHANNELIZER (TRIM LINE)
6161026		CHANNELIZER (VERTICAL PANEL)
6161027		CHANNELIZER (VERTICAL PANEL) WITH LIGHT
6161028		CHANNELIZER
6161030		TYPE III MOVEABLE BARRICADE
6161031	16	TYPE III MOVEABLE BARRICADE WITH LIGHT
6161033		DIRECTION INDICATOR BARRICADE
6161034		DIRECTION INDICATOR BARRICADE, WITH LIGHT
6161040		FLASHING ARROW PANEL
6161047		TYPE III OBJECT MARKER
6161051		WARNING LIGHT, TYPE A
6161052		WARNING LIGHT, TYPE B
6161053		WARNING LIGHT, TYPE C
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A		CHANGEABLE MESSAGE SIGN WITHOUT COMMUNICATION INTERFACE, CONTRACTOR FURNISHED/RETAINED
6161099	4	CHANGEABLE MESSAGE SIGN WITH COMMUNICATION INTERFACE, CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6173600D		CONTRACTOR FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER
6173602B		CONTRACTOR FURNISHED/COMMISSION RETAINED TEMPORARY TRAFFIC BARRIER
6174000A		TEMPORARY TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6176000B		COMMISSION FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER
6177000B		COMMISSION FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER HEIGHT TRANSITION
9019400		TEMPORARY LIGHTING
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

SUMMARY SHEET
SHEET 5 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE
JOB NO.: J5P3056
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

QUANTITY SHEETS - 2BS
SHEET 5 OF 5

REV.

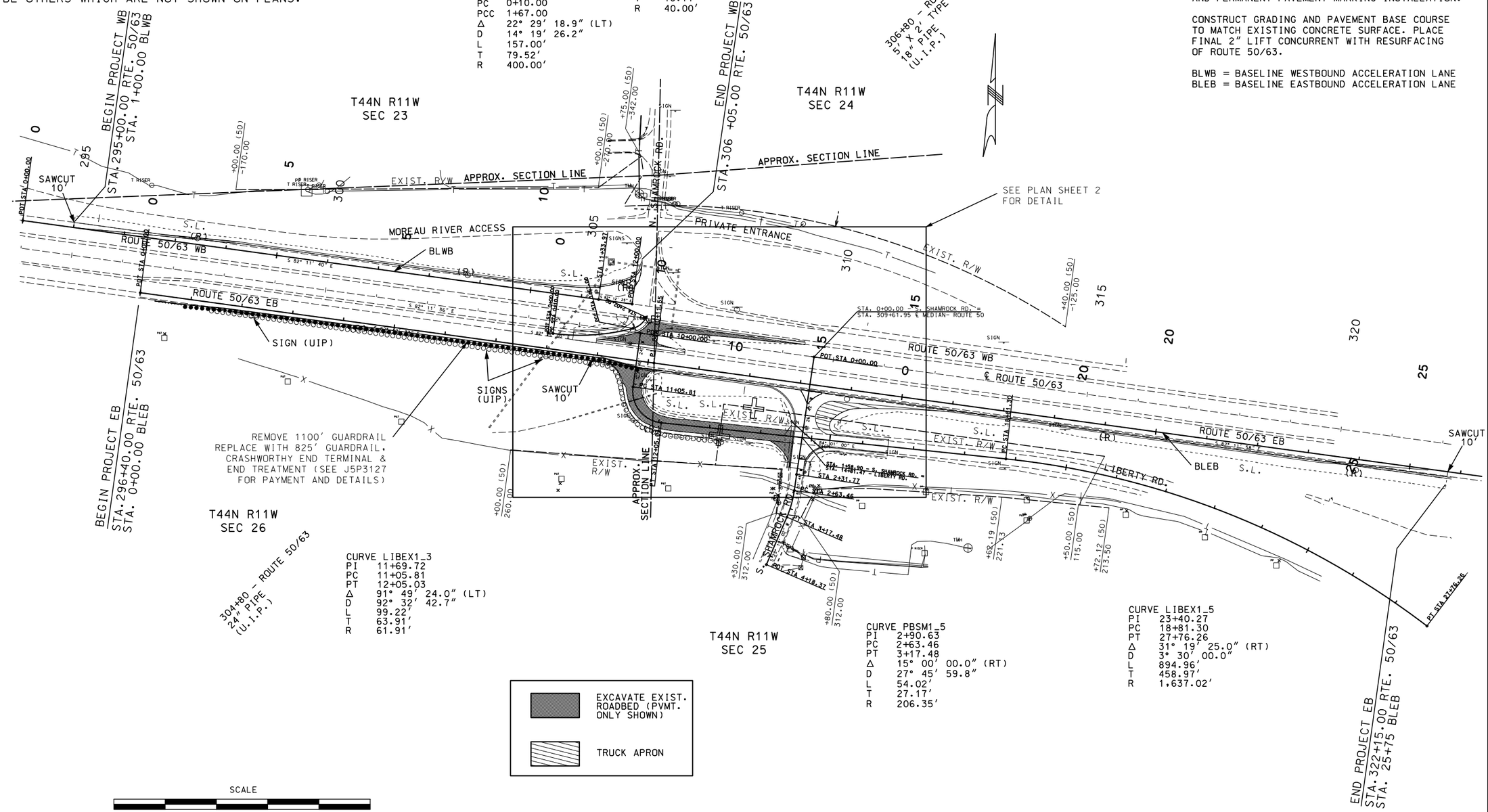
ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

ALL BEARINGS ARE SHOWN MODIFIED STATE PLANE BEARINGS, CENTRAL ZONE.

CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. UTILITIES PLOTTED ARE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS WHICH ARE NOT SHOWN ON PLANS.

CURVE PRMED1_3
PI 0+89.52
PC 0+10.00
PCC 1+67.00
Δ 22° 29′ 18.9″ (LT)
D 14° 19′ 26.2″
L 157.00′
T 79.52′
R 400.00′

CURVE PRMED1_4
PI 1+85.71
PCC 1+67.00
PT 2+02.00
Δ 50° 08′ 01.7″ (LT)
D 143° 14′ 22.0″
L 35.00′
T 18.71′
R 40.00′



CURVE LIBEX1_3
PI 11+69.72
PC 11+05.81
PT 12+05.03
Δ 91° 49′ 24.0″ (LT)
D 92° 32′ 42.7″
L 99.22′
T 63.91′
R 61.91′

CURVE PBSM1_5
PI 2+90.63
PC 2+63.46
PT 3+17.48
Δ 15° 00′ 00.0″ (RT)
D 27° 45′ 59.8″
L 54.02′
T 27.17′
R 206.35′

CURVE LIBEX1_5
PI 23+40.27
PC 18+81.30
PT 27+76.26
Δ 31° 19′ 25.0″ (RT)
D 3° 30′ 00.0″
L 894.96′
T 458.97′
R 1,637.02′

NOTES:

SEE J5P3127 FOR PAYMENT FOR REMOVAL AND INSTALLATION OF SIGNS, REMOVAL AND INSTALLATION OF GUARDRAIL, AND PERMANENT PAVEMENT MARKING INSTALLATION.

CONSTRUCT GRADING AND PAVEMENT BASE COURSE TO MATCH EXISTING CONCRETE SURFACE. PLACE FINAL 2″ LIFT CONCURRENT WITH RESURFACING OF ROUTE 50/63.

BLWB = BASELINE WESTBOUND ACCELERATION LANE
BLEB = BASELINE EASTBOUND ACCELERATION LANE

PLAN SHEET
SHEET 1 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 4
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

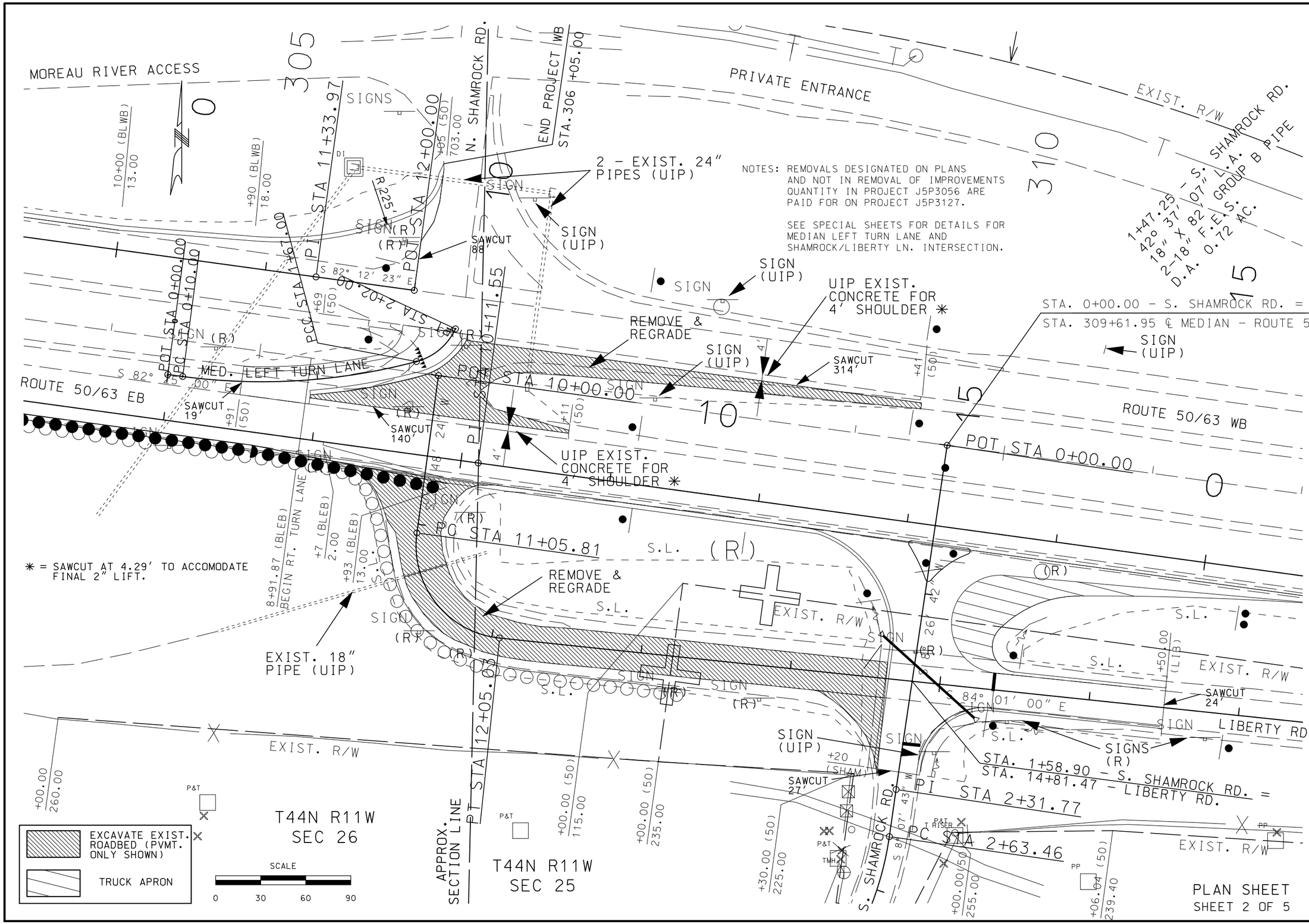
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN SHEET
LIBERTY RD./SHAMROCK INTERSECTION
SHEET 1 OF 5

REV.



STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 5
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

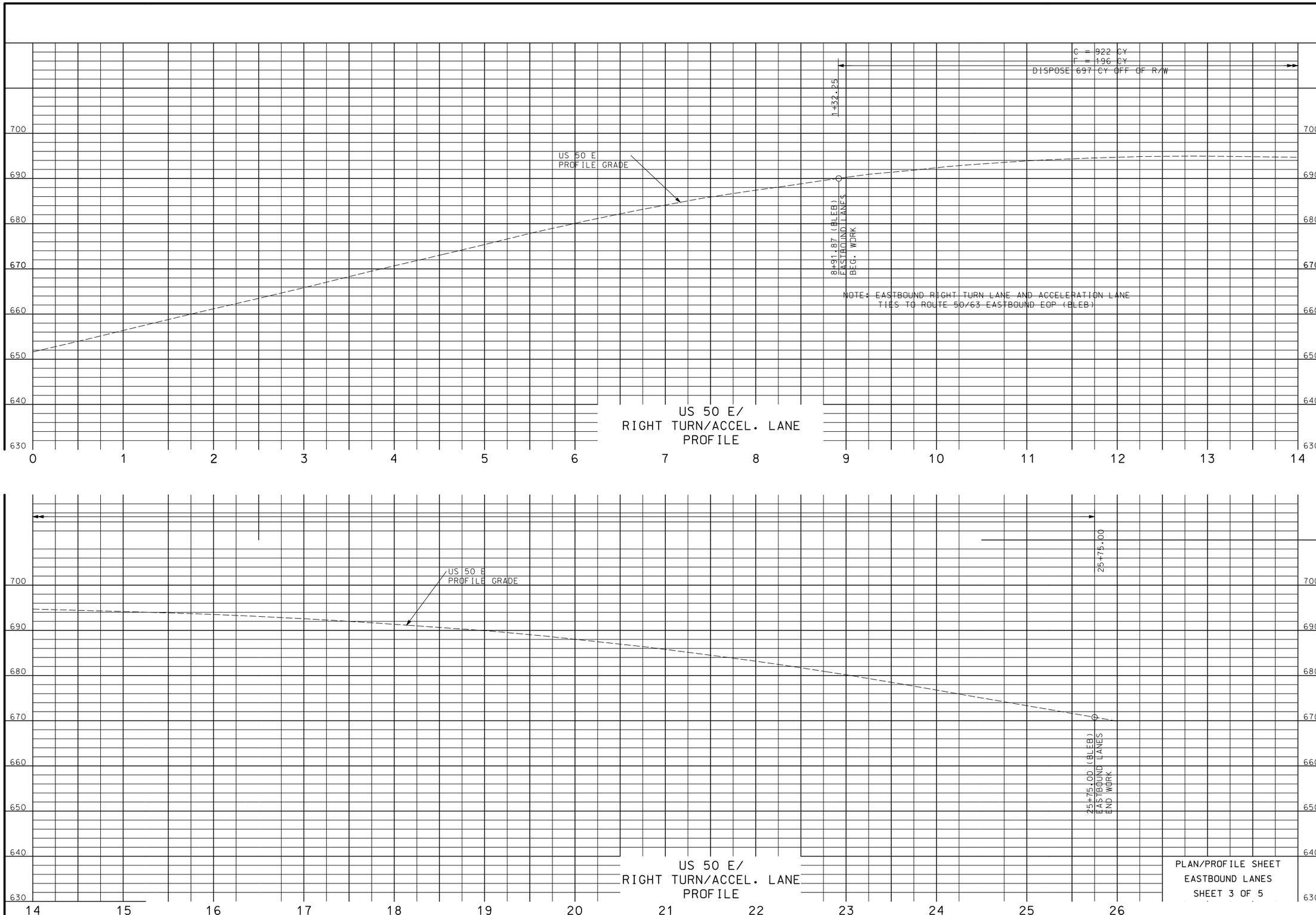
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN SHEET
LIBERTY RD./SHAMROCK INTERSECTION
DETAIL SHEET
SHEET 2 OF 5

REV.



STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/3/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	6
COUNTY	COLE
JOB NO.	J5P3056
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

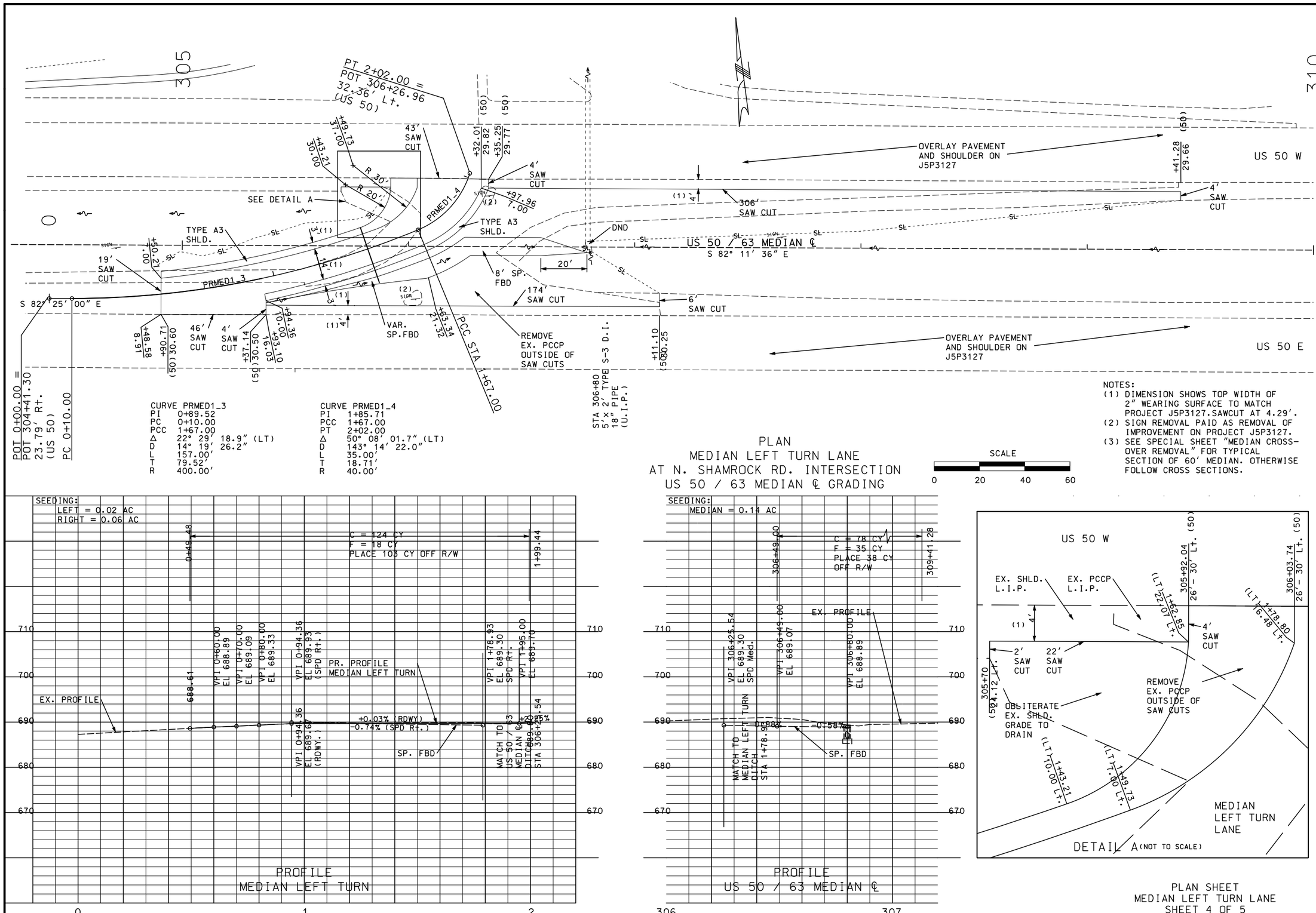
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN/PROFILE SHEET
EASTBOUND LANES
SHEET 3 OF 5

REV.



CURVE PRMED1_3
PI 0+89.52
PC 0+10.00
PCC 1+67.00
Δ 22° 29' 18.9" (LT)
D 14° 19' 26.2"
L 157.00'
T 79.52'
R 400.00'

CURVE PRMED1_4
PI 1+85.71
PCC 1+67.00
PT 2+02.00
Δ 50° 08' 01.7" (LT)
D 143° 14' 22.0"
L 35.00'
T 18.71'
R 40.00'

NOTES:
(1) DIMENSION SHOWS TOP WIDTH OF 2" WEARING SURFACE TO MATCH PROJECT J5P3127.SAWCUT AT 4.29'.
(2) SIGN REMOVAL PAID AS REMOVAL OF IMPROVEMENT ON PROJECT J5P3127.
(3) SEE SPECIAL SHEET "MEDIAN CROSS-OVER REMOVAL" FOR TYPICAL SECTION OF 60' MEDIAN. OTHERWISE FOLLOW CROSS SECTIONS.

PLAN
MEDIAN LEFT TURN LANE
AT N. SHAMROCK RD. INTERSECTION
US 50 / 63 MEDIAN ℄ GRADING

SCALE
0 20 40 60

PROFILE
MEDIAN LEFT TURN

PROFILE
US 50 / 63 MEDIAN ℄

DETAIL A (NOT TO SCALE)

PLAN SHEET
MEDIAN LEFT TURN LANE
SHEET 4 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

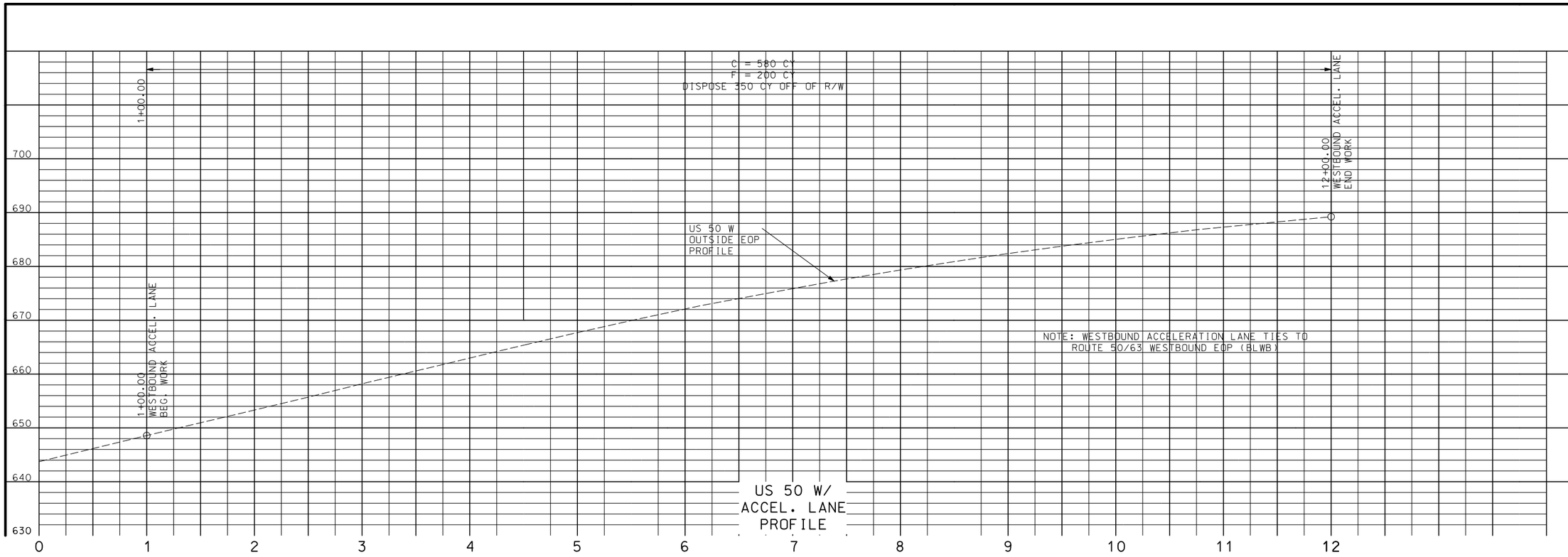
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 7
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

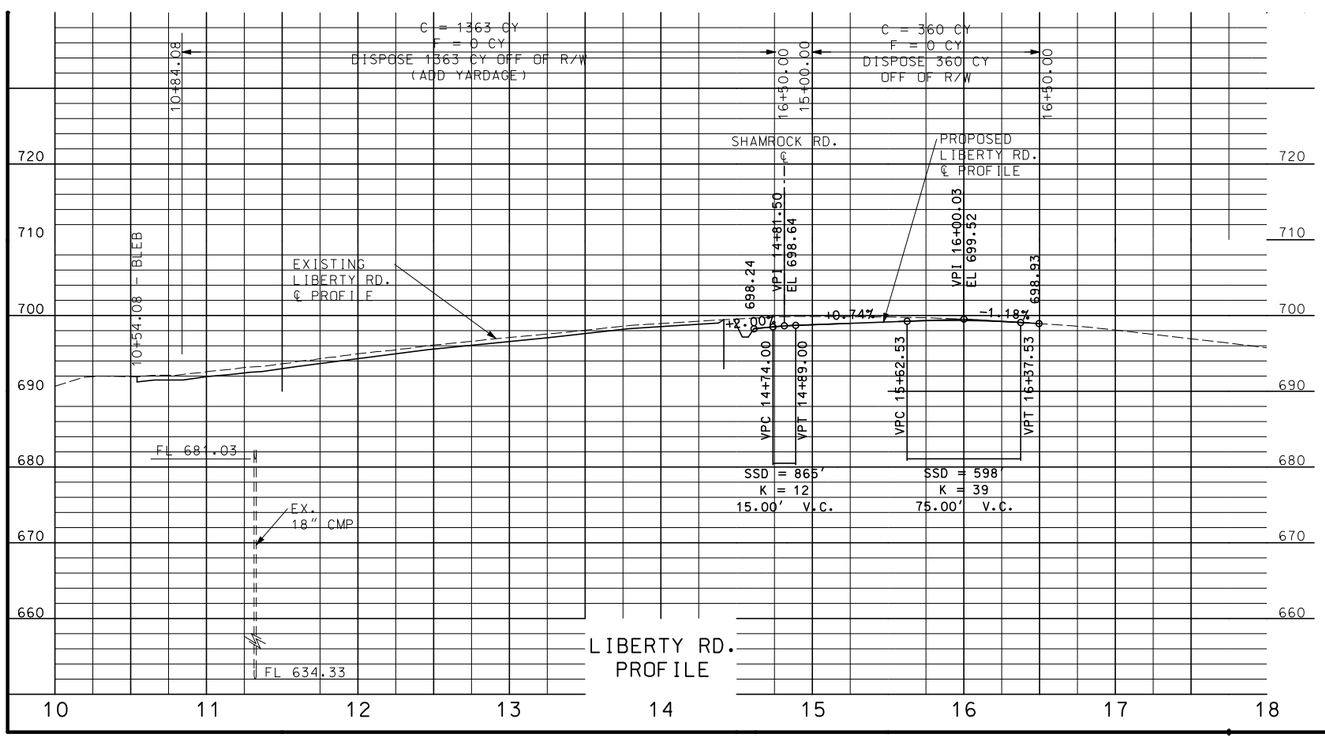
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

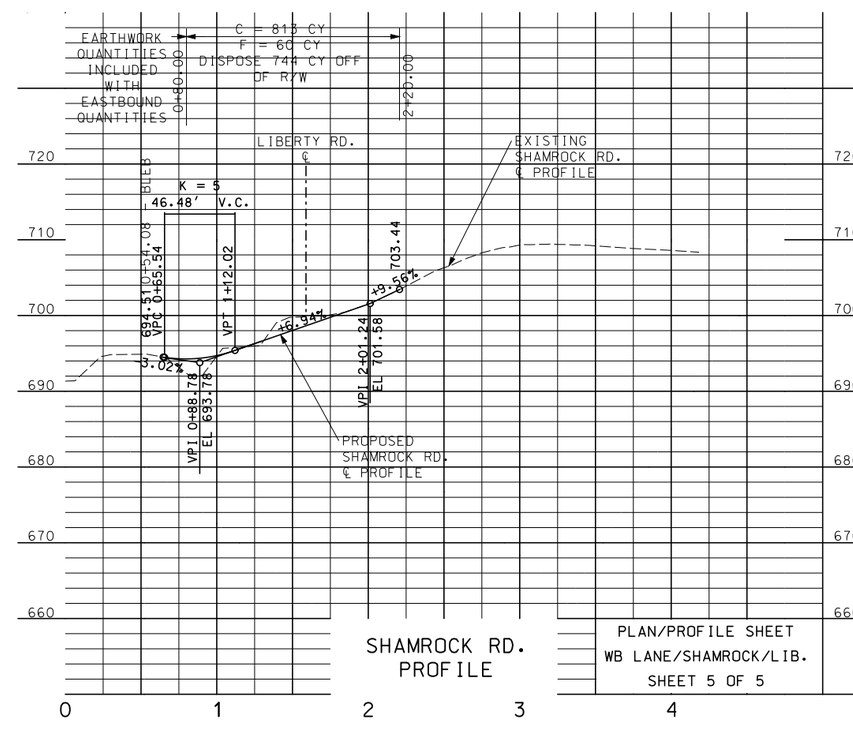
PLAN SHEET
MEDIAN LEFT TURN LANE
SHEET 4 OF 5



US 50 W/
ACCEL. LANE
PROFILE



LIBERTY RD.
PROFILE



SHAMROCK RD.
PROFILE

PLAN/PROFILE SHEET
WB LANE/SHAMROCK/LIB.
SHEET 5 OF 5

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 8
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

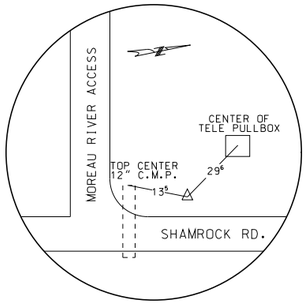
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PLAN/PROFILE SHEET
EASTBOUND LANES
SHEET 5 OF 5

REV.

W.P. #801

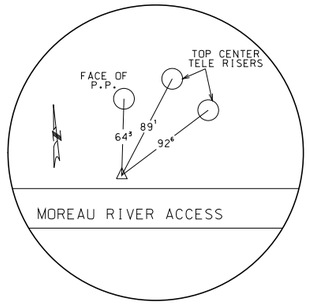
MOD. (GRND) COORDS.
E = 1756749.4379
N = 985680.4691
EL. = 690.02



5/8' REBAR W/CAP BURIED 0'-15' W/O W.E.P. SHAMROCK RD. 17' W/O N.E.P. MOREAU RIVER ACCESS

W.P. #802

MOD. (GRND) COORDS.
E = 1756061.3385
N = 985660.9374
EL. = 667.71



100d SPIKE BURIED 0'-3" W/O N.E.P. MOREAU RIVER ACCESS 700' W/O SHAMROCK RD.

WESTBOUND ACCELERATION LANE BASELINE

		MODIFIED STATE PLANE		STATE PLANE	
DESCRIPTION	STATION	NORTH	EAST	NORTH	EAST
BEGINNING OF BASELINE CHAIN	0+00.00	985657.86264	1755542.56051	985569.65416	1755385.45351
P.I.	11+33.97	985503.85508	1756666.02417	985415.66038	1756508.81663
END OF BASELINE CHAIN	12+00.00	985494.90119	1756731.44444	985406.70729	1756574.23105

LIBERTY RD. EXISTING CENTERLINE

		MODIFIED STATE PLANE		STATE PLANE	
DESCRIPTION	STATION	NORTH	EAST	NORTH	EAST
BEGINNING OF CENTERLINE CHAIN	10+00.00	985438.14033	1756747.58196	985349.95151	1756590.36712
P.C.	11+05.81	985333.31098	1756733.20964	985245.13154	1756575.99609
P.I.	11+69.72	985269.98995	1756724.52819	985181.81618	1756567.31542
P.T.	12+05.03	985263.32764	1756788.09338	985175.15446	1756630.87492
P.C.	18+81.30	985192.83345	1757460.67920	985104.66658	1757303.40055
P.I.	23+40.27	985144.99068	1757917.14761	985056.82809	1757759.82811
P.T. CURVE	27+76.26	984866.81647	1758282.21123	984778.67878	1758124.85906

ROUTE 50 CENTERLINE

		MODIFIED STATE PLANE		STATE PLANE	
DESCRIPTION	STATION	NORTH	EAST	NORTH	EAST
BEGINNING OF CENTERLINE CHAIN	253+62.00	986152.34182	1751538.31327	986064.08908	1751381.56462
END OF CENTERLINE CHAIN	330+01.84	985114.61127	1759107.34989	985026.45140	1758949.92387

EASTBOUND ACCELERATION LANE BASELINE

		MODIFIED STATE PLANE		STATE PLANE	
DESCRIPTION	STATION	NORTH	EAST	NORTH	EAST
BEGINNING OF BASELINE CHAIN	0+00.00	985517.04860	1755771.84070	985428.85272	1755614.71318
P.I.	10+11.55	985379.92730	1756774.05810	985291.74369	1756616.84089
END OF BASELINE CHAIN	33.13.07	985067.55090	1759054.27390	984979.39524	1758896.85263

SHAMROCK RD. CENTERLINE

		MODIFIED STATE PLANE		STATE PLANE	
DESCRIPTION	STATION	NORTH	EAST	NORTH	EAST
BEGINNING OF CENTERLINE CHAIN	0+00.00	985391.69297	1757086.36137	985303.50831	1756929.11621
P.I.	2+31.77	985162.43276	1757052.32331	985074.26861	1756895.08120
P.C.	2+63.46	985131.06455	1757047.84291	985042.90321	1756890.60120
P.I.	2+90.63	985104.17130	1757044.00168	985016.01237	1756886.76031
P.T.	3+17.48	985079.18859	1757033.33085	984991.03189	1756876.09044
END OF CENTERLINE CHAIN	4+18.37	984986.54271	1756993.39826	984898.39430	1756836.16142

MEDIAN OFFSET LEFT CENTERLINE

		MODIFIED STATE PLANE		STATE PLANE	
DESCRIPTION	STATION	NORTH	EAST	NORTH	EAST
BEGINNING OF CENTERLINE CHAIN	0+00.00	985438.84394	1756567.31047	985350.65506	1756410.11177
P.C.	0+10.00	985437.52425	1756577.22301	985349.33548	1756420.02342
P.I.	0+89.52	985427.02962	1756656.05104	985338.84179	1756498.84439
P.T.	1+67.00	985447.48474	1756732.89884	985359.29508	1756575.68532
P.C.	1+67.00	985447.48474	1756732.89884	985359.29508	1756575.68532
P.I.	1+85.71	985452.29713	1756750.97853	985364.10704	1756593.76339
P.T. CURVE	2+02.00	985469.25881	1756758.87383	985381.06720	1756601.65798

PROJECTION FACTOR = 1.0000895

REFERENCE POINTS & COORDINATE POINTS
SHEET 1 OF 1

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016
ROUTE 50 | STATE MO
DISTRICT CD | SHEET NO. 9
COUNTY COLE
JOB NO. J5P3056
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

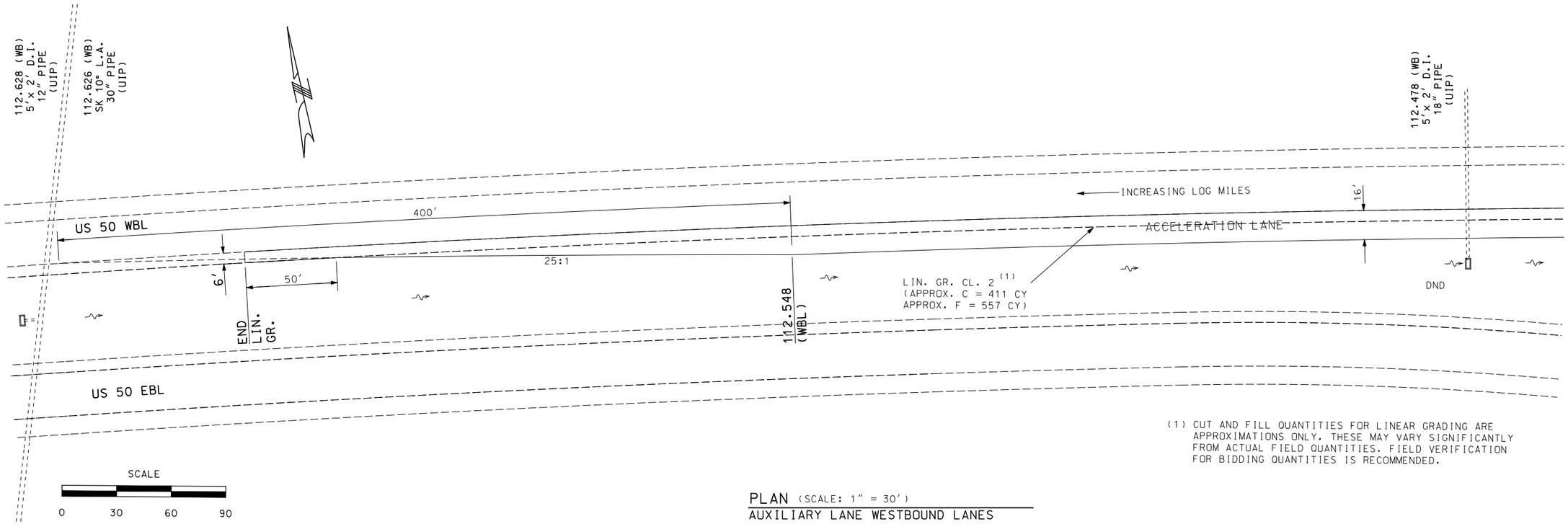
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

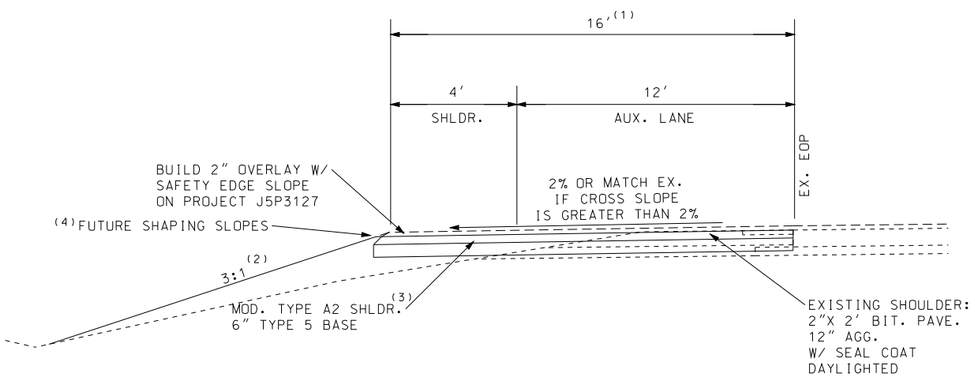
REFERENCE POINTS
COORDINATE POINTS
SHHET 1 OF 1

REV.



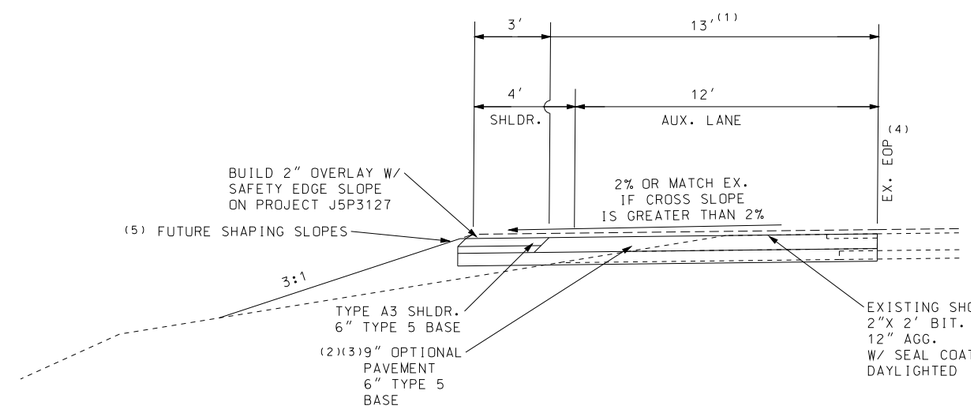
(1) CUT AND FILL QUANTITIES FOR LINEAR GRADING ARE APPROXIMATIONS ONLY. THESE MAY VARY SIGNIFICANTLY FROM ACTUAL FIELD QUANTITIES. FIELD VERIFICATION FOR BIDDING QUANTITIES IS RECOMMENDED.

PLAN (SCALE: 1" = 30')
AUXILIARY LANE WESTBOUND LANES



TYPICAL SECTION (NOT TO SCALE)
AUXILIARY LANE WESTBOUND LANES

(1) WIDTH VARIES FROM 189' EAST OF L.M. 112.356 TO L.M. 112.356 - SEE SPECIAL SHEET
WIDTH VARIES FROM L.M. 112.548 TO 300' WEST OF L.M. 112.548 - SEE SPECIAL SHEET
(2) MAY ADJUST TO MAXIMUM SLOPE OF 2:1 FOR A SHORT DISTANCE TO AVOID DISTURBING MEDIAN DROP INLET.
(3) CONSTRUCT ONLY THE 3-$\frac{3}{4}$" BASE ON THIS PROJECT. A 2" WEARING SURFACE SHALL BE PAID FOR ON THIS PROJECT, BUT BUILT ON PROJECT J5P3127.
(4) SHAPING SLOPES SHALL BE PAID FOR UNDER THE J5P3127 PROJECT.



(1) WIDTH VARIES FROM 165' EAST OF L.M. 149.519 TO L.M. 149.519 - SEE SPECIAL SHEET
WIDTH VARIES FROM L.M. 149.575 TO 56.5' EAST OF L.M. 149.575 - SEE SPECIAL SHEET
(2) REFER TO TYPICAL SECTION SHEETS FOR 9" OPTIONAL PAVEMENT MIX DESIGN
(3) CONSTRUCT THE BASE ONLY FOR THIS PROJECT. A 2" WEARING SURFACE SHALL BE PAID FOR ON THIS PROJECT, BUT BUILT ON PROJECT J5P3127.
(4) ANY REMNANT OF A RUMBLESTRIP LEFT AFTER OBLITERATION OF EXISTING SHOULDER SHALL BE PATCHED SMOOTH. ASSOCIATED COSTS SHALL BE INCIDENTAL TO THE PROJECT.
(5) SHAPING SLOPES SHALL BE PAID FOR UNDER THE J5P3127 PROJECT.

TYPICAL SECTION (NOT TO SCALE)
AUXILIARY LANE EASTBOUND LANES

AUXILIARY LANE ADDITION
US 50 AT LISLETOWN INTERSECTION
SPECIAL SHEET
SHEET 1 OF 4

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	10
COUNTY	
COLE	
JOB NO.	
J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

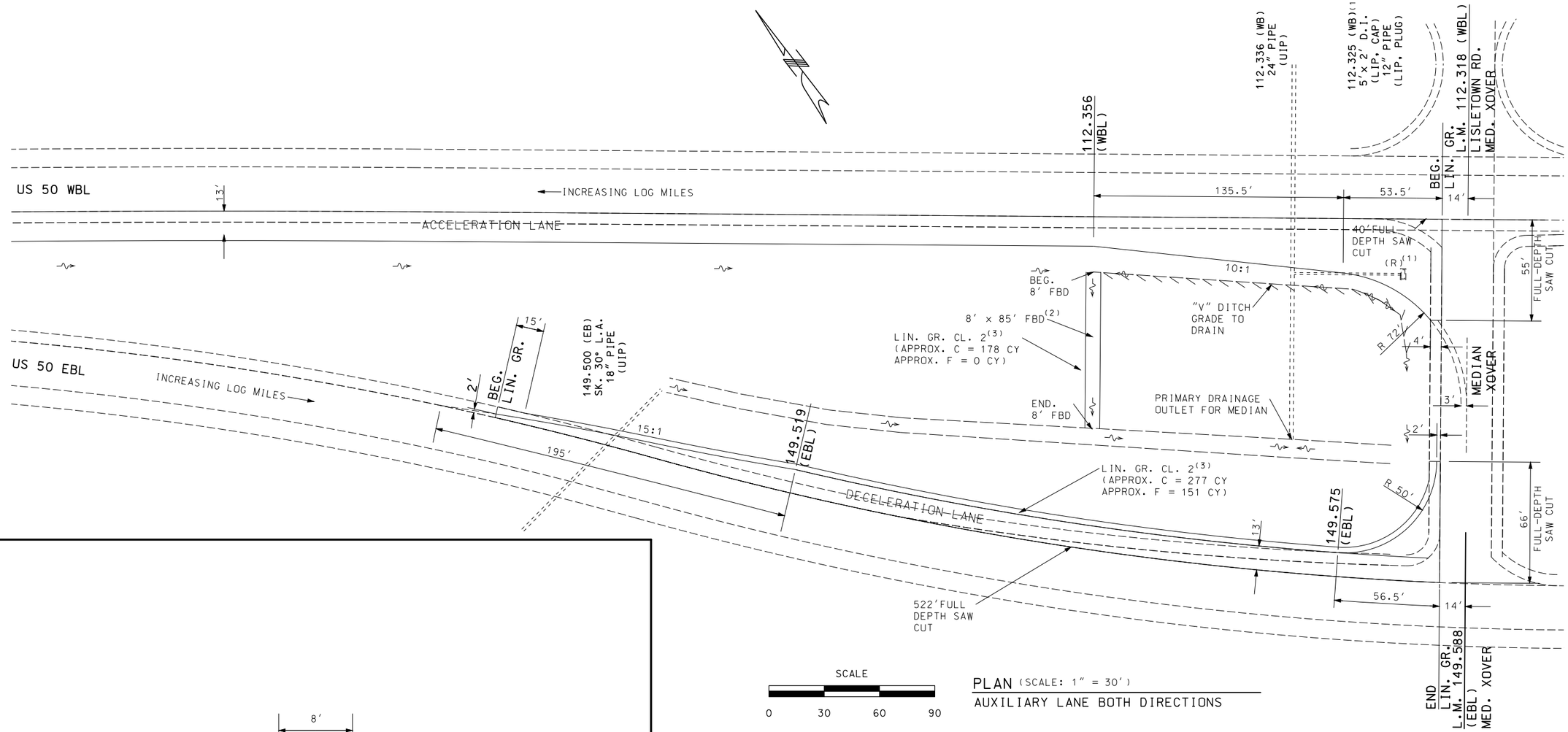
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

AUXILIARY LANE ADDITION
US 50 AT LISLETOWN RD.
INTERSECTION
SPECIAL SHEET
SHEET 1 OF 4

REV.

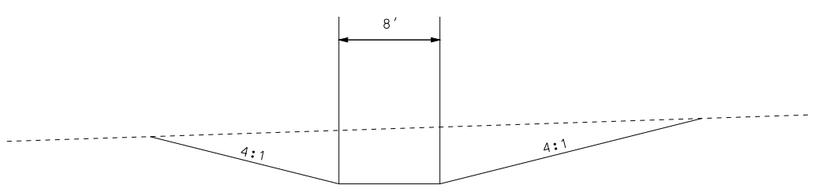


SCALE

0 30 60 90

PLAN (SCALE: 1" = 30')

AUXILIARY LANE BOTH DIRECTIONS



TYPICAL SECTION (NOT TO SCALE)

8' x 85' FLAT BOTTOM DITCH ACROSS MEDIAN

NOTES:

(1) REMOVE FRAME AND GRATE BEFORE CAPPING DROP INLET. CONTRACTOR SHALL RETAIN THE FRAME AND GRATE.

(2) LOCATION OF THE END OF DITCH MAY BE ADJUSTED TO OBTAIN A MIN. 1.0% FLOWLINE GRADE.

(3) CUT AND FILL QUANTITIES FOR LINEAR GRADING ARE APPROXIMATIONS ONLY. THESE MAY VARY SIGNIFICANTLY FROM ACTUAL FIELD QUANTITIES. FIELD VERIFICATION FOR BIDDING QUANTITIES IS RECOMMENDED.

AUXILIARY LANE ADDITION
US 50 AT LISLETOWN INTERSECTION
SPECIAL SHEET
SHEET 2 OF 4

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	11
COUNTY	
COLE	
JOB NO.	
J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

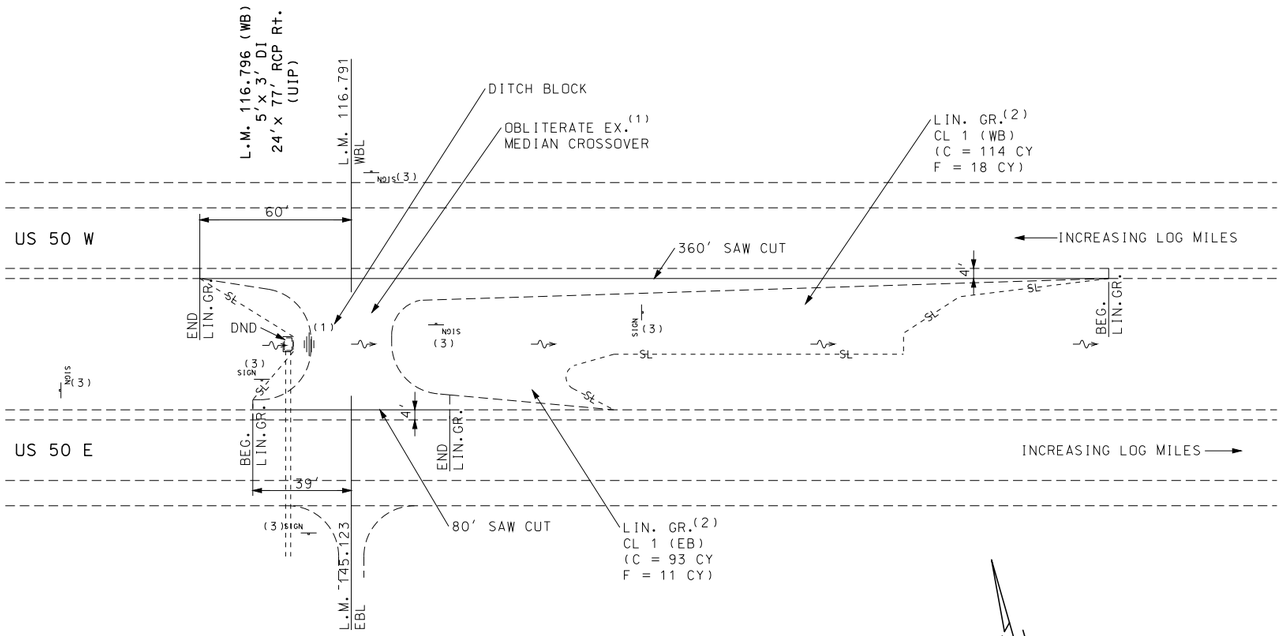
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

AUXILIARY LANE ADDITION
US 50 AT LISLETOWN RD.
INTERSECTION
SPECIAL SHEET
SHEET 2 OF 4

REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



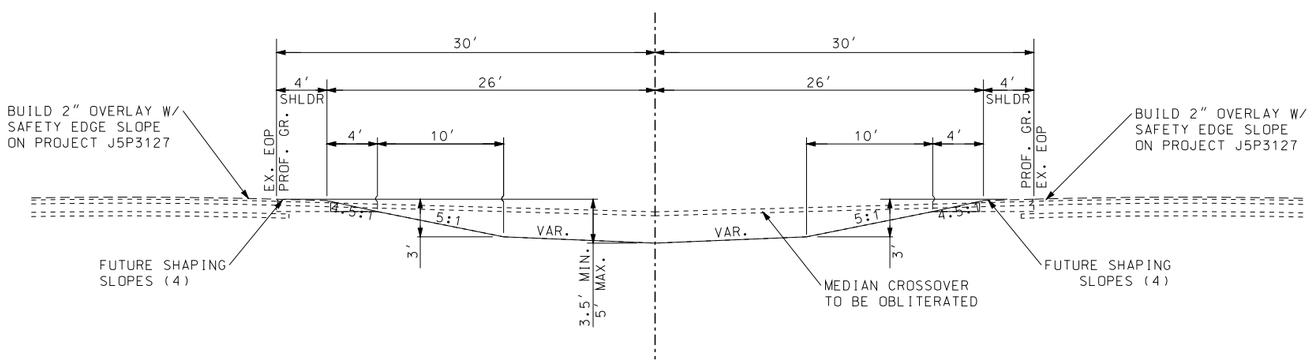
SCALE

0 30 60 90

PLAN
MEDIAN CROSSOVER REMOVAL

NOTES:

(1) GRADE PER STANDARD PLAN 731.10 FOR 60' MEDIAN RELIEF ON GRADE. DISPOSE OF EXCESS MATERIAL OFF OF RIGHT OF WAY.
(2) CUT AND FILL QUANTITIES FOR LINEAR GRADING ARE APPROXIMATIONS ONLY. THESE MAY VARY SIGNIFICANTLY FROM ACTUAL FIELD QUANTITIES. FIELD VERIFICATION FOR BIDDING QUANTITIES IS RECOMMENDED.
(3) REMOVAL OF SIGN SHALL BE PAID AS REMOVAL OF IMPROVEMENT ON PROJECT J5P3127.
(4) SHAPING SLOPES SHALL BE PAID FOR UNDER THE J5P3127 PROJECT.



TYPICAL SECTION (NOT TO SCALE)
60' MEDIAN

MEDIAN CROSSOVER REMOVAL
L.M. 116.791 WB
L.M. 145.123 EB
SPECIAL SHEET
SHEET 3 OF 4

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 12
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

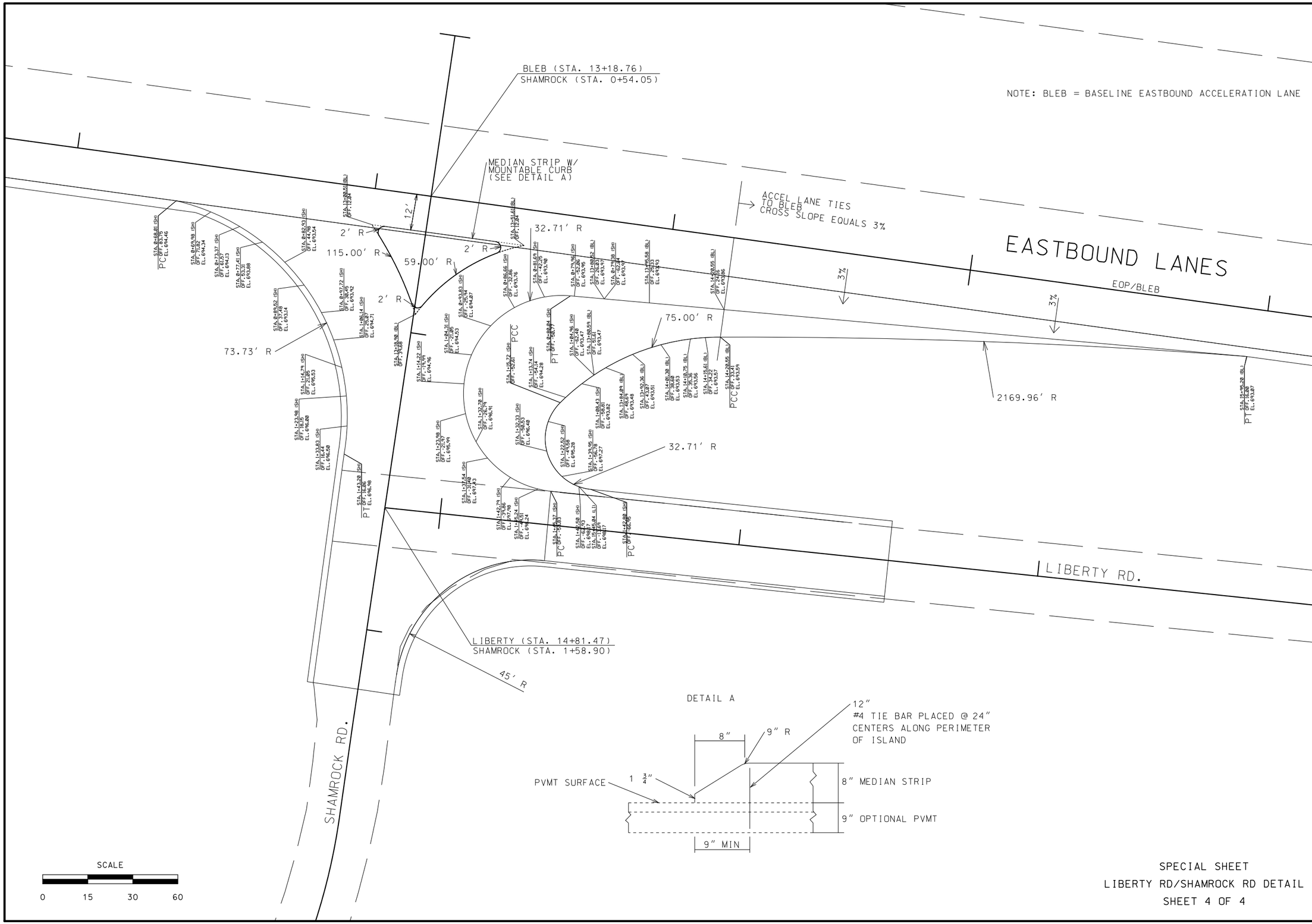
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MEDIAN CROSSOVER REMOVAL
SPECIAL SHEET
SHEET 3 OF 4

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



SPECIAL SHEET
LIBERTY RD/SHAMROCK RD DETAIL
SHEET 4 OF 4

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/3/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	13
COUNTY	COLE
JOB NO.	J5P3056
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SHEET
LIBERTY RD/SHAMROCK RD DETAIL
SHEET 4 OF 4

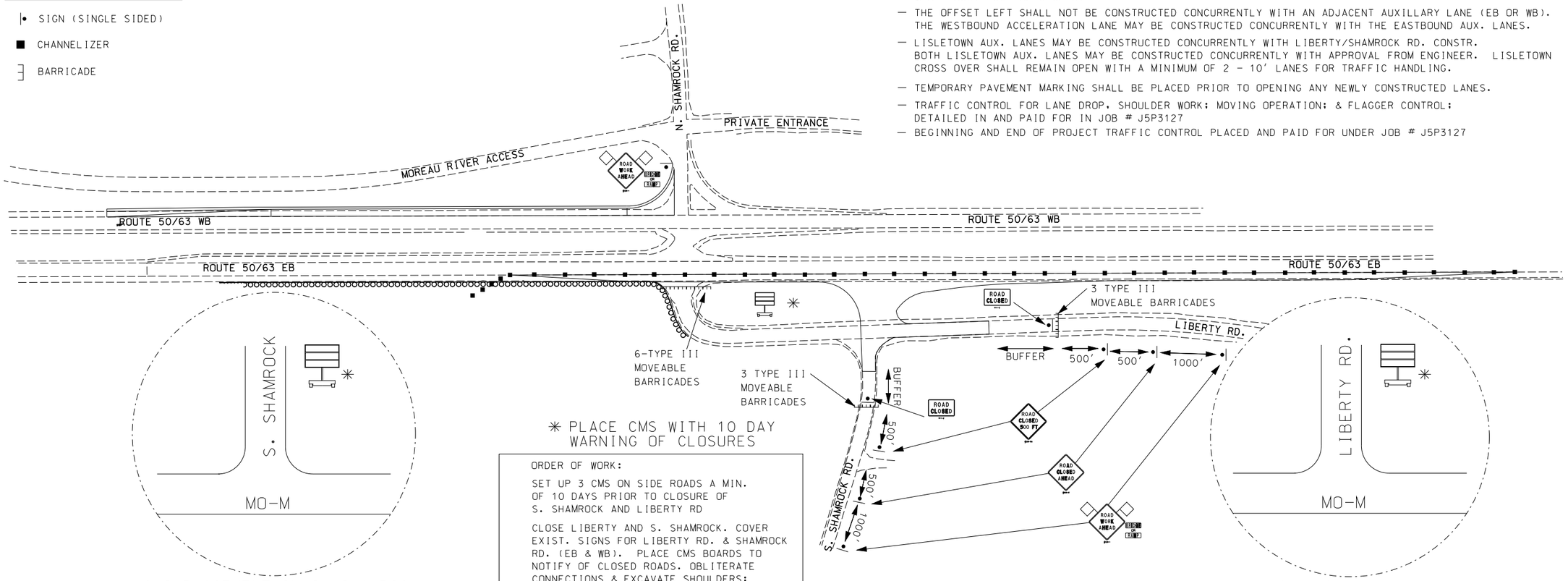
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE

NOTES:
- ALL WORK OCCURRING ADJACENT TO THE TRAVEL LANES SHALL BE CONDUCTED WITH A LANE DROP. DURING NON-WORKING HOURS, THE CONTRACTOR SHALL HAVE EDGE DROP OFF TREATMENT IN PLACE & ALL ROUTE 50 LANES OPEN.
- THE OFFSET LEFT SHALL NOT BE CONSTRUCTED CONCURRENTLY WITH AN ADJACENT AUXILLARY LANE (EB OR WB). THE WESTBOUND ACCELERATION LANE MAY BE CONSTRUCTED CONCURRENTLY WITH THE EASTBOUND AUX. LANES.
- LISLETOWN AUX. LANES MAY BE CONSTRUCTED CONCURRENTLY WITH LIBERTY/SHAMROCK RD. CONSTR. BOTH LISLETOWN AUX. LANES MAY BE CONSTRUCTED CONCURRENTLY WITH APPROVAL FROM ENGINEER. LISLETOWN CROSS OVER SHALL REMAIN OPEN WITH A MINIMUM OF 2 - 10' LANES FOR TRAFFIC HANDLING.
- TEMPORARY PAVEMENT MARKING SHALL BE PLACED PRIOR TO OPENING ANY NEWLY CONSTRUCTED LANES.
- TRAFFIC CONTROL FOR LANE DROP, SHOULDER WORK; MOVING OPERATION; & FLAGGER CONTROL; DETAILED IN AND PAID FOR IN JOB # J5P3127
- BEGINNING AND END OF PROJECT TRAFFIC CONTROL PLACED AND PAID FOR UNDER JOB # J5P3127



✳ PLACE CMS WITH 10 DAY WARNING OF CLOSURES

ORDER OF WORK:

SET UP 3 CMS ON SIDE ROADS A MIN. OF 10 DAYS PRIOR TO CLOSURE OF S. SHAMROCK AND LIBERTY RD

CLOSE LIBERTY AND S. SHAMROCK. COVER EXIST. SIGNS FOR LIBERTY RD. & SHAMROCK RD. (EB & WB). PLACE CMS BOARDS TO NOTIFY OF CLOSED ROADS. OBLITERATE CONNECTIONS & EXCAVATE SHOULDERS; CONSTRUCT NEW CONNECTION & AUX. LANES.

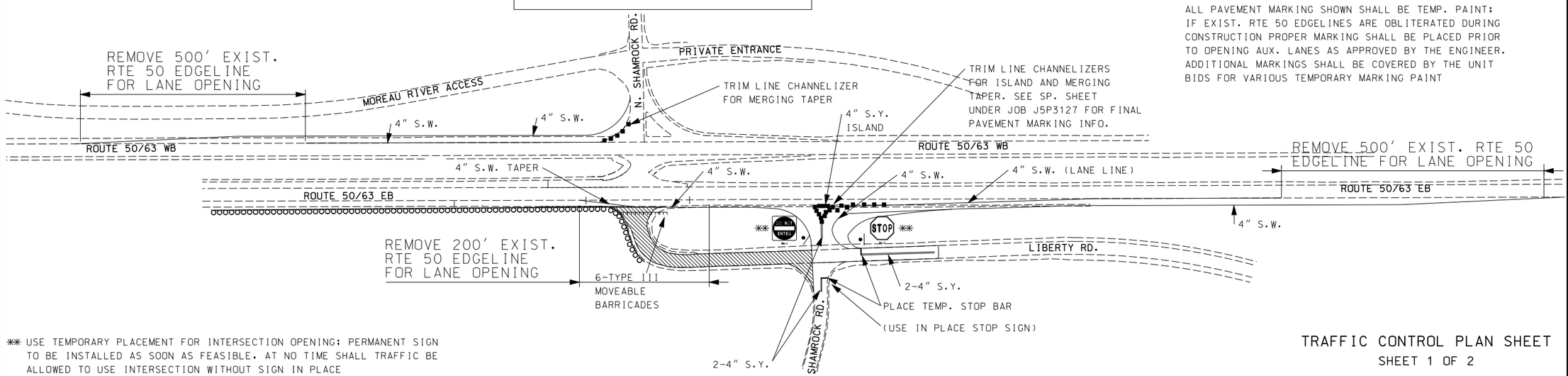
PLACE TEMPORARY PAVEMENT MARKINGS & CHANNELIZERS OPEN S. SHAMROCK, LIBERTY RD, & AUX. LANES TO TRAFFIC ON BASE MATERIAL LIFTS. FINAL LIFT SHALL BE PLACED CONCURRENTLY W/ RTE 50 SURFACING.

NOT TO SCALE

WB ACCEL. LANE SHOWN FOR INFORMATIONAL PURPOSES, CONTRACTOR MAY OPT TO CONSTRUCT WB ACCELERATION LANE AT DIFFERENT STAGE OF THE PROJECT.

ALL PAVEMENT MARKING SHOWN SHALL BE TEMP. PAINT; IF EXIST. RTE 50 EDGELINES ARE OBLITERATED DURING CONSTRUCTION PROPER MARKING SHALL BE PLACED PRIOR TO OPENING AUX. LANES AS APPROVED BY THE ENGINEER. ADDITIONAL MARKINGS SHALL BE COVERED BY THE UNIT BIDS FOR VARIOUS TEMPORARY MARKING PAINT

EXCAVATE EXIST. ROADBED (PVMT. ONLY SHOWN)



✳✳ USE TEMPORARY PLACEMENT FOR INTERSECTION OPENING; PERMANENT SIGN TO BE INSTALLED AS SOON AS FEASIBLE, AT NO TIME SHALL TRAFFIC BE ALLOWED TO USE INTERSECTION WITHOUT SIGN IN PLACE

TRAFFIC CONTROL PLAN SHEET
SHEET 1 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 14
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

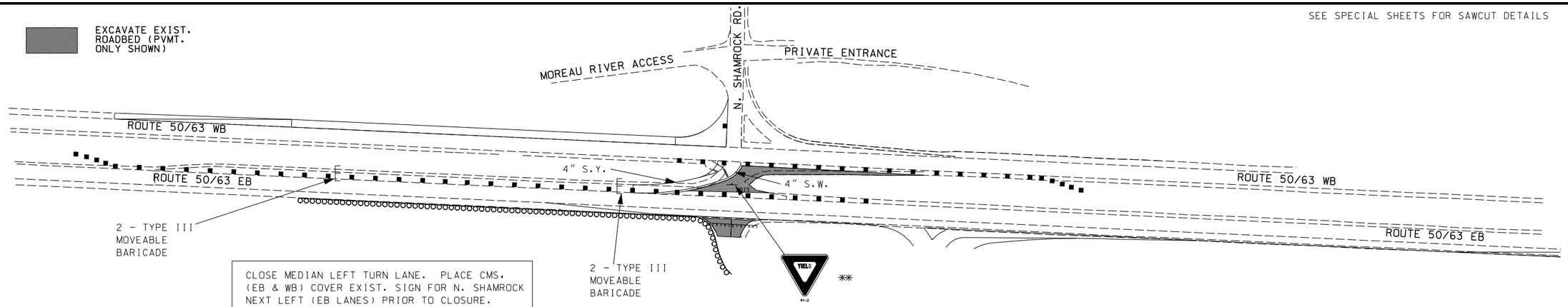
TRAFFIC CONTROL SHEET
LIBERTY RD./SHAMROCK INTERSECTION
SHHET 1 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

SEE SPECIAL SHEETS FOR SAWCUT DETAILS

EXCAVATE EXIST. ROADBED (PVMT. ONLY SHOWN)



CLOSE MEDIAN LEFT TURN LANE. PLACE CMS. (EB & WB) COVER EXIST. SIGN FOR N. SHAMROCK NEXT LEFT (EB LANES) PRIOR TO CLOSURE. OBLITERATE EXISTING MEDIAN CROSSING; CONST. NEW OFFSET LEFT TURN LANE.

PLACE TEMPORARY PAVEMENT MARKINGS; OPEN MEDIAN OFFSET LEFT, TRAFFIC ON BASE MATERIAL LIFTS. FINAL LIFT SHALL BE PLACED CONCURRENTLY W/ RTE 50 SURFACING.

** USE TEMPORARY PLACEMENT FOR INTERSECTION OPENING; PERMANENT SIGN TO BE INSTALLED AS SOON AS FEASIBLE, AT NO TIME SHALL TRAFFIC BE ALLOWED TO USE INTERSECTION WITHOUT SIGN IN PLACE

NOT TO SCALE

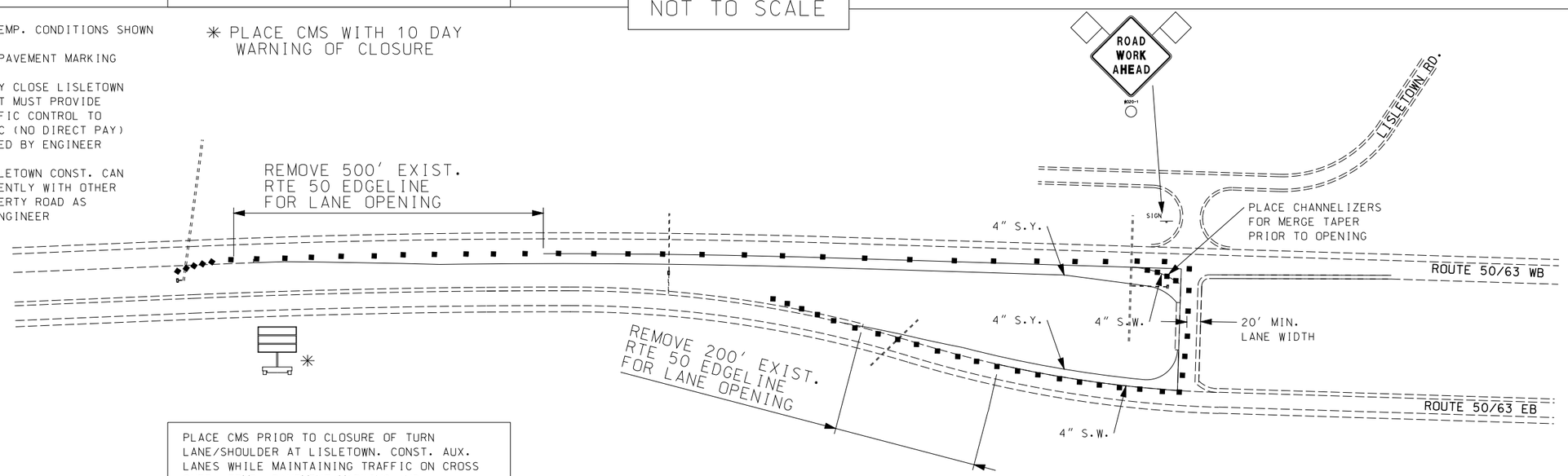
CLOSURE AND TEMP. CONDITIONS SHOWN

LEAVE EXIST. PAVEMENT MARKING

CONTRACTOR MAY CLOSE LISLETOWN CROSSOVER, BUT MUST PROVIDE ADEQUATE TRAFFIC CONTROL TO DETOUR TRAFFIC (NO DIRECT PAY) AND AS APPROVED BY ENGINEER

TIMING OF LISLETOWN CONST. CAN OCCUR CONCURRENTLY WITH OTHER CONST. AT LIBERTY ROAD AS APPROVED BY ENGINEER

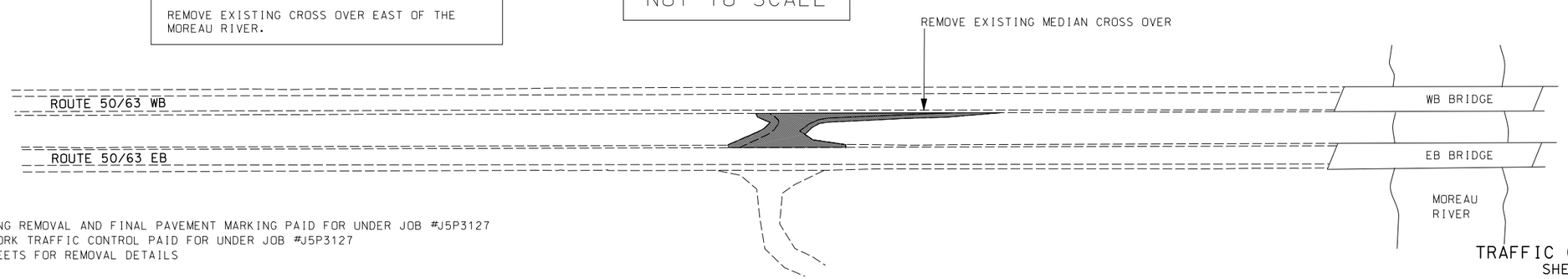
* PLACE CMS WITH 10 DAY WARNING OF CLOSURE



PLACE CMS PRIOR TO CLOSURE OF TURN LANE/SHOULDER AT LISLETOWN. CONST. AUX. LANES WHILE MAINTAINING TRAFFIC ON CROSS OVER. TEMP. PAVEMENT MARKING AND CHANNELIZERS FOR MERGING TAPER TO BE PLACED PRIOR TO OPENING. FINAL LIFT SHALL BE PLACED CONCURRENTLY WITH RTE 50 SURFACING

REMOVE EXISTING CROSS OVER EAST OF THE MOREAU RIVER.

NOT TO SCALE



PAVEMENT MARKING REMOVAL AND FINAL PAVEMENT MARKING PAID FOR UNDER JOB #J5P3127
USE SHOULDER WORK TRAFFIC CONTROL PAID FOR UNDER JOB #J5P3127
SEE SPECIAL SHEETS FOR REMOVAL DETAILS

TRAFFIC CONTROL SHEET
SHEET 2 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/3/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	15
COUNTY	COLE
JOB NO.	J5P3056
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

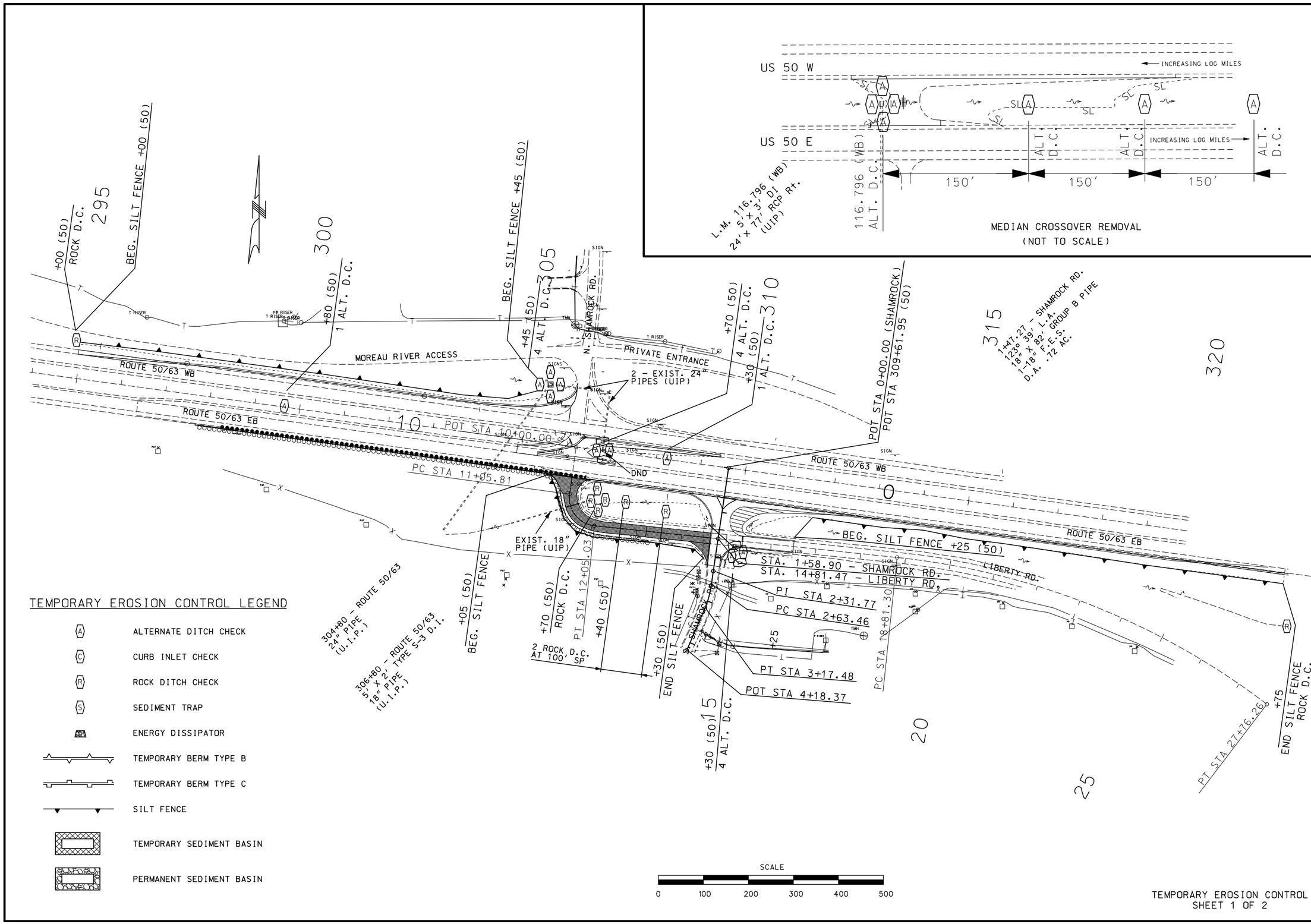
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET
LISLETOWN RD.
SHEET 2 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



TEMPORARY EROSION CONTROL LEGEND

- ALTERNATE DITCH CHECK
- CURB INLET CHECK
- ROCK DITCH CHECK
- SEDIMENT TRAP
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE
- TEMPORARY SEDIMENT BASIN
- PERMANENT SEDIMENT BASIN

TEMPORARY EROSION CONTROL
SHEET 1 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	16
COUNTY	
COLE	
JOB NO.	
J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

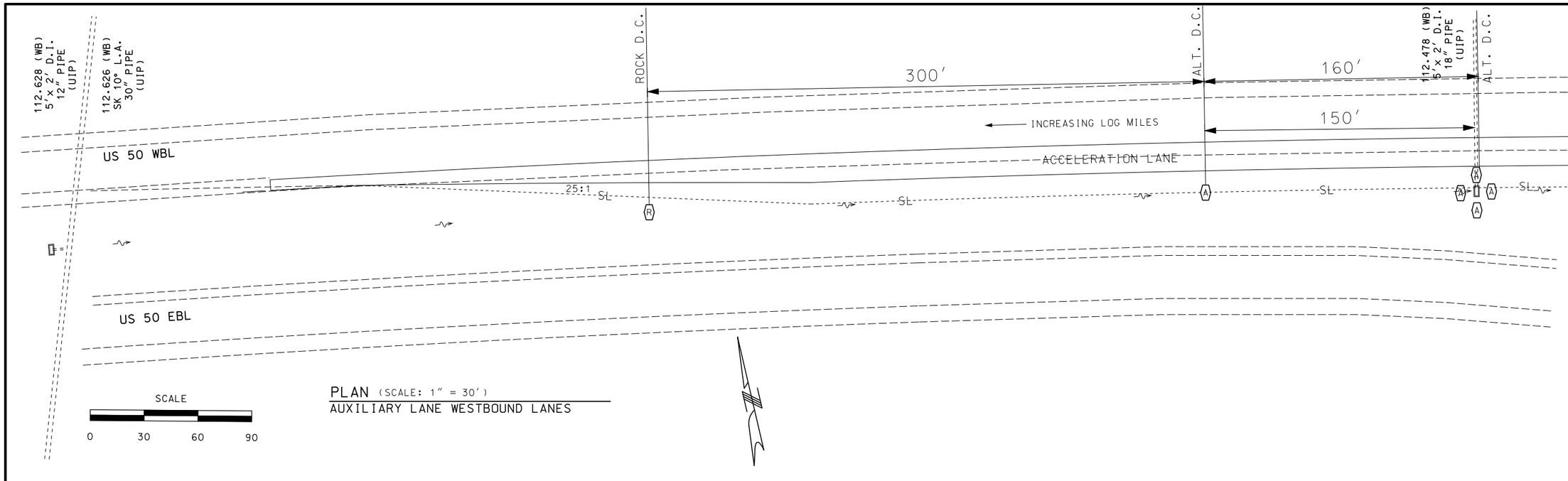
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

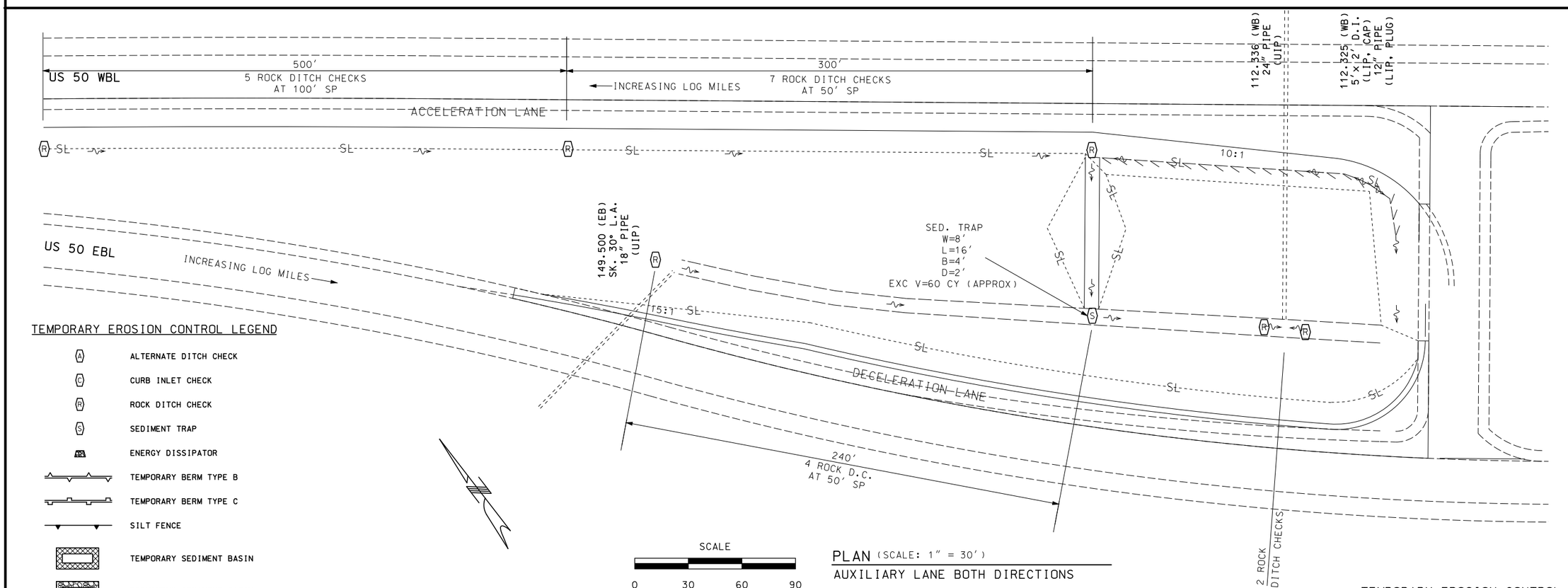
TEMPORARY EROSION CONTROL
SHEET 1 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



PLAN (SCALE: 1" = 30')
AUXILIARY LANE WESTBOUND LANES



PLAN (SCALE: 1" = 30')
AUXILIARY LANE BOTH DIRECTIONS

TEMPORARY EROSION CONTROL LEGEND

- ALTERNATE DITCH CHECK
- CURB INLET CHECK
- ROCK DITCH CHECK
- SEDIMENT TRAP
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE
- TEMPORARY SEDIMENT BASIN
- PERMANENT SEDIMENT BASIN

TEMPORARY EROSION CONTROL
SHEET 2 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 17
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

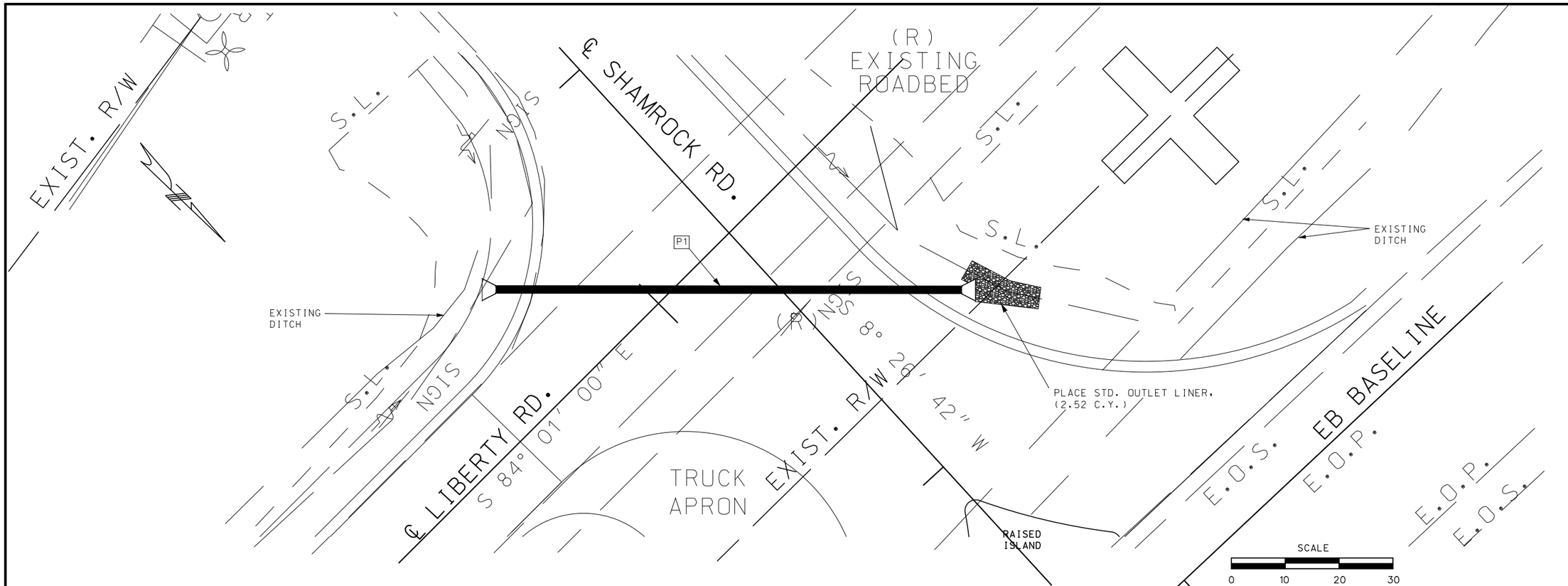
DATE	DESCRIPTION

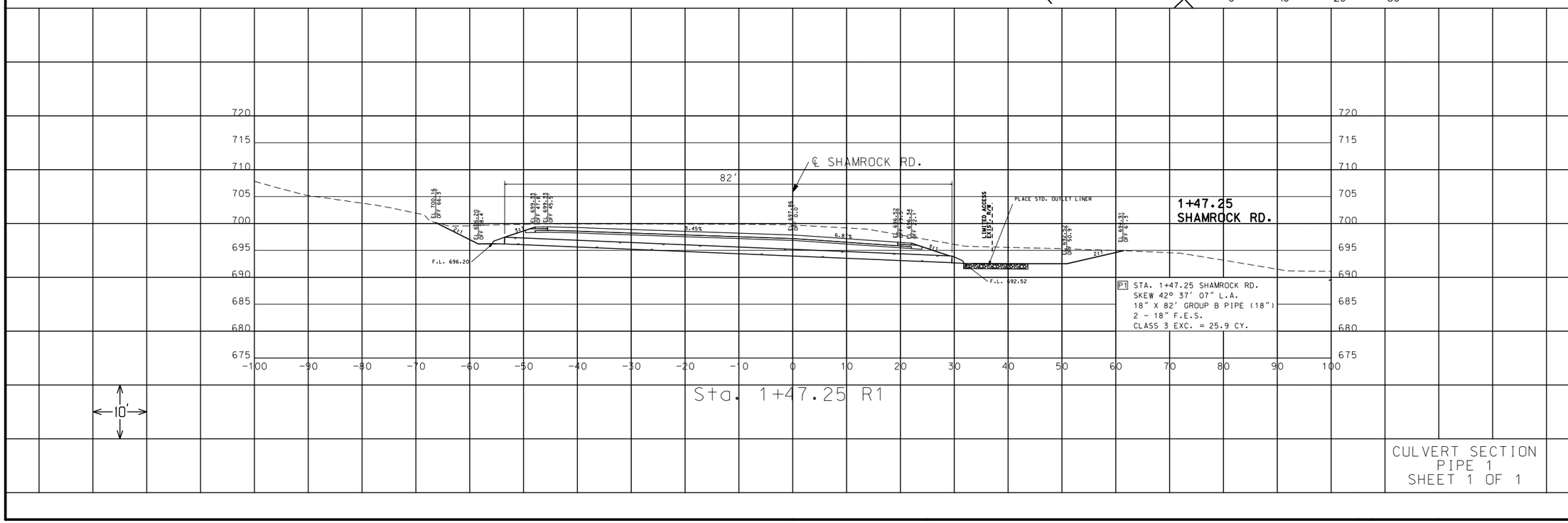
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

AUXILIARY LANE ADDITION
US 50 AT LISLETOWN RD.
INTERSECTION
EROSION CONTROL SHEET
SHEET 2 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.





CULVERT SECTION
PIPE 1
SHEET 1 OF 1

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 18
COUNTY COLE	
JOB NO. J5P3056	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PIPE 1
CULVERT SECTION SHEET
SHEET 1 OF 1

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY
COLE COUNTY
SEC 23, 25, 26, 29, 30 &32
44-11

DESIGN DESIGNATION
A.A.D.T. - 2017 = 18,240
A.A.D.T. - 2037 = 19,370
T = 10%
V = 65 M.P.H.

FUNCTIONAL CLASSIFICATION - FREEWAY

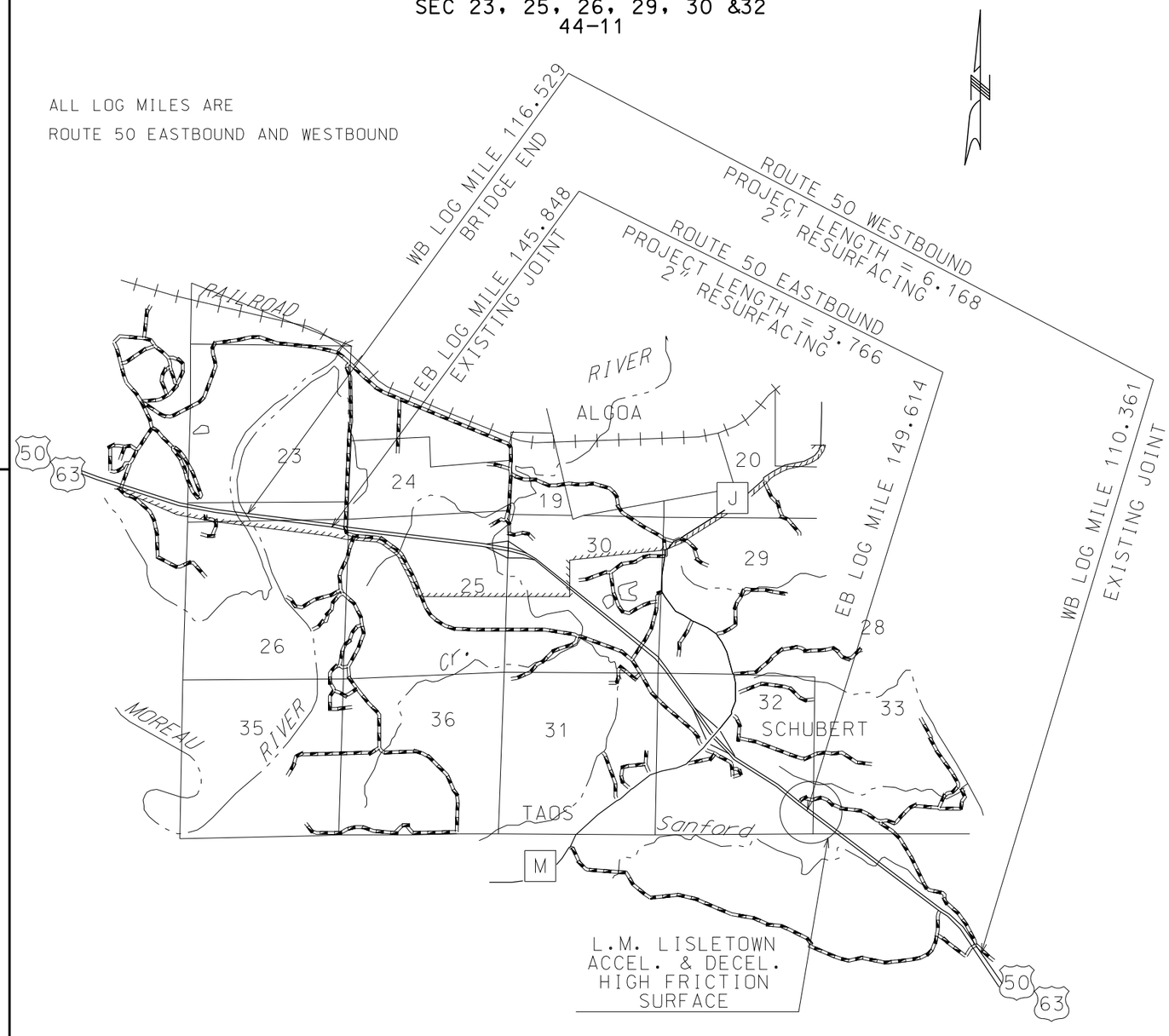
NO NEW RIGHT OF WAY REQUIRED

CONVENTIONAL SYMBOLS
(USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	—FO—	—FO—
OVERHEAD TELEPHONE		
UNDERGROUND TELEPHONE	—T—	—T—
OVERHEAD POWER		
UNDERGROUND POWER	—P—	—P—
GAS	—G—	—G—
WATER	—W—	—W—
MANHOLE	SAN	
FIRE HYDRANT	HYD	
WATER VALVE	WV	
WATER METER	WM	
DROP INLET	DI	
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN	
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	PED	
FENCE		
CHAIN LINK	—V—	
WOVEN WIRE	—X—	
GATE POST		
BENCHMARK	BM	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

ALL LOG MILES ARE
ROUTE 50 EASTBOUND AND WESTBOUND



INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (6 SHEETS)	2
QUANTITIES (QU) (12 SHEETS)	3
SPECIAL SHEETS (SS)	4-9
TRAFFIC CONTROL SHEETS (TC)	10-17
SIGNING (SN)	18-23
PAVEMENT MARKING (PM)	24-25

WESTBOUND LENGTH OF PROJECT

BEGINNING OF PROJECT	LOG MILE:	110.361
END OF PROJECT	LOG MILE:	116.529
APPARENT LENGTH		6.168 MILES
TOTAL EXCEPTIONS		0 MILES
NET LENGTH OF PROJECT		6.168 MILES
STATE LENGTH		6.168 MILES

EASTBOUND LENGTH OF PROJECT

BEGINNING OF PROJECT	LOG MILE:	145.848
END OF PROJECT	LOG MILE:	149.614
APPARENT LENGTH		3.766 MILES
TOTAL EXCEPTIONS		0 MILES
NET LENGTH OF PROJECT		3.766 MILES
STATE LENGTH		3.766 MILES

TOTAL LENGTH OF PROJECT

TOTAL CORRECTIONS	0	FEET
NET LENGTH OF PROJECT	52451.52	FEET
STATE LENGTH	9.934	MILES

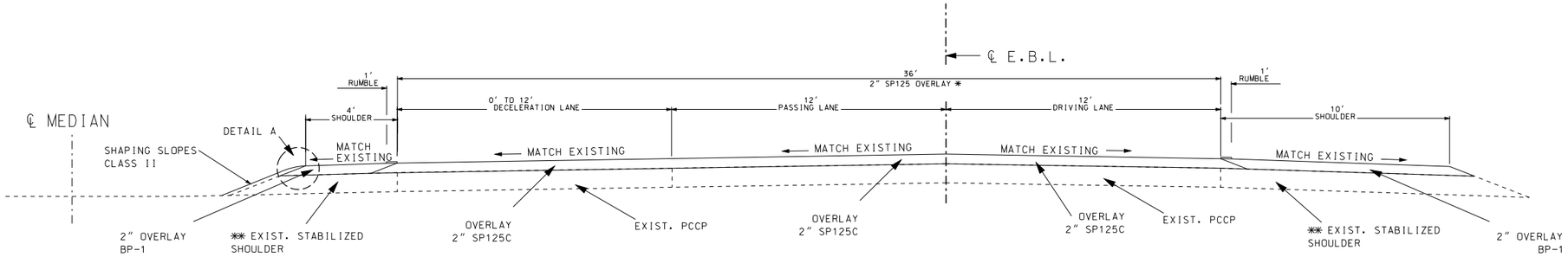
STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 1
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



SECTION ON TANGENT

ROUTE 50 EASTBOUND LANES

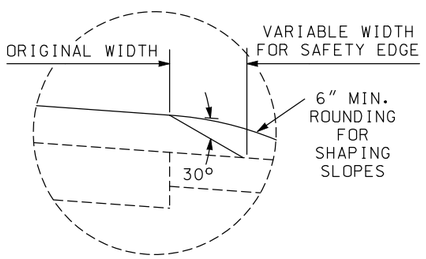
LM 145.848 – LM 146.000 ✳

PAY LIMITS	
SP125C	36.167′
BP-1	14.061′

✳ – LM 145.848 TO LM 145.868 – TAPER FROM 0′ TO 12′ DECEL. LANE.

LM 146.000 END PAY FOR RESURFACING, OFFSET LEFT PAID FOR UNDER PROJECT J5P3056

✳✳ – EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS

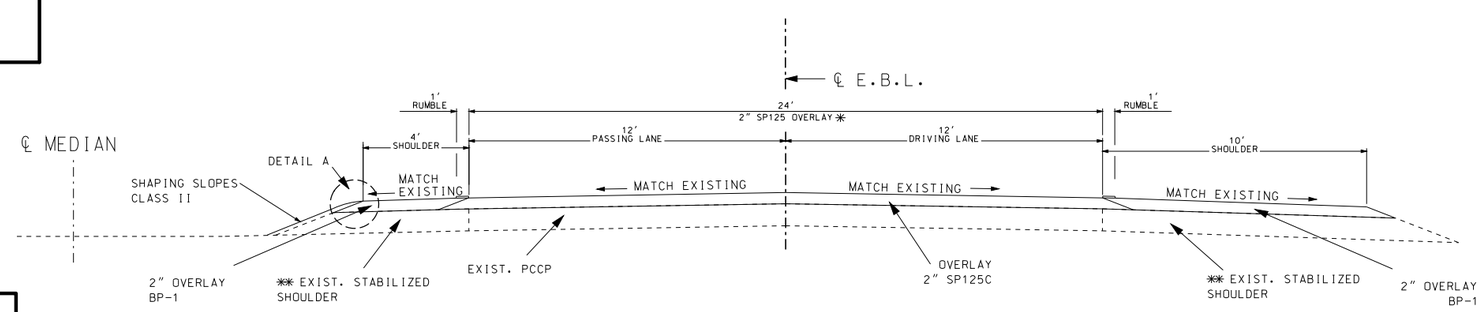


DETAIL A
SAFETY EDGE & FINAL GRADING

NOT TO SCALE

LOG MILES ARE APPROXIMATE. VERIFY ACTUAL LOCATIONS IN THE FIELD.

PAY LIMITS	
SP125C	24.167′
BP-1	14.061′



SECTION ON TANGENT

ROUTE 50 EASTBOUND LANES

LM 146.000 ✳ – LM 146.655

LM 146.895 – LM 147.265

LM 147.458 – LM 148.537

LM 148.652 – LM 149.077

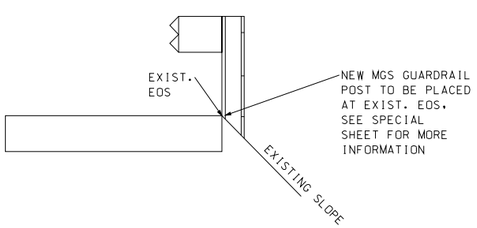
LM 149.221 – LM 149.614

✳ – LM 146.000 TO LM 146.010 – NO MEDIAN SHLDR PAID FOR UNDER PROJECT J5P3056

✳✳ – EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS

GUARDRAIL DETAIL

L.M. 145.857–146.009



TYPICAL SECTION
EASTBOUND LANES
SHEET 1 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

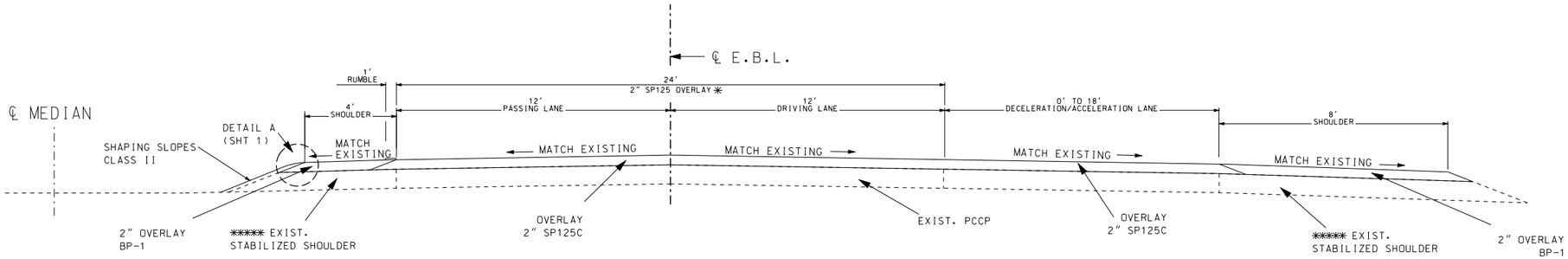
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.



SECTION ON TANGENT

ROUTE 50 EASTBOUND LANES

LM 146.655 - LM 146.804 ✳

LM 147.292 - LM 147.458 ✳✳

LM 148.537 - LM 148.597 ✳✳✳

LM 149.077 - LM 149.221 ✳✳✳✳

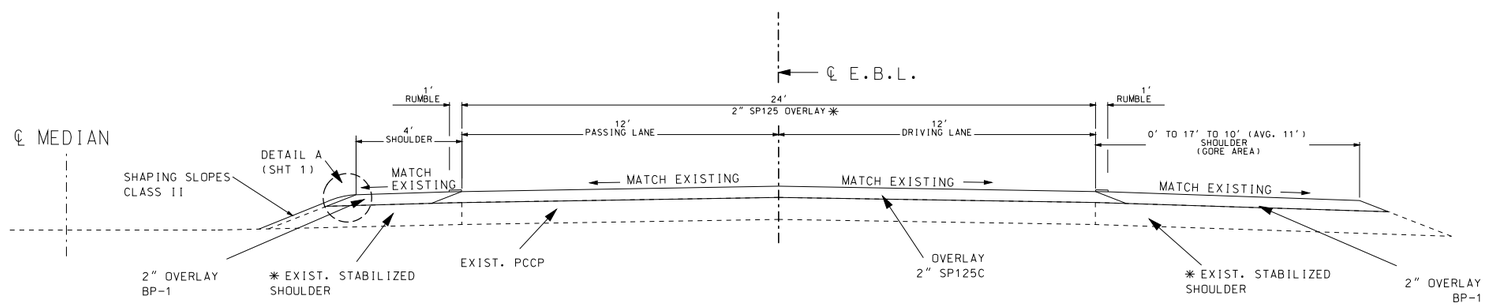
✳ - LM 146.655 TO LM 146.696 RT. - TRANS. FROM 0' WIDE DECEL. LANE TO 12' (MILITIA DR.)

✳✳ - LM 147.391 TO LM 147.458 RT. - TRANS. FROM 12' WIDE ACCEL. LANE TO 0' (MILITIA DR.)

✳✳✳ - TRANS. FROM 0' WIDE DECEL. LANE TO 18' RAMP LANE (ROUTE M/J)

✳✳✳✳ - LM 149.183 TO LM 149.221 RT. - TRANS. FROM 12' WIDE ACCEL. LANE TO 0' (ROUTE M/J)

✳✳✳✳✳ - EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS



SECTION ON TANGENT

ROUTE 50 EASTBOUND LANES

LM 146.817 - LM 146.895

LM 147.265 - LM 147.292

LM 148.608 - LM 148.652

LM 149.044 - LM 149.077

✳ - EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS

TYPICAL SECTION
EASTBOUND LANES
SHEET 2 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

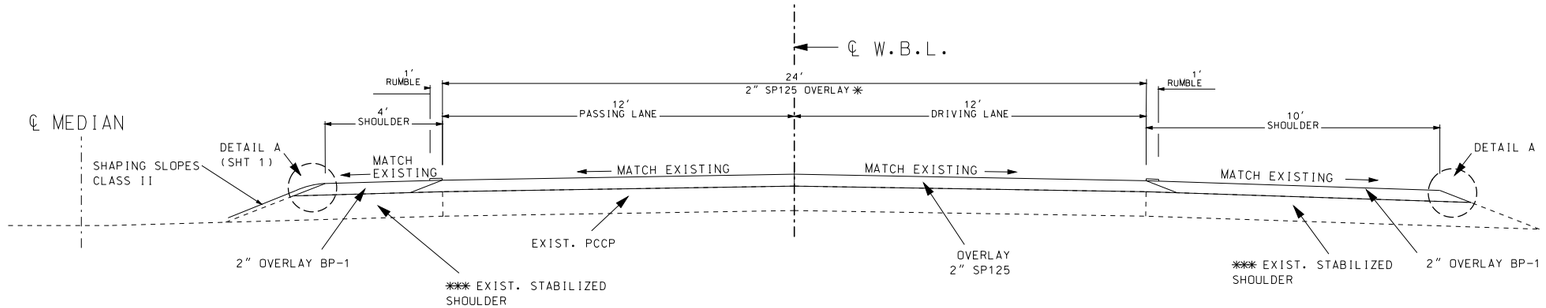
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.



SECTION ON TANGENT

ROUTE 50 WESTBOUND LANES

LM 110.361 - LM 110.725

LM 110.878 - LM 112.740 ✳✳

LM 112.850 - LM 113.278

LM 113.470 - LM 114.521

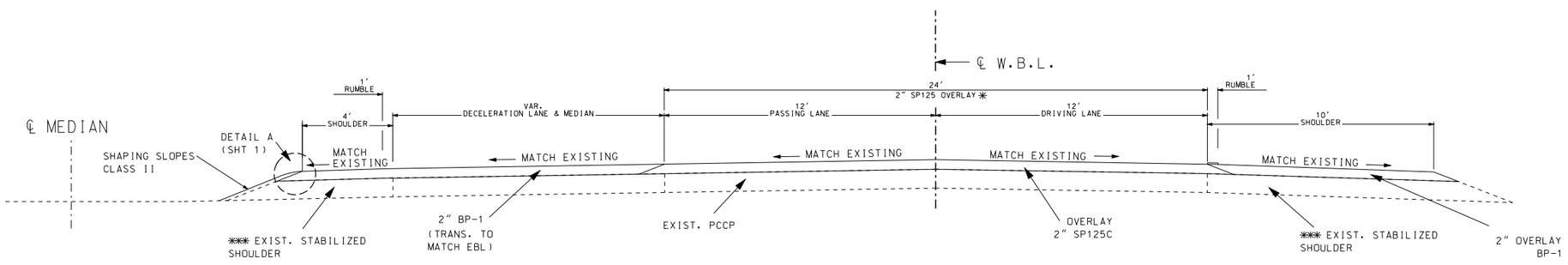
LM 114.656 - LM 115.112

LM 115.408 - LM 116.529

PAY LIMITS	
SP125C	24.167'
BP-1	14.061'

✳✳ - LM 112.293 TO LM 112.311 LT. - TRANS. FROM 4' SHLDR. TO 10' SHOULDER (LISLETOWN RD. INTERSECTION)

✳✳✳ - EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS



SECTION ON TANGENT

ROUTE 50 WESTBOUND LANES

LM 110.725 - LM 110.878 ✳

✳ - LM 110.821 TO LM 110.878 LT. - TRANS. FROM 15' WIDE DECEL. LANE WITH 4' SHLDR. TO 4' SHLDR. (MARINA RD. INTERSECTION)

✳✳✳ - EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS

TYPICAL SECTION
WESTBOUND LANES
SHEET 3 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

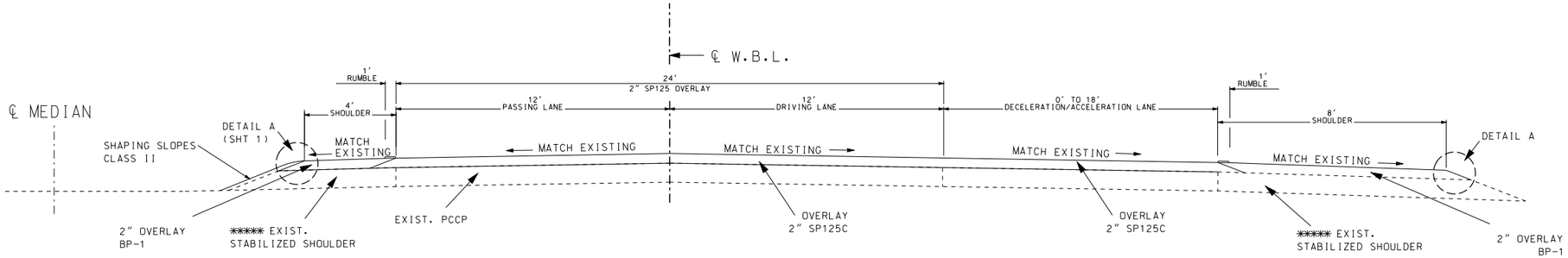
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.



SECTION ON TANGENT

ROUTE 50 WESTBOUND LANES

LM 112.740 - LM 112.809 *

LM 113.320 - LM 113.470 **

LM 114.521 - LM 114.642 ***

LM 115.112 - LM 115.408 ****

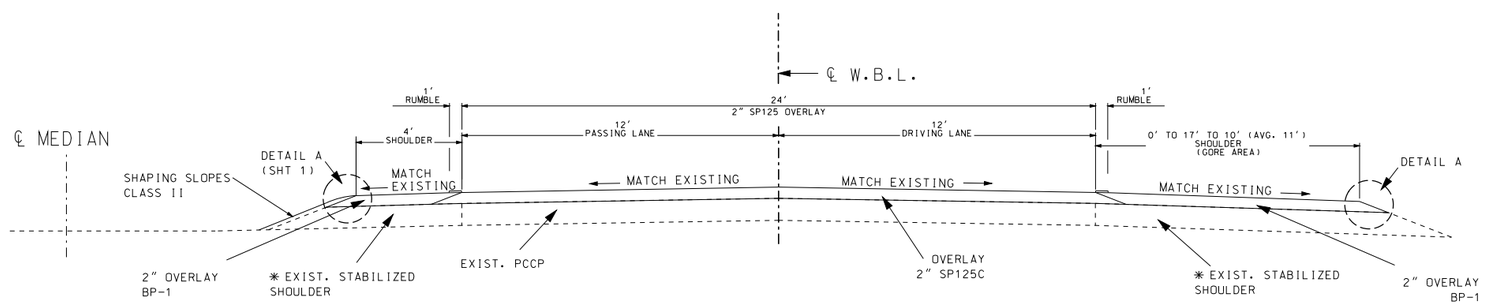
* - TRANS. FROM 0' WIDE DECEL. LANE TO 18' RAMP LANE (ROUTE M/J)

** - LM 113.432 TO LM 113.470 RT. - TRANS. FROM 12' WIDE ACCEL. LANE TO 0' (ROUTE M/J)

*** - LM 114.521 TO LM 114.558 - TRANS. FROM 0' WIDE DECEL. LANE TO 12' (MILITIA DR.)

**** - LM 115.361 TO LM 115.408 RT. - TRANS. FROM 12' WIDE ACCEL. LANE TO 0' (MILITIA DR.)

***** - EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS



SECTION ON TANGENT

ROUTE 50 WESTBOUND LANES

LM 112.809 - LM 112.850

LM 113.278 - LM 113.320

LM 114.642 - LM 114.745

LM 115.058 - LM 115.112

* - EXISTING SHOULDERS TO BE PREPARED FOR OVERLAY PRIOR TO PROJECT; COMPLETED BY OTHERS

TYPICAL SECTION
WESTBOUND LANES
SHEET 4 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

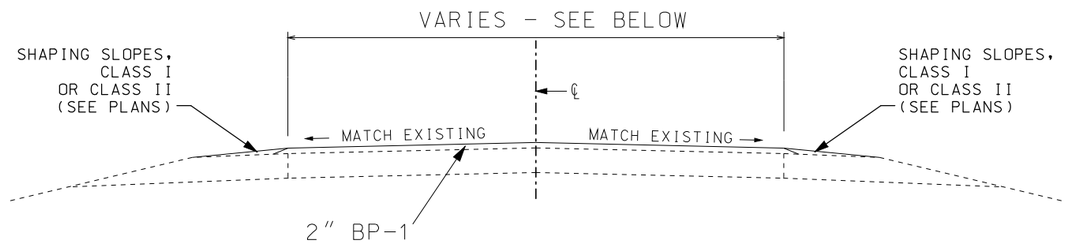
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.



SECTION ON TANGENT

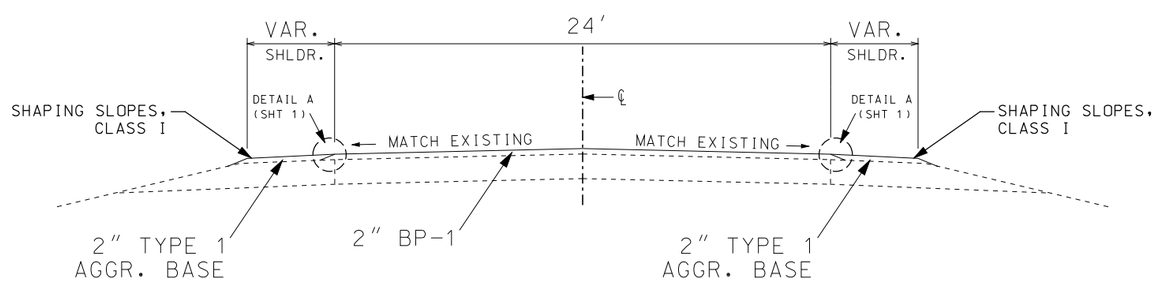
N. SHAMROCK RD. - 22'

MARINA RD. - 24'

LISLETOWN RD. (LM 112.317 WB) - 22'

MEDIAN CROSSOVER (LISLETOWN RD.) (LM 112.317 WB) - 30'

OUTER RD. 50 - 24'



SECTION ON TANGENT

ROUTE M (LM 7.924 - 8.013)
ROUTE J (LM 3.156 - 3.208)

TYPICAL SECTION
SIDE ROADS

SHEET 5 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

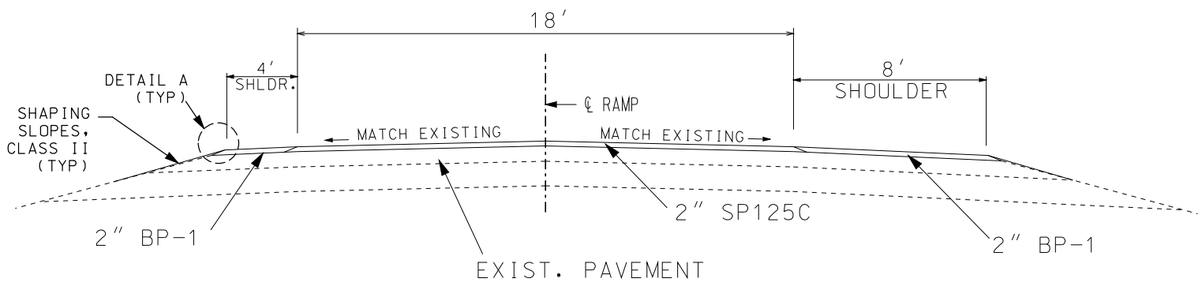
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.



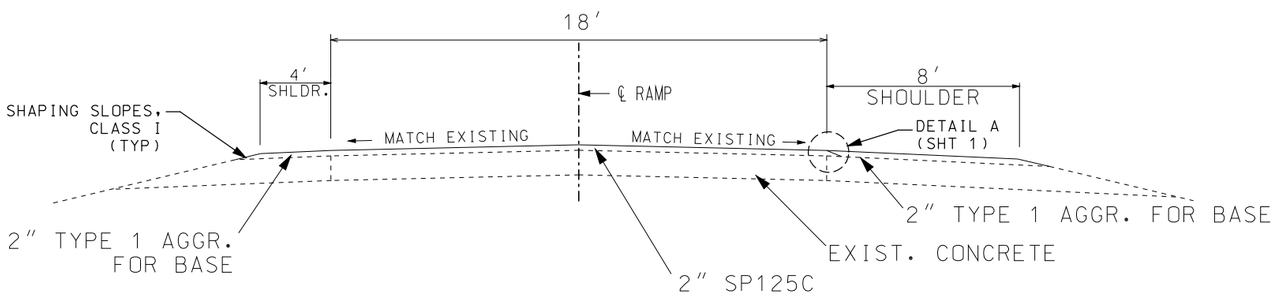
SECTION ON TANGENT - MILITIA DRIVE RAMPS

RAMPS 1,2,3 & 4

RAMP 1 EB 50 - LM 146.817 - LM 146.876
RAMP 2 EB 50 - LM 147.249 - LM 147.292
RAMP 3 WB 50 - LM 114.656 - LM 114.713
RAMP 4 WB 50 - LM 115.049 - LM 115.112

(END RESURFACING 100′ PAST GORE LINE)

LOG MILES AND LENGTHS ARE APPROXIMATE.
VERIFY IN FIELD.



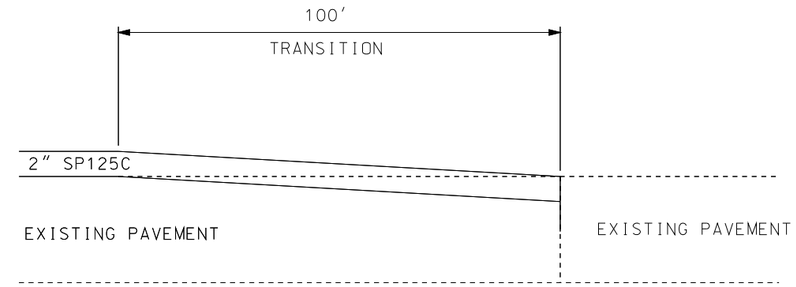
SECTION ON TANGENT - RTE. M/J RAMPS

RAMPS 1,2,3 & 4

RAMP 1 EB 50 - LM 148.608 - LM 148.881
RAMP 2 EB 50 - LM 148.890 - LM 149.077
RAMP 3 WB 50 - LM 112.809 - LM 113.015
RAMP 4 WB 50 - LM 113.019 - LM 113.320

LOG MILES AND LENGTHS ARE APPROXIMATE.
VERIFY IN FIELD.

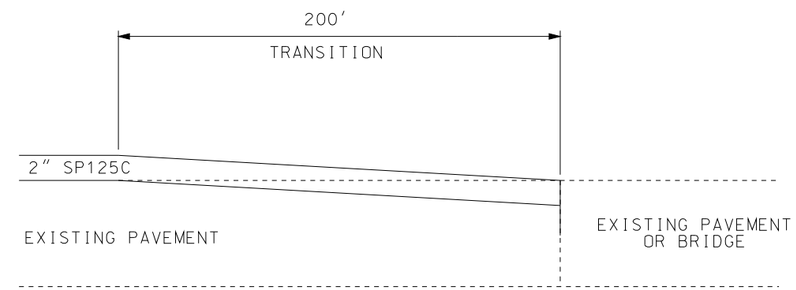
BEGIN/END OF LOG MILES ARE GIVEN
BASED ON ADJACENT MAINLINE



DEPTH TRANSITION FOR RAMP TIE-INS AT MILITIA DR.

RAMP 1 EB 50 - LM 146.857 - LM 146.876
RAMP 2 EB 50 - LM 147.249 - LM 147.267
RAMP 3 WB 50 - LM 114.694 - LM 114.713
RAMP 4 WB 50 - LM 115.049 - LM 115.068

BEGIN/END OF LOG MILES ARE GIVEN
BASED ON ADJACENT MAINLINE



DEPTH TRANSITION FOR BEGINNING OF PROJECT, END OF PROJECT

BEGIN AND END EB LANES
LM 145.848 TO LM 145.886 & 149.576 TO 149.614
(SEE SPECIAL SHEET 5 FOR EB END OF PROJECT DETAIL)

BEGIN AND END WB LANES
LM 110.361 TO LM 110.399 & 116.491 TO 116.529

TYPICAL SECTIONS
RAMPS AT MILITIA DR. &
ROUTE J/M
DEPTH TRANSITIONS

SHEET 6 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

REMOVALS FOR IMPROVEMENTS

APPROX. LOG MILE	APPROX. LOG MILE	LOCATION	DESCRIPTION	LENGTH FT.	EACH	REMARKS
145.881	146.069	EB RTE. 50	GUARDRAIL AND TURN DOWNS (2)	1100		GUARDRAIL WRAPS ONTO LIBERTY ROAD
147.061	147.090	RTE. 50 MEDIAN	CET, TRANSITION SECTIONS, END ANCHOR		4	1 CET, 2 TRANS. SECT., END ANCHOR - SEE SP. SHEET
146.023		EB RTE. 50 RT.	STREET SIGN		1	REMOVE SIGN & POST - SALVAGE AND REUSE SIGN
146.042		EB RTE. 50 RT.	SIGNS, POST & FOOTING		1	STOP, ONE WAY, DIVIDED HWY SIGN
146.074		EB RTE. 50 RT.	SIGN, POSTS & FOOTINGS		1	STRUCTURAL SIGN (MILITIA DR- 1 MILE) SALVAGE & REUSE SIGN
145.884		EB RTE. 50 RT.	SIGN & POST			HIGHWAY PATROL TROOP F SIGN
112.917	113.012	RTE. 50 WB EXIT RAMP	GUARDRAIL AND TURN DOWNS (2)	475		REMOVE AND REPLACE EXIST. - SEE SP. SHEET
113.022	113.171	RTE. 50 WB ENTR. RAMP	GUARDRAIL AND TURN DOWNS (2)	775		REMOVE AND REPLACE EXIST. - SEE SP. SHEET
114.809	114.838	RTE. 50 MEDIAN	CET, TRANSITION SECTIONS, END ANCHOR		4	1 CET, 2 TRANS. SECT., END ANCHOR - SEE SP. SHEET
115.499		RTE. 50 WB RT.	SIGN & POSTS (PORTION)		2	REMOVE EXIST. SIGN, CUT 4' FROM EXIST. POSTS FOR NEW SIGN
115.747		WB RTE. 50 RT.	SIGN & POST			HIGHWAY PATROL TROOP F SIGN
115.885		WB RTE. 50 RT.	SIGNS, POST & FOOTING		1	STOP, ONE WAY, DIVIDED HWY SIGN
0.063	0.078	LIBERTY RD RT. & LT.	SIGNS		3	NO PARKING (2), END OF STATE MAINTENANCE
0.092		LIBERTY RD RT.	SIGN & POST			NO PARKING - SALVAGE AND REUSE SIGN
116.788	116.750	RTE. 50 WB LT	EXIST. EDGELINE TO MEDIAN CROSS-OVER	200		REMOVE EXISTING YELLOW EDGELINE (GRADING UNDER J5P3056)
116.795	116.755	RTE. 50 WB LT	SIGNS		3	DO NOT ENTER(1) YIELD & ONE WAY(2) AFTER MEDIAN REMOVAL
1.042	1.055	MILITIA DR. - BRIDGE A5684	GUARDRAIL, CET'S, BRIDGE ANCHOR'S	150		BRIDGE RAIL, WEST AND EAST SIDE
1.097	1.110	MILITIA DR. - BRIDGE A5684	GUARDRAIL, CET'S, BRIDGE ANCHOR'S	150		BRIDGE RAIL, WEST AND EAST SIDE
1.051		MILITIA DR.	SAWCUT & CONC. CURB	5		SAWCUT & REMOVE EXIST. CURB TAPER PRIOR TO EXTENDING
1.101		MILITIA DR.	SAWCUT & CONC. CURB	5		SAWCUT & REMOVE EXIST. CURB TAPER PRIOR TO EXTENDING
		WB EXIT RAMP	SAWCUT & REMOVE CONCRETE CURB	65		LT & RT AT ROUTE M/ J
		WB ENTR. RAMP	SAWCUT & REMOVE CONCRETE CURB	135		LT & RT AT ROUTE M/ J
113.024		WB ENTR. RAMP (50 L.M.)	RAISED DIVISIONAL ISLAND		1	APPROX. 75 SY
113.024		WB ENTR. RAMP (50 L.M.)	W./N. 50/63 SIGN, 2 FLEXIBLE DELINEATORS		3	ON DIVISIONAL ISLAND - USE EXIST. SIGNS ON NEW POST
		EB EXIT RAMP	SAWCUT & REMOVE CONCRETE CURB	115		LT & RT AT ROUTE M/ J
		EB ENTR. RAMP	SAWCUT & REMOVE CONCRETE CURB	70		LT & RT AT ROUTE M/ J
110.838		WB RTE. 50	SIGNS, POST & FOOTING (2)			IN MEDIAN CROSS OVER - SALVAGE STREET SIGN & PLACE ON NEW
		TOTAL		1 LUMP SUM		

SHAPING SLOPES

LOG MILE	LOG MILE	LOCATION	LENGTH FEET	CLASS I STA.	CLASS II STA.	CLASS III STA.	REMARKS
145.848	146.000	EB RTE 50 LT.	802.56		8.0		TO OFFSET LT. (J5P3056)
146.000	146.010	EB RTE 50 LT.		2.6			FINAL SHAPING AFTER OVERLAY OF OFFSET LT FROM J5P3056
145.866	146.032	RTE 50 EB RT.	875.00			8.3	FOR GUARDRAIL: INCLUDES FINAL SHAPING AFTER OVERLAY FROM J5P3056
146.032	146.335	RTE 50 EB RT.	1,599.84	19.7			FINAL SHAPING AFTER OVERLAY (3056) INCLUDES LIBERTY CONNECTION
146.010	149.482	EB RTE 50 LT.	18,332.16		183.3		FROM OFFSET LT. TO LISLETOWN DECEL.
149.482	149.585	EB RTE 50 LT.	543.84	5.4			FINAL SHAPING AFTER OVERLAY OF DECEL. LN. (LISLETOWN) FROM J5P3056
149.592	149.614	EB RTE 50 LT.	116.16		1.2		AFTER X-OVER (PAID IN WB) TO END PROJECT
146.857	146.876	EB - MILITIA EXIT RAMP	100.00		1.0		TRANSITION PAST GORE AREA - INSIDE SHLDR.
147.076	147.095	EB - MILITIA ENTR. RAMP	100.00		1.0		TRANSITION PAST GORE AREA - INSIDE SHLDR.
147.061	147.090	RTE 50 EB	75.00			0.8	MEDIAN BRIDGE PROTECTION - MILITIA DR.
148.652	148.881	EB RTE 50 (L.M.)	1209.12	24.2			RTE M/J - EXIT RAMP SHOULDERS
148.89	149.077	EB RTE 50 (L.M.)	987.36	19.8			RTE M/J - ENTR. RAMP SHOULDERS
7.924	8.017	ROUTE M	227.00	4.6			ROUTE M SHLDRS
0.000	0.056	OUTER RD. 50	295.68	6.0			RTE M TO END CONC. ENTR. - INCLUDES RADIUS AREA
7.960		LIBERTY RD. @ M	80.00		1.6		RADIUS AREA PLUS 50' TIE IN
3.157	3.2	ROUTE J	105.00	2.2			ROUTE J SHLDRS
110.361	110.744	WB RTE 50 LT.	2,022.24		20.2		BEGIN. PROJECT TO BIG MEADOW X-OVER
110.845	112.311	WB RTE 50 LT.	7,740.48		77.4		X-OVER TO LISLETOWN X-OVER
110.845	110.927	WB RTE 50 LT.	432.96		4.3		FOR LEFT TURN LANE (EB TO MARINA) WB LOGS
110.833		WB RTE 50 RT.	90.00		1.2		MARINA RD. SHOULDERS
112.316		WB RTE 50 LT.	180.00		1.8		EAST SIDE LISLETOWN CROSSOVER
112.316		WB RTE 50 RT.	665.00		6.7		MARY LN. & LISLETOWN RD.
112.321	112.611	WB RTE 50 RT.	1,531.20	15.31			FINAL SHAPING AFTER OVERLAY OF ACCEL. LN. FROM J5P3056
112.611	115.875	WB RTE 50 LT.	17,233.92		172.3		END ACCEL. LANE TO OFFSET LEFT.
112.809	113.015	WB RTE 50 (L.M.)	1087.68	21.8			RTE M/J - EXIT RAMP SHOULDERS
112.917	113.012	RTE M/J EXIT RAMP (50 L.M.)				1.9	SHAPING SLOPES FOR NEW GUARDRAIL AND CET'S
113.019	113.32	WB RTE 50 (L.M.)	1589.28	31.8			RTE M/J - ENTR. RAMP SHOULDERS
113.022	113.171	RTE M/J ENTR. RAMP (50 L.M.)				1.0	SHAPING SLOPES FOR NEW GUARDRAIL AND CET'S
114.694	114.713	WB - MILITIA EXIT RAMP	100.00		1.0		TRANSITION PAST GORE AREA - INSIDE SHLDR.
114.809	114.838	RTE 50 WB				0.8	MEDIAN BRIDGE PROTECTION - MILITIA DR.
115.049	115.068	WB - MILITIA ENTR. RAMP	100.00		1.0		TRANSITION PAST GORE AREA - INSIDE SHLDR.
115.881	116.089	WB RTE50 RT.	1098.24	11.0			FINAL SHAPING AFTER OVERLAY OF ACCEL. LN. FROM J5P3056
115.883	116.529	WB RTE 50 LT.	3,410.88		34.1		OFFSET LT. TO END OF PROJECT
			TOTAL	164.4	516.1	12.8	
			USE	164.0	516.0	13.0	

SUMMARY SHEET
SHEET 1 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

ASPHALTIC CONCRETE MIXTURE PG 70-22 (SP125C MIX)							
LOG MILE	LOG MILE	LOCATION	LENGTH FEET	WIDTH FEET	2" SP125C TON (1.927)	POLYMER MODIFIED EMULSION MEMBRANE 0.2 GAL/SY (GAL)	REMARKS
145.848	145.868	EB RTE 50	100.00	30.167	35.88	67	AVG. WIDTH TAPER FOR LT. TURN
145.868	146.000	EB RTE 50	696.96	36.167	299.84	560	W/ LEFT TURN LANE TO OFFSET LT. (J5P3056)
146.000	146.655	EB RTE 50	3,458.40	24.167	994.18	1857	TO BEGIN TAPER FOR MILITIA EXIT RAMP
146.655	146.696	EB RTE 50	216.48	30.167	77.68	145	TAPER FOR MILITIA EXIT RAMP
146.696	146.790	EB RTE 50	496.32	36.167	213.52	399	W/ AUX. LANE TO MILITIA EXIT
146.790	146.817	EB RTE 50	142.56	39.167	66.42	124	WIDEN 12' - 18' - AUX. LANE TO RAMP
146.817	146.876	EB RTE 50	320.00	18.167	69.15	129	EXIT RAMP (L.M. FROM RTE 50)
146.817	147.292	EB RTE 50	2,508.00	24.167	720.97	1347	FROM WIDEN EXIT RAMP TO WIDEN ENTR. RAMP
147.249	147.292	EB RTE 50	255.00	18.167	55.10	103	ENTR. RAMP (L.M. FROM RTE 50)
147.292	147.334	EB RTE 50	221.76	39.167	103.32	193	WIDEN 18' TO 12' - AUX. LANE FROM ENTR. RAMP
147.334	147.391	EB RTE 50	300.96	36.167	129.48	242	AUX. LANE FOR MILITIA ENTR. RAMP
147.391	147.458	EB RTE 50	353.76	30.167	126.94	237	AVG. WIDTH TAPER FROM ENTR. RAMP
147.458	148.537	EB RTE 50	5,697.12	24.167	1,637.74	3060	TO BEGIN TAPER FOR RTE M/J EXIT RAMP
148.537	148.608	EB RTE 50	374.88	33.167	147.90	276	TAPER FOR EXIT RAMP
148.608	148.881	EB RTE 50	1,538.00	18.167	332.36	621	EXIT RAMP (L.M. FROM RTE 50)
148.881		EB RTE 50	1,897 SF		22.56	42	RADIUS AREA'S AT TOP OF RAMP
148.608	149.077	EB RTE 50	2,476.32	24.167	711.86	1330	FROM WIDEN EXIT RAMP TO WIDEN ENTR. RAMP
148.890	149.077	EB RTE 50	1,077.00	18.167	232.74	435	ENTR. RAMP (L.M. FROM RTE 50)
148.890		EB RTE 50	1,620 SF		19.27	36	RADIUS AREA'S AT TOP OF RAMP
149.077	149.183	EB RTE 50	559.68	36.167	240.78	450	AUX. LANE RTE M/J ENTR. RAMP
149.183	149.221	EB RTE 50	200.64	30.167	72.00	135	AVG. WIDTH TAPER FROM ENTR. RAMP
149.221	149.614	EB RTE 50	2,075.04	24.167	596.51	1114	END RAMP TAPER TO END PROJECT
						0	
110.361	112.740	WB RTE 50	12,561.12	24.167	3,610.92	6746	BEGIN. PROJECT TO TAPER RTE M/J EXIT RAMP
112.740	112.809	WB RTE 50	364.32	33.167	143.73	269	TAPER FOR EXIT RAMP
112.809	113.015	WB RTE 50	1,162.00	18.167	251.11	469	EXIT RAMP (L.M. FROM RTE 50)
113.015		WB RTE 50	1,696 SF		20.17	38	RADIUS AREA'S AT TOP OF RAMP
113.019		WB RTE 50	3,830 SF		45.56	85	RADIUS AREA'S AT TOP OF RAMP
113.019	113.320	WB RTE 50	1,606.00	18.167	347.05	648	ENTR. RAMP (L.M. FROM RTE 50)
113.320	113.350	WB RTE 50	158.40	33.167	62.49	117	TAPER FOR ENTR. RAMP
113.350	113.432	WB RTE 50	432.96	36.167	186.26	348	AUX. LANE FOR M/J ENTR. RAMP
113.432	113.470	WB RTE 50	200.64	30.167	72.00	135	AVG. WIDTH TAPER FROM ENTR. RAMP
113.470	114.521	WB RTE 50	5,549.28	24.167	1,595.24	2980	TO BEGIN TAPER TO MILIITA EXIT RAMP
114.521	114.558	WB RTE 50	195.36	30.167	70.10	131	AVG. WIDTH TAPER FOR EXIT RAMP
114.558	114.642	WB RTE 50	443.52	36.167	190.81	356	AUX. LANE FOR EXIT RAMP
114.642	114.656	WB RTE 50	73.92	39.167	34.44	64	WIDEN 12' TO 18' - AUX. LANE FROM EXIT RAMP
114.656	114.713	WB RTE 50	300.96	18.167	65.04	122	EXIT RAMP (L.M. FROM RTE 50)
114.656	115.112	WB RTE 50	2,407.68	24.167	692.13	1293	FROM WIDEN EXIT RAMP TO WIDEN ENTR. RAMP
115.112	115.127	WB RTE 50	79.20	39.167	36.90	69	WIDEN 18' TO 12' - AUX. LANE FROM ENTR. RAMP
115.049	115.112	WB RTE 50	332.64	18.167	71.88	134	ENTR. RAMP (L.M. FROM RTE 50)
115.127	115.361	WB RTE 50	1,235.52	36.167	531.53	993	AUX. LANE FOR MILITIA ENTR. RAMP
115.361	115.408	WB RTE 50	248.16	30.167	89.05	166	TAPER FOR ENTR. RAMP
115.408	116.529	WB RTE 50	5,918.88	24.167	1,701.49	3179	END RAMP TAPER TO END PROJECT
				TOTAL	16,724.10	31244	
				USE	16,724.1	31250	

TYPE 1 AGGREGATE FOR BASE (2 IN. THICK)						
LOG MILE	LOG MILE	LOCATION	LENGTH FEET	WIDTH FEET	TYPE 1 AGGR. (TONS)	REMARKS
148.652	148.881	EB RTE 50 (L.M.)	1209.12	12	187.00	RTE M/J - EXIT RAMP SHOULDERS - 4' & 8'
148.89	149.077	EB RTE 50 (L.M.)	987.36	12	152.70	RTE M/J - ENTR. RAMP SHOULDERS - 4' & 8'
112.809	113.015	WB RTE 50 (L.M.)	1087.68	12	168.20	RTE M/J - EXIT RAMP SHOULDERS - 4' & 8'
113.019	113.32	WB RTE 50 (L.M.)	1589.28	12	245.80	RTE M/J - ENTR. RAMP SHOULDERS - 4' & 8'
113.535		WB RTE 50	1465.00 SF		18.90	EMERGENCY CROSS OVER
3.157	3.2	ROUTE J	105.00	VAR.	28.00	LT. & RT. SHLDRS - LESS RAMP TERMINALS
7.924	8.017	ROUTE M	227.00	VAR.	60.00	LT. & RT. SHLDRS - LESS RAMPS & OUTER RDS.
0	0.056	OUTER RD 50	295.68	8	30.50	LT. & RT. SHLDRS
				TOTAL	891.10	
				USE	891.00	

SUMMARY SHEET
SHEET 2 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/24/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)							
LOG MILE	LOG MILE	LOCATION	LENGTH FEET	WIDTH FEET	2" BP-1 TON (1.948)	TACK 0.08 GAL/SY	REMARKS
145.848	146.000	EB RTE 50 LT.	802.56	4.061	39.19	29	TO OFFSET LT. (J5P3056)
146.010	149.482	EB RTE 50 LT.	18,332.16	4.061	895.20	662	FROM OFFSET LT. TO LISLETOWN DECEL.
149.592	149.614	EB RTE 50 LT.	116.16	4.061	5.67	4	AFTER X-OVER (PAID IN WB) TO END PROJECT
145.848	146.017	EB RTE 50 RT.	892.32	10.000	107.30	79	TO RT. TURN LANE TO LIBERTY RD.
146.335	146.655	EB RTE 50 RT.	1,689.60	10.000	203.17	150	FROM END NEW ACCEL. LN. TO TAPER MILITIA EXIT RAMP
146.655	146.696	EB RTE 50 RT.	216.48	9.000	23.43	17	TAPER - AVG. SHLDR WIDTH 10' - 8'
146.696	146.876	EB RTE 50 RT.	950.40	8.000	91.43	68	AUX. LN. & RAMP SHLDR.
146.817	146.895	EB RTE 50 RT.	5,712.00	SF	68.69	51	GORE AREA AND 4' INSIDE RAMP SHLDR
146.895	147.265	EB RTE 50 RT.	1,953.60	10.000	234.91	174	BETWEEN MILITIA RAMP GORES
0.990	1.041	MILITIA DR.	8,658.00	SF	104.11	77	MILL & FILL AREA NORTH OF BRIDGE
1.106	1.141	MILITIA DR.	6,300.00	SF	75.76	56	MILL & FILL AREA SOUTH OF BRIDGE
147.265	147.292	EB RTE 50 RT.	1,820.00	SF	21.88	16	GORE AREA AND 4' INSIDE RAMP SHLDR
147.249	147.391	EB RTE 50 RT.	749.76	8.000	72.13	53	RAMP SHLDR. & AUX. LANE
147.391	147.458	EB RTE 50 RT.	353.76	9.000	38.28	28	AVG. WIDTH TAPER FROM ENTR. RAMP
147.458	148.537	EB RTE 50 RT.	5,697.12	10.000	685.06	506	END ENTR. RAMP TAPER TO TAPER RTE M/J EXIT RAMP
148.537	148.608	EB RTE 50 RT.	374.88	9.000	40.57	30	TAPER - AVG. SHLDR WIDTH 10' - 8'
148.608	148.652	EB RTE 50 RT.	1,670.00	SF	20.08	15	GORE AREA RTE M/J EXIT RAMP
7.924	8.017	ROUTE M	491.04	24.333	141.81	106	ROUTE M (LESS FOR TEMP. HEADER)
0.000	0.056	OUTER RD. 50	295.68	VAR.	122.66	91	RTE M TO END CONC. ENTR. - INCLUDES RADIUS AREA
7.960		LIBERTY RD. @ M	4,044.00	SF	48.63	36	RADIUS AREA PLUS 50' TIE IN
148.652	149.044	EB RTE 50 RT.	1,750.00	SF	21.04	16	GORE AREA RTE M/J ENTR. RAMP
149.040	149.077	EB RTE 50 RT.	195.36	5.000	11.75	9	OUTSIDE SHLDR TAPER @ GORE - AVG. WIDTH 2' - 8'
149.077	149.183	EB RTE 50 RT.	559.68	8.000	53.84	40	AUX. LANE RTE M/J ENTR. RAMP
149.183	149.221	EB RTE 50 RT.	200.64	9.000	21.71	16	TAPER - AVG. SHLDR WIDTH 10' - 8'
149.221	149.614	EB RTE 50 RT.	2,075.04	10.000	249.52	184	END RAMP TAPER TO END PROJECT
110.361	110.725	WB RTE 50 LT.	1,921.92	4.061	93.85	69	BEGIN. PROJECT TO TAPER BIG MEADOW X-OVER
110.725	110.744	WB RTE 50 LT.	100.32	12.000	14.48	11	TAPERED WIDTH 8' - 16' FOR TURN LANE
110.744	110.845	WB RTE 50 LT.	533.28	16.000	102.60	76	TURN LANE TO ACCEL. TAPER AREA
110.845	110.878	WB RTE 50 LT.	4,095.00	SF	49.24	36	TAPERED ACCEL. AREA
110.835		WB RTE 50 LT.	10,575.00	SF	127.16	94	X-OVER AND EB TURN LANE
110.878	112.293	WB RTE 50 LT.	7,471.20	4.061	364.84	270	FROM END ACCEL. AREA TO WIDEN FOR LISLETOWN X-OVER
112.293	112.311	WB RTE 50 LT.	95.04	11.000	12.57	9	AVG. WIDTH SHLDR. AT X-OVER
112.316		WB RTE 50 LT.	7,443.00	SF	89.50	66	LISLETOWN X-OVER
112.611	115.875	WB RTE 50 LT.	17,233.92	4.061	841.57	622	END ACCEL. LANE TO OFFSET LEFT.
115.883	116.529	WB RTE 50 LT.	3,410.88	4.061	166.56	123	OFFSET LT. TO END OF PROJECT
110.361	112.740	WB RTE 50 RT.	12,561.12	10.000	1,510.44	1117	BEGIN. PROJECT TO TAPER RTE M/J EXIT RAMP
110.833		WB RTE 50 RT.	4,320.00	SF	51.95	38	MARINA RD.
112.316		WB RTE 50 RT.	10,800.00	SF	129.87	96	MARY LN. & LISLETOWN RD.
112.740	112.821	WB RTE 50 RT.	427.68	9.000	46.28	34	TAPER - AVG. SHLDR WIDTH 10' - 8'
112.809	112.850	WB RTE 50 RT.	1,805.00	SF	21.70	16	EXIT RAMP GORE AREA
3.157	3.200	ROUTE J	227.04	24.333	64.56	49	ROUTE J (LESS FOR TEMP. HEADER)
112.850	113.278	WB RTE 50 RT.	2,259.84	10.000	271.74	201	BETWEEN RAMP GORES
113.278	113.320	WB RTE 50 RT.	2,200.00	SF	26.45	20	ENTR. RAMP GORE AREA
113.292	113.320	WB RTE 50 RT.	147.84	5.000	8.89	7	OUTSIDE SHLDR TAPER @ GORE - AVG. WIDTH 2' - 8'
113.320	113.432	WB RTE 50 RT.	591.36	8.000	56.89	42	AUX. LANE ENTR. RAMP
113.432	113.470	WB RTE 50 RT.	200.64	9.000	21.71	16	AVG. WIDTH TAPER FROM ENTR. RAMP
113.470	114.521	WB RTE 50 RT.	5,549.28	10.000	667.28	493	TO BEGIN TAPER TO MILIITA EXIT RAMP
114.521	114.558	WB RTE 50 RT.	195.36	9.000	21.14	16	TAPER - AVG. SHLDR WIDTH 10' - 8'
114.558	114.713	WB RTE 50 RT.	818.40	8.000	78.73	58	AUX. LANE FOR EXIT RAMP TO END RAMP RESURF.
114.642	114.745	WB RTE 50 RT.	6,550.00	SF	78.76	58	GORE AREA AND 4' INSIDE RAMP SHLDR
114.745	115.058	WB RTE 50 RT.	1,652.64	10.000	198.72	147	BETWEEN RAMP GORES
115.058	115.112	WB RTE 50 RT.	2,320.00	SF	27.90	21	ENTR. RAMP GORE AREA
115.049	115.361	WB RTE 50 RT.	1,647.36	8.000	158.47	117	AUX. LANE ENTR. RAMP
115.361	115.408	WB RTE 50 RT.	248.16	9.000	26.86	20	AVG. WIDTH TAPER FROM ENTR. RAMP
115.408	115.808	WB RTE 50 RT.	2,112.00	10.000	253.96	188	END RAMP TAPER TO RT. TURN LANE TO N. SHAMROCK
115.808	115.883	WB RTE 50 RT.	17,200.00	SF	206.82	153	RT. TURN LANE, N. SHAMROCK, RIVER ACCESS, PRIVATE DR.
116.089	116.529	WB RTE 50 RT.	2,323.20	10.000	279.36	207	END ACCEL. LN. TO END OF PROJECT
				TOTAL	8,982.49	6643	
				USE	8,982.5	6650	

SUMMARY SHEET
SHEET 3 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

SURFACE SEAL

LOCATION	APPROX. LOG MILE	APPROX. LOG MILE	LENGTH FEET	SURFACE SEAL ✳ SY	REMARKS
EBL RTE 50 RT	145.848	146.017	892.32	99.1	BEGIN PROJECT TO RIGHT TURN LANE
EBL RTE 50 RT	146.335	146.656	1694.88	188.3	END OF ACCEL LANE TO EXIT RAMP MILITIA
EBL RTE 50 RT	146.852	147.266	2185.92	242.9	BETWEEN MILITIA GORES
EBL RTE 50 RT	147.460	148.531	5654.88	628.3	ENTRANCE RAMP MILITIA TO EXIT RAMP M/J
EBL RTE 50 RT	148.642	149.032	2059.20	228.8	BETWEEN M/J GORES
EBL RTE 50 RT	149.225	149.559	1763.52	195.9	ENTRACE RAMP M/J TO PRIVATE DRIVE ACROSS FROM LISLETOWN
EBL RTE 50 LT	146.030	149.482	18226.56	2025.2	END OF OFFSET LEFT TO DECEL LANE AT LISLETOWN
WBL RTE 50 RT	110.361	110.801	2323.20	258.1	BEGIN PROJECT TO MARINA RD
WBL RTE 50 RT	110.850	112.287	7587.36	843.0	MARINA RD TO LISLETOWN
WBL RTE 50 RT	112.338	112.733	2085.60	231.7	LISLETOWN TO EXIT RAMP M/J
WBL RTE 50 RT	112.842	113.276	2291.52	254.6	BETWEEN M/J GORES
WBL RTE 50 RT	113.464	114.512	5533.44	614.8	ENRANCE RAMP M/J TO EXIT RAMP MILITIA
WBL RTE 50 RT	114.696	115.069	1969.44	218.8	BETWEEN MILITIA GORES
WBL RTE 50 RT	115.408	115.814	2143.68	238.2	ENTRANCE RAMP MILITIA TO N. SHAMROCK
WBL RTE 50 RT	116.089	116.529	2323.20	258.1	N. SHAMROCK TO END PROJECT
WBL RTE 50 LT	110.361	112.286	10164.00	1129.3	BEGIN PROJECT TO LISLETOWN RD.
WBL RTE 50 LT	112.611	115.875	17233.92	1914.9	END OF ACCEL LANE TO OFFSET LEFT
WBL RTE 50 LT	115.883	116.529	3410.88	379.0	OFFSET LEFT TO END OF PROJECT
			TOTAL	9949.0	
			USE	9949	✳ SEAL RUMBLES PRIOR TO PVM'T MARKING - ONE FOOT WIDTH

GUARDRAIL

LOG MILE	LOG MILE	LOCATION	MGS GUARDRAIL 8FT. POSTS 6'3" SP LF	MGS HEIGHT & BLOCK TRANSITION EACH	TYPE A CRASHWORTHY END END TERMINAL (MASH) EACH	MGS BRIDGE APPROACH TRANS. SECT. (MAJOR RTE) EACH	MGS END ANCHOR EACH	TYPE A INTEGRAL CURB (6" & UNDER) LIN. FT. ✳	ASYMMETRICAL TRANSITION SECTION EACH	REMARKS
145.866	146.032	RTE 50 EB	875.0		1		1			L.M. 146.023 - 146.032 GRADING PAID FOR IN JOB. # J5P3056
147.061	147.090	RTE 50 EB	12.5		1		1		2	MEDIAN BRIDGE PROTECTION - MILITIA DR. - SEE SPECIAL SHEETS
112.917	113.012	RTE 50 WB EXIT RAMP	537.5		2					SHAPING SLOPES FOR NEW RAIL AND CET'S SEE SPECIAL SHEET
113.022	113.171	RTE 50 WB ENT. RAMP	825.0		1		1			SHAPING SLOPES FOR NEW RAIL AND CET SEE SPECIAL SHEET
114.809	114.838	RTE 50 WB	12.5		1		1		2	MEDIAN BRIDGE PROTECTION - MILITIA DR. - SEE SPECIAL SHEETS
116.476	116.527	RTE 50 WB		1	1					REPLACE CET AT MOREAU RIVER BRIDGE - MEDIAN SIDE
116.481	116.528	RTE 50 WB		1	1					REPLACE CET AT MOREAU RIVER BRIDGE - OUTSIDE
1.038	1.055	MILLITA DR.			2	2		34		BRIDGE END PROTECTION (EAST & WEST) EXTEND EXIST. CURB 17'
1.097	1.114	MILLITA DR.			2	2		34		BRIDGE END PROTECTION (EAST & WEST) EXTEND EXIST. CURB 17'
										✳DRILL & EPOXY 12" - #4 BARS INTO EXISTING CONCRETE PVM'T FOR ATTACHMENT OF CURB TO EXISTING PAVEMENT; INCIDENTAL TO INSTALLATION OF CURB, SEE STD. PLANS. FOR REQUIREMENTS
		TOTAL	2262.5	2	12	4	4	68	4	
		USE	2263	2	12	4	4	68	4	✳ FOR SHAPING SLOPES, CLASS III - SEE SHAPING SLOPES QUANTITY BOX

HIGH FRICTION SURFACE TREATMENT

LOCATION	LOG MILE	LOG MILE	LENGTH FEET	HIGH FRICTION SURF. TREATMENT SY	REMARKS
EBL RTE 50	149.363	149.614	1325.28	3534.1	SEE SPECIAL SHEET FOR MORE INFORMATION
					SEE JSP FOR INSTALLATION REQUIREMENTS ON NEW SURFACES
			TOTAL	3534.1	
			USE	3534	✳ 24' PAVEMENT WIDTH

SUMMARY SHEET
SHEET 4 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/25/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

FULL DEPTH PAVEMENT REPAIR									
LOG MILE	LOCATION	LANE	LENGTH	WIDTH	FULL DEPTH SY	SAWCUT LF	DOWEL BARS EACH	SUBGRADE COMPACTION * SY	REMARKS
145.952	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
145.986	RTE 50 EB	DRIVING	12	12	16.00	48	20	1.6	INCLUDES ADDITIONAL INTERNAL SAWCUT
146.046	RTE 50 EB	DRIVING	6	6	4.00	18	10	0.4	REPLACE HALF LANE WIDTH
146.050	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
146.086	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
146.174	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
146.418	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
146.474	RTE 50 EB	DRIVING	12	12	16.00	48	20	1.6	INCLUDES ADDITIONAL INTERNAL SAWCUT
146.520	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
146.758	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
146.841	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
146.869	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
146.922	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
146.969	RTE 50 EB	PASSING	15	12	20.00	51	20	2.0	INCLUDES ADDITIONAL INTERNAL SAWCUT
147.130	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
147.302	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
147.364	RTE 50 EB	PASSING	8	12	10.67	32	20	1.1	
147.449	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
147.592	RTE 50 EB	PASSING	6	12	8.00	30	20	0.8	
147.825	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
148.142	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
148.249	RTE 50 EB	DRIVING	8	12	10.67	32	20	1.1	
148.364	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
149.042	RTE 50 EB	ALL	6	36	24.00	78	60	2.4	INCLUDES AUX. LANE FOR RAMP 2
149.061	RTE 50 EB	AUX & PASS	6	24	16.00	54	40	1.6	INCLUDES AUX. LANE FOR RAMP 2
149.156	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
149.238	RTE 50 EB	DRIVING	6	12	8.00	30	20	0.8	
110.881	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
110.967	RTE 50 WB	BOTH	6	24	16.00	54	40	1.6	
111.292	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
111.334	RTE 50 WB	PASSING	8	12	10.67	32	20	1.1	
111.420	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
112.194	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
112.275	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
112.486	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
112.983	RTE 50 WB	DRIVING	6	12	8.00	30	20	0.8	
113.054	RTE 50 WB	DRIVING	6	12	8.00	30	20	0.8	
113.394	RTE 50 WB	BOTH	8	24	21.33	56	40	2.1	
113.988	RTE 50 WB	DRIVING	6	12	8.00	30	20	0.8	
114.271	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
114.306	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
114.397	RTE 50 WB	DRIVING	6	12	8.00	30	20	0.8	
114.502	RTE 50 WB	DRIVING	6	12	8.00	30	20	0.8	
115.289	RTE 50 WB	PASSING	12	12	16.00	48	20	1.6	INCLUDES ADDITIONAL INTERNAL SAWCUT
115.296	RTE 50 WB	DRIVING	20	12	26.67	58	20	2.7	
115.783	RTE 50 WB	DRIVING	6	12	8.00	30	20	0.8	
115.795	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
115.841	RTE 50 WB	PASSING	6	12	8.00	30	20	0.8	
0.255	WB RAMP 4		6	18	12.00	36	30	1.2	L.M. 0.000 = PVM'T JOINT AT RTE J
0.284	WB RAMP 4		20	18	40.00	72	30	4.0	INCLUDES INTERNAL SAWCUTS
0.241	EB RAMP 1		6	18	12.00	36	30	1.2	L.M. 0.000 = GORE POINT OF RAMP
0.294	EB RAMP 1		6	24	16.00	54	40	1.6	
0.148	EB RAMP 2		27	18	54.00	90	30	5.4	L.M. 0.000 AT RTE M/ INCLUDES INTERNAL SAWCUTS
				TOTAL	622.01	1947	1210	62.2	
				USE	622	1947	1210	62	

SUMMARY SHEET
SHEET 5 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE

JOB NO.: J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

CLASS B PARTIAL DEPTH PAVEMENT REPAIR							
LOG MILE	LOCATION	LANE	LENGTH	WIDTH	REMOVAL FOR CLASS B PARTIAL DEPTH PAVEMENT REPAIR SY	FURN. & PLACE BITUMINOUS MTRL. FOR CL. B PARTIAL DEPTH PVM'T REPAIR TON	REMARKS DIMENSIONS GIVEN ARE APPROXIMATE; ADJUST TO MATCH FIELD CONDITIONS
145.850	RTE 50 EB	PASSING	3	3	1.00	0.22	
145.869	RTE 50 EB	PASSING	3	6	2.00	0.43	
145.880	RTE 50 EB	DRIVING	2	4	0.89	0.19	
145.927	RTE 50 EB	DRIVING	2	2	0.44	0.10	
145.939	RTE 50 EB	DRIVING	2	2	0.44	0.10	
145.964	RTE 50 EB	PASSING	6	6	4.00	0.86	
146.013	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.032	RTE 50 EB	DRIVING	4	4	1.78	0.38	
146.040	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.046	RTE 50 EB	PASSING	4	4	1.78	0.38	
146.112	RTE 50 EB	PASSING	3	3	1.00	0.22	
146.121	RTE 50 EB	DRIVING	2	6	1.33	0.29	
146.132	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.247	RTE 50 EB	PASSING	3	4	1.33	0.29	
146.258	RTE 50 EB	DRIVING	4	4	1.78	0.38	
146.316	RTE 50 EB	PASSING	3	3	1.00	0.22	
146.327	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.341	RTE 50 EB	PASSING	3	3	1.00	0.22	
146.363	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.394	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.406	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.441	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.510	RTE 50 EB	PASSING	2	2	0.44	0.10	
146.521	RTE 50 EB	DRIVING	6	3	2.00	0.43	
146.544	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.576	RTE 50 EB	PASSING	3	3	1.00	0.22	
146.633	RTE 50 EB	DRIVING	3	6	2.00	0.43	
146.691	RTE 50 EB	PASSING	3	6	2.00	0.43	
146.726	RTE 50 EB	DRIVING	3	6	2.00	0.43	
146.771	RTE 50 EB	PASSING	4	4	1.78	0.38	
146.778	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.797	RTE 50 EB	PASSING	3	3	1.00	0.22	
146.868	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.878	RTE 50 EB	DRIVING	4	4	1.78	0.38	
146.889	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.900	RTE 50 EB	PASSING	2	12	2.67	0.57	
146.911	RTE 50 EB	DRIVING	6	3	2.00	0.43	
146.969	RTE 50 EB	DRIVING	3	3	1.00	0.22	
146.997	RTE 50 EB	PASSING	3	3	1.00	0.22	
147.021	RTE 50 EB	DRIVING	2	2	0.44	0.10	
147.096	RTE 50 EB	PASSING	4	4	1.78	0.38	
147.105	RTE 50 EB	PASSING	3	3	1.00	0.22	
147.170	RTE 50 EB	PASSING	3	6	2.00	0.43	
147.285	RTE 50 EB	DRIVING	3	3	1.00	0.22	
147.302	RTE 50 EB	DRIVING	2	2	0.44	0.10	
147.378	RTE 50 EB	DRIVING	2	6	1.33	0.29	
147.423	RTE 50 EB	DRIVING	3	4	1.33	0.29	
147.434	RTE 50 EB	BOTH	3	7	2.33	0.50	
147.480	RTE 50 EB	DRIVING	3	3	1.00	0.22	
147.537	RTE 50 EB	BOTH	3	6	2.00	0.43	
147.547	RTE 50 EB	PASSING	3	6	2.00	0.43	
147.567	RTE 50 EB	PASSING	3	3	1.00	0.22	
147.584	RTE 50 EB	PASSING	3	6	2.00	0.43	
147.592	RTE 50 EB	DRIVING	3	3	1.00	0.22	
147.604	RTE 50 EB	PASSING	3	3	1.00	0.22	
147.703	RTE 50 EB	PASSING	3	3	1.00	0.22	
147.742	RTE 50 EB	DRIVING	3	3	1.00	0.22	
147.796	RTE 50 EB	PASSING	3	3	1.00	0.22	
147.889	RTE 50 EB	BOTH	3	16	5.33	1.15	
147.934	RTE 50 EB	DRIVING	4	4	1.78	0.38	
148.036	RTE 50 EB	DRIVING	4	4	1.78	0.38	4" REPLACEMENT DEPTH USED FOR CALCULATIONS
148.127	RTE 50 EB	PASSING	3	3	1.00	0.22	REQUIRED TACK INCLUDED IN FURN. & PLACE QUANTITY
148.263	RTE 50 EB	BOTH	4	4	1.78	0.38	ASPH. FACTOR - 1.94 TONS/CY
		SUBTOTAL (1)			88.76	19.25	

SUMMARY SHEET
SHEET 6 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

CLASS B PARTIAL DEPTH PAVEMENT REPAIR

LOG MILE	LOCATION	LANE	LENGTH	WIDTH	REMOVAL FOR CLASS B PARTIAL DEPTH PAVEMENT REPAIR SY	FURN. & PLACE BITUMINOUS MTRL. FOR CL. B PARTIAL DEPTH PVM'T REPAIR TON	REMARKS DIMENSIONS GIVEN ARE APPROXIMATE; ADJUST TO MATCH FIELD CONDITIONS
148.286	RTE 50 EB	BOTH	4	4	1.78	0.38	
148.344	RTE 50 EB	DRIVING	3	6	2.00	0.43	
148.355	RTE 50 EB	DRIVING	3	6	2.00	0.43	
148.376	RTE 50 EB	DRIVING	4	4	1.78	0.38	
148.584	RTE 50 EB	PASSING	3	3	1.00	0.22	
148.628	RTE 50 EB	DRIVING	3	3	1.00	0.22	
148.661	RTE 50 EB	DRIVING	3	3	1.00	0.22	
148.775	RTE 50 EB	PASSING	3	3	1.00	0.22	
148.912	RTE 50 EB	DRIVING	4	4	1.78	0.38	
149.036	RTE 50 EB	DRIVING	3	3	1.00	0.22	
149.046	RTE 50 EB	DRIVING	3	3	1.00	0.22	
149.105	RTE 50 EB	DRIVING	3	3	1.00	0.22	
149.127	RTE 50 EB	PASSING	3	6	2.00	0.43	
149.277	RTE 50 EB	DRIVING	3	3	1.00	0.22	
149.328	RTE 50 EB	PASSING	3	3	1.00	0.22	
110.395	RTE 50 WB	DRIVING	3	3	1.00	0.22	
110.420	RTE 50 WB	DRIVING	4	4	1.78	0.38	
110.463	RTE 50 WB	PASSING	3	3	1.00	0.22	
110.491	RTE 50 WB	DRIVING	3	3	1.00	0.22	
110.529	RTE 50 WB	PASSING	3	6	2.00	0.43	
110.550	RTE 50 WB	DRIVING	3	3	1.00	0.22	
110.668	RTE 50 WB	DRIVING	3	3	1.00	0.22	
110.744	RTE 50 WB	PASSING	2	2	0.44	0.10	
110.775	RTE 50 WB	PASSING	3	6	2.00	0.43	
110.821	RTE 50 WB	DRIVING	4	4	1.78	0.38	
110.863	RTE 50 WB	PASSING	3	3	1.00	0.22	
111.292	RTE 50 WB	DRIVING	3	3	1.00	0.22	
111.472	RTE 50 WB	DRIVING	3	3	1.00	0.22	
111.530	RTE 50 WB	BOTH	3	3	1.00	0.22	
111.686	RTE 50 WB	DRIVING	4	4	1.78	0.38	
111.723	RTE 50 WB	DRIVING	3	3	1.00	0.22	
111.828	RTE 50 WB	PASSING	3	3	1.00	0.22	
112.125	RTE 50 WB	BOTH	6	3	2.00	0.43	
112.254	RTE 50 WB	PASSING	4	4	1.78	0.38	
112.263	RTE 50 WB	DRIVING	4	4	1.78	0.38	
112.344	RTE 50 WB	PASSING	3	3	1.00	0.22	
112.368	RTE 50 WB	DRIVING	3	3	1.00	0.22	
112.506	RTE 50 WB	DRIVING	3	3	1.00	0.22	
112.891	RTE 50 WB	DRIVING	4	4	1.78	0.38	
112.960	RTE 50 WB	BOTH	4	8	3.56	0.77	
112.983	RTE 50 WB	PASSING	3	3	1.00	0.22	
113.023	RTE 50 WB	DRIVING	3	3	1.00	0.22	
113.282	RTE 50 WB	DRIVING	4	4	1.78	0.38	AUX. LANE RAMP 4
113.302	RTE 50 WB	AUX.	3	3	1.00	0.22	AUX. LANE RAMP 4
113.387	RTE 50 WB	PASSING	3	3	1.00	0.22	
113.820	RTE 50 WB	PASSING	3	3	1.00	0.22	
114.054	RTE 50 WB	DRIVING	4	4	1.78	0.38	
114.077	RTE 50 WB	PASSING	6	3	2.00	0.43	
114.238	RTE 50 WB	PASSING	4	4	1.78	0.38	
114.248	RTE 50 WB	PASSING	4	4	1.78	0.38	
114.260	RTE 50 WB	PASSING	3	3	1.00	0.22	
114.271	RTE 50 WB	DRIVING	4	4	1.78	0.38	
114.306	RTE 50 WB	DRIVING	12	2	2.67	0.57	
114.420	RTE 50 WB	PASSING	3	3	1.00	0.22	
114.502	RTE 50 WB	PASSING	4	4	1.78	0.38	
114.674	RTE 50 WB	PASSING	3	3	1.00	0.22	
114.678	RTE 50 WB	PASSING	3	3	1.00	0.22	
114.697	RTE 50 WB	PASSING	4	4	1.78	0.38	
114.717	RTE 50 WB	DRIVING	3	3	1.00	0.22	
114.834	RTE 50 WB	DRIVING	2	2	0.44	0.10	
114.908	RTE 50 WB	PASSING	4	4	1.78	0.38	
115.211	RTE 50 WB	DRIVING	4	4	1.78	0.38	
		SUBTOTAL (2)			86.15	18.65	

CROSS STITCH TIE BARS

LOG MILE	LOCATION	LENGTH	CROSS STITCH TIE BAR EACH	REMARKS
146.363	RTE 50 EB	100	50	
146.758	RTE 50 EB	16	8	
146.969	RTE 50 EB	10	5	
146.997	RTE 50 EB	20	10	
147.064	RTE 50 EB	20	10	
147.302	RTE 50 EB	20	10	
147.361	RTE 50 EB	54	27	
147.716	RTE 50 EB	20	10	
148.068	RTE 50 EB	10	5	
148.211	RTE 50 EB	30	15	
148.224	RTE 50 EB	60	30	
148.249	RTE 50 EB	12	6	
148.475	RTE 50 EB	20	10	
148.541	RTE 50 EB	54	27	
148.950	RTE 50 EB	20	10	
149.105	RTE 50 EB	12	6	
149.301	RTE 50 EB	30	15	
149.361	RTE 50 EB	16	8	
149.372	RTE 50 EB	20	10	
110.863	RTE 50 WB	20	10	
110.959	RTE 50 WB	30	15	
111.001	RTE 50 WB	50	25	
111.334	RTE 50 WB	40	20	
111.849	RTE 50 WB	16	8	
111.891	RTE 50 WB	16	8	
111.950	RTE 50 WB	60	30	
111.973	RTE 50 WB	30	15	
112.370	RTE 50 WB	20	10	
113.246	RTE 50 WB	20	10	
113.394	RTE 50 WB	20	10	
114.861	RTE 50 WB	16	8	
115.289	RTE 50 WB	40	20	
115.318	RTE 50 WB	20	10	
116.205	RTE 50 WB	30	15	
0.049	WB RAMP 3	40	20	L.M. 0.000 = GORE POINT OF RAMP
0.221	WB RAMP 3	50	25	
0.000	WB RAMP 4	50	25	L.M. 0.000 = PVM'T JOINT AT RTE J
0.143	WB RAMP 4	60	30	
0.294	EB RAMP 1	50	25	L.M. 0.000 = GORE POINT OF RAMP
		TOTAL	611	
		USE	611	

SUMMARY SHEET
SHEET 7 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016
ROUTE 50 | STATE MO
DISTRICT CD | SHEET NO. 3
COUNTY COLE
JOB NO. J5P3127
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

CLASS B PARTIAL DEPTH PAVEMENT REPAIR

LOG MILE	LOCATION	LANE	LENGTH	WIDTH	REMOVAL FOR CLASS B PARTIAL DEPTH PAVEMENT REPAIR SY	FURN. & PLACE BITUMINOUS MTRL. FOR CL. B PARTIAL DEPTH PVM'T REPAIR TON	REMARKS DIMENSIONS GIVEN ARE APPROXIMATE; ADJUST TO MATCH FIELD CONDITIONS
115.260	RTE 50 WB	DRIVING	4	4	1.78	0.38	
115.299	RTE 50 WB	BOTH	6	6	4.00	0.86	
115.318	RTE 50 WB	PASSING	3	3	1.00	0.22	
115.571	RTE 50 WB	PASSING	4	4	1.78	0.38	
115.717	RTE 50 WB	DRIVING	4	3	1.33	0.29	
115.783	RTE 50 WB	PASSING	3	3	1.00	0.22	
115.806	RTE 50 WB	DRIVING	3	6	2.00	0.43	
115.806	RTE 50 WB	PASSING	2	4	0.89	0.19	
115.997	RTE 50 WB	BOTH	4	4	1.78	0.38	
116.112	RTE 50 WB	DRIVING	6	6	4.00	0.86	
0.014	WB RAMP 3		3	4	1.33	0.29	L.M. 0.000 = GORE POINT OF RAMP
0.028	WB RAMP 4		4	4	1.78	0.38	L.M. 0.000 = PVM'T JOINT AT RTE J
0.276	WB RAMP 4		3	3	1.00	0.22	
			SUBTOTAL (3)		23.67	5.1	
			SUBTOTAL (2)		86.15	18.65	
			SUBTOTAL (1)		88.76	19.25	
				TOTAL	198.58	43	
				USE	198.6	43	

MOBILIZATION

1 LUMP SUM

COLDMILLING (3IN. THICK OR LESS)

LOG MILE	LOG MILE	LOCATION	LENGTH (FEET)	WIDTH (FEET)	MILL & FILL SY	REMARKS
0.99	1.04	MILITIA DR.	264.00	VAR.	962.0	ASPHALT PORTION NORTH OF BRIDGE
1.106	1.141	MILITIA DR.	184.80	VAR.	700.0	ASPHALT PORTION SOUTH OF BRIDGE
				TOTAL	1,662.0	
				USE	1,662	

FLEXIBLE DELINEATORS (YELLOW)

LOCATION	LOG MILE	LOG MILE	FLEXIBLE DELINEATOR EACH	REMARKS
EBL RTE 50 RT.	149.095	146.103	6.0	ON RAISED ISLAND SEE PVM'T MARKING SHEET
		TOTAL	6.0	
		USE	6	

MODIFIED COLDMILLING (DEPTH TRANSISITON)

LOG MILE	LOG MILE	LOCATION	LENGTH FEET	WIDTH FEET	MOD. COLDMILLING SY	REMARKS
145.848	145.886	EB	200	38	844.4	BEGINNING OF EB LANES
146.857	146.876	EB	100	30	333.3	RAMP 1 - MILITIA DR.
147.249	147.267	EB	100	30	333.3	RAMP 2 - MILITIA DR.
7.924	7.933	ROUTE M	100	24	266.7	ROUTE M
146.034	-	EB	50	22	122.2	LIBERTY RD. @ ROUTE M
0.045	0.054	OR 50E	50	24	133.3	TRANSITION INTO CONC. ENTR.
149.585	149.592	EB (MEDIAN)	50	36	200.0	TRANS. MEDIAN X-OVER W/ END PROJECT MILL
149.576	149.592	EB LT	80	15	133.3	LISLETOWN RD. X-OVER
149.576	149.614	EB	200	38	844.4	END OF EB LANES
110.361	110.399	WB	200	38	844.4	BEGINNING OF WB LANES
110.833	-	WB	50	VAR.	140.0	MARINA RD.
110.817	110.907	WB	VAR.	VAR.	1175.0	BIG MEADOWS/MARINA RD. MEDIAN X-OVER
112.317	-	WB	50	22	122.2	LISLETOWN RD.
112.317	-	WB	VAR.	VAR.	240.0	MARY LN.
3.157	3.166	ROUTE J	100	24	266.7	ROUTE J
114.694	114.713	WB	100	30	333.3	RAMP 3 -MILITIA DR.
115.049	115.068	WB	100	30	333.3	RAMP 4 - MILITIA DR.
115.877	-	WB	VAR.	VAR.	567.0	MOREAU R./N. SHAMROCK/PRIVATE ENTRANCE
116.491	116.529	WB	200	38	844.4	END OF WB LANES
				TOTAL	8077.2	
				USE	8.077	

SUMMARY SHEET
SHEET 8 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

DOWEL BAR RETROFIT

LOG MILE	LOCATION	LANE	DOWEL BAR RETROFIT EACH	REMARKS
146.112	RTE 50 EB	PASSING	6	
146.174	RTE 50 EB	DRIVING	6	
146.274	RTE 50 EB	PASSING	6	
146.341	RTE 50 EB	BOTH	12	
146.363	RTE 50 EB	DRIVING	6	
146.366	RTE 50 EB	PASSING	6	
146.478	RTE 50 EB	BOTH	12	
146.484	RTE 50 EB	DRIVING	6	
146.488	RTE 50 EB	BOTH	12	
146.497	RTE 50 EB	PASSING	6	
146.516	RTE 50 EB	BOTH	12	
146.538	RTE 50 EB	BOTH	12	
146.666	RTE 50 EB	DRIVING	6	
146.758	RTE 50 EB	PASSING	6	
146.778	RTE 50 EB	BOTH	12	
146.797	RTE 50 EB	BOTH	12	
146.812	RTE 50 EB	BOTH	12	
146.876	RTE 50 EB	DRIVING	6	
146.889	RTE 50 EB	DRIVING	6	
146.930	RTE 50 EB	BOTH	12	
146.959	RTE 50 EB	BOTH	12	
146.969	RTE 50 EB	DRIVING	6	
146.997	RTE 50 EB	BOTH	12	
147.147	RTE 50 EB	BOTH	12	
147.149	RTE 50 EB	BOTH	12	
147.170	RTE 50 EB	PASSING	6	
147.193	RTE 50 EB	BOTH	12	
147.285	RTE 50 EB	BOTH	12	
147.302	RTE 50 EB	DRIVING	6	
147.335	RTE 50 EB	BOTH	12	
147.364	RTE 50 EB	DRIVING	6	
147.371	RTE 50 EB	BOTH	12	
147.396	RTE 50 EB	DRIVING	6	
147.449	RTE 50 EB	DRIVING	6	
147.567	RTE 50 EB	BOTH	12	
147.584	RTE 50 EB	BOTH	12	
147.655	RTE 50 EB	BOTH	12	
147.659	RTE 50 EB	BOTH	12	
147.691	RTE 50 EB	BOTH	12	
147.716	RTE 50 EB	BOTH	12	
147.733	RTE 50 EB	BOTH	12	
147.780	RTE 50 EB	DRIVING	6	
147.796	RTE 50 EB	BOTH	12	
147.825	RTE 50 EB	PASSING	6	
147.849	RTE 50 EB	BOTH	12	
147.864	RTE 50 EB	BOTH	12	
147.907	RTE 50 EB	BOTH	12	
147.944	RTE 50 EB	DRIVING	6	
147.947	RTE 50 EB	BOTH	12	
148.061	RTE 50 EB	PASSING	6	
148.068	RTE 50 EB	DRIVING	6	
148.142	RTE 50 EB	PASSING	6	
148.211	RTE 50 EB	PASSING	6	
148.226	RTE 50 EB	PASSING	6	
148.249	RTE 50 EB	PASSING	6	
148.394	RTE 50 EB	BOTH	12	
148.438	RTE 50 EB	BOTH	12	
148.460	RTE 50 EB	BOTH	12	
148.533	RTE 50 EB	BOTH	12	
148.620	RTE 50 EB	BOTH	12	
148.644	RTE 50 EB	BOTH	12	
148.745	RTE 50 EB	BOTH	12	
148.757	RTE 50 EB	BOTH	12	
	SUBTOTAL (1)		600	

DOWEL BAR RETROFIT

LOG MILE	LOCATION	LANE	DOWEL BAR RETROFIT EACH	REMARKS
148.801	RTE 50 EB	BOTH	12	
148.816	RTE 50 EB	BOTH	12	
148.827	RTE 50 EB	BOTH	12	
148.874	RTE 50 EB	BOTH	12	
148.950	RTE 50 EB	BOTH	12	
148.952	RTE 50 EB	BOTH	12	
149.010	RTE 50 EB	ALL	18	INCLUDES AUXILLARY LANE
149.105	RTE 50 EB	BOTH	12	
149.127	RTE 50 EB	BOTH	12	
149.144	RTE 50 EB	BOTH	12	
149.156	RTE 50 EB	PASSING	6	
149.166	RTE 50 EB	BOTH	12	
149.251	RTE 50 EB	BOTH	12	
149.257	RTE 50 EB	BOTH	12	
149.301	RTE 50 EB	BOTH	12	
149.312	RTE 50 EB	BOTH	12	
149.328	RTE 50 EB	BOTH	12	
149.361	RTE 50 EB	BOTH	12	
149.367	RTE 50 EB	BOTH	12	
149.372	RTE 50 EB	BOTH	12	
110.668	RTE 50 WB	DRIVING	6	
110.849	RTE 50 WB	DRIVING	6	
110.881	RTE 50 WB	DRIVING	6	
110.902	RTE 50 WB	BOTH	12	
110.957	RTE 50 WB	BOTH	12	
110.985	RTE 50 WB	BOTH	12	
111.002	RTE 50 WB	BOTH	12	
111.058	RTE 50 WB	BOTH	12	
111.088	RTE 50 WB	BOTH	12	
111.150	RTE 50 WB	BOTH	12	
111.259	RTE 50 WB	BOTH	12	
111.292	RTE 50 WB	DRIVING	6	
111.354	RTE 50 WB	BOTH	12	
111.365	RTE 50 WB	BOTH	12	
111.396	RTE 50 WB	DRIVING	6	
111.420	RTE 50 WB	DRIVING	6	
111.498	RTE 50 WB	BOTH	12	
111.513	RTE 50 WB	BOTH	12	
111.530	RTE 50 WB	BOTH	12	
111.609	RTE 50 WB	BOTH	12	
111.627	RTE 50 WB	DRIVING	6	
111.632	RTE 50 WB	BOTH	12	
111.671	RTE 50 WB	BOTH	12	
111.677	RTE 50 WB	BOTH	12	
111.723	RTE 50 WB	BOTH	12	
111.736	RTE 50 WB	BOTH	12	
111.779	RTE 50 WB	BOTH	12	
111.805	RTE 50 WB	BOTH	12	
111.828	RTE 50 WB	BOTH	12	
111.917	RTE 50 WB	BOTH	12	
111.950	RTE 50 WB	BOTH	12	
111.973	RTE 50 WB	BOTH	12	
112.064	RTE 50 WB	BOTH	12	
112.370	RTE 50 WB	DRIVING	6	
112.406	RTE 50 WB	PASSING	6	
112.440	RTE 50 WB	BOTH	12	
112.456	RTE 50 WB	DRIVING	6	
112.486	RTE 50 WB	DRIVING	6	
112.749	RTE 50 WB	BOTH	12	
112.983	RTE 50 WB	PASSING	6	
113.023	RTE 50 WB	BOTH	12	
113.166	RTE 50 WB	BOTH	12	
113.245	RTE 50 WB	PASSING	6	
	SUBTOTAL (2)		678	

DOWEL BAR RETROFIT

LOG MILE	LOCATION	LANE	DOWEL BAR RETROFIT EACH	REMARKS
113.246	RTE 50 WB	DRIVING	6	
113.302	RTE 50 WB	AUX.	6	AUX. LANE RAMP 4
113.392	RTE 50 WB	PASSING	12	
113.476	RTE 50 WB	DRIVING	6	
113.660	RTE 50 WB	BOTH	12	
113.795	RTE 50 WB	BOTH	12	
113.820	RTE 50 WB	BOTH	12	
113.988	RTE 50 WB	PASSING	6	
114.091	RTE 50 WB	BOTH	12	
114.184	RTE 50 WB	BOTH	12	
114.368	RTE 50 WB	BOTH	12	
114.447	RTE 50 WB	BOTH	12	
114.532	RTE 50 WB	BOTH	12	
114.555	RTE 50 WB	BOTH	12	
114.559	RTE 50 WB	DRIVING	6	
114.678	RTE 50 WB	BOTH	12	
114.717	RTE 50 WB	BOTH	12	
114.797	RTE 50 WB	BOTH	12	
114.834	RTE 50 WB	DRIVING	6	
114.861	RTE 50 WB	BOTH	12	
114.908	RTE 50 WB	BOTH	12	
114.923	RTE 50 WB	DRIVING	6	
115.014	RTE 50 WB	BOTH	12	
115.289	RTE 50 WB	DRIVING	6	
115.299	RTE 50 WB	BOTH	12	
115.318	RTE 50 WB	BOTH	12	
115.392	RTE 50 WB	BOTH	12	
115.437	RTE 50 WB	DRIVING	6	
115.630	RTE 50 WB	BOTH	12	
115.642	RTE 50 WB	DRIVING	6	
115.725	RTE 50 WB	BOTH	12	
115.752	RTE 50 WB	AUX.	6	AUX. LANE DECEL FOR RAMP
115.766	RTE 50 WB	DRIVING	6	
115.997	RTE 50 WB	BOTH	12	
116.012	RTE 50 WB	BOTH	12	
116.099	RTE 50 WB	BOTH	12	
116.185	RTE 50 WB	PASSING	6	
116.206	RTE 50 WB	BOTH	12	
116.208	RTE 50 WB	BOTH	12	
116.367	RTE 50 WB	BOTH	12	
0.034	WB RAMP 3		6	L.M. 0.000 = GORE POINT OF RAMP
0.049	WB RAMP 3		6	
0.055	WB RAMP 3		6	
0.070	WB RAMP 3		6	
0.089	WB RAMP 3		6	
0.006	WB RAMP 4		6	L.M. 0.000 = PVM'T JOINT AT RTE J
0.048	WB RAMP 4		6	
0.080	WB RAMP 4		6	
0.143	WB RAMP 4		6	
0.183	WB RAMP 4		6	
0.194	WB RAMP 4		6	
0.210	WB RAMP 4		6	
0.222	WB RAMP 4		6	
0.227	WB RAMP 4		6	
0.265	WB RAMP 4		6	
0.272	WB RAMP 4		6	
0.274	WB RAMP 4		6	
0.034	EB RAMP 1		6	L.M. 0.000 = GORE POINT OF RAMP
0.035	EB RAMP 1		6	
0.091	EB RAMP 1		6	
0.115	EB RAMP 1		6	
	SUBTOTAL (3)		528	

SUMMARY SHEET

SHEET 9 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE 50 | STATE MO

DISTRICT CD | SHEET NO. 3

COUNTY COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

DOWEL BAR RETROFIT				
LOG MILE	LOCATION	LANE	DOWEL BAR RETROFIT EACH	REMARKS
0.253	EB RAMP 1		6	
0.008	EB RAMP 2		6	L.M. 0.000 = PVM'T JOINT AT RTE M
0.043	EB RAMP 2		6	
0.066	EB RAMP 2		6	
0.151	EB RAMP 2		6	
0.162	EB RAMP 2		6	
		SUBTOTAL (4)	36	
		SUBTOTAL (3)	528	
		SUBTOTAL (2)	678	
		SUBTOTAL (1)	600	
		TOTAL	1842	
		USE	1842	

BITUMINOUS SHOULDER RUMBLE STRIP					
LOCATION	APPROX. LOG MILE	APPROX. LOG MILE	LENGTH FEET	SHOULDER RUMBLE STA.	REMARKS
EBL RTE 50 RT	145.848	146.017	892.32	8.9	BEGIN PROJECT TO RIGHT TURN LANE
	146.335	146.656	1694.88	17.0	END OF ACCEL LANE TO EXIT RAMP MILITIA
	146.852	147.266	2185.92	22.0	BETWEEN MILITIA GORES
	147.460	148.531	5654.88	57.0	ENTRANCE RAMP MILITIA TO EXIT RAMP M/J
	148.642	149.032	2059.20	21.0	BETWEEN M/J GORES
	149.225	149.559	1763.52	18.0	ENTRACE RAMP M/J TO PRIVATE DRIVE ACROSS FROM LISLETOWN
EBL RTE 50 LT	146.030	149.482	18226.56	183.0	END OF OFFSET LEFT TO DECEL LANE AT LISLETOWN
WBL RTE 50 RT	110.361	110.801	2323.20	24.0	BEGIN PROJECT TO MARINA RD
	110.850	112.287	7587.36	76.0	MARINA RD TO LISLETOWN
	112.338	112.733	2085.60	21.0	LISLETOWN TO EXIT RAMP M/J
	112.842	113.276	2291.52	23.0	BETWEEN M/J GORES
	113.464	114.512	5533.44	56.0	ENRANCE RAMP M/J TO EXIT RAMP MILITIA
	114.696	115.069	1969.44	20.0	BETWEEN MILITIA GORES
	115.408	115.814	2143.68	22.0	ENTRANCE RAMP MILITIA TO N. SHAMROCK
	116.089	116.529	2323.20	24.0	N. SHAMROCK TO END PROJECT
WBL RTE 50 LT	110.361	112.286	10164.00	102.0	BEGIN PROJECT TO LISLETOWN RD.
	112.611	115.875	17233.92	173.0	END OF ACCEL LANE TO OFFSET LEFT
	115.883	116.529	3410.88	35.0	OFFSET LEFT TO END OF PROJECT
			TOTAL	902.9	
			USE	903	

FURNISHING AND PLACING CLEAN AGGREGATE - 2" THICK				
LOCATION	LOG MILE	LOG MILE	FURN. & PLACE CLEAN AGGR. SY	REMARKS
EBL RTE 50	147.061	147.090	85.0	SEE JSP & SPECIAL SHEET FOR MORE INFORMATION
				COVER AREA INSIDE MEDIAN PROTECTION GUARDRAIL AT MILLITIA DRIVE BRIDGE
			85.0	
			85	

SUMMARY SHEET
SHEET 10 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY COLE

JOB NO. J5P3127

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

			PAVEMENT MARKING														
			WATERBORNE PAVEMENT MARKING PAINT, TYPE P BEADS					HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT, TYPE L BEADS					TYPE 2 PREFORMED MARKING TAPE (GROOVED)				
APPROX. LOGMILE	APPROX. LOGMILE	LOCATION	4" SOLID WHITE FT.	4" SOLID YELLOW FT.	24" SOLID YELLOW FT.	24" SOLID WHITE FT.	8" SOLID WHITE FT.	6" INT. WHITE FT.	6' DASHED WHITE FT.	6" SOLID WHITE FT.	6" SOLID YELLOW FT.	12" SOLID WHITE FT.	LEFT/RIGHT ARROW EACH	WORD "ONLY" EACH	24" WHITE STOPBAR FT.	12" WHITE YIELD LINE TRIANGLES EACH	REMARKS
145.848	146.030	EB RTE 50 LT									975.0						DECEL. LANE (N. SHAMROCK RD./LIBERTY RD.) INCLUDING OFFSET LT.
145.886	146.036	EB RTE 50 LT								1000.0						10	LT TURN LANE LINE TO END OF OFFSET LT.
146.01	149.585	EB RTE 50 LT									18920.0						EDGELINE FROM OFFSET LEFT TO END NEW DECEL LANE AT LISLETOWN RD.
149.585	149.614	EB RTE 50 LT							10.0		116.2						DASHED FOR LISLETOWN RD AND EDGELINE TO END OF HIGH FRICTION TREATMENT
149.519	149.585	EB RTE 50 LT							50.0	150.0							LANE LINES FOR DECEL LANE TO LISLETOWN RD.
145.848	149.614	EB RTE 50						4971.1									EB INT. LANE LINE
145.848	146.036	EB RTE 50 RT								992.6							EDGELINE FROM BEGIN PROJECT TO RT. TURN LANE LINE
146.036	146.090	EB RTE 50 RT/SHAMROCK							31.0	592.0							EDGELINE TURN LANE & SHAMROCK, LANE LINE TO ISLAND
146.090	146.124	EB RTE 50 RT				33.0				298.0	125.0						AROUND ISLAND
146.106		SHAMROCK RD. (50 L.M.)		50.0													CENTERLINE AT DIVISIONAL ISLAND
146.093		SHAMROCK RD. (50 L.M.)		24.0											12		CENTERLINE & STOPBAR
146.093	146.125	SHAMROCK/LIBERTY (50 L.M.)	290.0	136.0											12		EDGELINES RT. & LT. CENTERLINE & STOPBAR
146.107	146.211	EB ACCEL RT (50 L.M.)								650.0							EDGELINE FROM LIBERTY STOP BAR
146.090	146.211	EB RTE 50 RT								638.5							EDGELINE TO DASH LINE
146.211	146.335	EB RTE 50 RT							50.0	654.7							ACCEL. LANE EDGELINE AND DASHED LANE LINE TO END ACCEL. LANE
146.335	146.791	EB RTE 50 RT							60.0	2407.7							EDGELINE FROM ACCEL TO DECEL OF MILITIA DR EXIT RAMP
146.791	146.876	EB RTE 50 RT								455.0	100.0	225.0					GORE LINE FOR EXIT RAMP & EDGELINES RT & LT TO END OF RESURFACING
146.876	147.076	EB 50(L.M.) MILITIA RAMP					110.0			1080.0	1085.0						EXIT RAMP - END RESURF. TO END OF RAMP
146.791	147.268	EB RTE 50 RT								2518.6		360.0					GORE LINE AND EDGE LINE TO ENTR. RAMP GORE LINE
147.076	147.249	EB 50(L.M.) MILITIA RAMP								790.0	760.0						BEGIN ENTR. RAMP TO BEGIN RESURF. 100' BEFORE GORE LINE
147.249	147.334	EB RTE 50 RT								450.0	100.0	175.0					GORE LINE AND EDGELINES RT & LT - ENTR. RAMP TO END MAINLINE GORE
147.267	147.334	EB RTE 50 RT										360.0					GORELINE
147.334	147.458	EB RTE 50 RT							100.0	654.7							ACCEL. LANE (MILITIA DR.) - DASH FROM GORE TO TAPER
147.458	148.597	EB RTE 50 RT								6013.9							EDGELINE TO GORE OF RTE M/J EXIT RAMP
148.597	148.652	EB RTE 50 RT										265.0					GORELINE
148.597	148.881	EB RTE 50 RT (L.M.)								1485.0	1285.0	265.0					RAMP 1 - ROUTE M/J - EDGELINES AND GORELINE
148.652	149.044	EB RTE 50 RT								2069.8							EDGELINE BETWEEN GORELINES
149.044	149.080	EB RTE 50 RT										265.0					GORELINE
148.892	149.080	EB RTE 50 RT (L.M.)								885.0	750.0	340.0					RAMP 2 - ROUTE M/J - EDGELINE AND GORELINE
149.080	149.221	EB RTE 50 RT							100.0	744.5							ACCEL. LANE (ROUTE M/J) - DASH FROM GORE TO TAPER
7.924	8.013	ROUTE M	939.8	117.5													ROUTE M
149.221	149.614	EB RTE 50 RT								2075.0							EDGELINE END OF ACCEL. TO END OF PROJECT
110.361	112.809	WB RTE 50 RT								12925.4							EDGELINE TO EXIT RAMP
110.361	116.519	WB RTE 50						8128.6									WB INT. LANE LINE
110.323	110.725	WB RTE 50 LT		2122.6													EDGELINE TO TURN LANE
110.725	110.878	WB RTE 50 LT					90.0		28.8	220.0	1210.0		4				MARINA RD. CROSS OVER - INCLUDES MARKING FOR EB TURN LANE
110.878	112.311	WB RTE 50 LT									7566.2						EDGELINE TO PVM'T MARKING CHANGES AT LISLETOWN RD.
112.311	112.502	WB RTE 50 LT				55.0			140.0	650.0	105.0						NEW WB ACCEL. LANE LINES & CHEVRONS; +YELLOW EDGELINE FOR CROSSOVER
112.322	115.875	WB RTE 50 LT									18759.8						EDGELINE FROM BEGIN. ACCEL. LANE TO NEW OFFSET LT.
112.318		LISLETOWN RD.		600.0													LISLETOWN RD. CENTERLINE
112.809	113.012	WB RTE 50 RT (L.M.)								1230.0	890.0	185.0					RAMP 3 - ROUTE M/J - EDGE AND GORE LINES
113.000	113.012	WB RTE 50 RT (L.M.)			45.0						50.0						ADD APRON LT. SIDE OF RAMP - SEE SPECIAL SHEET
112.795	112.844	WB RTE 50 RT										260.0					GORE LINE WB LANES - EXIT RAMP
3.156	3.208	WB RTE 50 RT	549.1	343.2													ROUTE J
113.012	113.320	WB RTE 50 RT					120.0			1630.0	1280.0	270.0					RAMP 4 - ROUTE M/J
112.850	113.278	WB RTE 50 RT								2259.8							EDGELINE BETWEEN GORES FOR RTE M/J RAMPS
113.278	113.320	WB RTE 50 RT										375.0					GORE LINE WB LANES - ENTR. RAMP
113.320	113.470	WB RTE 50 RT							100.0	792.0							ACCEL. LANE - ENTR. RAMP - DASHED FROM GORE TO TAPER
113.470	114.521	WB RTE 50 RT								5549.3							EDGELINE FROM END ACCEL. LANE TO TAPER MILITIA DR. EXIT RAMP
114.521	114.642	WB RTE 50 RT							107.0	638.9							DECEL LANE (MILITIA DR.) - DASHED FROM END TAPER TO GORE
114.642	114.704	WB RTE 50 RT										325.0					GORE LINE MILITIA DR EXIT RAMP
114.642	114.713	WB RTE 50 RT (L.M.)								374.9	100.0	275.0					EXIT RAMP - MILITIA DR. TO END OF RESURFACE 100' PAST GORE LINE
114.713	114.836	WB 50 (L.M.) MILITIA RAMP					125.0			910.0	705.0						EXIT RAMP - END RESURF. TO PVM'T JOINT - EDGELINES, LANE LINES & ISLAND
114.704	115.069	WB RTE 50 RT								1927.2							EDGELINE BETWEEN GORES FOR MILITIA DR. RAMPS
0.991	1.112	MILITIA DR.	1075.0	1345.0									2	2			MILITIA DR. (INCLUDE BRIDGE)
115.069	115.126	WB RTE 50 RT										300.0					GORE LINE WB LANES - ENTR. RAMP
114.836	115.049	WB 50 (L.M.) MILITIA RAMP					110.0			1210.0	1035.0						ENTR. RAMP - PVM'T JOINT TO BEG. RESURF. - EDGELINES, LANE LINES & ISLAND
115.049	115.126	WB RTE 50 RT (L.M.)								406.6	100.0	300.0					ENTR. RAMP - MILITIA DR. - BEGIN RESURFACE TO END GORE LINE
115.126	115.410	WB RTE 50 RT							310.0	1499.5							ACCEL. LANE (MILITIA DR.)
115.41	115.812	WB RTE 50 RT								2122.6							EDGELINE END OF ENTR. RAMP TO RT. TURN LANE TO N. SHAMROCK
115.812	115.879	WB RTE 50 RT	70.0	290.0			172.0		7.0	380.0							N. SHAMROCK TO NEW WB ACCEL. LANE
115.879	116.089	WB RTE 50 RT				112.0			83.0	1667.0	44.0						NEW WB ACCEL. LANE LINES & CHEVRONS
116.089	116.519	WB RTE 50 RT								2270.4							EDGELINE FROM ACCEL. LANE TO END OF PROJECT
115.883	116.519	WB RTE 50 LT									3358.1						EDGELINE FROM OFFSET LEFT TO END OF PROJECT
116.75	116.797	WB RTE 50 LT									248.2						EDGELINE TO CLOSE GAP AT REMOVED MEDIAN CROSS-OVER
		TOTAL	2923.9	5028.3	45.0	200.0	727.0	13,099.7	1,176.8	65,268.6	59,667.5	4,545.0	6.0	2.0	24.0	10.0	MATCH EXISTING PAVEMENT MARKING - UNLESS
		USE	2924	5028	45	200	727	79,545			59,668	4,545	6	2	24	10	CHANGES AS SHOWN ON SPECIAL SHEETS

SUMMARY SHEET
SHEET 11 OF 12

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

COUNTY: COLE
JOB NO.: J5P3127
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

EFFECTIVE: 08-01-2012

SIGN	SIZE (IN.)	AREA (SQ. FT.)	QTY	TOTAL AREA	QTY RELOC	TOTAL RELOC AREA	DESCRIPTION
WARNING SIGNS							
W01-1L	48X48	16.00					TURN (SYMBOL LEFT ARROW)
W01-1R	48X48	16.00					TURN (SYMBOL RIGHT ARROW)
W01-2L	48X48	16.00					CURVE (SYMBOL LEFT ARROW)
W01-2R	48X48	16.00					CURVE (SYMBOL RIGHT ARROW)
W01-3L	48X48	16.00					REVERSE TURN (SYMBOL LEFT ARROW)
W01-3R	48X48	16.00					REVERSE TURN (SYMBOL RIGHT ARROW)
W01-4L	48X48	16.00					REVERSE CURVE (SYMBOL LEFT ARROW)
W01-4R	48X48	16.00					REVERSE CURVE (SYMBOL RIGHT ARROW)
W01-4bL	48X48	16.00					DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT ARROWS)
W01-4bR	48X48	16.00					DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT ARROWS)
W01-4cL	48X48	16.00					TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT ARROWS)
W01-4cR	48X48	16.00					TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT ARROWS)
W01-6	60X30	12.50					HORIZONTAL ARROW (SYMBOL)
W01-6a	72X36	18.00					HORIZONTAL ARROW (SYMBOL ON PERMANENT BARRICADE)
W01-7	60X30	12.50					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-7a	72X36	18.00					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL ON PERMANENT BARRICADE)
W01-8	18X24	3.00					CHEVRON (SYMBOL)
W01-8a	30X36	7.50					CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
W03-1	48X48	16.00					STOP AHEAD (SYMBOL)
W03-2	48X48	16.00	1	16			YIELD AHEAD (SYMBOL)
W03-3	48X48	16.00					SIGNAL AHEAD (SYMBOL)
W03-4	48X48	16.00					BE PREPARED TO STOP
W03-5	48X48	16.00					SPEED LIMIT AHEAD
W04-1L	48X48	16.00	2	32			MERGE (SYMBOL FROM LEFT)
W04-1aL	48X48	16.00					MERGE (LEFT ARROW AT LANE DROP)
W04-1R	48X48	16.00	2	32			MERGE (SYMBOL FROM RIGHT)
W04-1aR	48X48	16.00					MERGE (RIGHT ARROW AT LANE DROP)
W05-1	48X48	16.00	3	48			ROAD/BRIDGE/RAMP NARROWS
W05-3	48X48	16.00					ONE LANE BRIDGE
W05-5	48X48	16.00					NARROW LANES
W06-1	48X48	16.00					DIVIDED HIGHWAY (SYMBOL)
W06-2	48X48	16.00					DIVIDED HIGHWAY END (SYMBOL)
W06-3	48X48	16.00					TWO WAY TRAFFIC (SYMBOL)
W07-3a	30X24	5.00					NEXT XX MILES (PLAQUE)
W08-1	48X48	16.00					BUMP
W08-2	48X48	16.00					DIP
W08-3	48X48	16.00					PAVEMENT ENDS
W08-4	48X48	16.00					SOFT SHOULDER
W08-5	48X48	16.00					SLIPPERY WHEN WET (SYMBOL)
W08-6	48X48	16.00					TRUCK CROSSING WITH FLAGS
W08-6c	48X48	16.00					TRUCK ENTRANCE
W08-7	36X36	9.00					LOOSE GRAVEL
W08-9	48X48	16.00					LOW SHOULDER
W08-11	48X48	16.00					UNEVEN LANES
W08-12	48X48	16.00					NO CENTER LINE
W10-1	42 RND.	9.62					RAILROAD CROSSING
W012-1	24X24	4.00					DOUBLE DOWN ARROW (SYMBOL)
W012-2	48X48	16.00					LOW CLEARANCE (SYMBOL)
W012-2x	24X18	3.00					LOW CLEARANCE (PLAQUE)
W012-2a	84X24	14.00					OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W08-15	48X48	16.00					GROOVED PAVEMENT
W08-15p	30X24	5.00					MOTORCYCLE (PLAQUE)
W08-17	48X48	16.00					SHOULDER DROP-OFF (SYMBOL)
W08-17p	30X24	5.00					SHOULDER DROP-OFF (PLAQUE)
SPECIAL	120X60	50.00					LOW CLEARANCE XX FT XX IN XX MILES AHEAD
SPECIAL	120X60	50.00					WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
W013-1	30X30	6.25					ADVISORY SPEED (PLAQUE)
W016-2	30X24	5.00					XXX FEET (PLAQUE)
W016-3	30X24	5.00					X MILE (PLAQUE)
W020-1	48X48	16.00	7	112			ROAD/BRIDGE/RAMP WORK AHEAD
W020-2	48X48	16.00					DETOUR AHEAD
W020-3	48X48	16.00					ROAD CLOSED AHEAD
W020-4	48X48	16.00	2	32			ONE LANE ROAD AHEAD
W020-5	48X48	16.00	4	64			RIGHT/CENTER/LEFT LANE CLOSED AHEAD
W020-5a	48X48	16.00					2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
W020-6a	48X48	16.00	2	32			RIGHT/CENTER/LEFT LANE CLOSED
W020-7a	48X48	16.00	2	32			FLAGGER (SYMBOL) WITH FLAGS
W021-2	36X36	9.00					FRESH OIL
W021-5	48X48	16.00	2	32			SHOULDER WORK AHEAD
W022-1	48X48	16.00					BLASTING ZONE AHEAD
W022-2	42X36	10.50					TURN OFF 2-WAY RADIO AND PHONE
W022-3	42X36	10.50					END BLASTING ZONE
W022-6e	21X15	2.19	2	4.38			WET PAINT (ARROW PIVOTS)
GUIDE SIGNS							
SPECIAL	36X36	9.00					FRESH OIL/LOOSE GRAVEL
E05-1	36X48	12.00	1	12			GORE EXIT
E05-2	48X36	12.00					EXIT OPEN
E05-2a	48X36	12.00					EXIT CLOSED
G020-1	60X24	10.00	4	40			ROAD WORK NEXT 6 MILES
G020-2	48X24	8.00	4	32			END ROAD WORK
G020-4	36X18	4.50					PILOT CAR FOLLOW ME
SPECIAL	42X30	8.75					PLEASE WAIT FOR PILOT CAR
G020-5aP	36X24	6.00					WORK ZONE (PLAQUE)
M04-8a	24X18	3.00					END DETOUR
M04-9L	48X36	12.00					DETOUR (LEFT ARROW)
M04-9R	48X36	12.00					DETOUR (RIGHT ARROW)
M04-10L	48X18	6.00					DETOUR (ARROW LEFT)
M04-10R	48X18	6.00					DETOUR (ARROW RIGHT)
REGULATORY SIGNS							
R1-1	48X48	13.25					STOP
R1-2	48 TRI.	6.93	1	6.93			YIELD
R1-2a	36X36	9.00					TO ONCOMING TRAFFIC (PLAQUE)
R1-3	20X9	1.25					X-WAY (PLAQUE)
R2-1	36X48	12.00	4	48			SPEED LIMIT XX
R3-1	48X48	16.00					NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00					NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00					NO TURNS
R3-4	48X48	16.00					NO U-TURN (SYMBOL)
R3-7L	30X30	6.25					LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25					RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00					DO NOT PASS
R4-2	36X48	12.00					PASS WITH CARE
R4-7aL	36X48	12.00					KEEP LEFT (HORIZONTAL ARROW)
R4-7a	36X48	12.00					KEEP RIGHT (HORIZONTAL ARROW)
R5-1	30X30	6.25					DO NOT ENTER
R5-1a	36X24	6.00					WRONG WAY
R6-1L	48X18	6.00					ONE WAY ARROW (LEFT)
R6-1R	48X18	6.00					ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00					ONE WAY (LEFT)
R6-2R	24X30	5.00					ONE WAY (RIGHT)
R10-6	24X36	6.00					STOP HERE ON RED (45° ARROW)
R11-2	48X30	10.00					ROAD CLOSED
R11-3a	60X30	12.50					ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50					ROAD CLOSED TO THRU TRAFFIC
S4-4	36X15	3.75					WHEN FLASHING
CONST-3A	60X48	20.00					FINE SIGN
CONST-3X	56X12	4.67					SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS							
SPECIAL	36X48	12.00					POINT OF PRESENCE
SPECIAL	96X48	32.00	2	64			POINT OF PRESENCE
CONST-7-48	48X24	8.00					RATE OUR WORK ZONE
CONST-7-72	72X36	18.00	4	72			RATE OUR WORK ZONE
616-10.05 CONSTRUCTION SIGNS TOTAL				711			
616-10.10 RELOCATED SIGNS TOTAL							

ITEM NUMBER	TOTAL QTY	DESCRIPTION
6122008		IMPACT ATTENUATOR (8 SAND BARRELS)
6122009		IMPACT ATTENUATOR (9 SAND BARRELS)
6122010		IMPACT ATTENUATOR (10 SAND BARRELS)
6122012		IMPACT ATTENUATOR (12 SAND BARRELS)
6122014		IMPACT ATTENUATOR (14 SAND BARRELS)
6122017		IMPACT ATTENUATOR (17 SAND BARRELS)
6122019		IMPACT ATTENUATOR (19 SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6123000A	2	TRUCK OR TRAILER MOUNTED ATTENUATOR (TMA)
6161007		SPEED LIMIT AND STROBE LIGHT ASSEMBLY
6161008	13	ADVANCED WARNING RAIL SYSTEM
6161009	9	FLAG ASSEMBLY
6161020		CHANNELIZER (DRUM-LIKE)
6161022		CHANNELIZER (CONES)
6161024		CHANNELIZER (TRIM LINE) WITH LIGHT
6161025		CHANNELIZER (TRIM LINE)
6161026		CHANNELIZER (VERTICAL PANEL)
6161027		CHANNELIZER (VERTICAL PANEL) WITH LIGHT
6161028	332	CHANNELIZER
6161030		TYPE III MOVEABLE BARRICADE
6161031		TYPE III MOVEABLE BARRICADE WITH LIGHT
6161033		DIRECTION INDICATOR BARRICADE
6161034		DIRECTION INDICATOR BARRICADE, WITH LIGHT
6161040	3	FLASHING ARROW PANEL
6161047		TYPE III OBJECT MARKER
6161051		WARNING LIGHT, TYPE A
6161052		WARNING LIGHT, TYPE B
6161053		WARNING LIGHT, TYPE C
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A		CHANGEABLE MESSAGE SIGN WITHOUT COMMUNICATION INTERFACE, CONTRACTOR FURNISHED/RETAINED
6161099	2	CHANGEABLE MESSAGE SIGN WITH COMMUNICATION INTERFACE, CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6173600D		CONTRACTOR FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER
6173602B		CONTRACTOR FURNISHED/COMMISSION RETAINED TEMPORARY TRAFFIC BARRIER
6174000A		TEMPORARY TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6176000B		COMMISSION FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER
6177000B		COMMISSION FURNISHED/RETAINED TEMPORARY TRAFFIC BARRIER HEIGHT TRANSITION
9019400		TEMPORARY LIGHTING
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	3

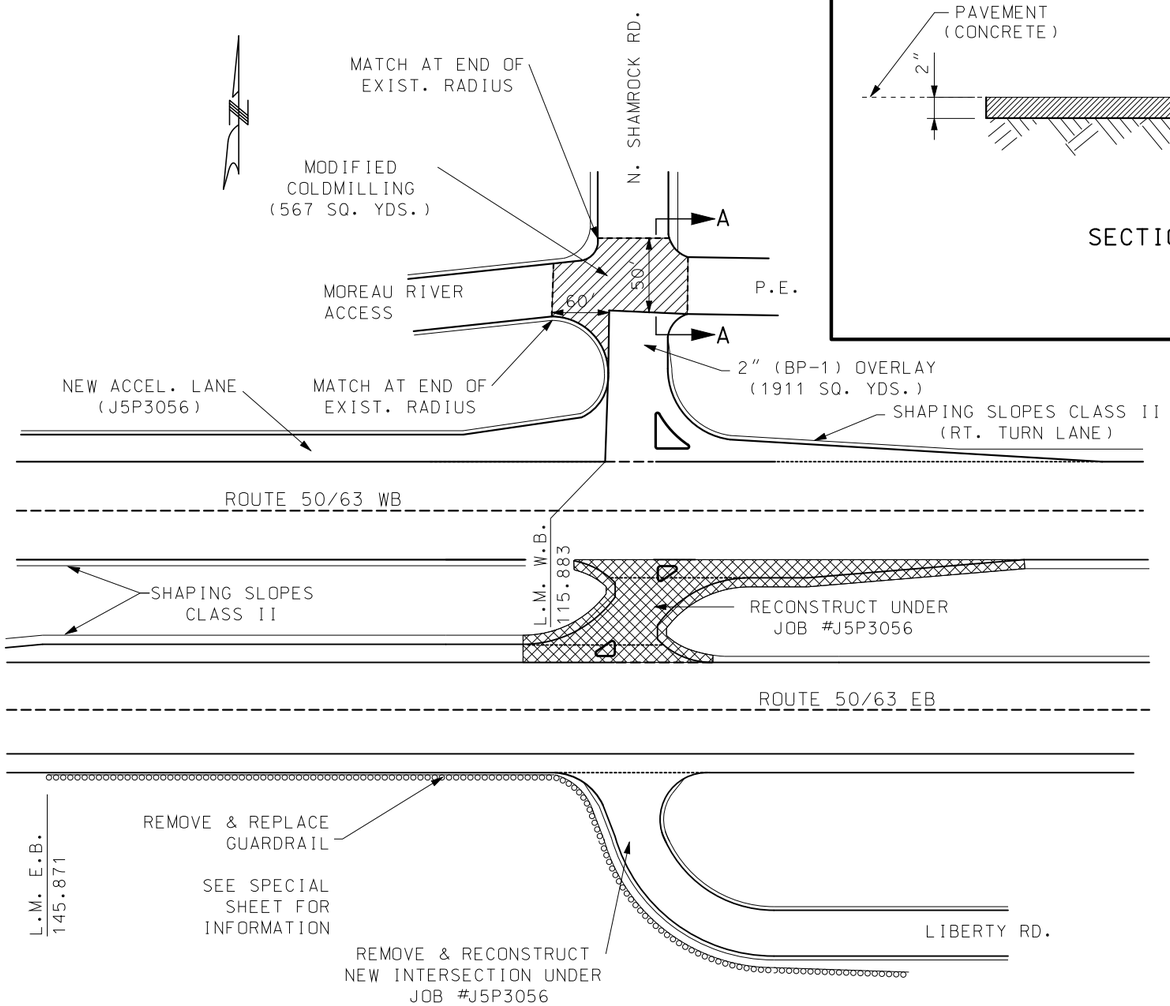
COUNTY: COLE
JOB NO.: J5P3127
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

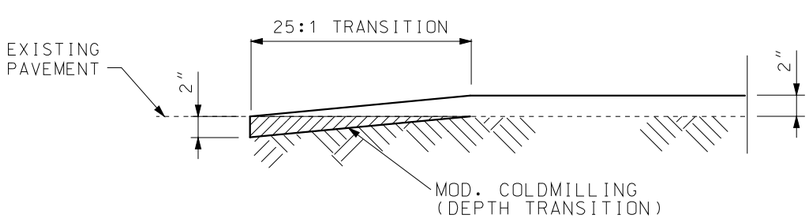
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

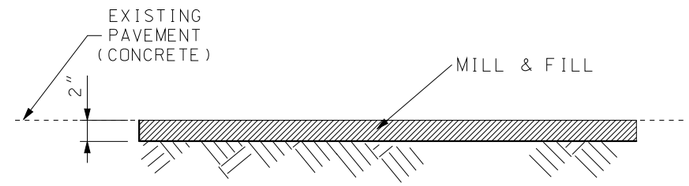
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

N. SHAMROCK RD./LIBERTY RD.
L.M. 146.034 E.B./L.M. 115.877 W.B.

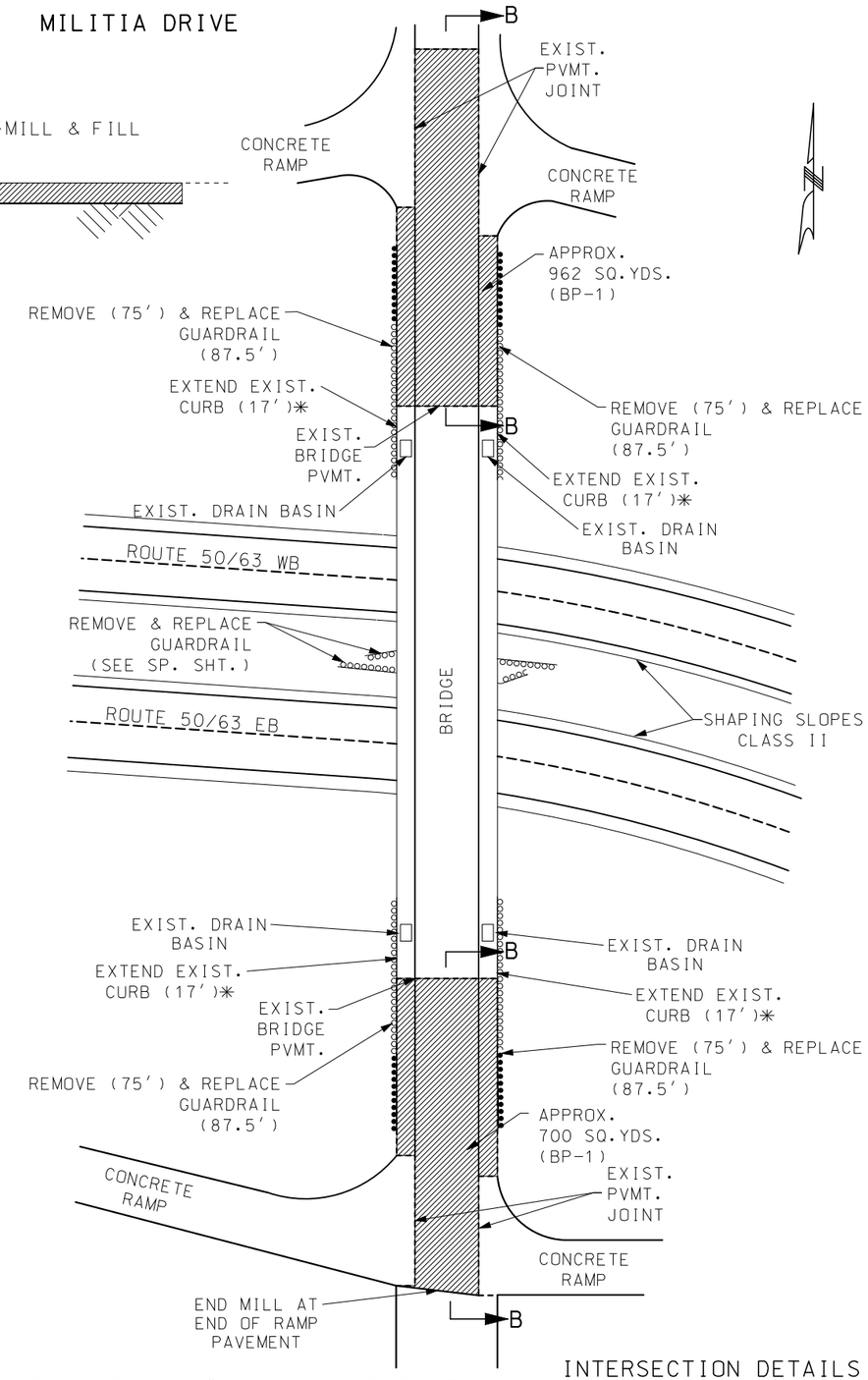




SECTION A-A



SECTION B-B



✳ DRILL & EPOXY 12" - #4 BARS INTO EXISTING CONCRETE PVM'T FOR ATTACHMENT OF CURB TO EXISTING PVM'T.: INCIDENTAL TO INSTALLATION OF CURB. SEE STD. PLANS FOR REQUIREMENTS.

LEGEND

- DEPTH TRANSITION
- COLDMILLING
- EXIST. ROADBED REMOVAL (J5P3056)

LOG MILES AND LENGTHS ARE APPROXIMATE. VERIFY IN FIELD.

NOT TO SCALE

INTERSECTION DETAILS
DEPTH TRANSITIONS
SPECIAL SHEET
SHEET 1 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

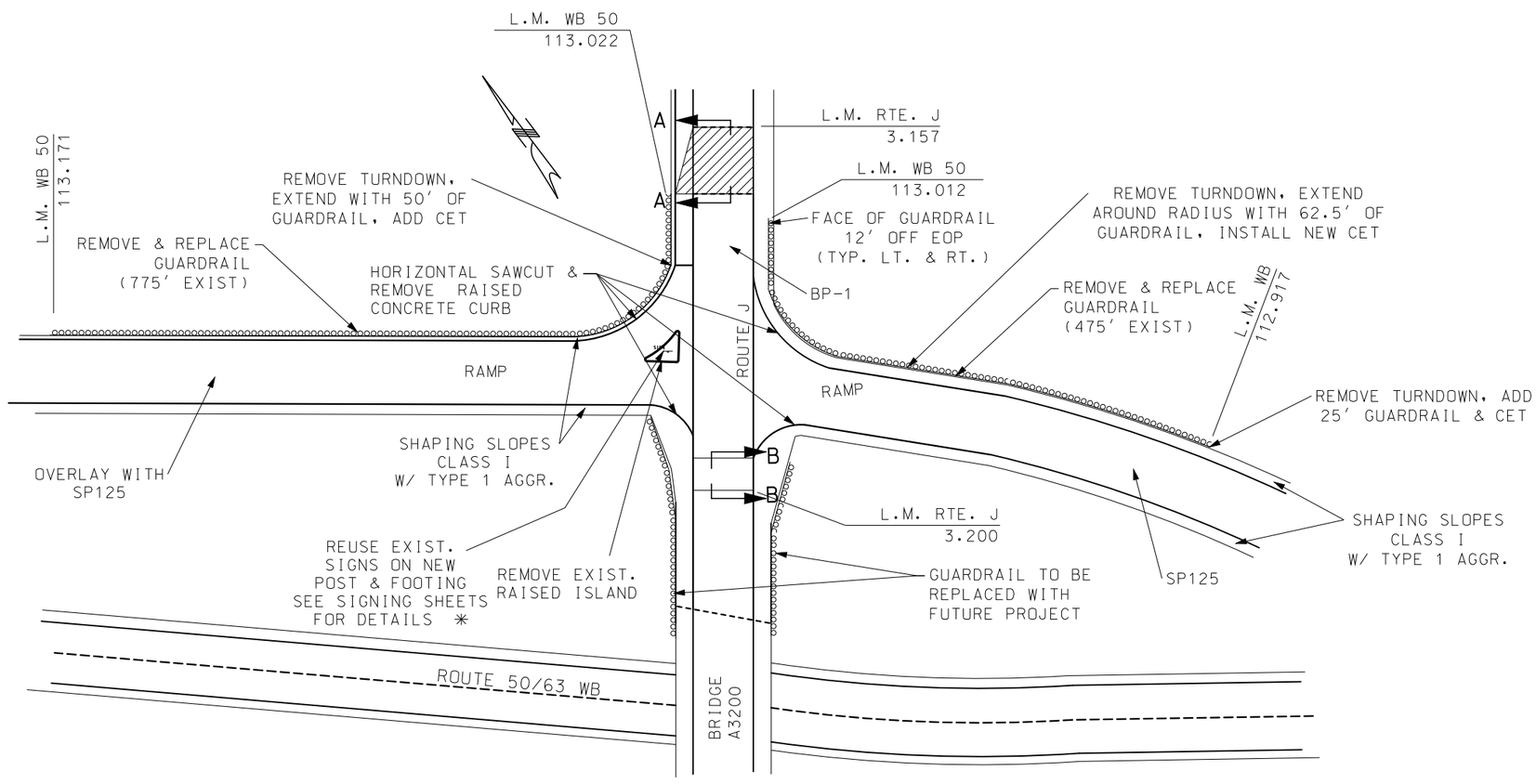
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 4
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

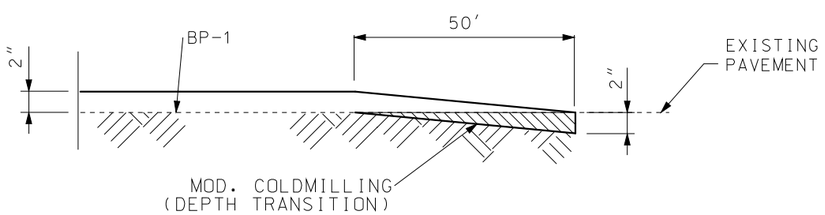
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

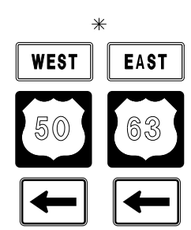
REV.

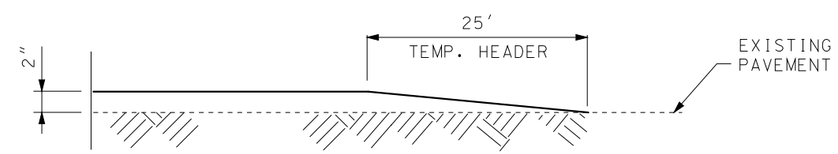
ROUTE J





SECTION A-A





SECTION B-B

LEGEND

DEPTH TRANSITION

LOG MILES AND LENGTHS ARE APPROXIMATE.
VERIFY IN FIELD.

NOT TO SCALE

INTERSECTION DETAILS
DEPTH TRANSITIONS
SPECIAL SHEET
SHEET 2 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

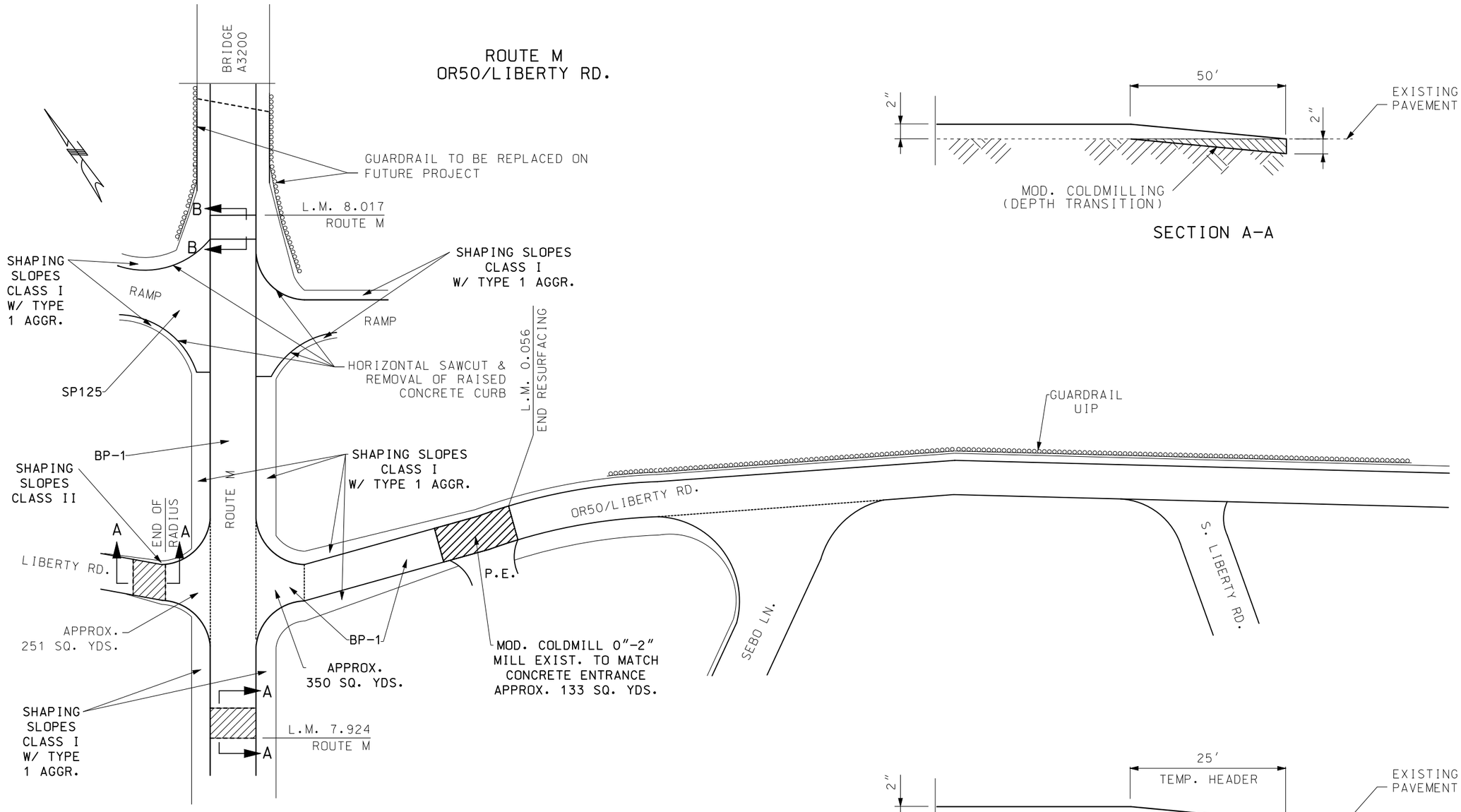
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 5
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

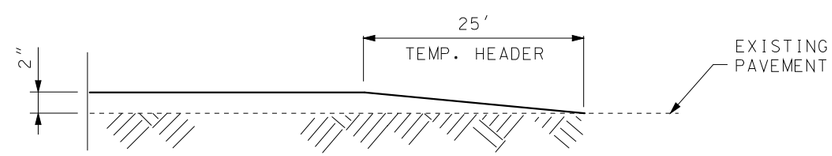
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.



SECTION A-A



SECTION B-B

LEGEND

DEPTH TRANSITION

LOG MILES AND LENGTHS ARE APPROXIMATE. VERIFY IN FIELD.

NOT TO SCALE

INTERSECTION DETAILS
DEPTH TRANSITIONS
SPECIAL SHEET
SHEET 3 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

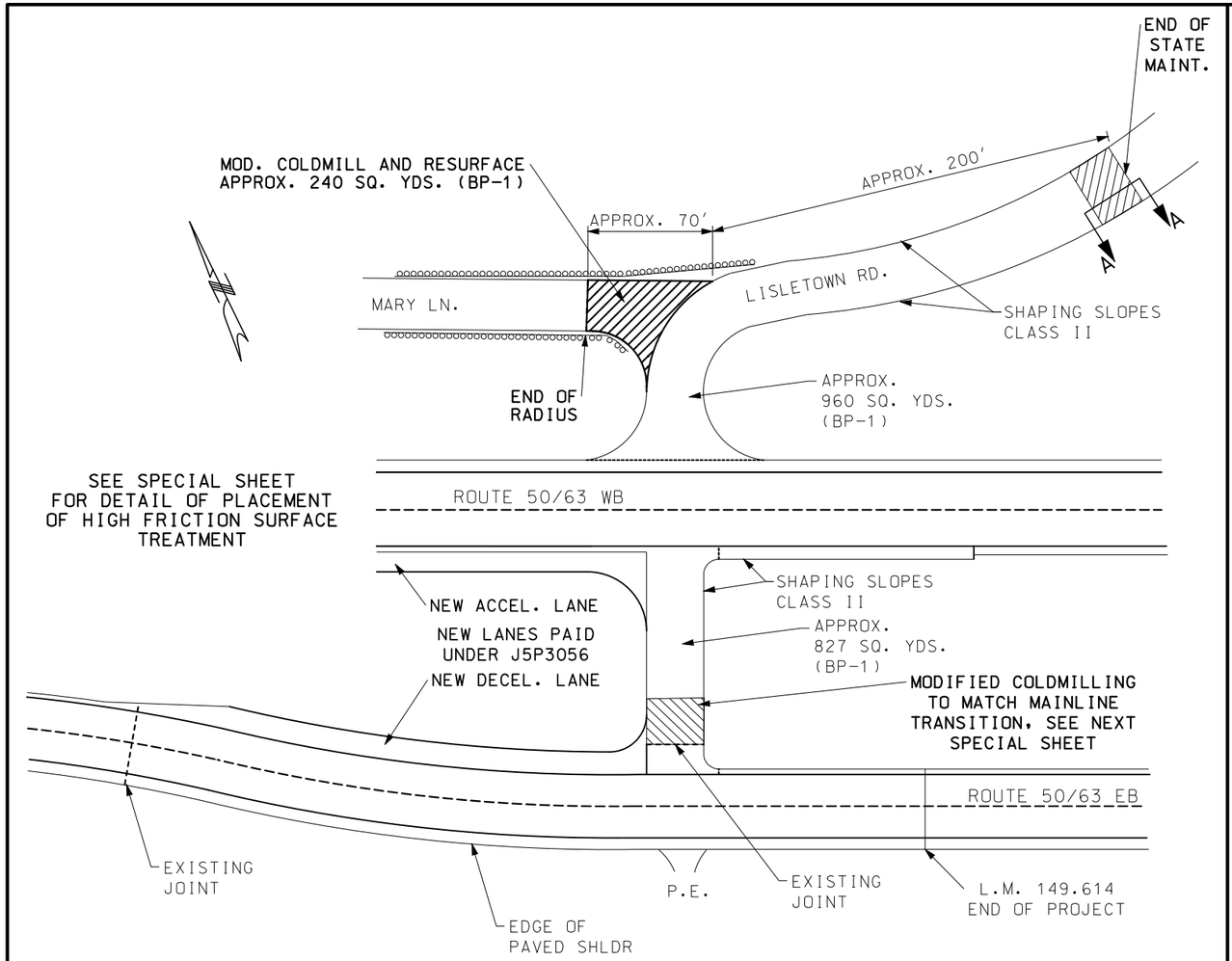
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

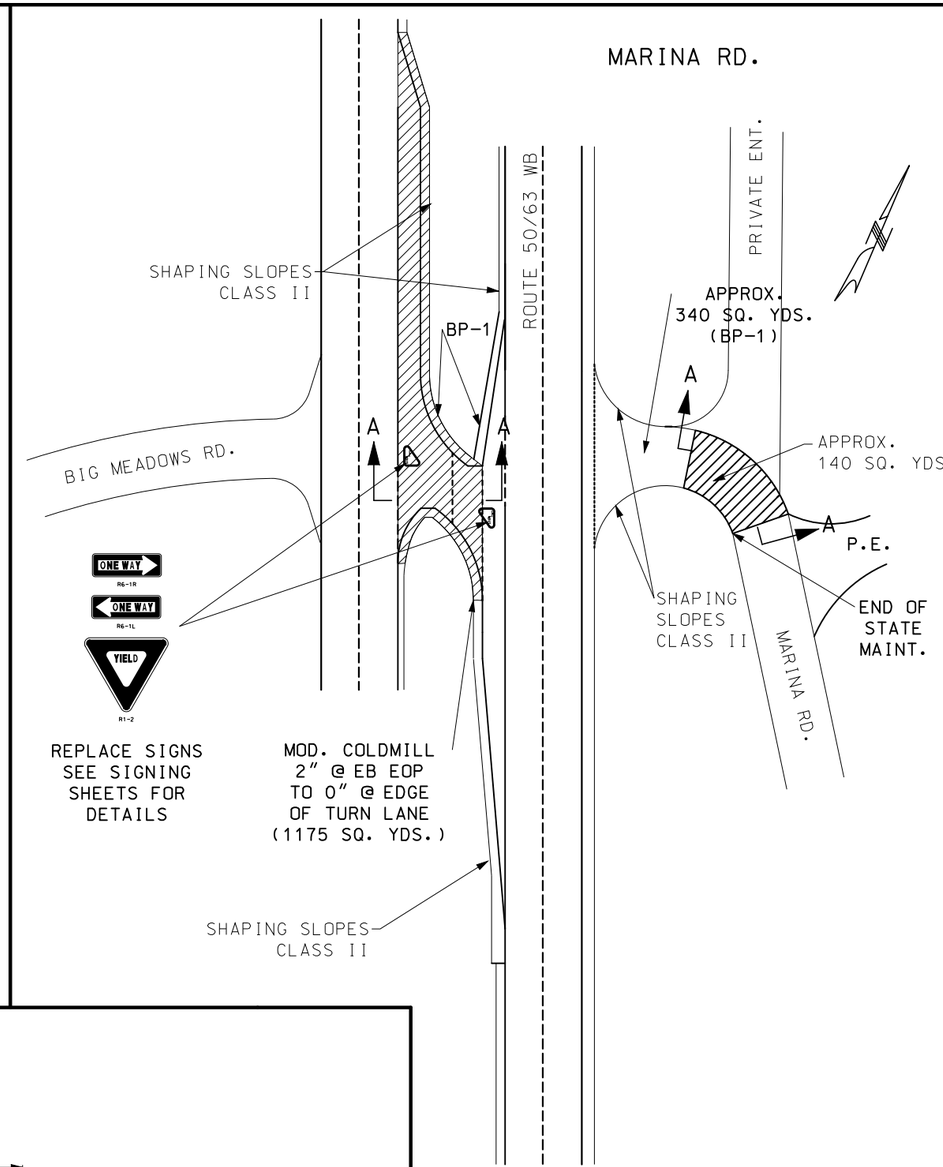
DATE PREPARED	
10/3/2016	
ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	6
COUNTY	
COLE	
JOB NO.	
J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

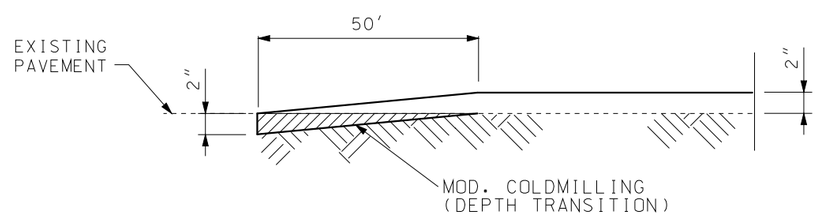




NOT TO SCALE

LEGEND

DEPTH TRANSITION



SECTION A-A

LOG MILES AND LENGTHS ARE APPROXIMATE. VERIFY IN FIELD.

INTERSECTION DETAILS
DEPTH TRANSITIONS
SPECIAL SHEET
SHEET 4 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	7
COUNTY	
COLE	
JOB NO.	
J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

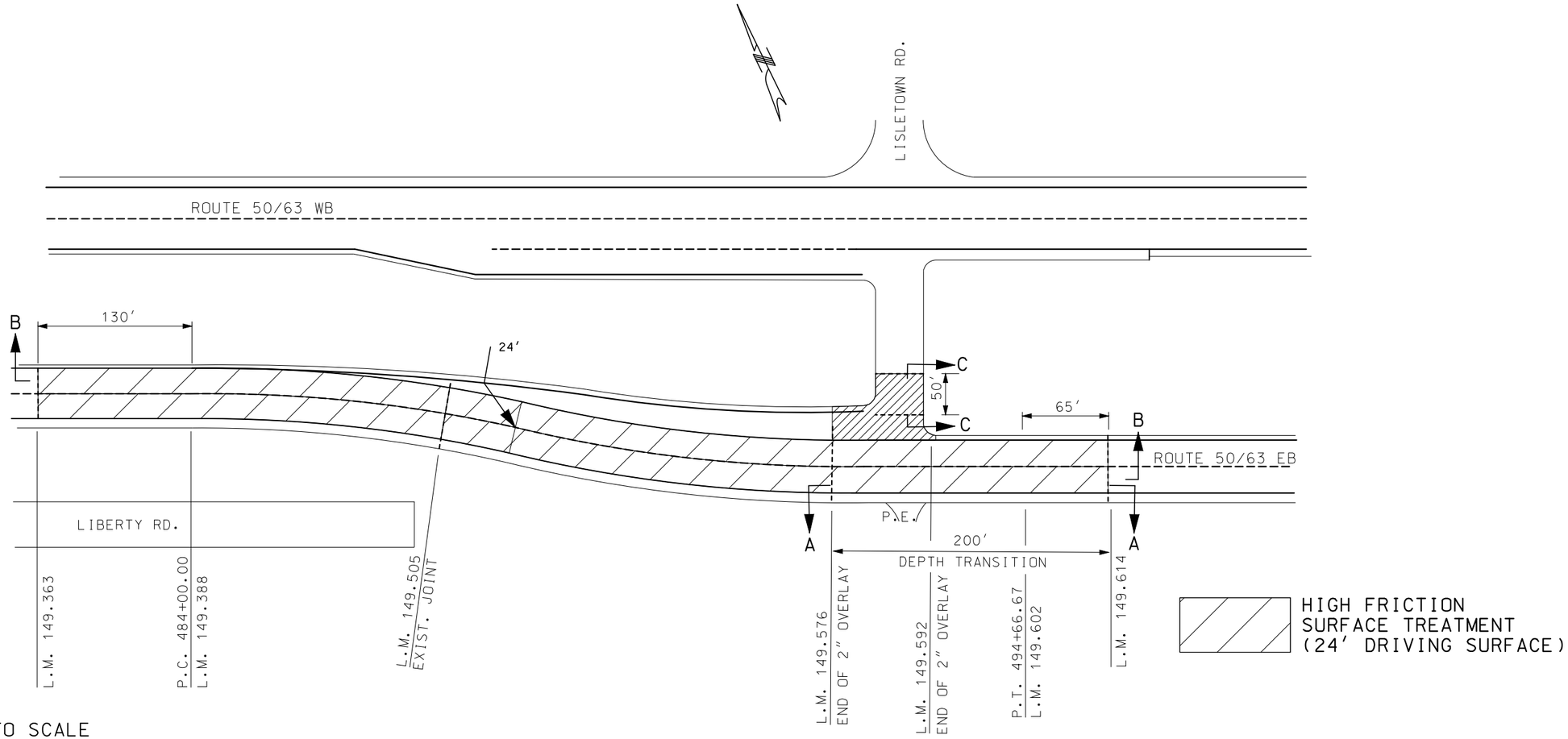
DESCRIPTION

DATE

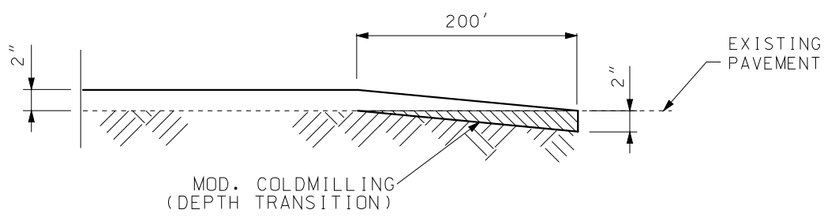
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

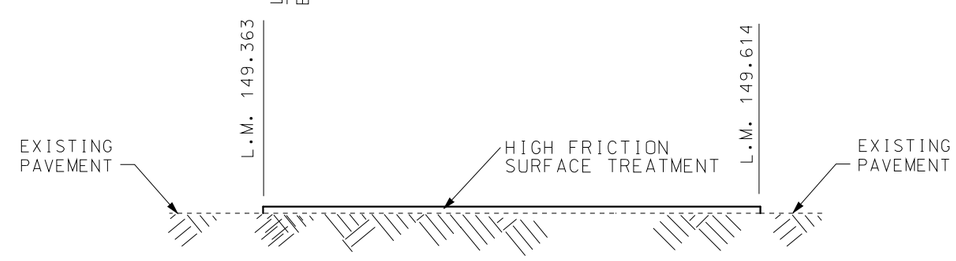
REV.



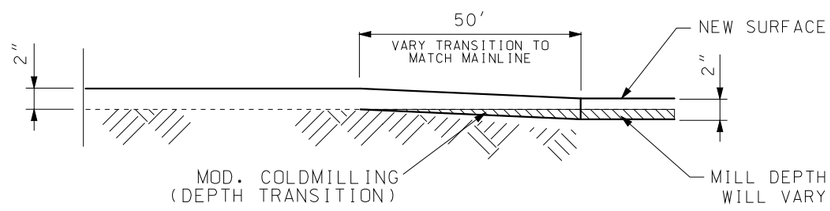
NOT TO SCALE



SECTION A–A



SECTION B–B



SECTION C–C

SEE JSP'S FOR PLACEMENT REQUIREMENTS INCLUDING CURE TIME BEFORE PLACEMENT ON NEW ASPHALT SURFACE & AMBIENT TEMPERATURE REQUIREMENTS

LOG MILES AND LENGTHS ARE APPROXIMATE.
LOG MILES BASED ON ROUTE 50.
VERIFY IN FIELD.

PLACEMENT OF HIGH FRICTION SURFACE TREATMENT
SPECIAL SHEET
SHEET 5 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

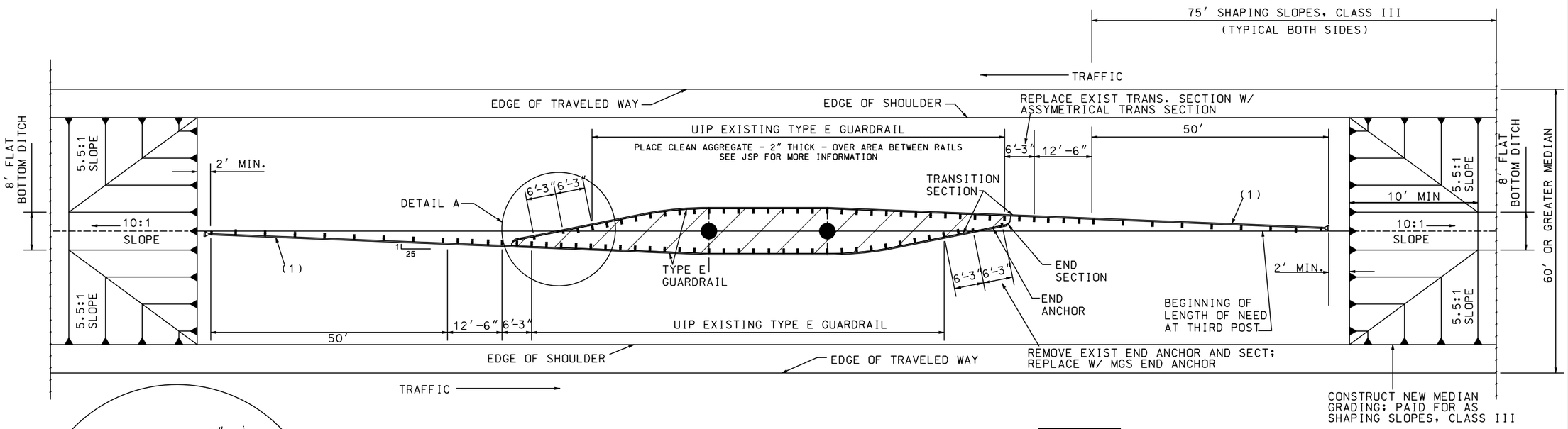
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/3/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	8
COUNTY	COLE
JOB NO.	J5P3127
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

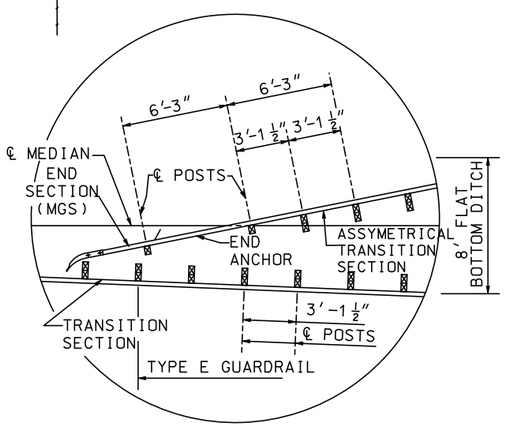
REV.



GUARDRAIL MODIFICATION FOR BRIDGE PIERS AT ℄ OF MEDIAN-MIITIA DR.

FURNISH AND PLACE CLEAN AGGR - 2" THICK

(1) TYPE A MASH CRASHWORTHY END TREATMENT. LENGTH MAY VARY BY MANUFACTURER; NO ADDITIONAL PAY FOR ADJUSTMENTS DUE TO LENGTH.



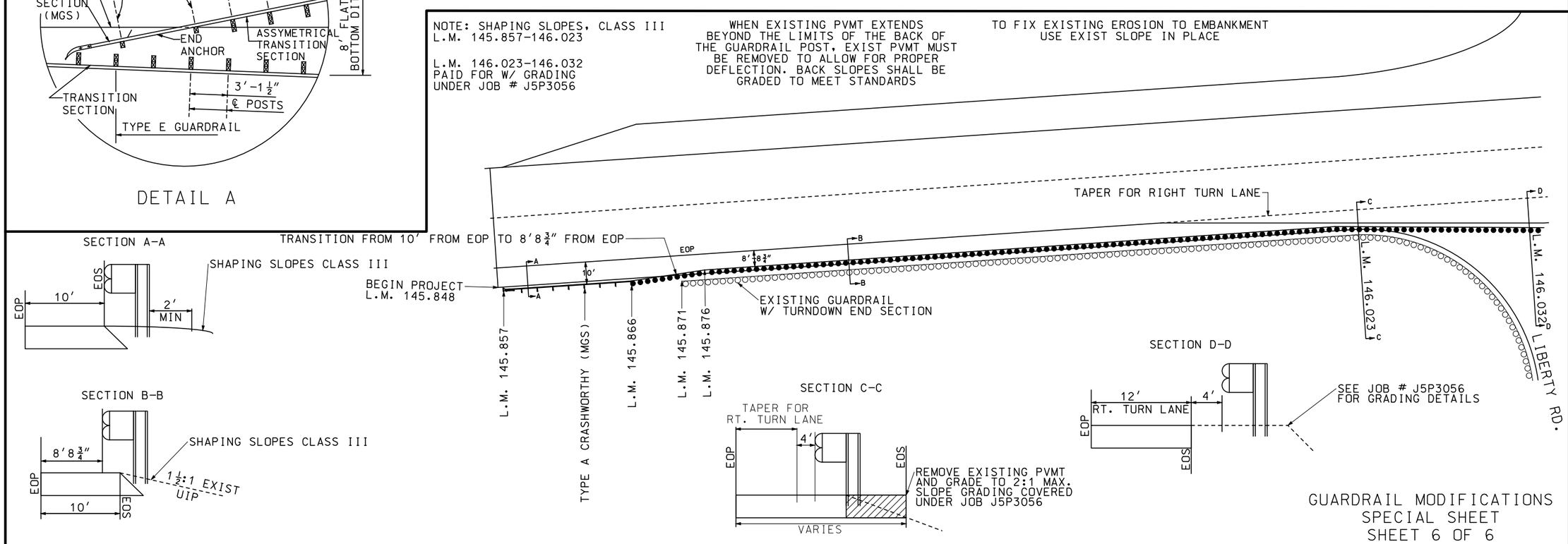
DETAIL A

NOTE: SHAPING SLOPES, CLASS III
L.M. 145.857-146.023

L.M. 146.023-146.032
PAID FOR W/ GRADING
UNDER JOB # J5P3056

WHEN EXISTING PVMT EXTENDS BEYOND THE LIMITS OF THE BACK OF THE GUARDRAIL POST, EXIST PVMT MUST BE REMOVED TO ALLOW FOR PROPER DEFLECTION. BACK SLOPES SHALL BE GRADED TO MEET STANDARDS

TO FIX EXISTING EROSION TO EMBANKMENT USE EXIST SLOPE IN PLACE



GUARDRAIL MODIFICATIONS
SPECIAL SHEET
SHEET 6 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	9
COUNTY	
COLE	
JOB NO.	
J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

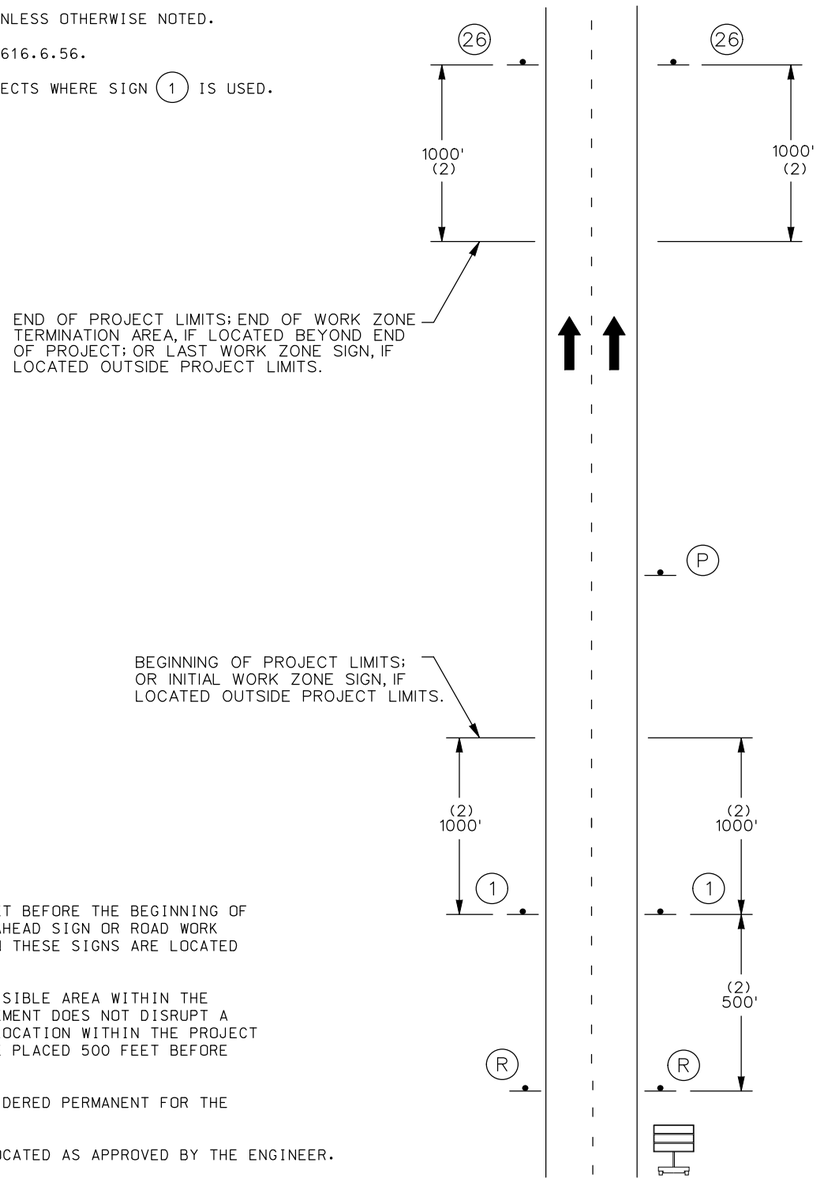
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

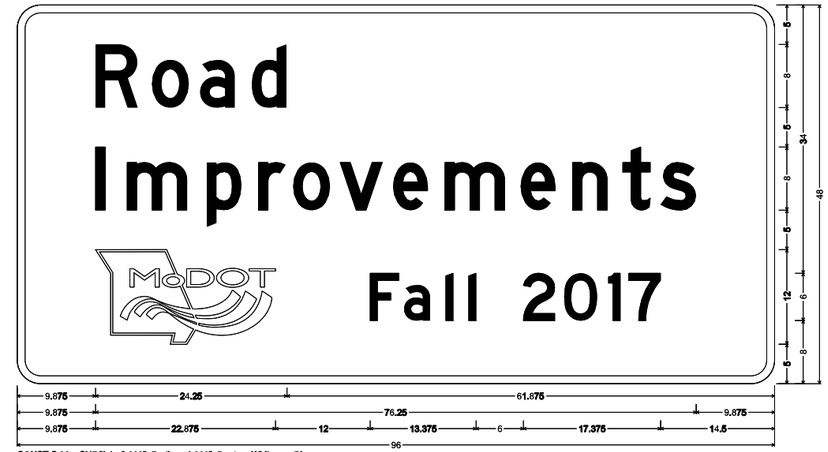
BEGIN/END OF PROJECT SIGNING

MULTI-LANE DIVIDED

GENERAL NOTES:

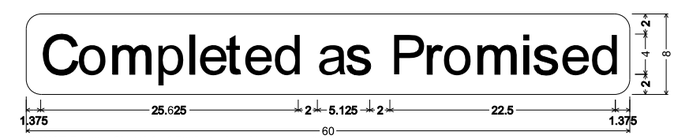
1. ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
2. DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS AND AS APPROVED BY THE ENGINEER. WHERE TRAFFIC BACKUPS ARE EXPECTED BEYOND THE ADVANCE WARNING AREA, ADDITIONAL SIGNING MAY BE NEEDED.
3. ALL SIGNS SHALL BE PORTABLE UNLESS OTHERWISE NOTED.
4. SIGN (1) IS REQUIRED PER EPG 616.6.56.
5. SIGN (26) IS USED ON ALL PROJECTS WHERE SIGN (1) IS USED.





CONST-5-96 SHR2L1; 3.000" Radius, 1.000" Border, White on Blue;
[Road] D; [Improvements] D; [Fall 2017] D;
Table of letter and object lefts.

R 9.875	o 17.125	a 23.125	d 29.750									
I 9.875	m 14.000	p 24.000	r 30.625	o 35.000	v 41.000	e 47.625	m 54.250	e 63.750	n 70.375	t 76.750	s 81.625	
w 9.875	r 44.750	a 49.000	l 54.375	57.250	2 64.125	O 69.375	1 75.000	7 77.500				



CONST-5P-60 SHR4L1; 1.500" Radius, No border, Yellow;
[Completed as Promised] Black Arial;
Table of letter and object lefts.

C 1.375	o 5.000	m 8.250	p 12.750	l 15.875	e 17.125	t 19.875	e 21.625	d 24.500	a 29.000	s 31.750
P 36.125	r 39.500	o 41.375	m 44.500	i 49.125	s 50.250	e 53.125	d 56.000			

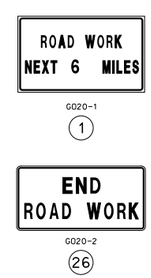
NOTES:

SIGN CONST-7-72 IS PLACED 500 FEET BEFORE THE BEGINNING OF PROJECT LIMITS OR THE ROAD WORK AHEAD SIGN OR ROAD WORK NEXT XX MILES SIGN, IF USED, WHEN THESE SIGNS ARE LOCATED OUTSIDE THE PROJECT LIMITS.

SIGN CONST-5-96 IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE, THE SIGN MAY BE PLACED 500 FEET BEFORE SIGN CONST-7-72.

ALL SIGNS ON THIS SHEET ARE CONSIDERED PERMANENT FOR THE DURATION OF THE PROJECT.

CHANGEABLE MESSAGE SIGNS TO BE LOCATED AS APPROVED BY THE ENGINEER.



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANGEABLE MESSAGE SIGN

NOT TO SCALE

TRAFFIC CONTROL PLAN
BEGIN AND END OF PROJECT
SHEET 1 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

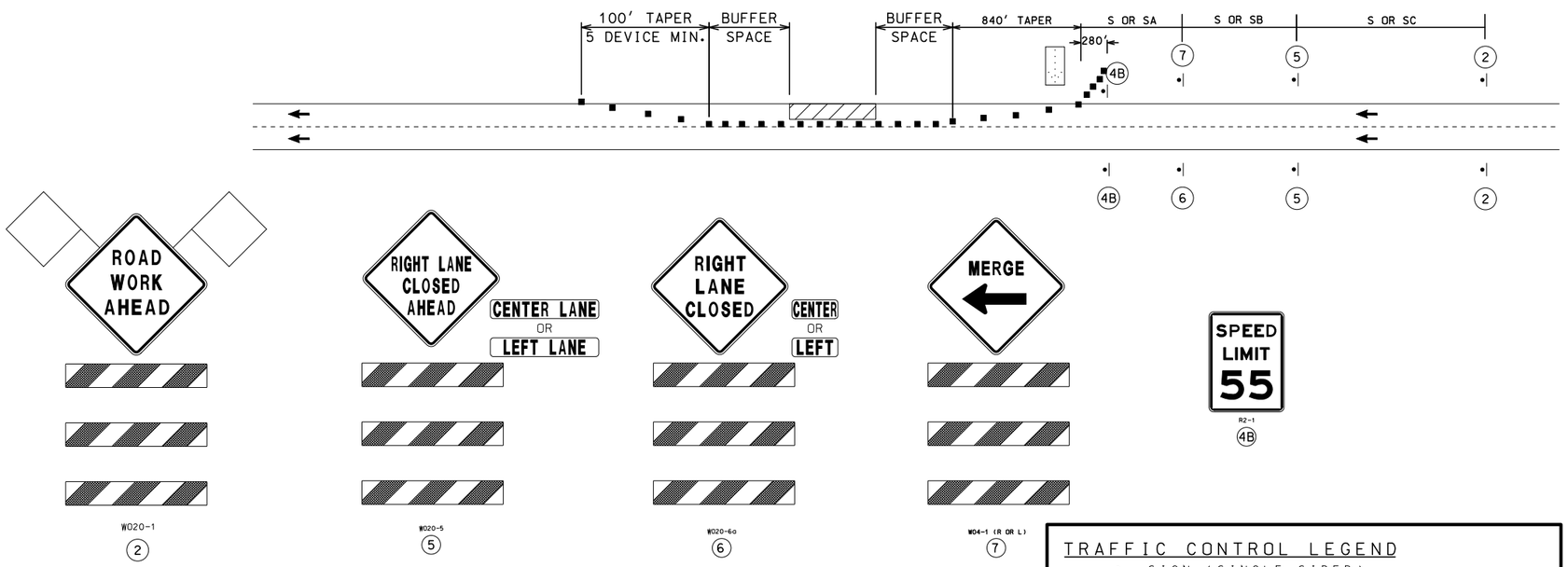
DATE PREPARED	
10/24/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 10
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

LANE CLOSURE – DUAL LANE ROUTE 50



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADES
- WORK ZONE
- FLASHING ARROW PANEL

NOTES:

LAYOUTS ARE TYPICAL FOR EITHER LANE.

SIGN (2) NOT NEEDED IF LOCATED WITHIN LIMITS OF AN ACTIVITY AREA WHERE ANOTHER SIGN (2) IS ALREADY USED.

SIGN (4B) MAY BE MOVED UPSTREAM IF THE ENGINEER DEEMS THE WORK ZONE REQURES ADVANCE SPEED LIMIT NOTIFICATION.

NOT TO SCALE

TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES [2]				
SPEED MPH (S) [1]	TAPER LENGTHS (L) FOR LATERAL SHIFTS (W) FT [2]		CHANNELIZER SPACING [3], FT	
	SHOULDER [4] (T1)	LANE [5] (T2)	TAPERS	BUFFER/ WORK AREA
UP TO 35	70	245	35 [6]	40 [6]
40-45	150	540	40 [6]	80 [6]
50-55	185	660	50 [7]	80 [7]
60-70	235	840	60 [7]	120 [7]

1) SPEED LIMIT IS BASED ON POSTED SPEED LIMIT.
2) TAPER LENGTHS MAY BE ADJUSTED TO ACCOMODATE CROSSROADS, CURVES, INTERSECTIONS, RAMPS OR OTHER GEOMETRIC FEATURES.
3) CHANNELIZER SPACING MAY BE REDUCED TO DISCOURAGE TRAFFIC ENCROACHMENT.
4) BASED ON 10 FT. SHOULDER WIFTH.
5) BASED ON 12 FT. LANE WIDTH.
6) SPACING REDUCED TO 1/2 AT INTERSECTIONS.
7) SPACING MAY BE REDUCED TO 1/2 AT INTERSECTIONS.

LONGITUDINAL BUFFER SPACE	
POSTED SPEED PRIOR TO CONSTRUCTION, MPH	LENGTH, FT.
UP TO 35	280
40-45	400
50-55	560
60-70	840

SIGN SPACING FOR ADVANCE SIGN SERIES [8, 9]		
POSTED SPEED MPH (P)	NON-DIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)
0-35	200 FT	200 FT
40-45	350 FT	500 FT
50-55	500 FT	1000 FT
60-70	SA - 1000 FT, SB - 1500 FT AND SC - 2640 FT	

8) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION.
9) SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

TAPER LENGTH (L)

L = W X P FOR 40 MPH OR MORE

$L = \frac{WP^2}{60}$ FOR 35 MPH OR LESS

L = TAPER LENGTH IN FEET

W = LATERAL SHIFT IN FEET

P = POSTED SPEED PRIOR TO ROAD WORK IN MPH

TRAFFIC CONTROL PLAN

LANE CLOSURE – DIVIDED HIGHWAY

SHEET 2 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

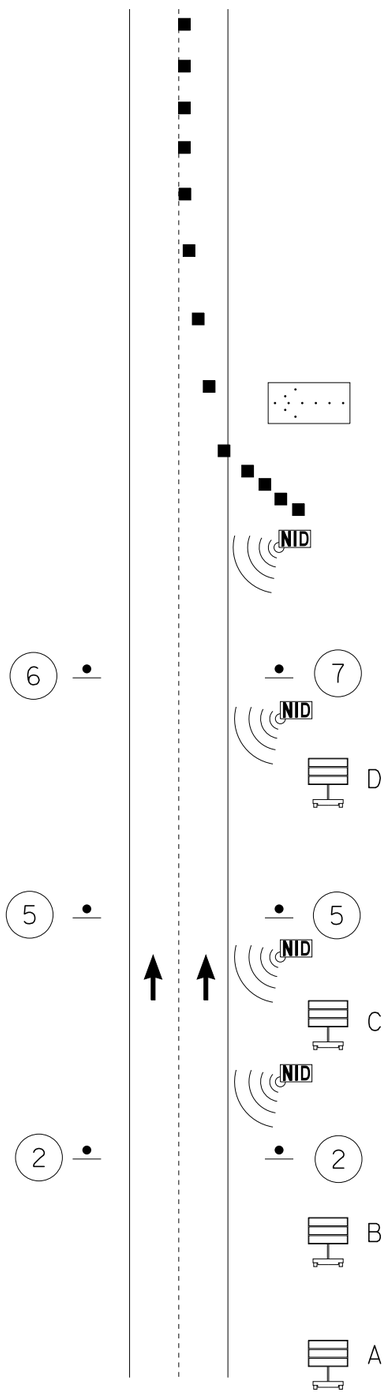
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 11
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

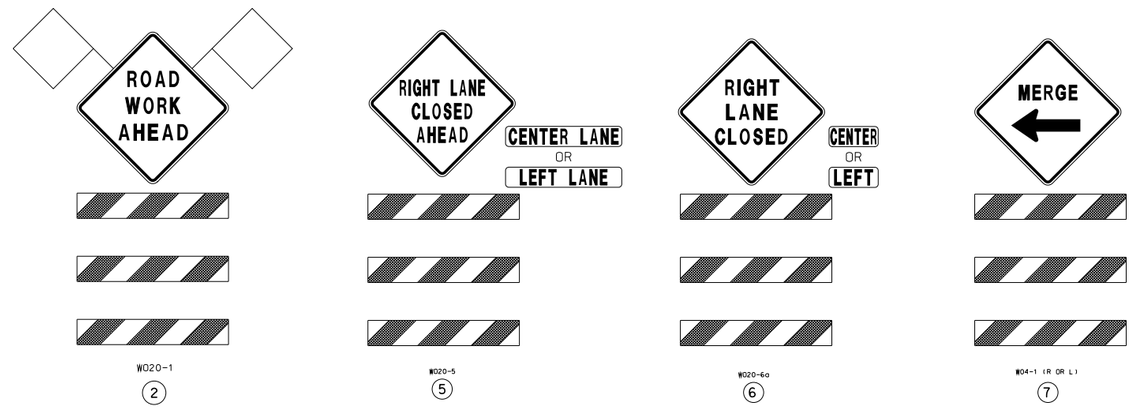
DATE	DESCRIPTION

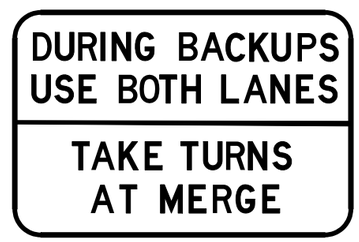
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DYNAMIC LATE MERGE SYSTEM – ZIPPER MERGE (OPTIONAL) ✳







A. CMS LOCATED BEYOND THE ESTIMATED MAXIMUM QUEUE LENGTH. (BOARD MESSAGE - STOPPED TRAFFIC AHEAD/USE BOTH LANES)

B. CMS LOCATED BEYOND THE ESTIMATED QUEUE LENGTH AT THE TIME WHEN SYSTEM ACTIVATION WILL OCCUR. (BOARD MESSAGE - STOPPED TRAFFIC AHEAD/USE BOTH LANES)

C. CMS LOCATED BEYOND THE ESTIMATED QUEUE LENGTH AT THE TIME WHEN SYSTEM ACTIVATION WILL OCCUR. (BOARD MESSAGE - MERGE AHEAD/USE BOTH LANES)

D. CMS LOCATED AT POINT OF MERGE. (BOARD MESSAGE - MERGE HERE/TAKE TURNS)

NOTES:

THE CHANGEABLE MESSAGE SIGNS AND NON-INTRUSIVE DETECTORS SHALL BE SPACED ALONG THE ROUTE AS NEEDED FOR PROPER SYSTEM OPERATIONS.

STATIC SIGNS MAY BE USED AS A SUPPLEMENT FOR CMS BOARDS. THE STATIC SIGN PROVIDES A CONTINUOUS REINFORCING MESSAGE TO THE TRAVELING PUBLIC.

STATIC SIGNS MAY BE LOCATED BEYOND AND WITHIN THE ANTICIPATED QUEUE LENGTH.

✳ IF TRAFFIC BACKUPS OCCUR FREQUENTLY, THIS SYSTEM MAY BE USED AS APPROVED BY ENGINEER.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- CHANGEABLE MESSAGE BOARD
- FLASHING ARROW PANEL
- NON-INTRUSIVE DETECTOR

NOT TO SCALE

TRAFFIC CONTROL PLAN

ZIPPER MERGE

SHEET 3 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

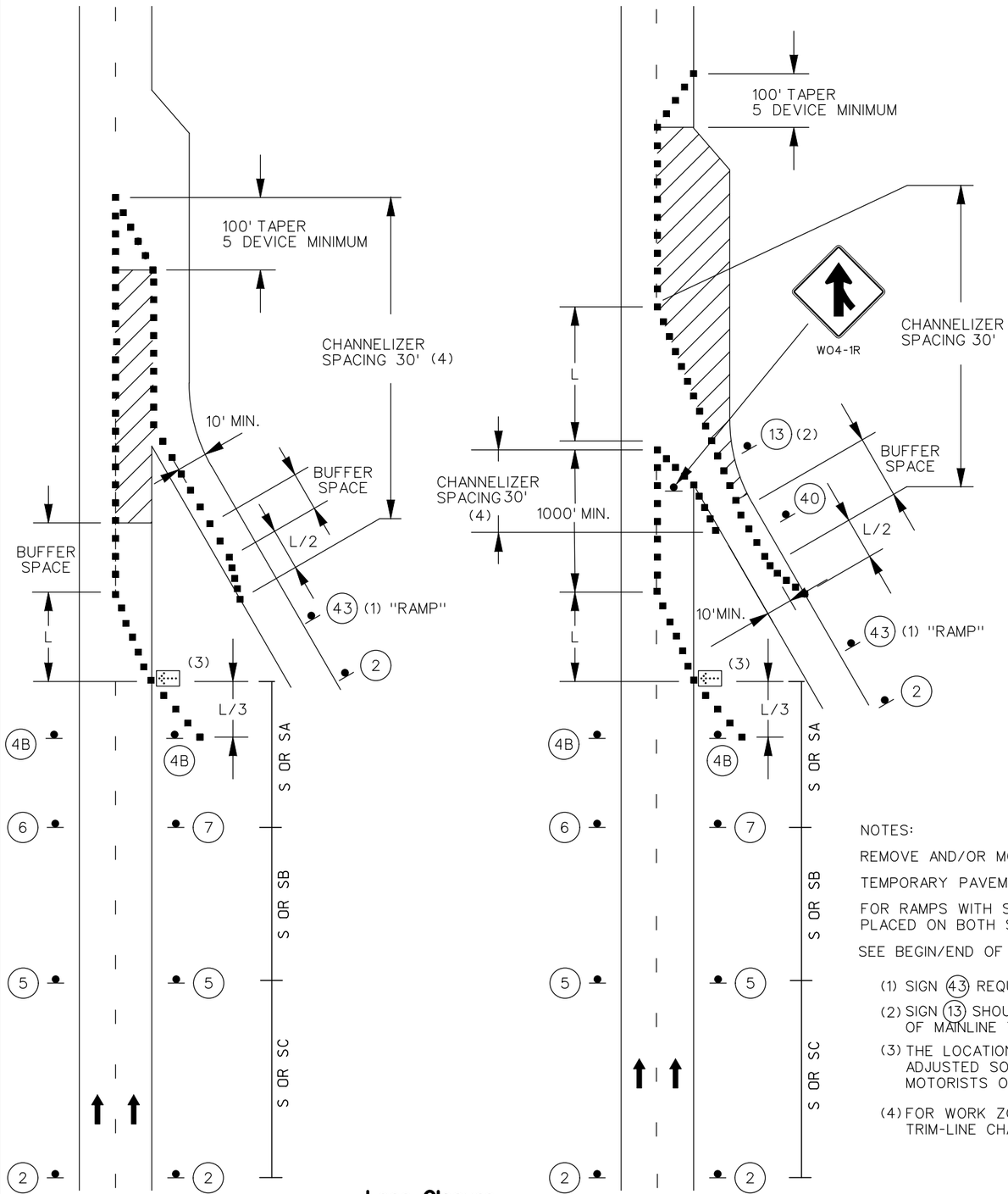
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 12
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

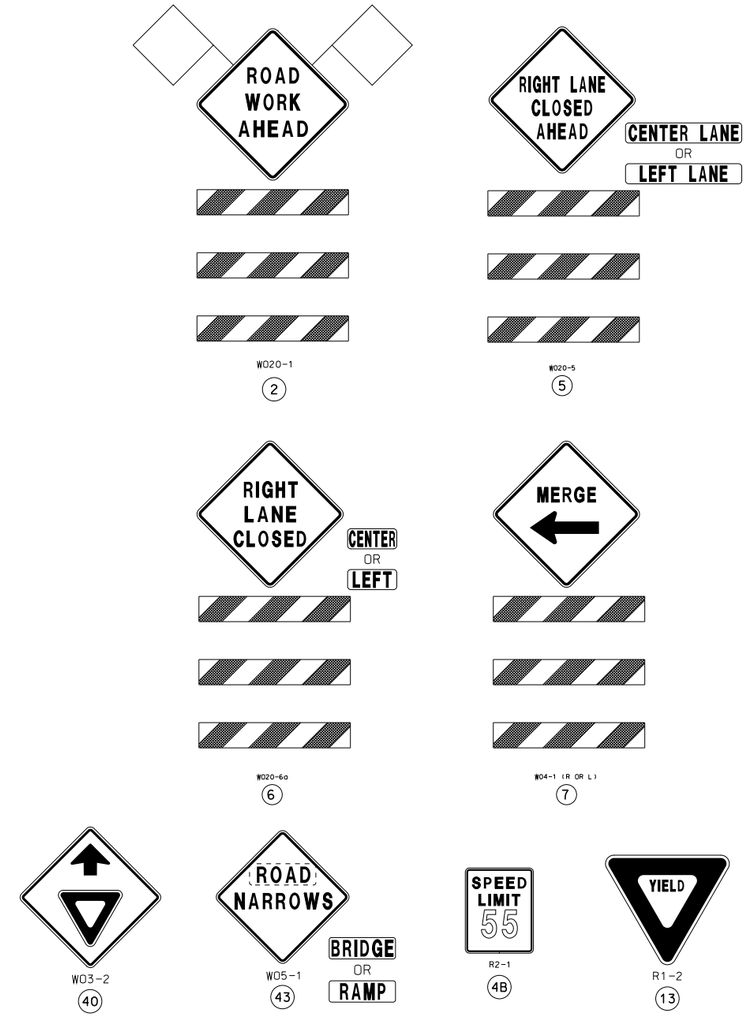
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



Lane Closure
Entrance Ramp Areas



NOTES:

REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

FOR RAMPS WITH SHARP CURVES OR MULTIPLE LANES, RAMP SIGNS MAY BE PLACED ON BOTH SIDES OF THE RAMP.

SEE BEGIN/END OF PROJECT SIGNING SHEET FOR ADDITIONAL SIGNS.

(1) SIGN (43) REQUIRED WHEN RAMP WIDTH IS REDUCED.

(2) SIGN (13) SHOULD BE PLACED ON THE RAMP TO PROVIDE ADEQUATE VISIBILITY OF MAINLINE TRAFFIC.

(3) THE LOCATION OF THE SIGN SEQUENCE AND MERGE TAPER SHOULD BE ADJUSTED SO THAT THE ARROW PANEL LOCATION IS NOT CONFUSING TO MOTORISTS ON THE RAMP.

(4) FOR WORK ZONES WHERE DEVICES ARE IN PLACE OVERNIGHT, USE TRIM-LINE CHANNELIZERS.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADES
- WORK ZONE
- FLASHING ARROW PANEL
- TYPE B WARNING LIGHT

NOT TO SCALE

TRAFFIC CONTROL PLAN
ENTRANCE RAMP
SHEET 4 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

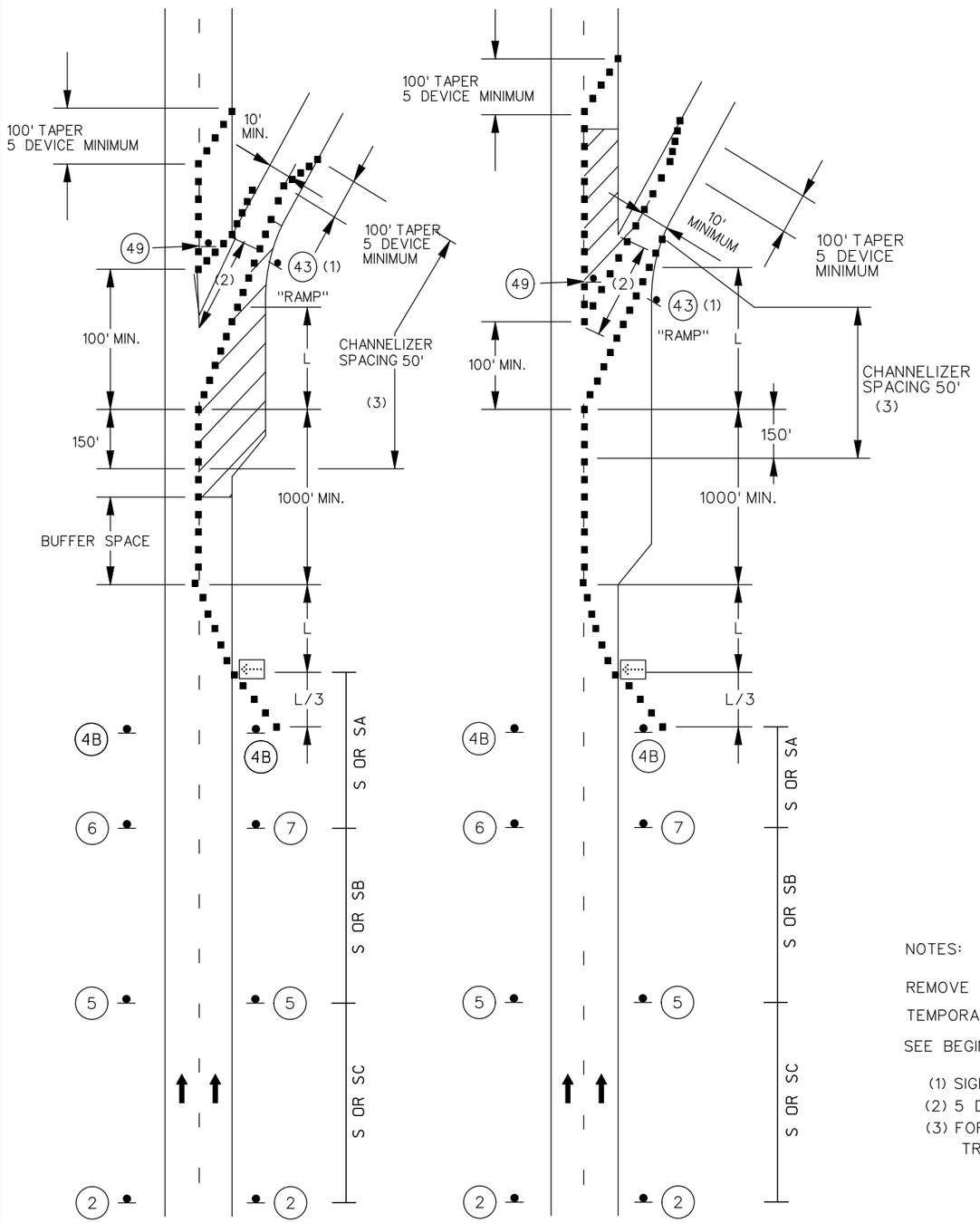
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 13
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

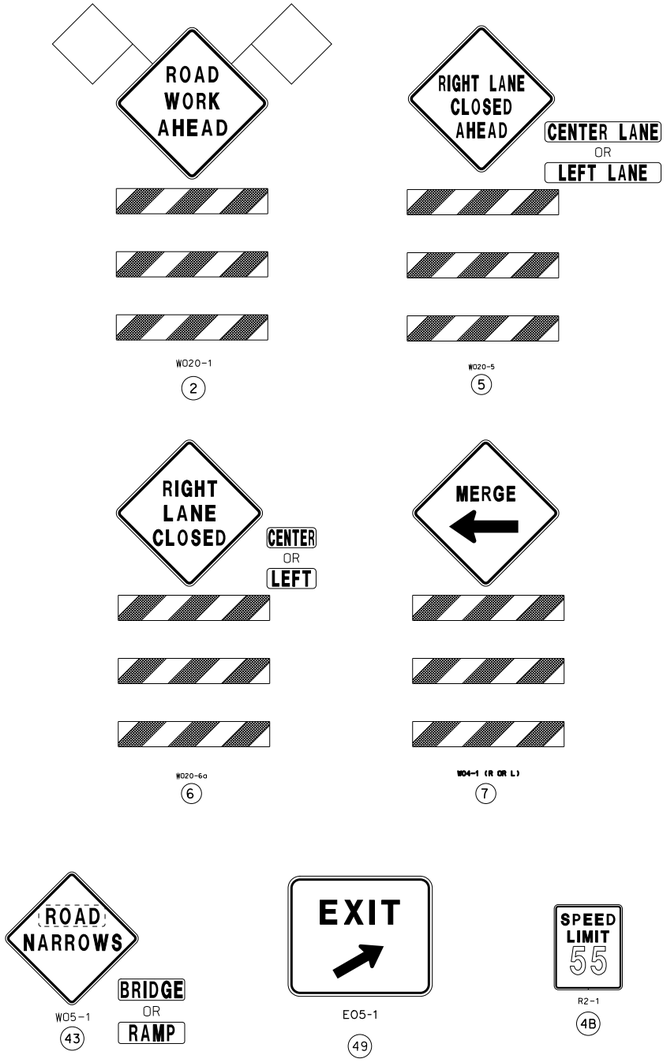
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



LANE CLOSURE
EXIT RAMP AREAS



NOTES:

REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

SEE BEGIN/END OF PROJECT SIGNING SHEET FOR ADDITIONAL SIGNS.

(1) SIGN (43) REQUIRED WHEN RAMP WIDTH IS REDUCED.
(2) 5 DEVICE MINIMUM.
(3) FOR WORK ZONES WHERE DEVICES ARE IN PLACE OVERNIGHT, USE TRIM-LINE CHANNELIZERS.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADES
- WORK ZONE
- FLASHING ARROW PANEL
- TYPE B WARNING LIGHT

NOT TO SCALE

TRAFFIC CONTROL PLAN
EXIT RAMP
SHEET 5 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

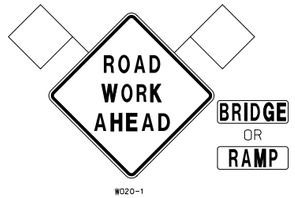
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 14
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

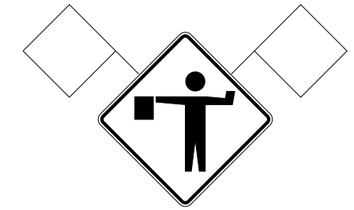
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

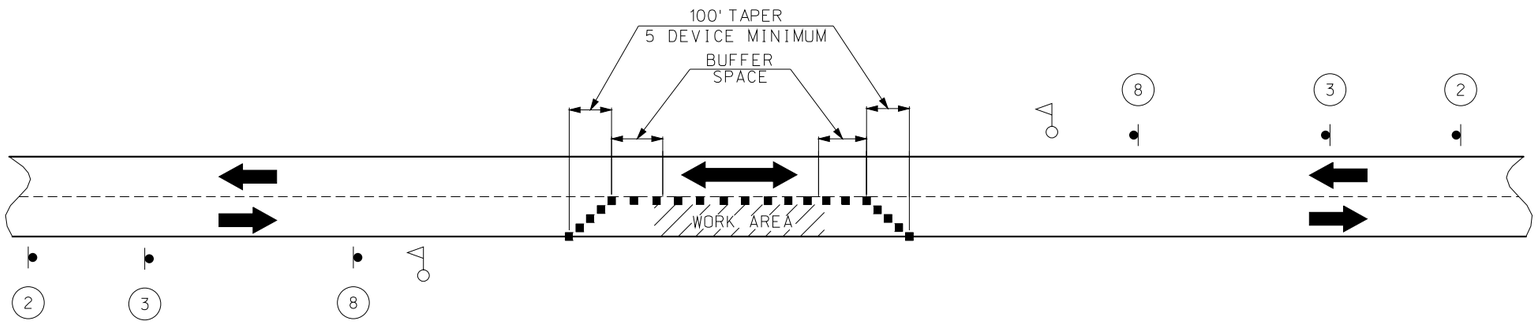


2

3



8



NOTES:

ANY EXISTING SIGN THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.

ALL SPACING OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FINAL PLACEMENT OF SIGNS SHALL BE AS APPROVED BY THE ENGINEER.

LAYOUT SHOWN IS TYPICAL FOR EITHER LANE.

DAYLIGHT FLAGGING OPERATIONS ONLY.

NO DIRECT PAYMENT WILL BE MADE FOR CONES. CONES ALLOWABLE FOR DAYLIGHT OPERATIONS ONLY.

CHANNELIZING DEVICES LOCATED DOWNSTREAM OF THE ONE-LANE, TWO-WAY TAPER ARE OPTIONAL. THESE DEVICES SHOULD BE ELIMINATED WHEN THEIR USE WILL REDUCE THE USABLE LANE WIDTH, INCLUDING ANY ACCEPTABLE SHOULDERS, TO LESS THAN 10′ OR WILL SIGNIFICANTLY AFFECT THE OPERATION.

SIGN SPACING FOR ADVANCE SIGN SERIES (2) (3)		
SPEED (1) MPH	NON-DIVIDED HIGHWAYS	DIVIDED HIGHWAYS
0 - 35	200	200
40 - 45	350	500
50 - 55	500	1000
60 - 70	SA - 1000 FT. SB - 1500 FT. AND SC - 2640 FT.	

NOTES:

DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

(1) POSTED SPEED LIMIT PRIOR TO ROAD WORK.

(2) SPACING BETWEEN SIGNS, BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

(3) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

NOT TO SCALE

TRAFFIC CONTROL PLAN

LANE CLOSURE - 2 LANE

SHEET 6 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 15
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

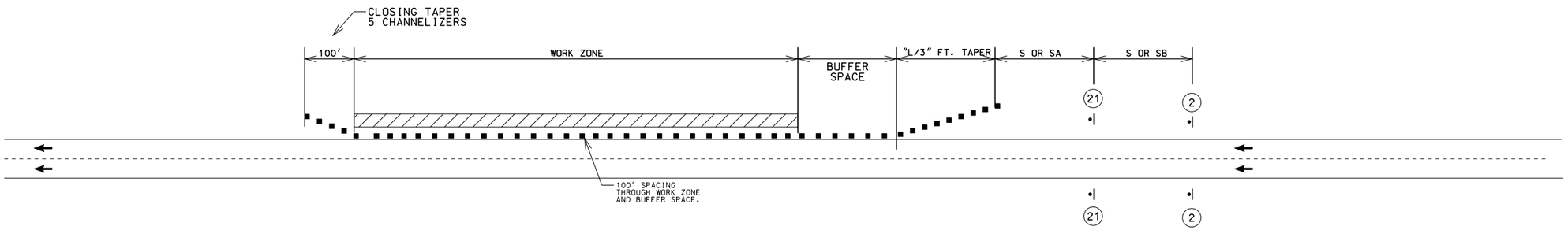
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

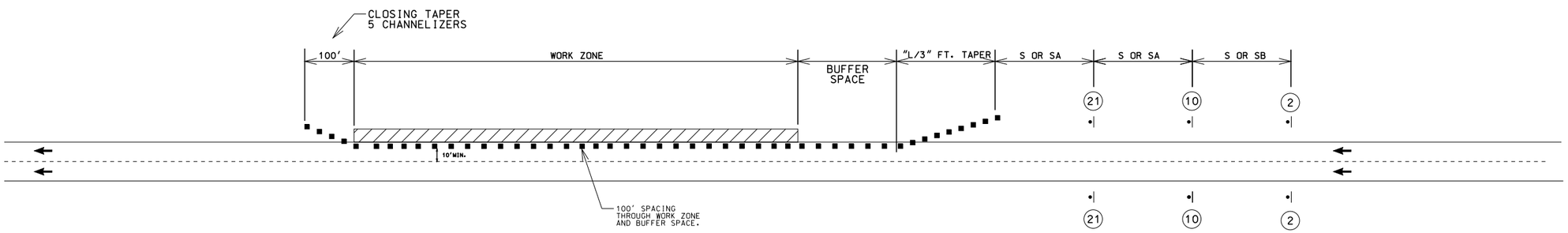
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

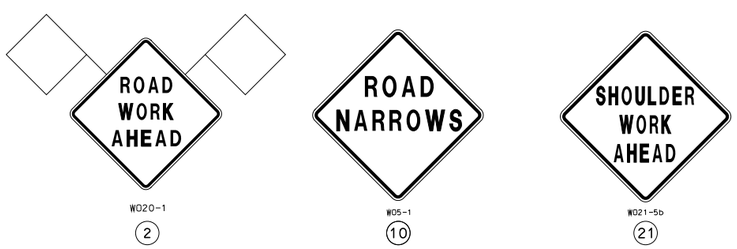
REV.

SHOULDER WORK – NO ENCROACHMENT



SHOULDER WORK – MINOR ENCROACHMENT





TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLAGGER
- CONES
- DIRECTION INDICATOR BARRICADE
- CHANNELIZER (TRIM LINE)
- TUBLAR MARKER
- MOVABLE BARRICADE
- FLASHING ARROW PANEL
- CHANGEABLE MESSAGE BOARD
- TRUCK MOUNTED ATTENUATOR
- REVOLVING WARNING LIGHT

NOTES:

ANY EXISTING SIGN THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.

ALL SPACING OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FINAL PLACEMENT OF SIGNS SHALL BE AS APPROVED BY THE ENGINEER.

LAYOUT SHOWN IS TYPICAL FOR EITHER LANE.

ADDITIONAL SIGN (2) (WITHOUT ADVANCE WARNING RAIL SYSTEM) TO BE PLACE ON ANY CONNECTING CITY STREET, COUNTY ROAD, OR STATE HIGHWAY; 200' FROM RTE. 54.

SEE TRAFFIC CONTROL SHEET 3 FOR SIGN AND DEVICE SPACING.

NOT TO SCALE

TRAFFIC CONTROL PLAN
SHOULDER WORK
SHEET 7 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

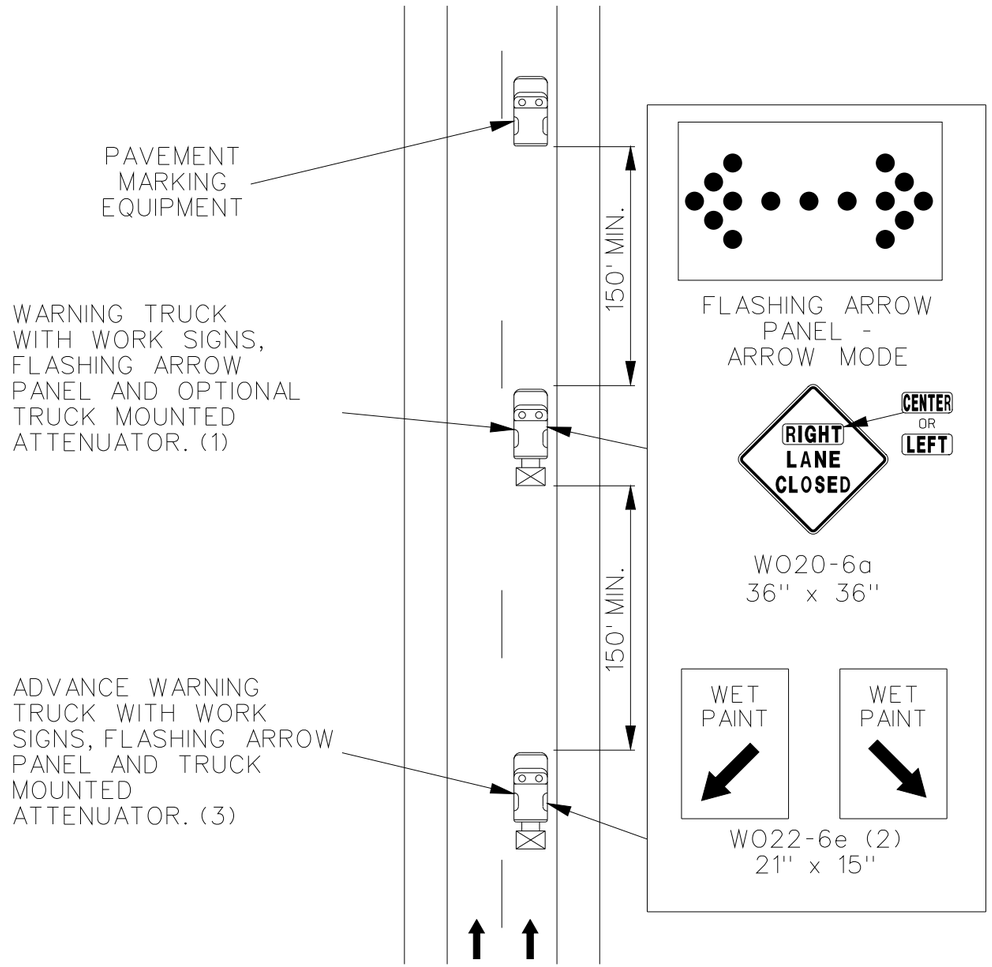
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/3/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	16
COUNTY	COLE
JOB NO.	J5P3127
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



MULTI-LANE DIVIDED HIGHWAY

(1) TRUCK IS OPTIONAL ON TWO-LANE UNDIVIDED HIGHWAYS IF SIGNING AND ARROW BOARD IS MOUNTED ON THE PAVEMENT MARKING EQUIPMENT.

(2) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE IN WHICH THE PAVEMENT MARKING MATERIAL IS BEING APPLIED. AT THE CONTRACTOR'S OPTION, A FRONT FACING WET PAINT SIGN MAY BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT MARKING EQUIPMENT.

(3) ADVANCE WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL OR SPACING SHOWN, WHICHEVER IS GREATER.

MOVING OPERATION ON HIGHWAY OPEN TO TRAFFIC
PAVEMENT MARKING

TRAFFIC CONTROL LEGEND

FLASHING ARROW PANEL

NOT TO SCALE

TRAFFIC CONTROL PLAN
MOVING OPERATION
SHEET 8 OF 8

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

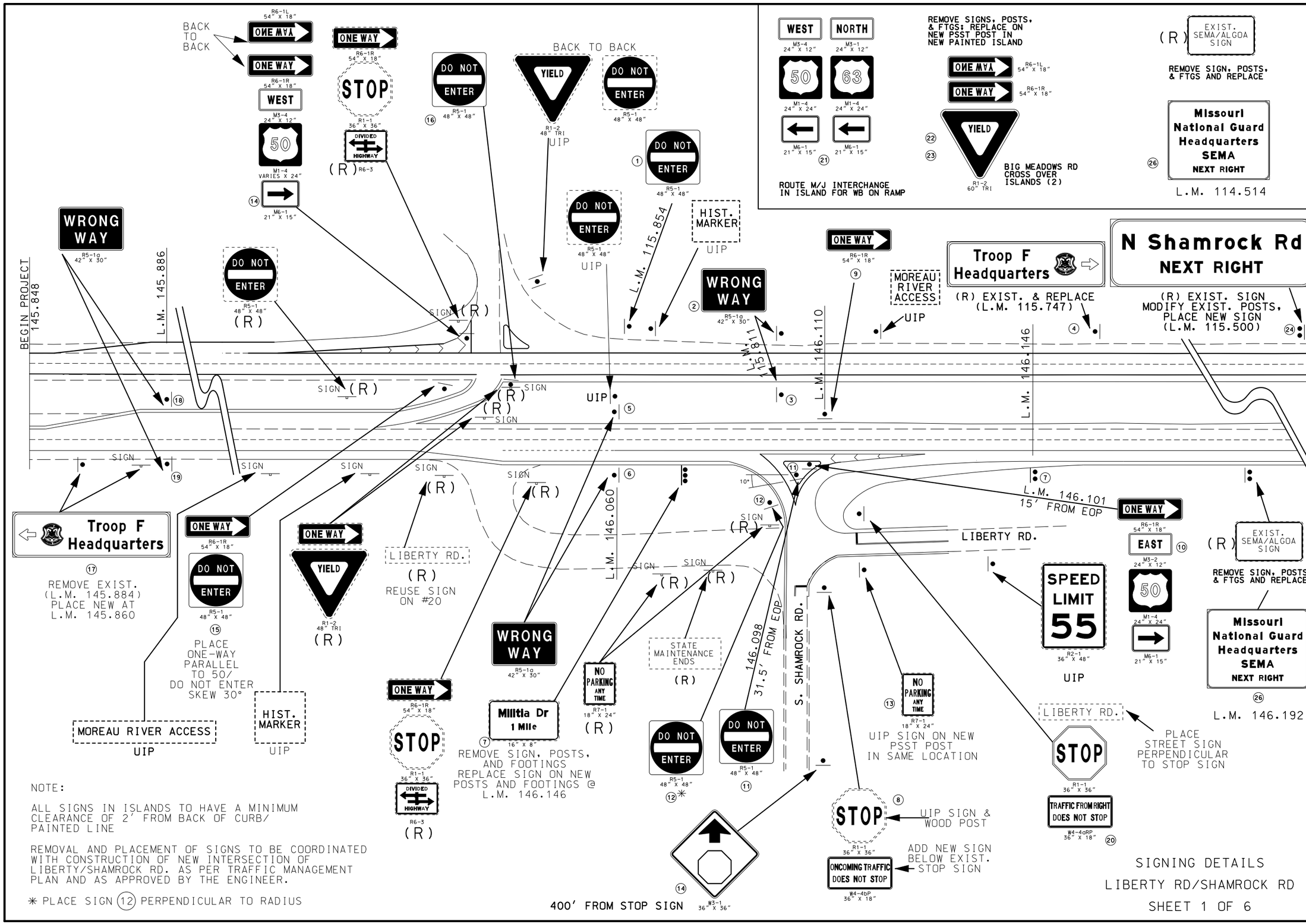
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 17
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



NOTE:

ALL SIGNS IN ISLANDS TO HAVE A MINIMUM CLEARANCE OF 2' FROM BACK OF CURB/ PAINTED LINE

REMOVAL AND PLACEMENT OF SIGNS TO BE COORDINATED WITH CONSTRUCTION OF NEW INTERSECTION OF LIBERTY/SHAMROCK RD. AS PER TRAFFIC MANAGEMENT PLAN AND AS APPROVED BY THE ENGINEER.

✳ PLACE SIGN (12) PERPENDICULAR TO RADIUS

SIGNING DETAILS

LIBERTY RD/SHAMROCK RD

SHEET 1 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 18
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

EFFECTIVE 10-01-2016

SIGNS						PIPE POST ✳					STRUCTURAL STEEL											U CHANNEL POST	PERFORATED SQUARE STEEL TUBE POST															FOOTINGS		REMARKS AND OTHER REQUIRED ITEMS.
											POSTS ✳						BACKING BARS 2" X 3/8" BARS @ 2.55 LBS PER LIN FT				TOTAL		2 IN							2.5 IN						BREAK-AWAY ASSEMBLY	EMBD	BOLT DOWN	
SIGN NO.	SIGN SIZE	LOG MILE	HORZ CLEAR IF NOT STD	LOCATION	SIGN DTL. SHT. NO.	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL	NO. EACH	LGTH	TOTAL	TOTAL	ITEM NO. 9031210	ITEM NO. 9031250	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	ANCHOR 7 GA. ITEM NO. 9031273	OMNI 7 GA. ITEM NO. 9031279	ANCHOR 12 GA. ITEM NO. 9031271	OMNI 12 GA. ITEM NO. 9031278	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT ITEM NO. 9031272	ANCHOR 7 GA. ITEM NO. 9031281	OMNI 7 GA. ITEM NO. 9031282	ITEM NO. 9031241	ITEM NO. 9031010	ITEM NO. 9031020	
						IN.	LF	LF		LBS		LF	LF	LF		LBS	EACH	IN.	LF	LBS	LBS	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	CU YDS	CU YDS	
1	48"X48"	155.854		WB RT.																						6							32			2	.18		
2	42"X30"	115.811		WB RT.													2	32	5.33	13.6	13.6					3							16				.09		
3	42"X30"	115.811		WB LT.													2	32	5.33	13.6	13.6					3							16				.09		
4	84"X24"	115.747		WB RT.																						6							32			2	.18		SEE D31 SHEET FOR DETAILS
5	42"X30"	146.060		EB LT.													2	32	5.33	13.6	13.6					3							16				.09		
6	42"X30"	146.060		EB RT.													2	32	5.33	13.6	13.6					3							16				.09		
7	16"X8"	146.146		EB RT.							3	22.38	24.09		18	836.5					836.5																14.5		USE EX. SIGN ON NEW POSTS & FTGS
8	36"X18"	0.039		SHAMROCK LT.																																			PLACE SIGN ON EX. U-CHANNEL POST
																																							N.O.P. FOR ATTACHMENT
9	54"X18"	146.110		EB LT.																						6							32			2	.18		
10	54"X18"	146.101		EB RT.		4	18.93		10.79	204.25							2	32	5.33	13.6	13.6															1	0.36		
	24"X12"																																							
	24"X24"																																							
	21"X15"																																							
11	48"X48"	146.098		EB RT.																						6							32			2	.18		31.5' FROM EOP - NOSE OF ISLAND
																																							MIN. 2' FROM B.O.C: SKEW 10°
12	48"X48"	0.021		SHAMROCK RT.																						6							32			2	.18		
13	EXIST	0.033		SHAMROCK LT.																						3							16				.09		
14	36"X36"	0.115		SHAMROCK LT.																						3							16				.09		
15	54"X18"	115.884		WB LT.		4	18.84		10.79	203.28							4	32	10.66	27.2	27.2																0.36		SEE X-SECTION FOR ALLIGNMENT
	48"X48"																																							
16	48"X48"	115.874		WB LT.																						6							32			2	.18		
17	84"X24"	145.860		EB RT.																						6							32			2	.18		SEE D31 SHEET FOR DETAILS
18	42"X30"	145.886		EB LT.													2	32	5.33	13.6	13.6					3							16				.09		
19	42"X30"	145.886		EB RT.													2	32	5.33	13.6	13.6					3							16				.09		
20	36"X36"	0.012		LIBERTY RD.																						3							16				.09		
	36"X18"																																							
21	24"X12"	113.024																								3							16				.09		USE EX. SIGNS & BACKING BARS ON
	24"X12"	(50 L.M.)		WB ON RAMP																																			NEW POST
	24"X24"			RTE M/J																																				
	24"X24"																																							
	21"X15"																																							
	21"X15"																																							
22	60" TRI	110.830		RTE 50		4	19.05'		10.79	205.55							4	32	10.66	27.2	27.2																.036		REMOUNT STREET SIGN USING
	54"X18"	(50 L.M.)		WB (MEDIAN)													2	17	2.83	7.22	7.22																		EXIST. HARDWARE. NO DIRECT PAY
	54"X18"																																							
23	60" TRI	110.845		RTE 50		4	19.05'		10.79	205.55							4	32	10.66	27.2	27.2																.036		REMOUNT STREET SIGN USING
	54"X18"	(50 L.M.)		WB (MEDIAN)													2	17	2.83	7.22	7.22																		EXIST. HARDWARE. NO DIRECT PAY
	54"X18"																																							
24	108"X36"	115.500		WB RT.																																			UIP AFTER MODIFYING EXIST. POSTS
25	108"X84"	146.192		EB RT.							1	19.55	20.88		9	363.9																					.32		
26	108"X84"	114.514		WB RT.							1	18.89	19.78		9	348.0																					.30		
SUBTOTAL										820						1548				191						72							384			14	18.7		
TOTAL										820											1740					72							384			14	18.7		

✳ BREAKAWAY ASSEMBLY IS INCIDENTAL FOR PIPE AND STRUCTURAL STEEL POSTS

ROUND PIPE POST AND FOOTING DATA TABLE

NOM. SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	C.Y.
2½	5.79	0.48	4'- 3½"	12"	4'-6"	0.13
3	7.58	0.63	4'- 3½"	12"	4'-6"	0.13
4	10.79	0.90	5'- 3½"	18"	5'-6"	0.36

POST AND FOOTING DATA TABLE

POST DES. NO.	NOM. SIZE	POST WEIGHT LBS/FT	POST WEIGHT LBS/IN	STUB LENGTH	FOOTING DIA.	LEVEL GROUND DEPTH	LEVEL GROUND C.Y.	6:1 GRADE DEPTH	6:1 GRADE C.Y.	4:1 GRADE DEPTH	4:1 GRADE C.Y.	3:1 OR 2:1 GRADE DEPTH	3:1 OR 2:1 GRADE C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

SIGNING DETAILS
SHEET 2 OF 6

D-29

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016
ROUTE 50 | STATE MO
DISTRICT CD | SHEET NO. 19
COUNTY COLE
JOB NO. J5P3127
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

EFFECTIVE 10-01-2016

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	W5-1a	R5-1	R6-1R	R6-1L	R1-1	W3-1	W4-4bP	M6-1	M1-4	M3-2	M3-4	R1-2	W4-4aRP			
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH															
			WRONG WAY 42"x30"	DO NOT ENTER 48"x48"	R 1-10b 54"x18"	R 1-10a 54"x18"	STOP 36"x36"	36"x36"	36"x18"	21"x15"	24"x24"	EAST 24"x12"	WEST 24"x12"	60"TRI	36"x18"			
1	115.854	WB RT.		1														
2	115.811	WB RT.	1															
3	115.811	WB LT.	1															
5	146.060	EB LT.	1															
6	146.060	EB RT.	1															
8	0.039	SHAMROCK LT.							1									
9	146.110	EB LT.			1													
10	146.101	EB RT.			1					1	1	1						
11	146.098	EB RT.		1														
12	0.021	SHAMROCK RT.		1														
13	0.033	SHAMROCK LT.																
14	0.115	SHAMROCK LT.			1	1		1		1	1		1					
15	115.884	WB LT.		1	1													
16	115.874	WB LT.		1														
18	145.886	EB LT.	1															
19	145.886	EB RT.	1															
20	0.012	LIBERTY RD.					1								1			
22	110.830	BIG MEADOWS (ISLAND)			1	1								1				
23	110.845	BIG MEADOWS (ISLAND)			1	1								1				
		SUBTOTAL	6	5	6	3	1	1	1	2	2	1	1	2	1			

SIGN SUMMARY

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE, TYPE & SQUARE FEET: SIZE	FLAT SHEET SH ITEM NO. 9035004A	FLAT SHEET FLUORESCENT SHF ✳ ITEM NO. 9035069A	STRUCTURAL ST ITEM NO. 9035011A	STRUCTURAL FLUORESCENT STF ✳ ITEM NO. 9035071A
W5-1a		6	42" X 30"	52.5			
R5-1		5	48" X 48"	80			
R6-1R		6	54" X 18"	40.5			
R6-1L		3	54" X 18"	20.25			
R1-1		1	36" X 36"	9			
W3-1		1	36" X 36"		9		
W4-4bP		1	36" X 18"		4.5		
W4-4aRP		1	36" X 18"		4.5		
M6-1		2	21" X 15"	4.375			
M1-4		2	24" X 24"	8			
M3-2		1	24" X 12"	2			
M3-4		1	24" X 12"	2			
#4 - TROOP F RT.	1	1	84" X 24"			14	
#17 - TROOP F LT.	1	1	84" X 24"			14	
#24 - N. SHAMROCK RD.	1	1	108" X 36"			27	
#25 - MO NAT GUARD/SEMA	1	1	108" X 84"			63	
#26 - MO NAT GUARD/SEMA	1	1	108" X 84"			63	
			TOTAL	219	18	181	

✳ ORANGE, YELLOW & YELLOW/GREEN

SIGNING DETAILS
SHEET 3 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 10/3/2016

ROUTE	STATE
50	MO
DISTRICT	SHEET NO.
CD	20

COUNTY: COLE
JOB NO.: J5P3127
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

E4-3 ST-STRUCTURAL; 6.000" Radius, 1.000" Border, White on Green;
[Missouri] E Mod; [National Guard] E Mod; [Headquarters] E Mod; [SEMA] E Mod 125% spacing; [NEXT RIGHT] E Mod;
Table of letter and object lefts.

M	I	s	s	o	u	r	I										
28.500	39.125	42.875	49.500	56.375	64.000	72.250	78.000										
N	a	t	I	o	n	a	I	G	u	a	r	d					
6.625	15.750	23.125	29.625	33.625	41.250	48.875	57.000	66.500	75.500	83.000	91.125	96.250					
H	e	a	d	q	u	a	r	t	e	r	s						
12.375	21.500	28.375	36.000	43.500	51.625	59.250	67.375	72.250	78.125	85.625	90.625						
S	E	M	A														
36.750	45.750	53.750	63.250														
N	E	X	T	R	I	G	H	T									
26.875	33.125	38.875	44.875	55.375	61.625	64.375	70.750	76.750									

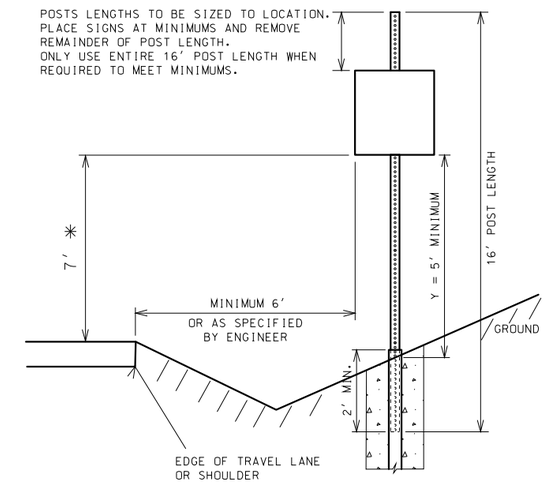
SIGN NO.	25
LOG MILE	146.192
ROADWAY	ROUTE 50 EB RT.

E4-3 ST-STRUCTURAL; 6.000" Radius, 1.000" Border, White on Green;
[Missouri] E Mod; [National Guard] E Mod; [Headquarters] E Mod; [SEMA] E Mod 125% spacing; [NEXT RIGHT] E Mod;
Table of letter and object lefts.

M	I	s	s	o	u	r	I										
28.500	39.125	42.875	49.500	56.375	64.000	72.250	78.000										
N	a	t	I	o	n	a	I	G	u	a	r	d					
6.625	15.750	23.125	29.625	33.625	41.250	48.875	57.000	66.500	75.500	83.000	91.125	96.250					
H	e	a	d	q	u	a	r	t	e	r	s						
12.375	21.500	28.375	36.000	43.500	51.625	59.250	67.375	72.250	78.125	85.625	90.625						
S	E	M	A														
36.750	45.750	53.750	63.250														
N	E	X	T	R	I	G	H	T									
26.875	33.125	38.875	44.875	55.375	61.625	64.375	70.750	76.750									

SIGN NO.	26
LOG MILE	114.514
ROADWAY	ROUTE 50 WB RT.

MOUNTING HEIGHT DETAIL



✳ 7' MINIMUM REQUIRED IN URBAN APPLICATIONS AND PREFERRED IN RURAL APPLICATIONS. *IN RURAL APPLICATIONS ONLY* - IN SITUATIONS WHERE THE 7' MINIMUM CAN NOT BE ATTAINED WITH A 16' PSST A RANGE OF 5'- 7' CAN BE USED AS LONG AS DISTANCE "Y" IS ALSO MAINTAINED.

NOTE: PERFORATED SQUARE STEEL TUBE (PSST) POSTS ARE PAID AS 16 LINEAR FOOT. CONTRACTOR IS RESPONSIBLE TO PROPERLY PLACE SIGN AS SHOWN ABOVE IN "MOUNTING HEIGHT DETAIL"

POSTS - 12 GAUGE - 2.5" X 2.5"

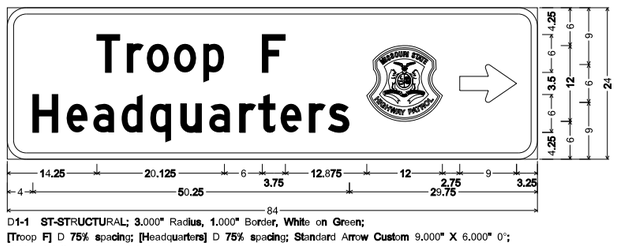
ANCHORS - 7 GAUGE - 3" X 3" O.D.

BREAKAWAY - CERTIFIED NCHRP 350 COMPLIANT USE REQUIRED FOR DOUBLE POST INSTALLATIONS ONLY

GALVANIZATION - ALL PSST POSTS, ANCHORS AND BREAKAWAY CASTINGS SHALL BE GALVANIZED PER MoDOT STANDARD SPECIFICATIONS

SIGN NO.	24
LOG MILE	SIGN NO.
ROADWAY	ROUTE 50 WB RT.

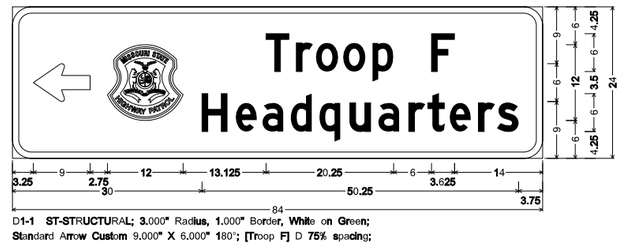
SIGN NO.	4
LOG MILE	115.747
ROADWAY	ROUTE 50 WB RT.



D1-1 ST-STRUCTURAL; 3.000" Radius, 1.000" Border, White on Green;
[Troop F] D 75% spacing; [Headquarters] D 75% spacing; Standard Arrow Custom 9.000" X 6.000" 0°;
Table of letter and object lefts.

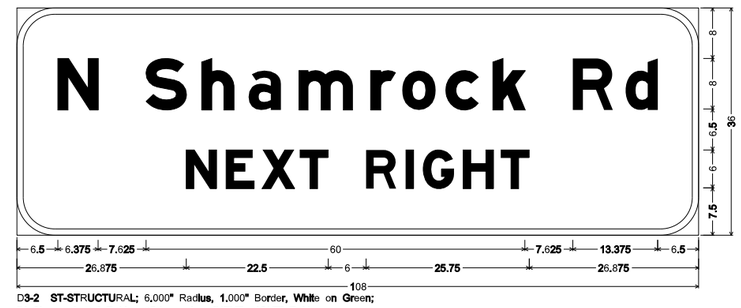
T	r	o	o	p	F	⇧	⇨										
14.250	19.000	22.125	26.375	31.125	40.375	57.000	71.750										
H	e	a	d	q	u	a	r	t	e	r	s						
4.000	9.375	13.625	18.125	22.625	27.500	32.000	36.750	39.875	43.250	47.875	50.875						

SIGN NO.	17
LOG MILE	145.860
ROADWAY	ROUTE 50 EB RT.



D1-1 ST-STRUCTURAL; 3.000" Radius, 1.000" Border, White on Green;
Standard Arrow Custom 9.000" X 6.000" 180°; [Troop F] D 75% spacing;
[Headquarters] D 75% spacing;
Table of letter and object lefts.

⇦	T	r	o	o	o	p	F										
3.250	15.000	40.125	45.000	48.125	52.375	57.000	66.375										
H	e	a	d	q	u	a	r	t	e	r	s						
30.000	35.375	39.625	44.125	48.625	53.500	58.000	62.750	65.750	69.250	73.875	76.875						



D3-2 ST-STRUCTURAL; 6.000" Radius, 1.000" Border, White on Green;
[N Shamrock Rd] E Mod 95% spacing; [NEXT RIGHT] E Mod;
Table of letter and object lefts.

N	S	h	a	m	r	o	c	k	R	d		
6.500	20.500	29.250	36.750	44.625	56.000	61.000	68.000	75.375	88.125	96.375		
N	E	X	T	R	I	G	H	T				
26.875	33.125	38.875	44.875	55.375	61.625	64.375	70.750	76.750				

SIGNING DETAILS
SHEET 4 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	10/25/2016
ROUTE	50
STATE	MO
DISTRICT	CD
SHEET NO.	21
COUNTY	COLE
JOB NO.	J5P3127
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

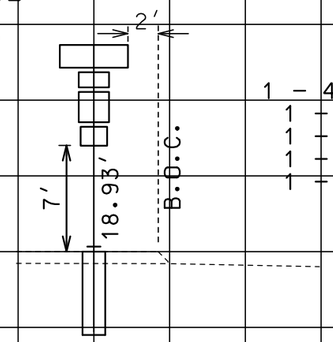
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

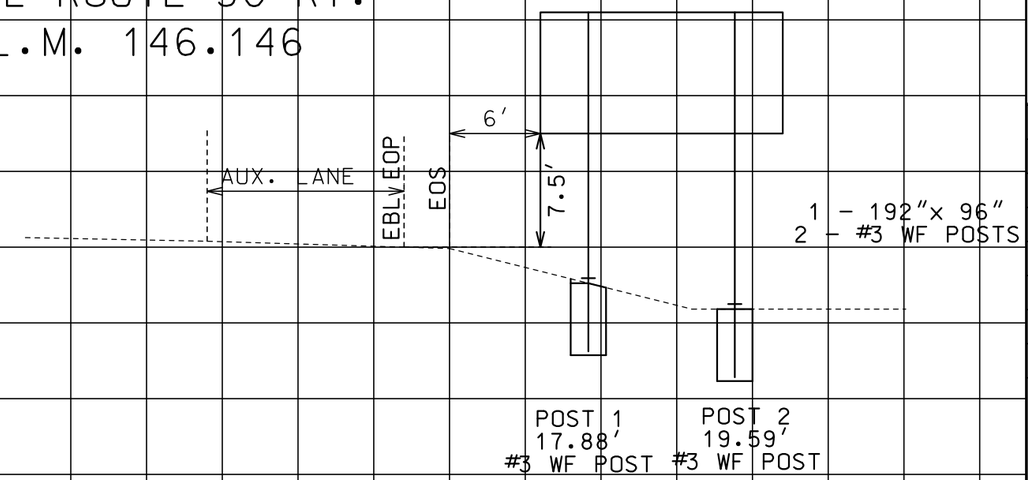
(10) EBL ROUTE 50 RT.
L.M. 146.101
IN RAISED ISLAND

PLACE SIGN A MINIMUM OF 2' FROM BACK OF CURB IN ALL DIMENSIONS



1 - 4" PIPE POST
1 - 54" X 18"
1 - 24" X 12"
1 - 24" X 24"
1 - 21" X 15"

(7) EBL ROUTE 50 RT.
L.M. 146.146

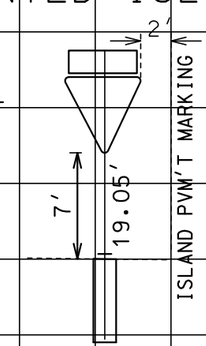


1 - 192"x 96"
2 - #3 WF POSTS

(22) WBL ROUTE 50 MEDIAN - L.M. 110.830
(IN PAINTED ISLAND)

(23) WBL ROUTE 50 MEDIAN - L.M. 110.845
(IN PAINTED ISLAND)

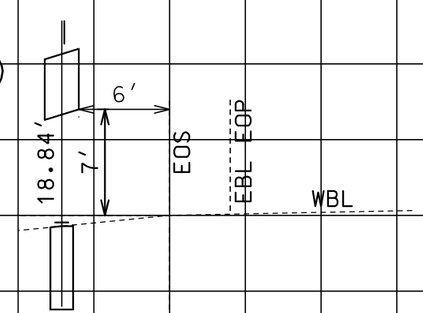
PLACE SIGN A MINIMUM OF 2' FROM PAINTED ISLAND IN ALL DIMENSIONS, X-SECT. TYPICAL BOTH LOCATIONS



1 - 4" PIPE POST
2 - 54" X 18"
(BACK TO BACK)
1 - 60" TRI.

SALVAGE EXISTING STREETS SIGNS & REINSTALL USING EXIST. HARDWARE

(15) EBL ROUTE 50 RT.
L.M. 146.101
IN RAISED ISLAND



54" X 18" ONE WAY
PARALLEL WITH 50 EOS

48" X 48" DO NOT ENTER
30° SKEW W/ 50 EOS

30°

5'

SIGNING DETAILS
SHEET 5 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT 5	SHEET NO. 22
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

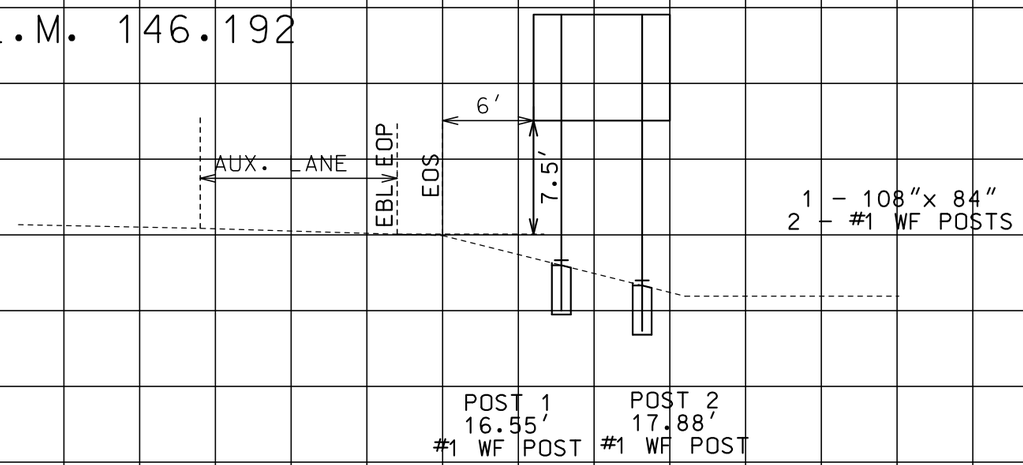
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

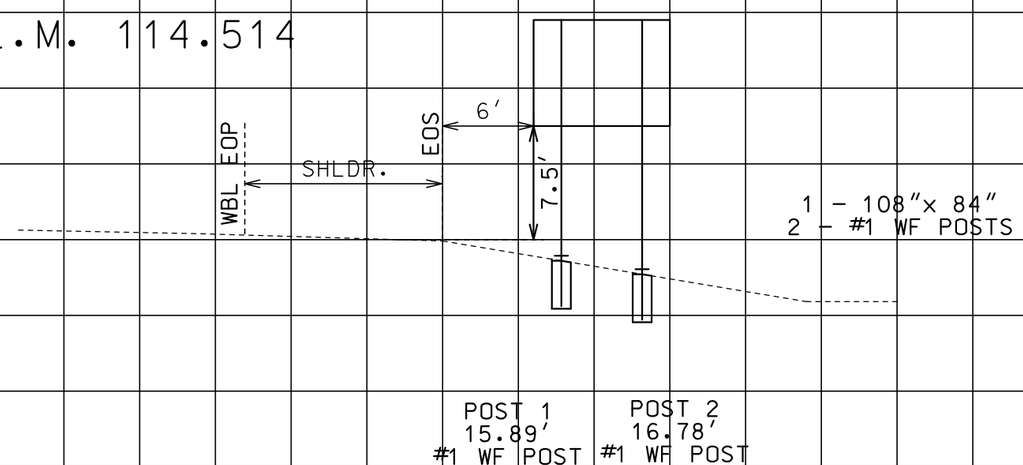
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

(25) EBL ROUTE 50 RT.
L.M. 146.192



(26) WBL ROUTE 50 RT.
L.M. 114.514



5'

SIGNING DETAILS
SHEET 6 OF 6

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER
PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

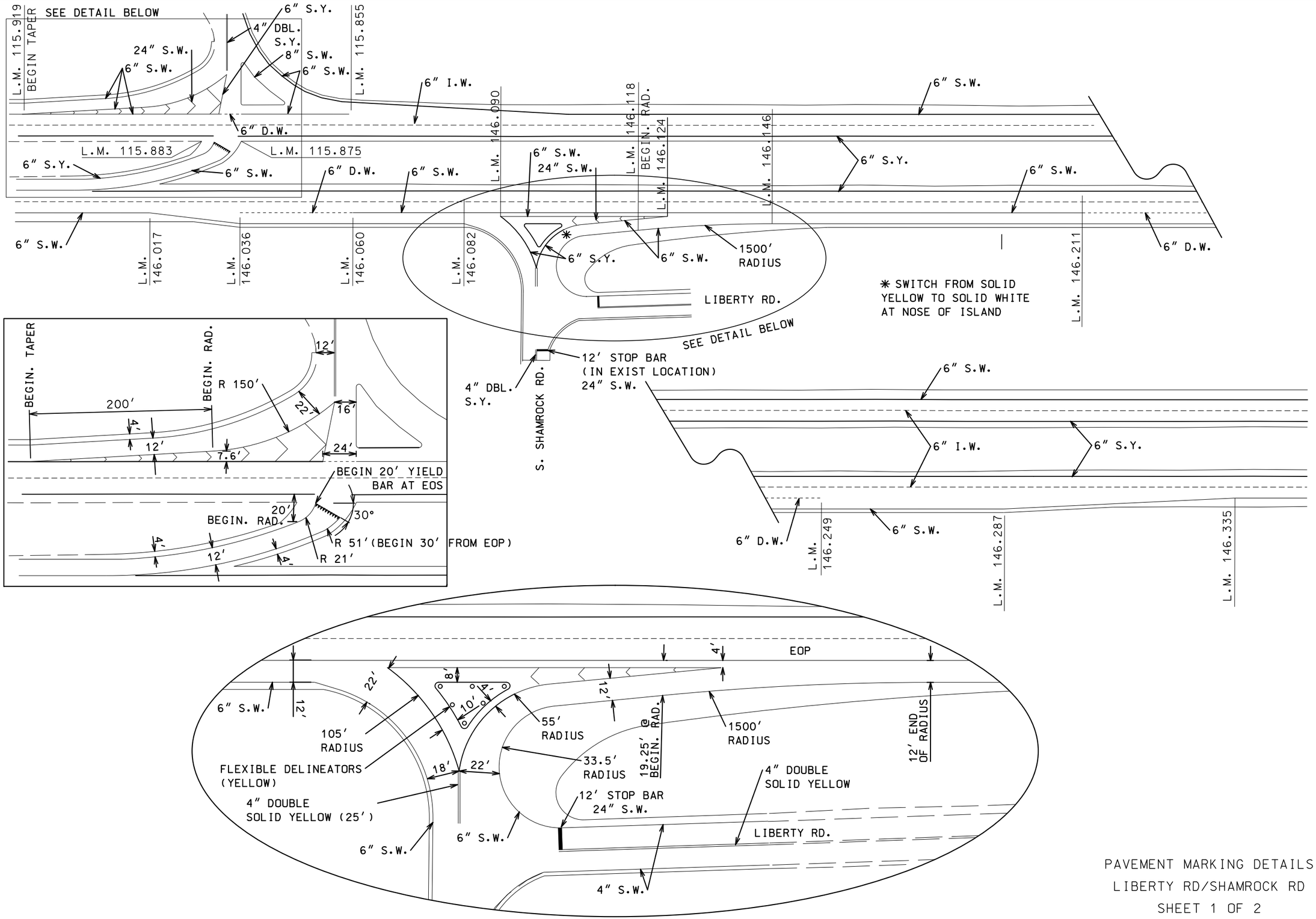
DATE PREPARED	
10/3/2016	
ROUTE 50	STATE MO
DISTRICT 5	SHEET NO. 23
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



PAVEMENT MARKING DETAILS
LIBERTY RD/SHAMROCK RD
SHEET 1 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

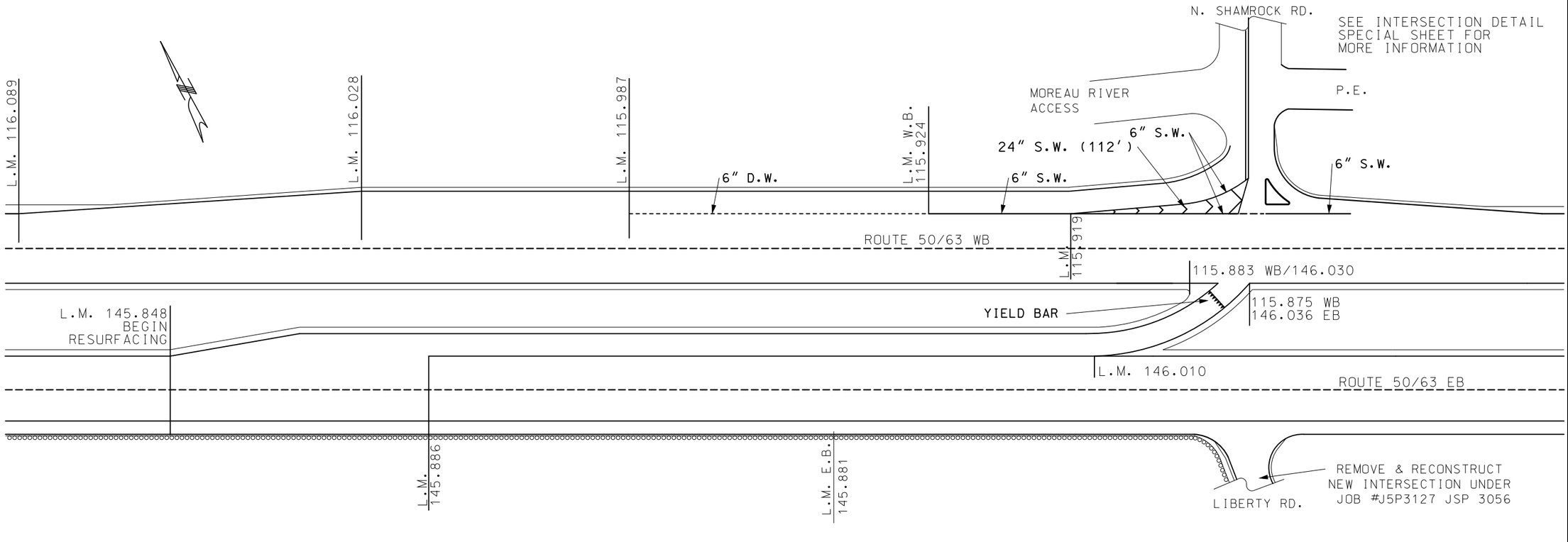
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

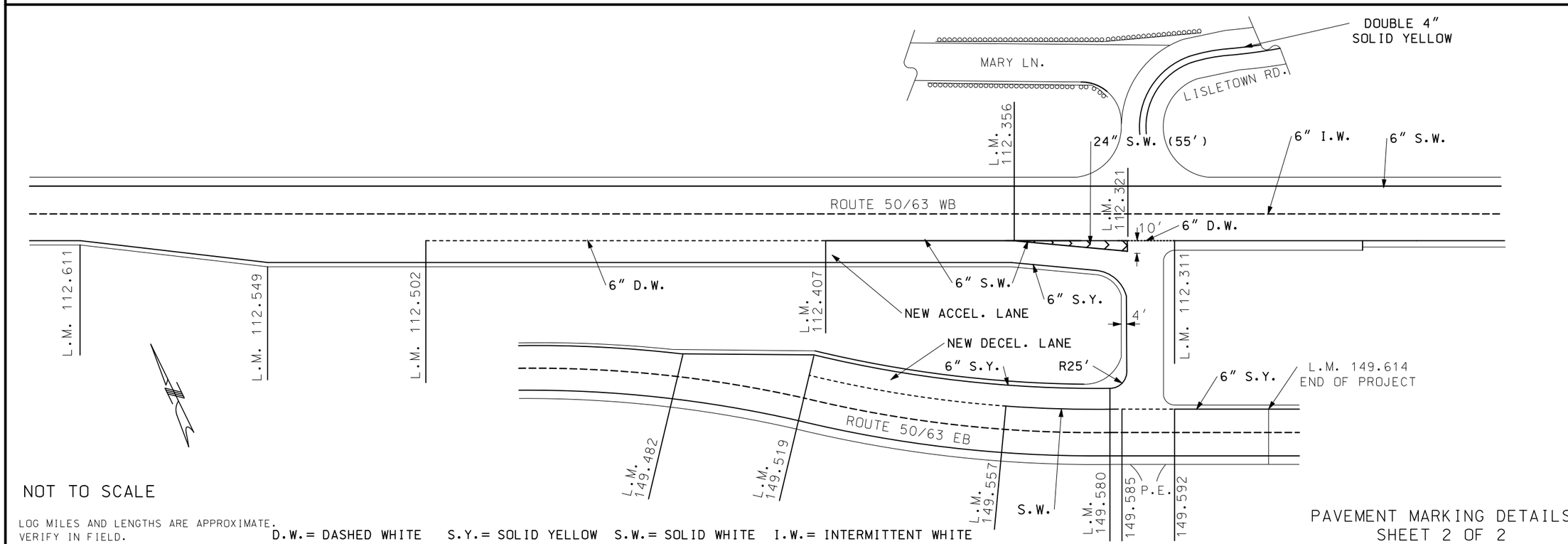
DATE PREPARED	
10/27/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 24
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)





NOT TO SCALE

LOG MILES AND LENGTHS ARE APPROXIMATE.
VERIFY IN FIELD.

D.W.= DASHED WHITE S.Y.= SOLID YELLOW S.W.= SOLID WHITE I.W.= INTERMITTENT WHITE

PAVEMENT MARKING DETAILS
SHEET 2 OF 2

STATE OF MISSOURI
ROBERT B. GREEN
NUMBER PE-25339
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED	
10/27/2016	
ROUTE 50	STATE MO
DISTRICT CD	SHEET NO. 25
COUNTY COLE	
JOB NO. J5P3127	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.