

ROADWAY IMPROVEMENT PLAN

OLD LEMAY FERRY ROAD AND VOGEL ROAD

JEFFERSON COUNTY, MISSOURI

SIGNALIZATION OF VOGEL ROAD AND OLD LEMAY FERRY ROAD

FEDERAL PROJECT NO. STP-5403(641)

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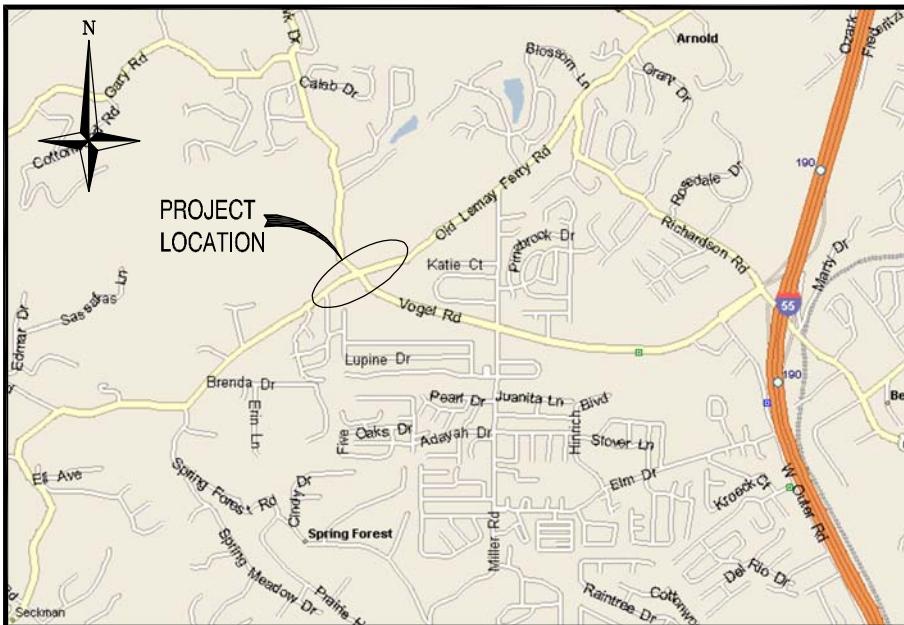
BENCHMARK

5/8" REBAR AND TRAVERSE CAP SOUTHWEST OF THE INTERSECTION OF VOGEL ROAD AND OLD LEMAY FERRY ROAD. ELEVATION IS 598.54 FEET. IT IS 16.5' SSE OF THE BACK OF CURB OF OLD LEMAY FERRY ROAD, 36.9' SW OF THE CENTER OF A GRATE INLET IN OLD LEMAY FERRY ROAD, AND 28.2' EAST OF A WATER METER. THE VERTICAL DATUM IS NAVD88 AS BROADCAST USING THE MODOT VRS NETWORK.

THE LAND TIE FROM THE EXISTING CENTERLINE INTERSECTION OF OLD LEMAY FERRY ROAD AND VOGEL ROAD TO A FOUND STONE AT THE CENTER OF SECTION 36, T. 43 N, R. 5 E IS NORTH 50 DEGREES 25 MINUTES 51 SECONDS EAST, A DISTANCE OF 1265.96 FEET. FESTUS, MO 63028

ADT INFO

LEMAY FERRY NORTH OF VOGEL = 2,867
LEMAY FERRY SOUTH OF VOGEL = 7,417
VOGEL EAST OF LEMAY FERRY = 8,107
VOGEL WEST OF LEMAY FERRY = 3,859



REMOVAL LEGEND

(TBR)	- TO BE REMOVED
(TBR&R)	- TO BE REMOVED AND REPLACED
(UIP)	- USE IN PLACE
(ATG)	- ADJUST TO GRADE
(TBR&R)	- TO BE REMOVED AND RELOCATED
PR.	- PROPOSED
EX.	- EXISTING
X	- REMOVAL ITEM
---	- PAVEMENT REMOVAL
---	- MISCELLANEOUS REMOVAL
---	- TREE/BRUSH REMOVAL BY AREA

RIGHT OF WAY LEGEND

---	- EXISTING P. ROW or PREScriptive EASEMENT
---	- PROPOSED ROW
---	- PROPOSED PERMANENT EASEMENT
---	- PROPOSED TEMPORARY SLOPE EASEMENT
XX	- PROPOSED RIGHT OF WAY AREA
ZZ	- EXISTING PREScriptive EASEMENT AREA TO BE CONVERTED TO PROPOSED RIGHT OF WAY AREA
ZZ	- PROPOSED DRAINAGE EASEMENT

PAVEMENT MARKING LEGEND

SWL	- SOLID WHITE LINE
SYL	- SOLID YELLOW LINE
DSY	- DOUBLE SOLID YELLOW
YSD	- YELLOW SKIP DASH
WSD	- WHITE SKIP DASH
WASD	- WHITE ABBREVIATED SKIP DASH
L&S	- LETTER & SYMBOLS

PROPOSED LEGEND

(TBR)	- TO BE REMOVED
(TBR&R)	- TO BE REMOVED AND REPLACED
(UIP)	- USE IN PLACE
(CONC)	- CONCRETE
(TEMP)	- TEMPORARY
(PAV'T)	- PAVEMENT
(PR)	- PROPOSED
(EX)	- EXISTING

PAVEMENT REMOVAL

PAVEMENT MARKING

PAVEMENT MARKING

TRAFFIC CONTROL / STAGING LEGEND

	WORK AREA
	TRAFFIC CONTROL BARREL OR DRUM WATER - C1 WATER
	TYPE III BARRICADE
	TRAFFIC CONTROL SIGN
	OPEN LANE OF TRAFFIC
	FLAGGER
	SILT FENCE
	TEMPORARY INLET CHECK
	TYPE I TEMPORARY DITCH CHECK
	TYPE II TEMPORARY DITCH CHECK
	AREA TO BE TEMP./PERM. FERTILIZED/MULCHED/SEEDED

EROSION CONTROL PLAN LEGEND

	TELEPHONE - AT&T GLENN HOGENMILLER 122 N. 2ND ST. FESTUS, MO 63028 636-931-7525
	CABLE - CHARTER DARYL STEFFEN 815 CHARTER COMMONS DRIVE TOWN & COUNTRY, MO 63017 636-387-6663
	GAS - LACLEDE GAS BRIAN LANGENBACHER 4118 SHREWSBURY AVE SHREWSBURY, MO 63119 314-768-7767

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
2. 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.
3. DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS STATED OTHERWISE ON THE PLANS.
4. IF AN OPEN TRENCH CONDITION WILL REMAIN OPEN OVERNIGHT, "PAVEMENT EDGE TREATMENT" SHALL BE PROVIDED IN ACCORDANCE WITH McDOT STANDARD DRAWING 619.10.
5. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, SILTATION FABRIC FENCES. CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR JEFFERSON COUNTY. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE FOR ESTIMATING PURPOSES ONLY. THE OWNER AND/OR JEFFERSON COUNTY MAY AT THEIR OPTION DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITING OF SILT OR MUD ON NEW OR EXISTING PAVEMENT SHALL BE REMOVED IMMEDIATELY. ANY DEPOSITING OF SILTS OR MUD IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR JEFFERSON COUNTY.
6. ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER, PROPOSED ROADS, AND/OR PAVED AREAS SHALL BE COMPAKTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPAKCTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. ALL FILL PLACED IN PROPOSED ROADS SHALL BE COMPAKTED FROM THE BOTTOM OF THE FILL UP. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCERNED WITH GRADING AND BACK FILLING OPERATIONS. A COPY OF THE GRADING COMPAKCTION TEST RESULTS SHALL BE PROVIDED TO JEFFERSON COUNTY.
7. NO SLOPES SHALL BE STEEPER THAN 3(HORIZONTAL) TO 1 (VERTICAL) EXCEPT AS NOTED ON THE PLANS.
8. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES.
9. PROVIDE ADEQUATE OFF-STREET PARKING FOR CONSTRUCTION EMPLOYEES. PARKING ON NON-SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEE VEHICLES IS TRACKED ONTO THE PAVEMENT CAUSING HAZARDOUS ROADWAY AND DRIVEWAY CONDITIONS.
10. ANY DISTURBED ITEM OFF PROJECT PROPERTY (I.E. BUSHES, FENCES, MAILBOXES, ETC.) SHALL BE REPLACED, IN KIND.
11. THE OFFSETS TO ALL INLETS AND MANHOLES ARE TO THE CENTER OF THE DRAINAGE STRUCTURE. A CONCENTRIC DRAINAGE STRUCTURE WAS USED TO CALCULATE THIS DISTANCE.
12. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THE VARIOUS ROADWAY IMPROVEMENTS.
13. SIGNAL AND LIGHTING EQUIPMENT IS SHOWN ON THE ROADWAY PLANS FOR INFORMATION ONLY. SIGNAL AND LIGHTING INFORMATION SHOWN IN THE SIGNAL AND LIGHT PLANS SHALL TAKE PRECEDENCE OVER THESE ITEMS SHOWN ON THE ROADWAY PLANS.
14. SYMBOLS, STOP BARS AND YIELD BARS SHALL BE PRE-FORMED TAPE. ALL OTHER PAVEMENT MARKING SHALL BE WATERBORNE PAINT.
15. ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED USING WATER BLASTING OR GRINDING AND SHALL BE INCLUDED IN THE COST OF THE PAVEMENT MARKING PAY ITEM.
16. THE CONTRACTOR IS RESPONSIBLE TO REPLACE ANY DISTURBED CONTROL POINTS AND PROVIDE APPROPRIATE DOCUMENTATION TO THE COUNTY. THE COST OF SAID WORK SHALL BE INCLUDED IN THE COST OF CONTRACTOR FURNISHED SURVEYING AND STAKING.
17. ANY EXISTING SIGNS SHOWN TO BE REMOVED SHALL BE THE PROPERTY OF THE COUNTY AND SET ASIDE AT THE SITE FOR THE COUNTY TO PICK UP. POSTS TO BE REMOVED FROM THE SITE BY THE CONTRACTOR.

JASON JONAS, P.E.
PUBLIC WORKS DIRECTOR
JEFFERSON COUNTY, MO



Corporate Engineering
Certificate # 000381

STATE OF MISSOURI
BRIAN E.
COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED

ROUTE STATE
6 MO
DISTRICT SHEET NO.
6 1
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE PREPARED
DESCRIPTION
DATE
PRELIMINARY SUBMITTAL
8/19/13
PRELIMINARY APPROVAL
8/19/13
70% SUBMITTAL (TO COUNTY)
70% SUBMITTAL (TO COUNTY)
4/29/14
PS&E SUBMITTAL (TO COUNTY)
4/29/14

TRANSPORTATION
ENGINEERS+PLANNERS
12400 OLIVE BLVD, SUITE 430
ST. LOUIS, MO 63141
(314) 575-6844
450 COTTONWOOD RD, SUITE B
GLEN CARSON, IL 62344
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COVER SHEET
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

ROADWAY ITEMS			
202-20.10	REMOVAL OF IMPROVEMENTS	LS	1
203-10.00	CLASS A EXCAVATION	CUYD	1582
203-60.00	COMPACTING EXCAVATION	CUYD	607
304-01.43	TYPE 1 AGGREGATE FOR BASE (4 IN. THICK)	SQYD	937
401-01.50	TYPE A2 SHOULDER	SQYD	688
401-12.09	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-1)	TON	565
401-12.11	BITUMINOUS PAVEMENT MIXTURE PG64-22, (BP-2)	TON	578
407-10.05	TACK COAT	GAL	253
608-10.00	CONCRETE MEDIAN	SQ YD	37
609-10.52	CURB AND GUTTER TYPE B	FT	262
616-10.05	CONSTRUCTION SIGNS	SQ FT	507
616-10.28	CHANNELIZER	EA	88
616-10.30	TYPE III MOVEABLE BARRICADE	EA	2
618-10.00	MOBILIZATION	LS	1
619-10.00	PAVEMENT EDGE TREATMENT	LF	549
622-10.01	COLD MILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (LESS THAN 3 IN. THICK)	SQ YD	4199
622-99.05	TEMPORARY RAMPS	SQYD	95
627-40.00	CONTRACTOR FURNISHED SURVEYING AND STAKING	LS	1

DRAINAGE ITEMS			
206-30.00	CLASS 3 EXCAVATION	CU YD	135
216-35.00	PARTIAL REMOVAL OF CULVERT CONCRETE	LS	1
609-60.20	FURNISHING TYPE 2 ROCK DITCH LINER	CU YD	99
609-60.40A	FURNISHING TYPE 4 ROCK DITCH LINER	CU YD	42
609-60.42	PLACING TYPE 2 ROCK DITCH LINER	CU YD	99
609-60.44	PLACING TYPE 4 ROCK DITCH LINER	CU YD	42
614-11.20	CURVED VANE GRATE AND FRAME (2 FT. X 2 FT. OR 600MM X 600MM)	EA	1
614-30.11	MANHOLE FRAME AND COVER, TYPE 1B	EA	1
703-40.40	CLASS B1 CONCRETE (BRIDGES AND CULVERTS)	CU YD	19.2
706-10.20	REINFORCING STEEL (BRIDGES AND CULVERTS)	LBS	2930
720-12.00	SELECT GRANULAR BACKFILL FOR STRUCTURAL SYSTEMS	CU YD	37
726-10.18	18 IN. PIPE GROUP A	FT	63
726-10.24	24 IN. PIPE GROUP A	FT	27
726-10.42	42 IN. PIPE GROUP A	FT	37
731-00.60	PRECAST CONCRETE MANHOLE - 60 IN.	FT	7
731-10.22	PRECAST CONCRETE DROP INLET 2 FT X 2 FT	FT	5
731-99.01	DOUBLE CURBE INLET AND TOP	FT	16
732-06.18A	18 IN. OR ALLOWED SUBSTITUTE GROUP A FLARED END SECTION	EA	2
732-06.42	42 IN. OR ALLOWED SUBSTITUTE GROUP A FLARED END SECTION	EA	1

LANDSCAPING ITEMS			
805-20.00A	SEEDING - WARM SEASON MIXTURES	ACRE	0.3
806-10.17	TEMPORARY SEEDING AND MULCHING	ACRE	0.3
806-10.19	SILT FENCE	LF	559
806-10.21	TYPE I DITCH CHECK	EA	3
806-10.22	TYPE II DITCH CHECK	EA	4
806-10.25	INLET CHECK	EA	4

SIGNING ITEMS			
903-10.10	CONCRETE FOOTING, EMBEDDED	CUYD	0.13
903-12.20	PIPE POST	LB	40
903-12.40	BREAKAWAY ASSEMBLY	EA	1
903-12.50A	U-CHANNEL POST, 3LB	LF	377
903-50.04	TYPE SHR2L-1 SIGN	SQFT	43
903-99.02a	REMOVE EXISTING SIGN	EA	14
903-99.02b	RELOCATE EXISTING SIGN	EA	5

PAVEMENT MARKING			
620-51.30	TYPE 2 PREFORMED MARKING TAPE (GROOVED), LEFT/RIGHT ARROW	EA	9
620-51.40	TYPE 2 PREFORMED MARKING TAPE (GROOVED), 24 IN. WHITE, YIELD LINE TRIANGLES	EA	5
620600B	4 IN. WHITE ACRYLIC WATERBORNE PAVEMENT MARKING PAINT	LF	132
620-60.01B	4 IN. YELLOW ACRYLIC WATERBORNE PAVEMENT MARKING PAINT	LF	2940
620-61.06	ACRYLIC WATERBORNE PAVEMENT MARKING PAINT, 6 IN., WHITE	LF	2438
620-61.22	ACRYLIC WATERBORNE PAVEMENT MARKING PAINT, 12 IN., WHITE	LF	43
620-61.24	ACRYLIC WATERBORNE PAVEMENT MARKING PAINT, 24 IN., WHITE	LF	130
620-99.02	ACRYLIC WATERBORNE PAVEMENT MARKING PAINT, COMBINATION STRAIGHT/LEFT/RIGHT ARROW	EA	9
620-99.03	ACRYLIC WATERBORNE PAVEMENT MARKING PAINT, 12 IN, YELLOW	LF	58

LIGHTING			
901-99.03	CONDUIT, 1.5 IN. RIGID, IN TRENCH (AMEREN UE STD)	LF	439

SIGNALS			
902-05.13	SIGNAL HEAD, TYPE 3B, LED	EA	5
902-05.15	SIGNAL HEAD, TYPE 5B, LED	EA	3
902-32.35	POST, TYPE C, 35 FT.	EA	1
902-32.40	POST, TYPE C, 40 FT.	EA	2
902-32.42	POST, TYPE C, 42 FT.	EA	1
902-42.83	CONTROLLER ASSEMBLY HOUSING, NEMA TS2 CONTROLLER	EA	1
902-50.20	CONDUIT, 1", LOOP DETECTOR	LF	178
902-52.00	CONDUIT, 2", IN TRENCH	LF	16
902-53.00	CONDUIT, 3", IPUSHED	LF	62
902-73.00	CONDUIT, 3", IPUSHED	LF	247
902-82.08	CABLE, #8 AWG 1 CONDUCTOR, POWER	LF	80
902-83.11	CABLE, #16 AWG 7 CONDUCTOR	LF	1430
902-85.00	CABLE, LOOP DETECTOR, IN DUCT	LF	1830
902-85.10	CABLE, LOOP DETECTOR, LEAD-IN	LF	800
902-86.20	POWER SUPPLY ASSEMBLY, TYPE 2	EA	1
902-88.11	PREFORMED, PULLBOX CLASS 2	EA	3
902-88.12	PREFORMED, PULLBOX CLASS 3	EA	1
902-91.00	BASE, CONCRETE	CUYD	14.9

A-SHEET
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

ABC

BB



CIVIL ENGINEER

DATE PREPARED

ROUTE STATE MO

DISTRICT SHEET NO. 6 3

COUNTY JEFFERSON

JOB NO. 2011-105

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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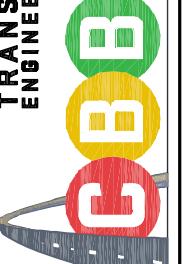
LOCATION	REMOVAL OF IMPROVEMENTS - 1 LUMP SUM													
	TREE REMOVAL (AC)	SAWCUT (FT)	PAVEMENT REMOVAL (SQ YDS)	CURB & GUTTER REMOVAL (FT)	INLET REMOVAL (EA)	FES REMOVAL (EA)	CULVERT END SECTION REMOVAL (EA)	STORM SEWER REMOVAL (FT)	MILLING (SQ YDS)	TEMP RAMP (SQ YD)	EDGE TREATMENT (FT)	TIE BARS (DRILLED & INSTALLED) (FT)	TACK COAT (GAL)	2" BITUMINOUS PAV'T MIX PG64-22 (BP-1) (TON)
SE QUADRANT 39+67.90 TO 66+82.11 40+05.63 TO 40+20.74	0.15	193 32	176 14	49	2	1	1	80		44	193 32	202 34		
NE QUADRANT 41+39.45 TO 42+42.94		108	21								108	113		
OLD VOGEL RD / RELOCATED VOGEL RD 39+49.66 TO 41+58.10	0.08	216	441					106			216	226		
OLD LEMAY FERRY RD 36+56.14 TO 38+00.00 38+00.00 TO 39+50.00 39+50.00 TO 41+50.00 41+50.00 TO 43+50.00 43+50.00 TO 46+08.73									536 610 811 812 935	44 20		27 31 41 41 47	61 69 91 91 105	
VOGEL RD 65+85.75 TO 66+52.99									495	31		25	56	
TOTAL =	0.23	549	652	49	2	1	1	186	4199	95	549	575	212	473

FOR INFORMATION ONLY

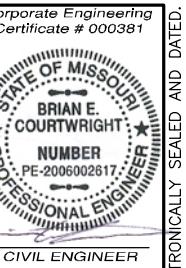
LOCATION	WIDENING & PAVING									
	4" T-1 AGG FOR BASE (SQ YDS)	6" BITUMINOUS PAV'T MIX PG64-22 (BP-2) (TON)	8" BITUMINOUS PAV'T MIX PG64-22 (BP-2) (TON)	TACK COAT (GAL)	2" BITUMINOUS PAV'T MIX PG64-22 (BP-1) (TONS)	DOWELLED-ON CONC. MEDIAN (SQ YDS)	5 3/4" TYPE A2 SHLDR (SQ YDS)	EDGE CONC. CURB & GUTTER (FT)	TIE BARS (PLACED AND FASTENED) (LBS)	
SE QUADRANT 39+67.90 TO 66+82.11 40+05.63 TO 40+20.74	216 14		67 6	7 1	17 1	37	165	151	157	
NE QUADRANT 41+39.45 TO 42+42.94	35		16	2	4		352			
OLD VOGEL RD / RELOCATED VOGEL RD 39+49.66 TO 41+58.10	672	210	279	31	70		171	111	116	
TOTAL =	937	210	368	41	92	37	688	262	273	
					578					

EARTHWORK					
STA	to STA	UNADJUSTED EXCAVATION (CU YD)	EXCAVATION ADJUSTED FOR 25% SHINKAGE (CU YD)	COMPACTING EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
Lemay Ferry RIGHT					
40+00.00	to 40+50.00	44.0	33.0	1.8	31.2
41+50.00	to 42+00.00	6.8	5.1	57.9	-52.8
Lemay Ferry LEFT					
40+00.00	to 40+50.00	18.0	13.5	169.9	-156.4
40+50.00	to 41+00.00	300.2	225.2	154.3	70.9
41+00.00	to 41+50.00	332.6	249.5	11.6	237.9
41+50.00	to 42+00.00	39.3	29.5	5.0	24.5
Old Vogel Rd RIGHT					
66+50.00	to 67+00.00	10.8	8.1	2.6	5.5
Relocated Vogel Rd					
47+00.00	to 47+50.00	419.0	314.3	77.5	236.8
47+50.00	to 48+00.00	410.5	307.9	126.1	181.8
TOTAL =		1582	1187	607	580

LOCATION	DRAINAGE																		
	CULVERT EXTENSION			PRECAST DROP INLET			MH W/F&C TYPE 1-B	PRECAST CONC. MH 60 IN.	END SECTION	PIPE (RCP)	CLASS 3 EXCAV.	GRANULAR BACKFILL	ROCK LINER TYPE 2	ROCK LINER TYPE 4					
	PARTIAL REMOVAL OF CULVERT CONCRETE		CONCRETE	REINFORCEMENT	2'X2' (FT)	CURVED VANE G&F (EA)													
BRANCH A																			
A1 66+29.51	1	19.2	2930								7								
BRANCH B																			
B1 40+00.92																			
B2 40+05.44																			
B3 40+15.58																			
B4 39+99.12																			
B5 39+99.90																			
BRANCH C																			
C1 39+73.84																			
BRANCH D																			
D1 40+44.12																			
D2 41+04.12																			
TOTAL =	1	19.2	2930	4.8	1	15.9	1	7.2	2	1	63	27	37	135	37	99	99	42	42



B-SHEET
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



Corporate Engineering
Certificate # 000381
STATE OF MISSOURI
BRIAN E.
COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED
ROUTE STATE
MO
DISTRICT SHEET NO.
6 4
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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

PAVEMENT MARKING

LOCATION	YELLOW		WHITE				COMB LEFT/RIGHT & THRU ARROW (EA)			
	4" DSY (FT)	12" SYL (HATCH) (FT)	4" SWL (FT)	6" SWL (FT)	6" WASD (FT)	12" SWL (HATCH) (FT)	24" SWL (STOPBAR) (FT)	YIELD SYMBOL (EA)	LEFT/RIGHT ARROW (EA)	
OLD LEMAY FERRY ROAD 36+56.14 TO 40+50.00 41+16.33 TO 46+08.73	931 1590	9 49	848 1137	18 18	43 35	12 35	5 2	3 2	3 2	
VOGEL ROAD 66+02.36 TO 67+85.00	318		341			42		3	3	
RELOCATED VOGEL RD 47+72.18 TO 46+96.87	101		132 76			41		1	1	
TOTAL =	2940	58	132	2402	36	43	130	5	9	9

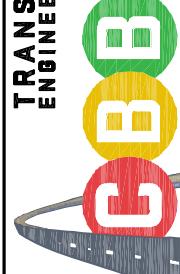
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EROSION CONTROL

LOCATION	SEEDING (AC)	TEMP. SEEDING & MULCHING (AC)	SILT FENCE (FT)	INLET CHECK (EA)	DITCH CHECK	
					T-I (EA)	T-II (EA)
SE QUADRANT	0.04	0.04	161	3	1	
NE QUADRANT	0.07	0.07	155		1	2
SW QUADRANT	0.06	0.06	136	1	1	
NW QUADRANT	0.1	0.1	107			2
TOTAL =	0.3	0.3	559	4	3	4

TRAFFIC CONTROL

LOCATION	CHANNELIZERS (EA)	RELOCATE CHANNELIZERS (EA)	TYPE III BARRICADES (EA)	CONSTRUCTION SIGNS (SQ.FT)	TEMP 6" SWL (FT)	TEMP 6" AWSD (FT)	TEMP 12" SWL (FT)	TEMP 4" DSY (FT)	TEMP 24" SWL (STOPBAR) (FT)	TEMP YIELD BARS (EA)
PHASE I @ INTERSECTION W21-1A (4)	88				59				42	42
W20-1 (4)					144					
G20-2 (4)					144					
PHASE II @ INTERSECTION 36+50 TO 40+50 OLD LEMAY 4+50 TO 46+10 OLD LEMAY VOGEL RD		31				533	18	42	738	124.8
						474	18		948	
						381	18		316	83.2
PHASE III @ INTERSECTION 36+50 TO 40+50 OLD LEMAY 4+50 TO 46+10 OLD LEMAY VOGEL RD			32	2						52
				16						
TOTAL =	88	63	2	507	1388	54	42	2002	260	108
					FOR INFO ONLY					47
										FOR INFORMATION ONLY; SEE NOTE ON TRAFFIC CONTROL & STAGING PLAN



B-SHEET

VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

DESCRIPTION	DATE	PRELIMINARY SUBMITTAL	PRELIMINARY APPROVAL
12430 OLIVE BLVD, SUITE 430 ST. LOUIS, MO 63141 (314) 375-6844	8/19/13	70% SUBMITTAL (TO COUNTY)	4/24/14
450 COTTONWOOD RD, SUITE B GLEN CARSON, IL 62344 (618) 565-2912		PS&E SUBMITTAL (TO COUNTY)	4/29/14
		4" SWL ON RELOCATED VOGEL RD	10/3/14



www.cbdjafc.com

GROUND MOUNTED SIGNS

LOCATION	DIMENSION (in) x (in)	TYPE SHR2L-1 SIGN (FT)	RELOCATE EX SIGN (EA)	EX SIGN (TBR) (EA)	U-CHANNEL POST (FT)	ROUND PIPE POST 2 1/2" DIA (LBS)	BREAKAWAY ASSEMBLY (EA)	CONCRETE FOOTINGS, EMBEDDED (CU YD)	DESCRIPTION
OLD LEMAY FERRY ROAD 40+19 RT 40+27 RT 40+34 RT	36 x 36 30 x 30	9 7		2	46	40	1	0.13	R1-1 "STOP" & STREET SIGNS R1-2 "YIELD" W12-1 "DOUBLE DOWN" W3-3 "SOUTH" W16-9P "AHEAD" W5-1 "STOP AHEAD" "WARNING FIBER OPTIC" MISC SIGNS MISC SIGNS MISC SIGNS
47+00 LT 42+15 LT 41+20 LT 41+14 LT 41+00 LT 40+19 LT 39+88 LT 39+50 LT 39+14 LT	30 x 30 24 x 10 12 x 18 12 x 18 20 x 24	7 2		1	45 27 35	39 2 1			R1-1 "STOP" & STREET SIGNS OM-3R "CHEVRONS" "ADOPT-A-ROAD" OM-3R "CHEVRONS"
VOGEL ROAD 69+50 LT 66+43 LT 66+32 LT 66+33 LT 66+25 LT	30 x 30 24 x 10 12 x 18	7 2		1					W3-3 "SOUTH" W16-9P "AHEAD" OBJECT MARKER R1-1 "STOP" & STREET SIGNS OBJECT MARKER "WARNING FIBER OPTIC"
RELOCATED VOGEL RD 48+18 RT 46+50 45+50	30 x 30 24 x 10 24 x 36 20 x 24	7 2		45 39 39 35					W3-3 "SOUTH" W16-9P "AHEAD" R2-1 30 "SPEED LIMIT 30" "ADOPT-A-ROAD"
TOTAL =		43	5	14	377	40	1	0.13	

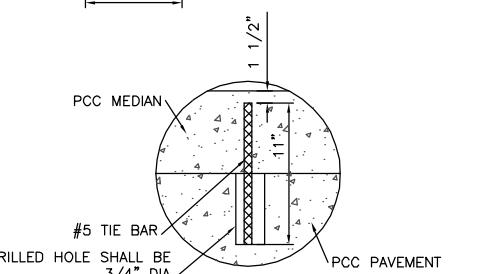
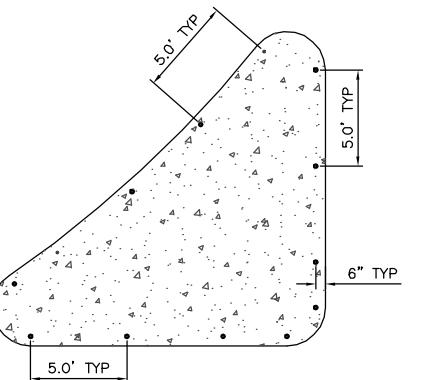
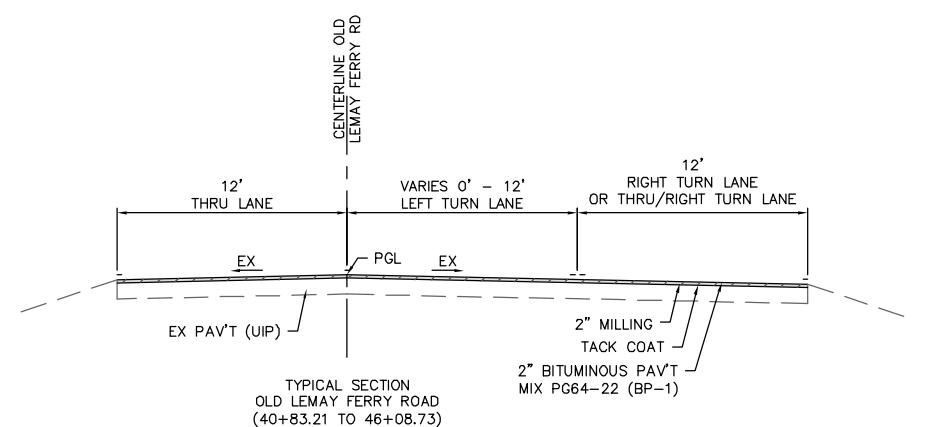
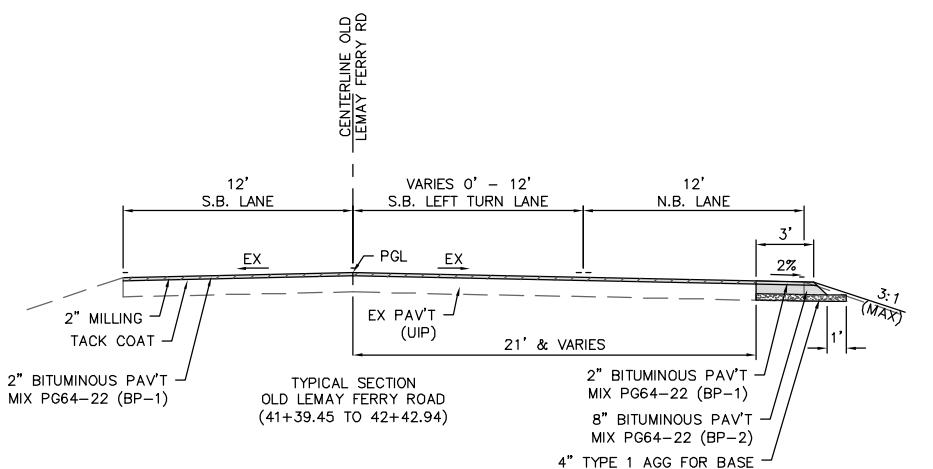
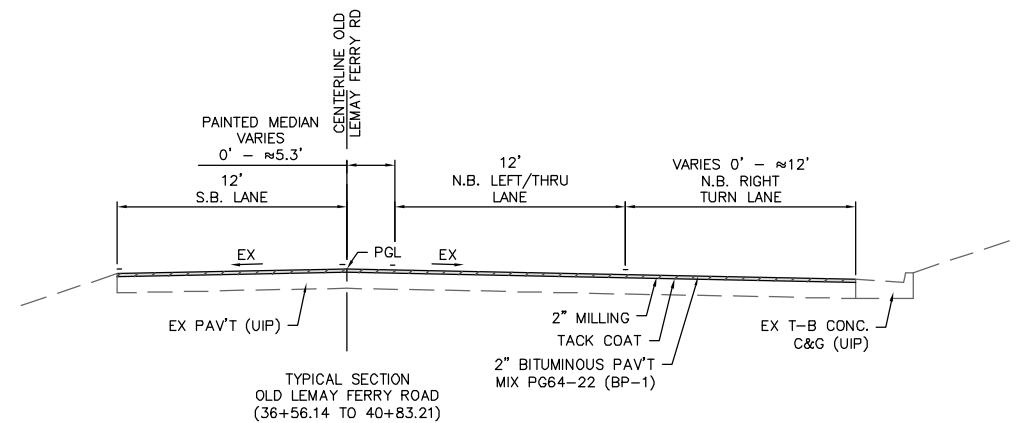


Corporate Engineering
Certificate # 000381

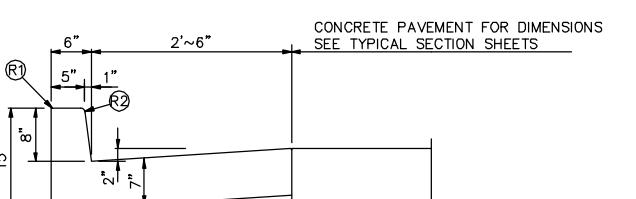
STATE OF MISSOURI
BRIAN E.
COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED

ROUTE STATE
MO
DISTRICT SHEET NO.
6 5
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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



DOWELED ON CONCRETE MEDIAN DETAIL
SEE MoDOT STANDARD 608.30 FOR FURTHER INFO



TYPICAL SECTIONS
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



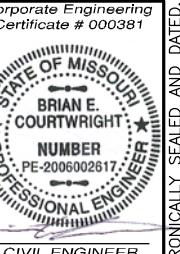
TEP

TRANSPORTATION
ENGINEERS+PLANNERS

12400 OLIVE BLVD, SUITE 430
ST. LOUIS, MO 63141
(314) 875-6844

450 COTTONWOOD RD, SUITE B
GLEN CARON, IL 60234
(815) 565-2612

www.teptronic.com



Corporate Engineering
Certificate # 000381

STATE OF MISSOURI
BRIAN E.
COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED

ROUTE STATE
MO
DISTRICT SHEET NO.
6 6
COUNTY JEFFERSON
JOB NO.
2011-105
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

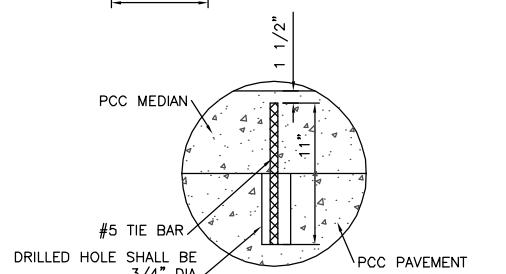
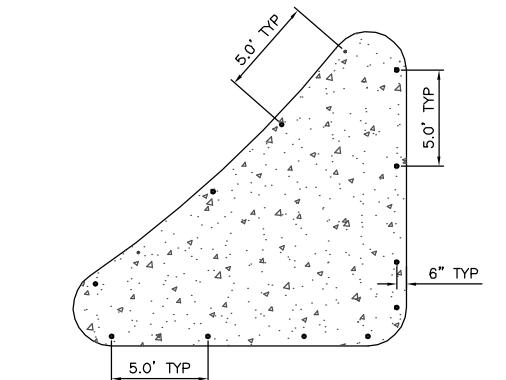
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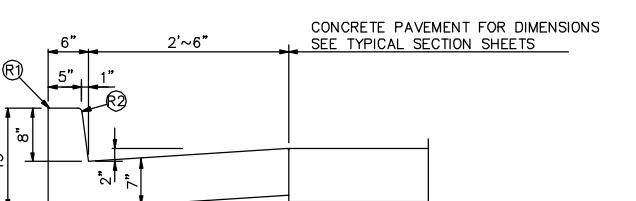
TYPICAL SECTIONS
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

www.tedurtraffic.com

TRANSPORTATION ENGINEERS+PLANNERS		DATE	DESCRIPTION
		6/21/13	PRELIMINARY SUBMITTAL
		8/19/13	PRELIMINARY APPROVAL
		1/24/14	70% SUBMITTAL (TO COUNTY)
		4/29/14	PS&E SUBMITTAL (TO COUNTY)
12400 OLIVE BLVD, SUITE 430 ST. LOUIS, MO 63141 (314) 875-6844	450 COTTONWOOD RD, SUITE B GLEN CARON, IL 62334 (618) 565-2612		

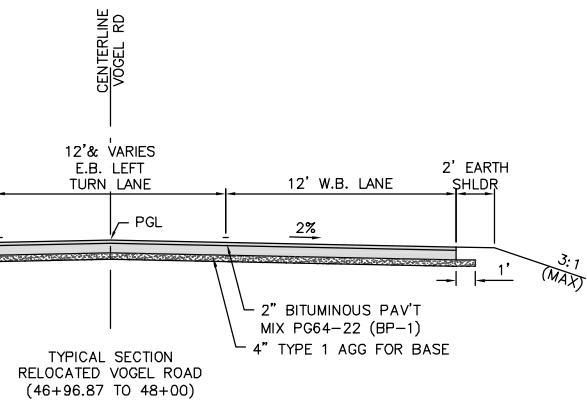


DOWELED ON CONCRETE MEDIAN DETAIL
SEE MoDOT STANDARD 608.30 FOR FURTHER INFO

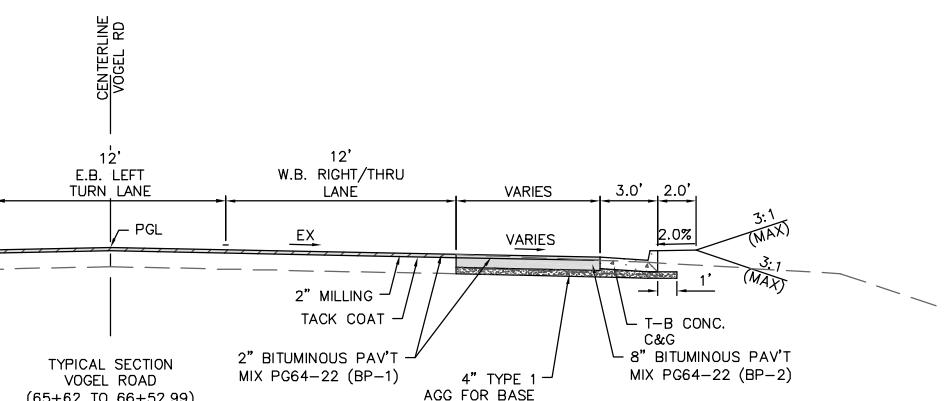


TYPE B
(BARRIER)
CURB & GUTTER

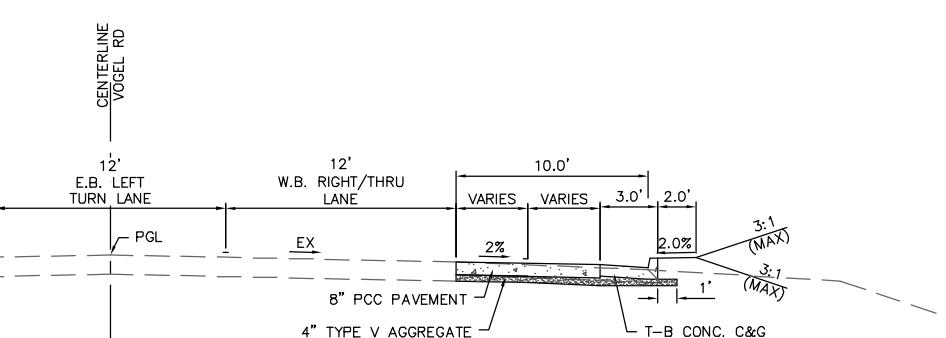
LEGEND
 $\textcircled{R}1$ ROUND TO 1" RADIUS. (EXCEPT FOR SAWED JOINTS)
 $\textcircled{R}2$ ROUND TO 1" RADIUS.
 $\textcircled{R}3$ CONSTRUCT TO 9" RADIUS



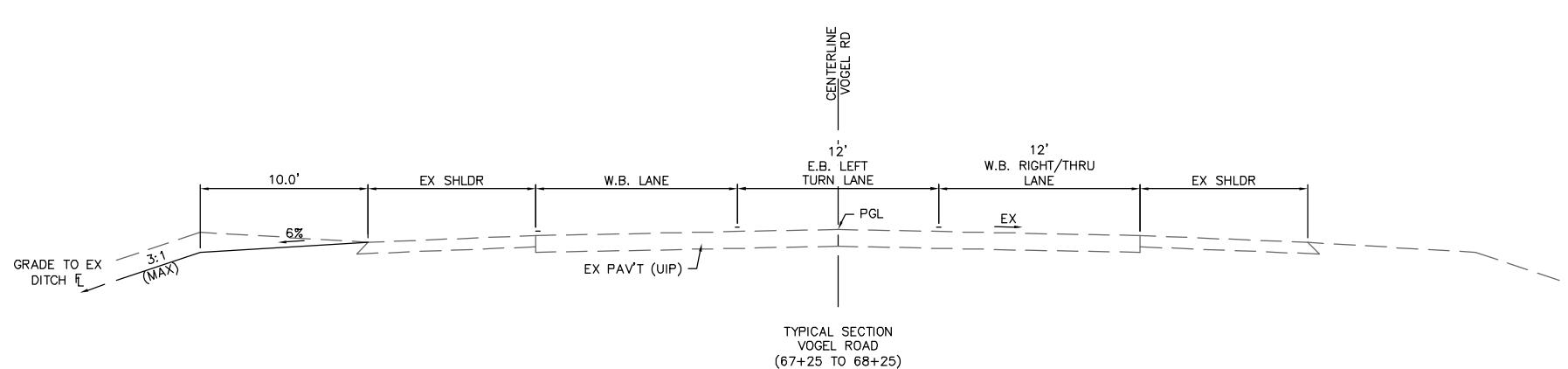
TYPICAL SECTION
RELOCATED VOGEL ROAD
(46+96.87 TO 48+00)



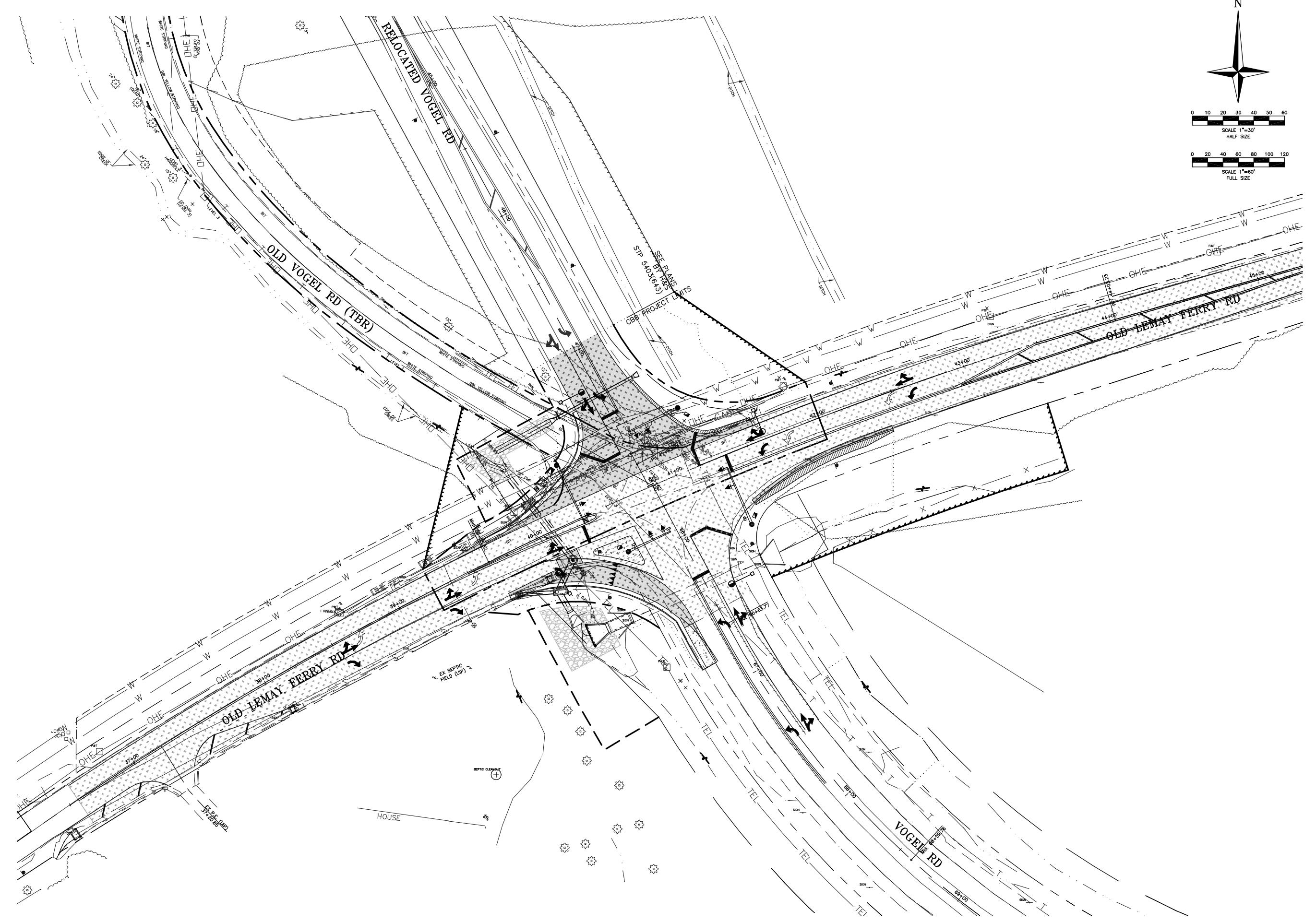
TYPICAL SECTION
VOGEL ROAD
(65+62 TO 66+52.99)



TYPICAL SECTION
VOGEL ROAD
(66+52.99 TO 66+82.11)



TYPICAL SECTION
VOGEL ROAD
(67+25 TO 68+25)



OVERALL

VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-55403(641)

6/21/13	PRELIMINARY SUBMITTAL
6/19/13	PRELIMINARY APPROVAL
7/24/14	70% SUBMITTAL (TO COUNTY)
4/29/14	PS&E SUBMITTAL (TO COUNTY)

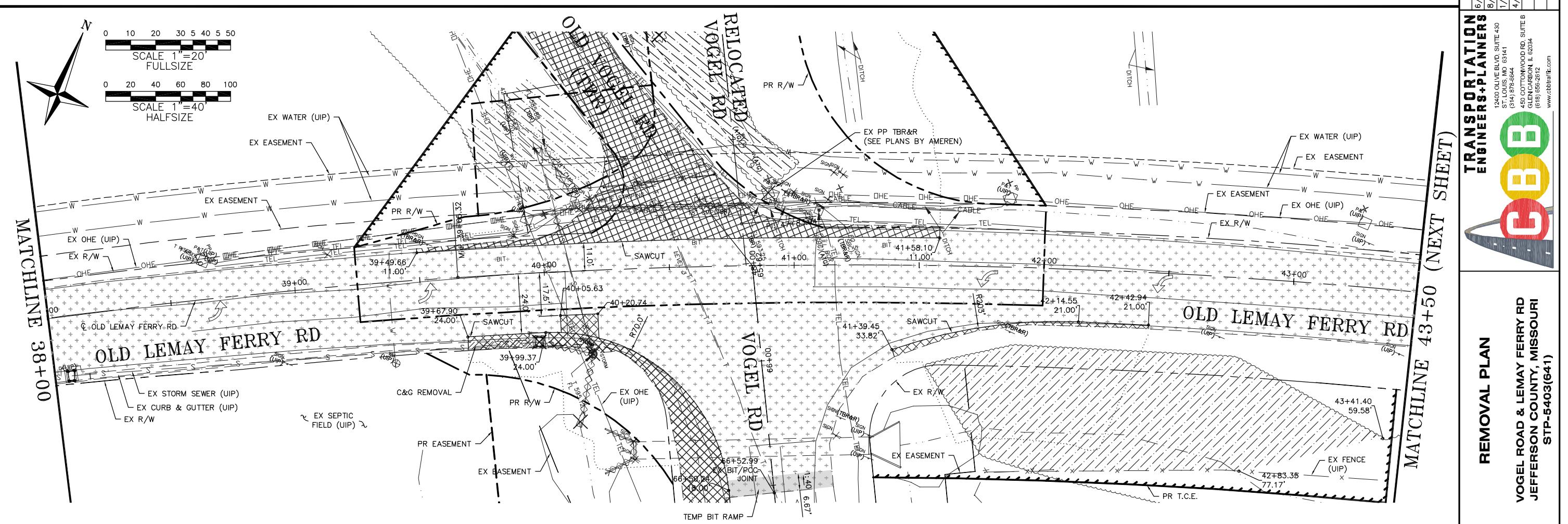
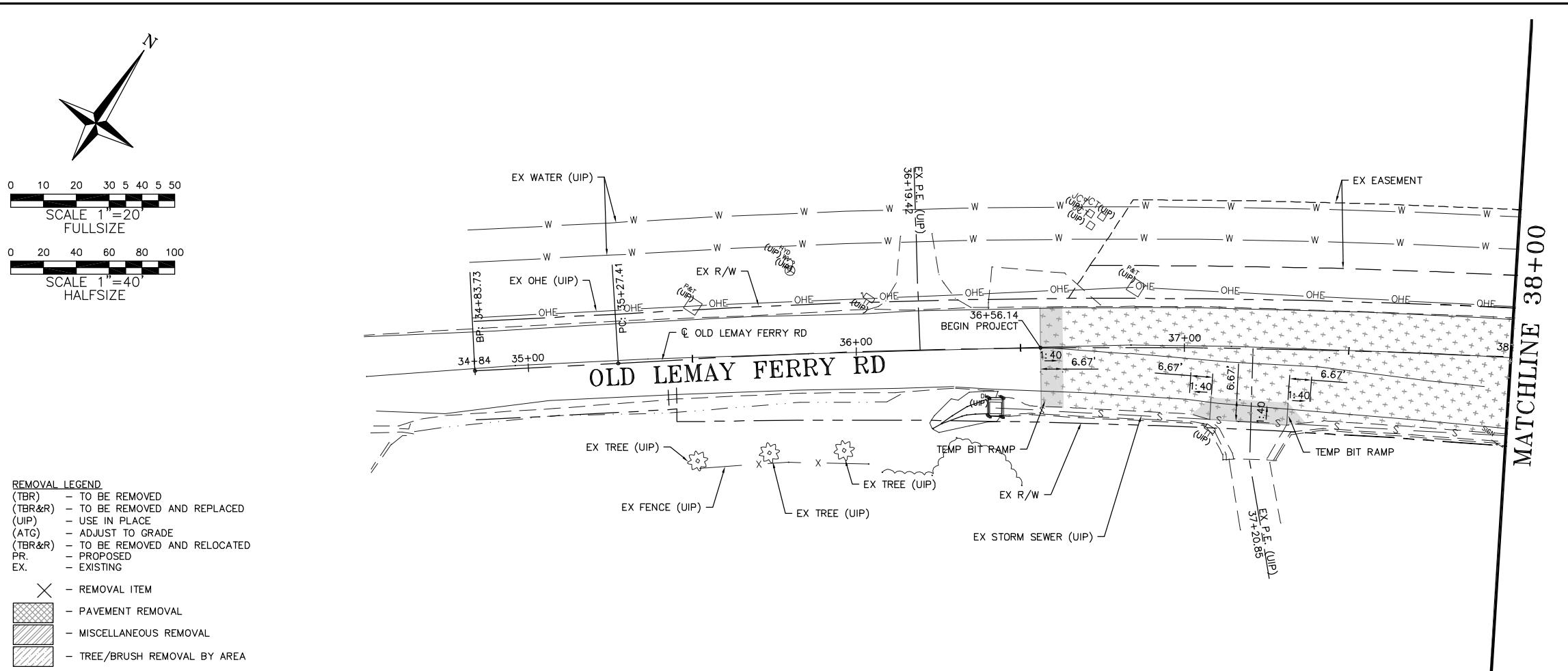
Corporate Engineering Certificate # 000381	
 <p>STATE OF MISSOURI BRIAN E. COURTWRIGHT NUMBER PE-2006002817 PROFESSIONAL ENGINEER</p>	
<p><i>[Handwritten signature]</i></p> <p>CIVIL ENGINEER</p>	
<p>DATE PREPARED</p>	
ROUTE	STATE MO
DISTRICT 6	SHEET NO. 7
<p>COUNTY JEFFERSON</p>	
<p>JOB NO. 2011-105</p>	
<p>CONTRACT ID.</p>	
<p>PROJECT NO.</p>	
<p>BRIDGE NO.</p>	
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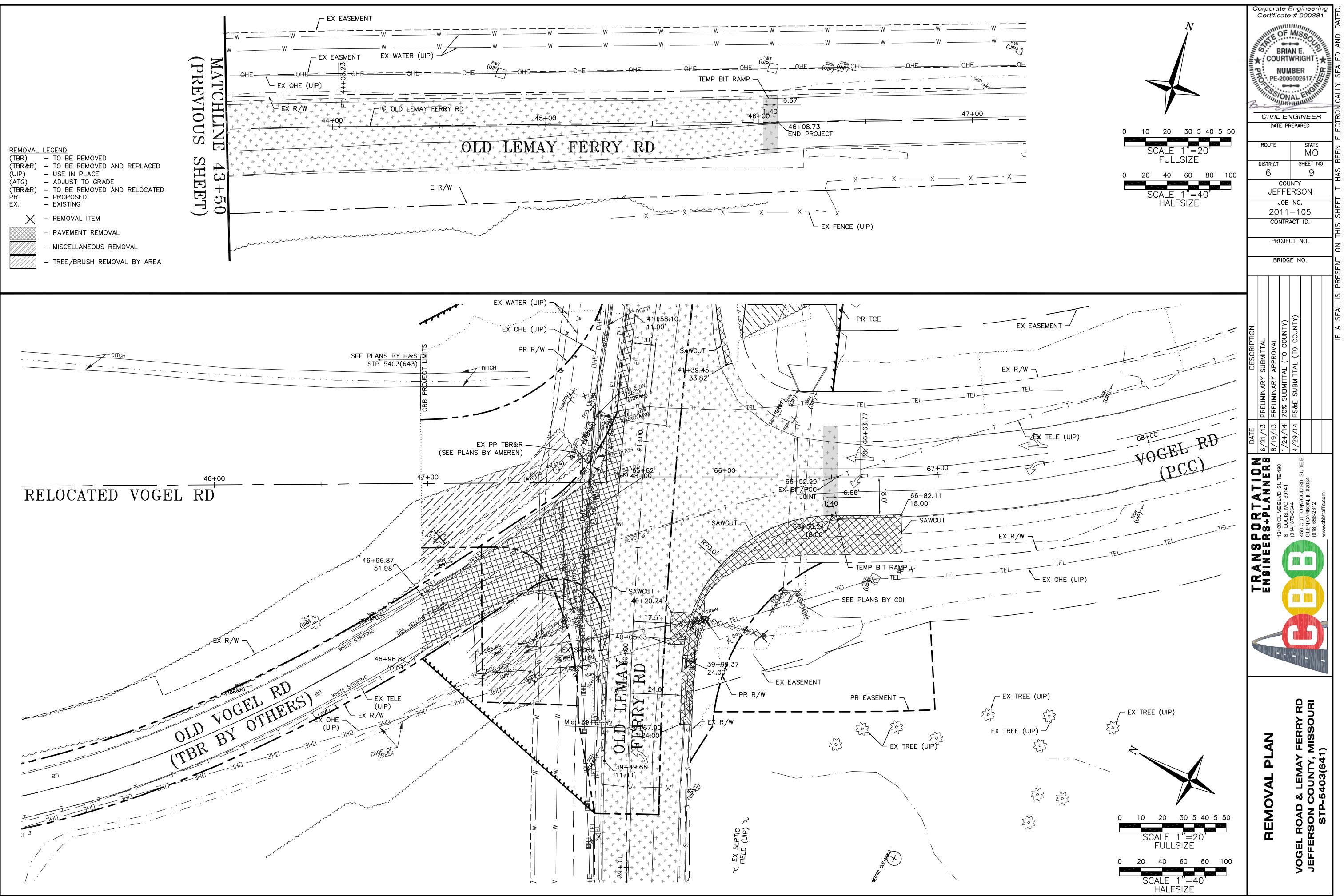
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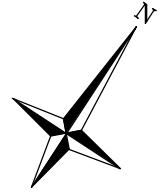
Corporate Engineering
Certificate # 000381

STATE OF MISSOURI
BRIAN E. COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED
ROUTE STATE MO
DISTRICT SHEET NO. 8
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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

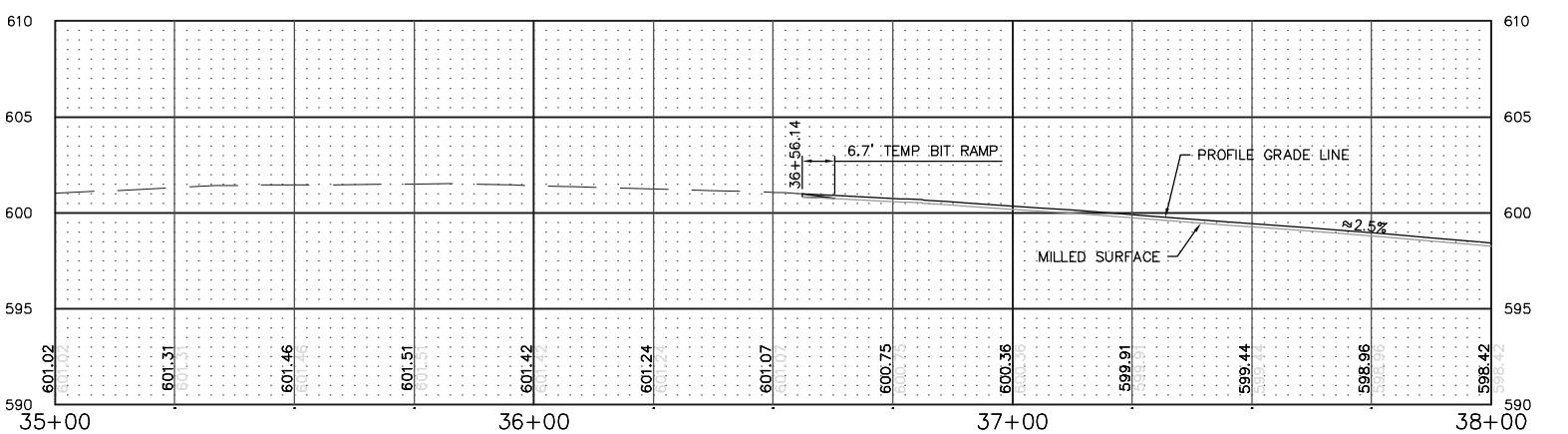






MAICHLINE 38+00
(NEXT SHEET)

PLANS BY CDI FOR
IMAGE ITEMS



OLD LEMAY FERRY

POSED LEGEND

(R) - TO BE REMOVED
 (R&R) - TO BE REMOVED AND REPLACED
 () - USE IN PLACE
 C - CONCRETE
 P - TEMPORARY
 PAV'T - PAVEMENT
 - PROPOSED
 - EXISTING

 - PR BIT PAV'T W/ 2" SURFACE COURSE

 - PR PCC ITEM

 - PR BITUMINOUS SHOULDERS

 - PR 2" MILLING & 2" RESURFACING EX PAV'T

..... - PR GRADING LIMITS

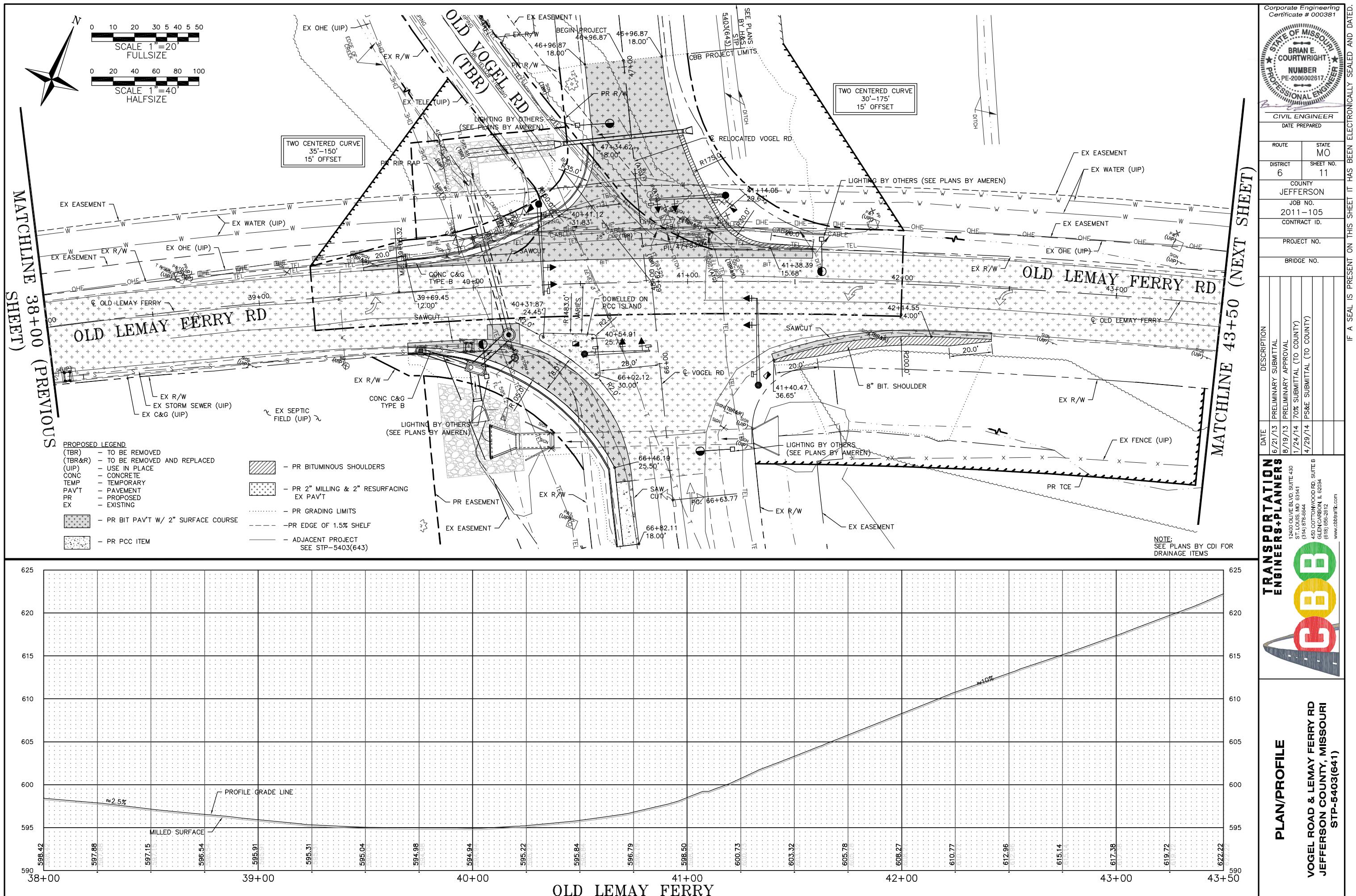
-- - PR EDGE OF 1.5% SHELF

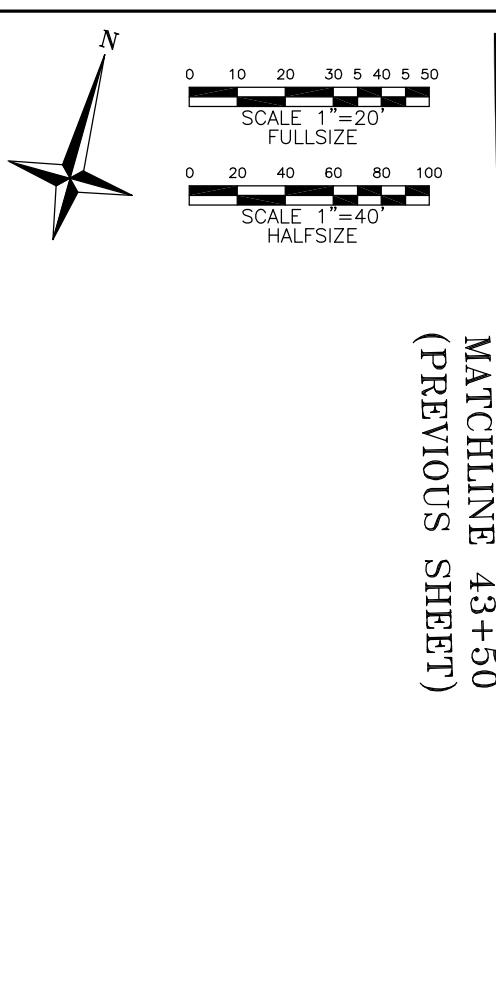
— - ADJACENT PROJECT
 SEE STP-5403(643)

VOGEL ROAD & LEMAY FER JEFFERSON COUNTY, MISS. STD. 54032/641

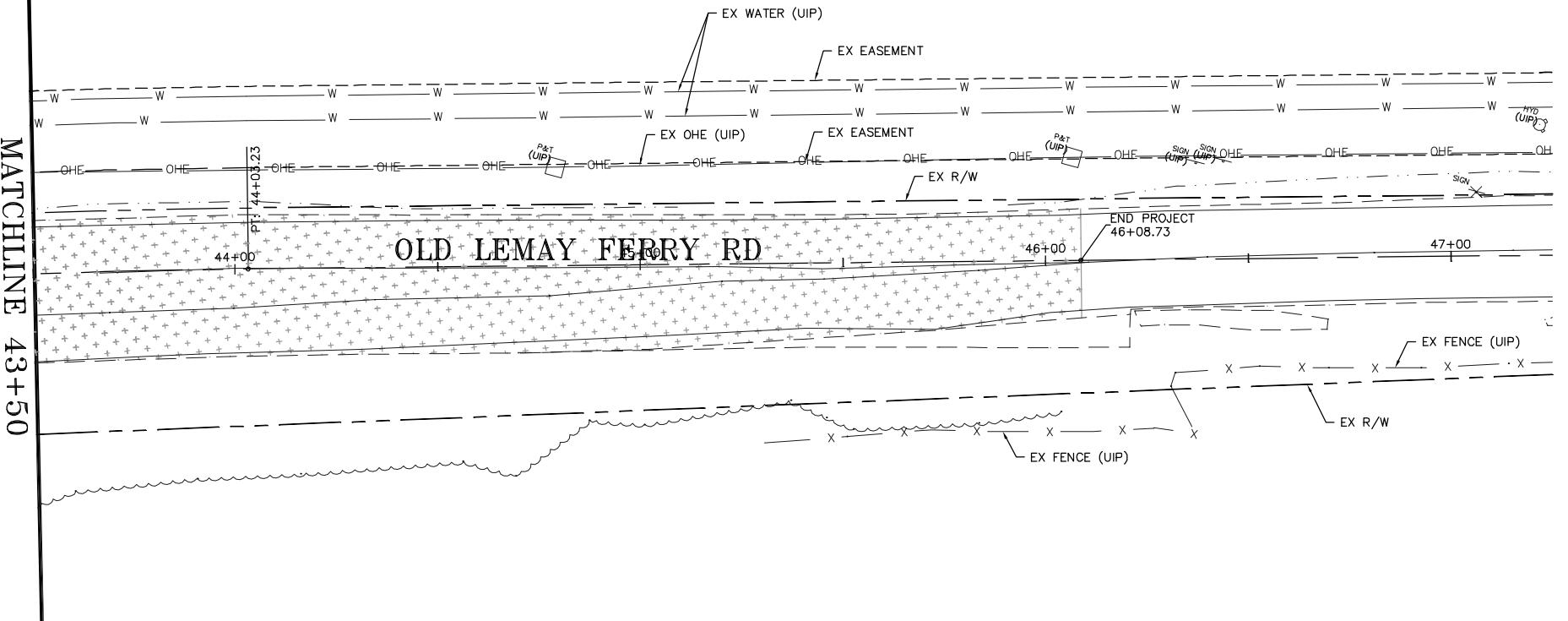
TRANSPORT
ENGINEER







MATCHLINE 43+50
(PREVIOUS SHEET)



NOTE:
SEE PLANS BY CDI FOR
DRAINAGE ITEMS

PROPOSED LEGEND

(TBR) - TO BE REMOVED
(TBR&R) - TO BE REMOVED AND REPLACED
(UIP) - USE IN PLACE
CONC - CONCRETE
TEMP - TEMPORARY
PAV'T - PAVEMENT
PR - PROPOSED
EX - EXISTING

- PR BIT PAV'T W/ 2" SURFACE COURSE

- PR PCC ITEM

- PR BITUMINOUS SHOULDERS

- PR 2" MILLING & 2" RESURFACING EX PAV'T

- PR GRADING LIMITS

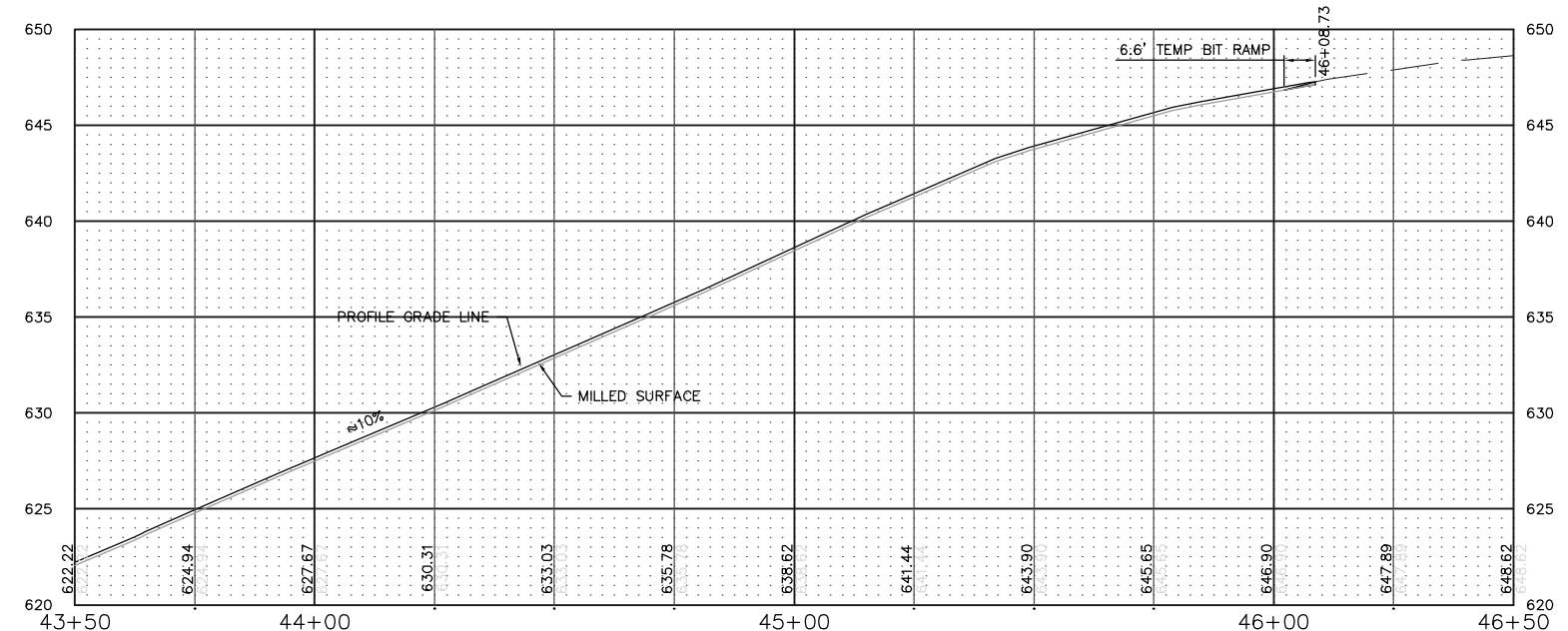
- PR EDGE OF 1.5% SHELF

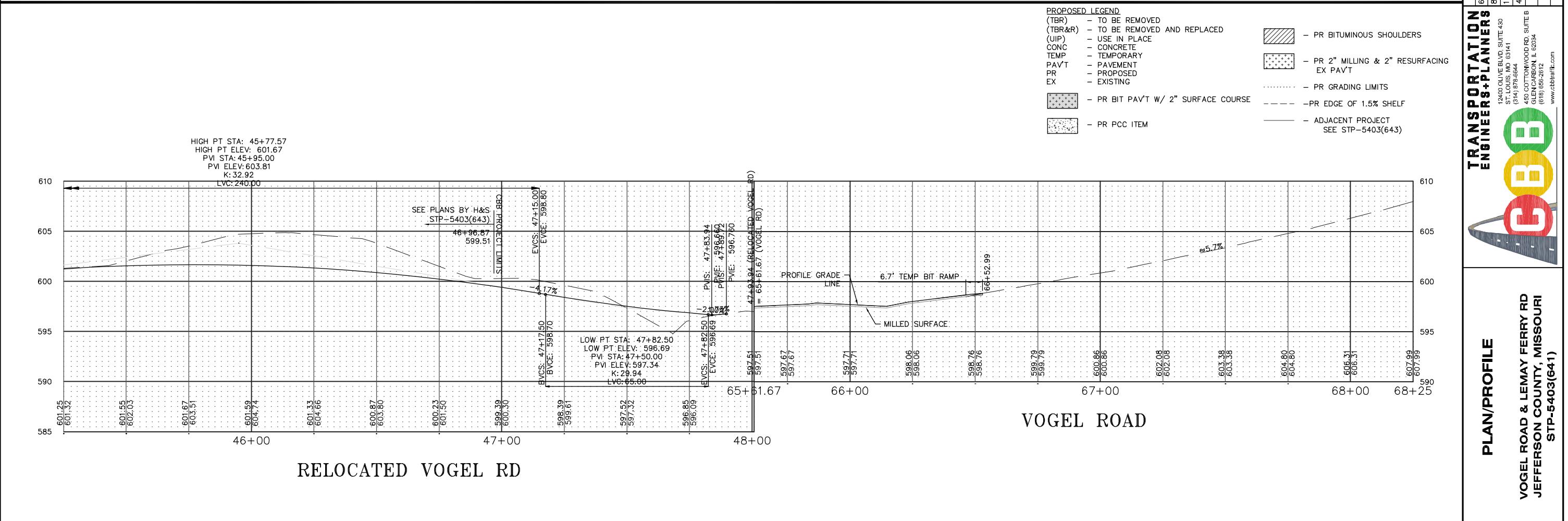
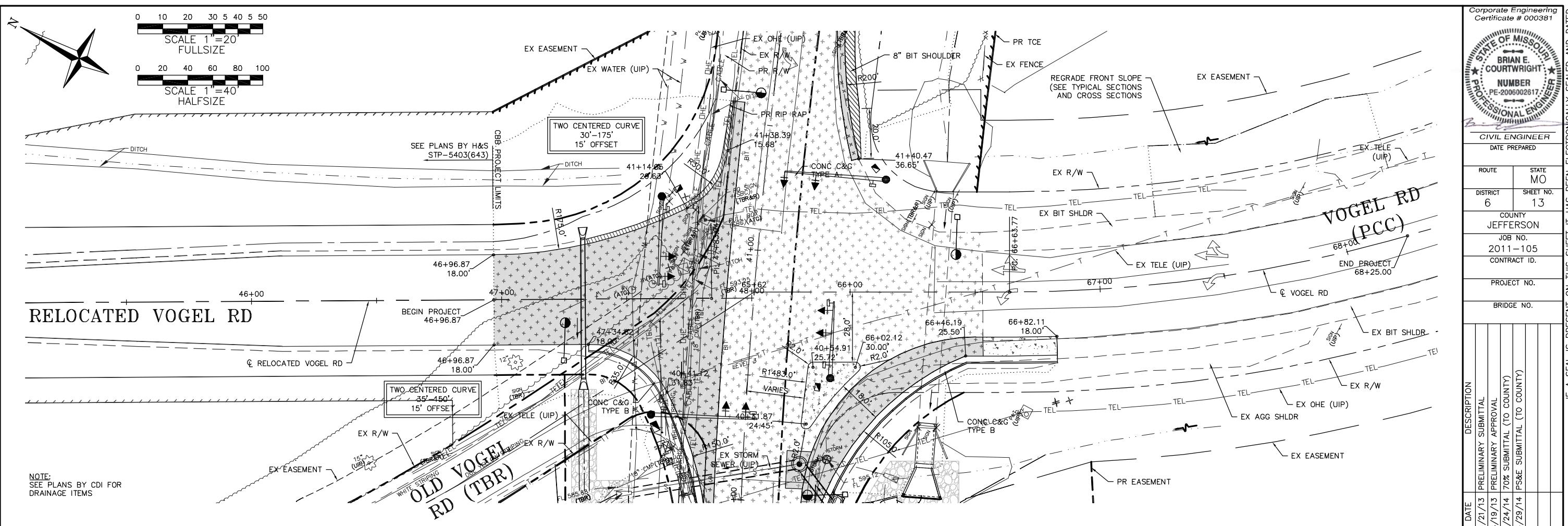
- ADJACENT PROJECT SEE STP-5403(643)

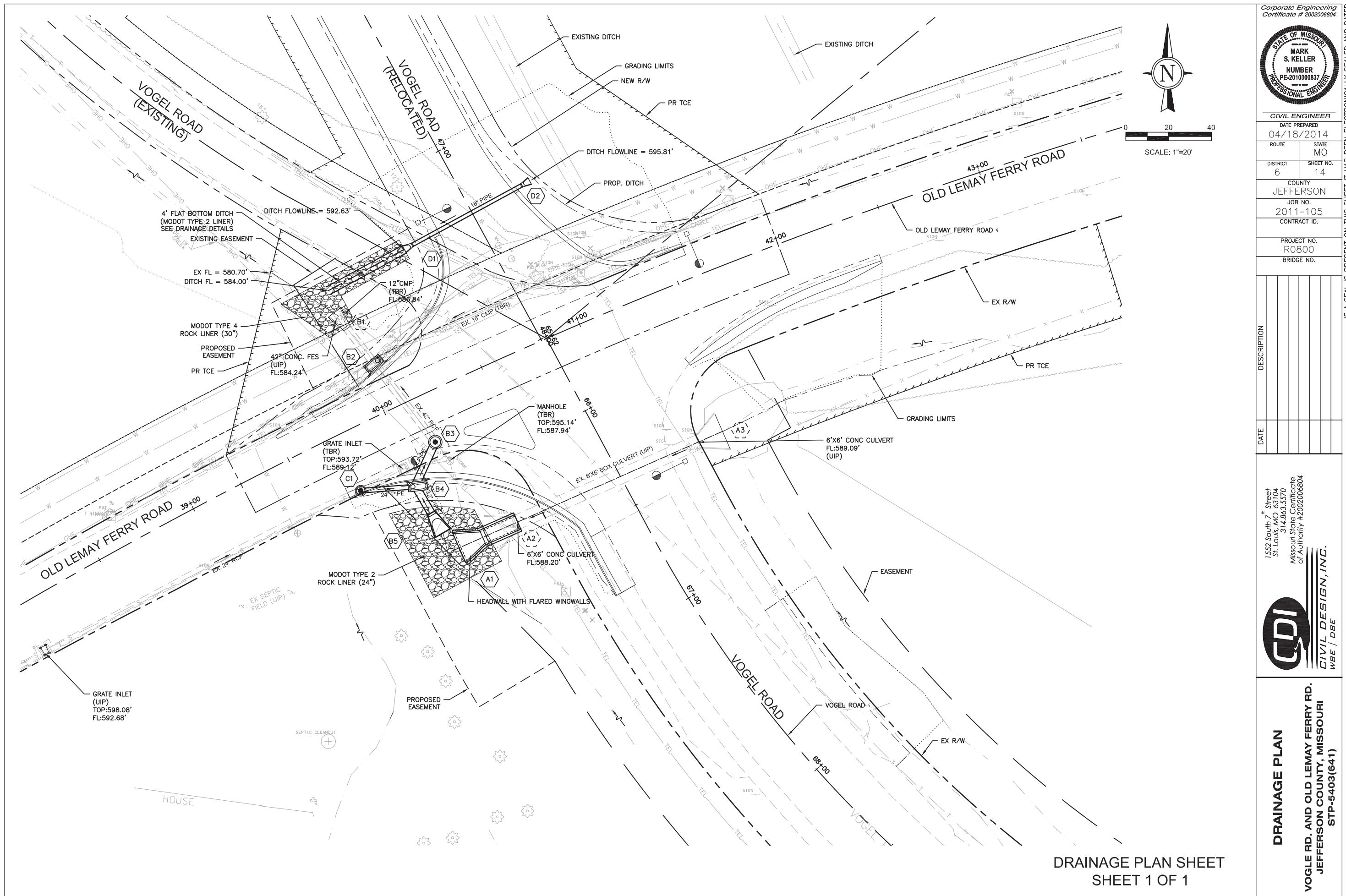
Corporate Engineering Certificate # 000381	
STATE OF MISSOURI BRIAN E. COURTWRIGHT NUMBER PE-200602617	
PROFESSIONAL ENGINEER CIVIL ENGINEER	
DATE PREPARED	
ROUTE	STATE MO
DISTRICT	SHEET NO. 12
COUNTY	JEFFERSON
JOB NO.	2011-105
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

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

TRANSPORTATION ENGINEERS+PLANNERS	DATE 6/21/13 DESCRIPTION PRELIMINARY SUBMITTAL
12400 OLIVE BLVD, SUITE 430 (314) 375-6844	DATE 8/19/13 DESCRIPTION PRELIMINARY APPROVAL
450 COTTONWOOD RD, SUITE B GLEN CARON, IL 62344 (618) 556-2912 www.cbdjaffr.com	DATE 1/24/14 DESCRIPTION 70% SUBMITTAL (TO COUNTY)
VOGEL ROAD & LEMAY FERRY RD JEFFERSON COUNTY, MISSOURI STP-5403(641)	DATE 4/29/14 DESCRIPTION PS&E SUBMITTAL (TO COUNTY)





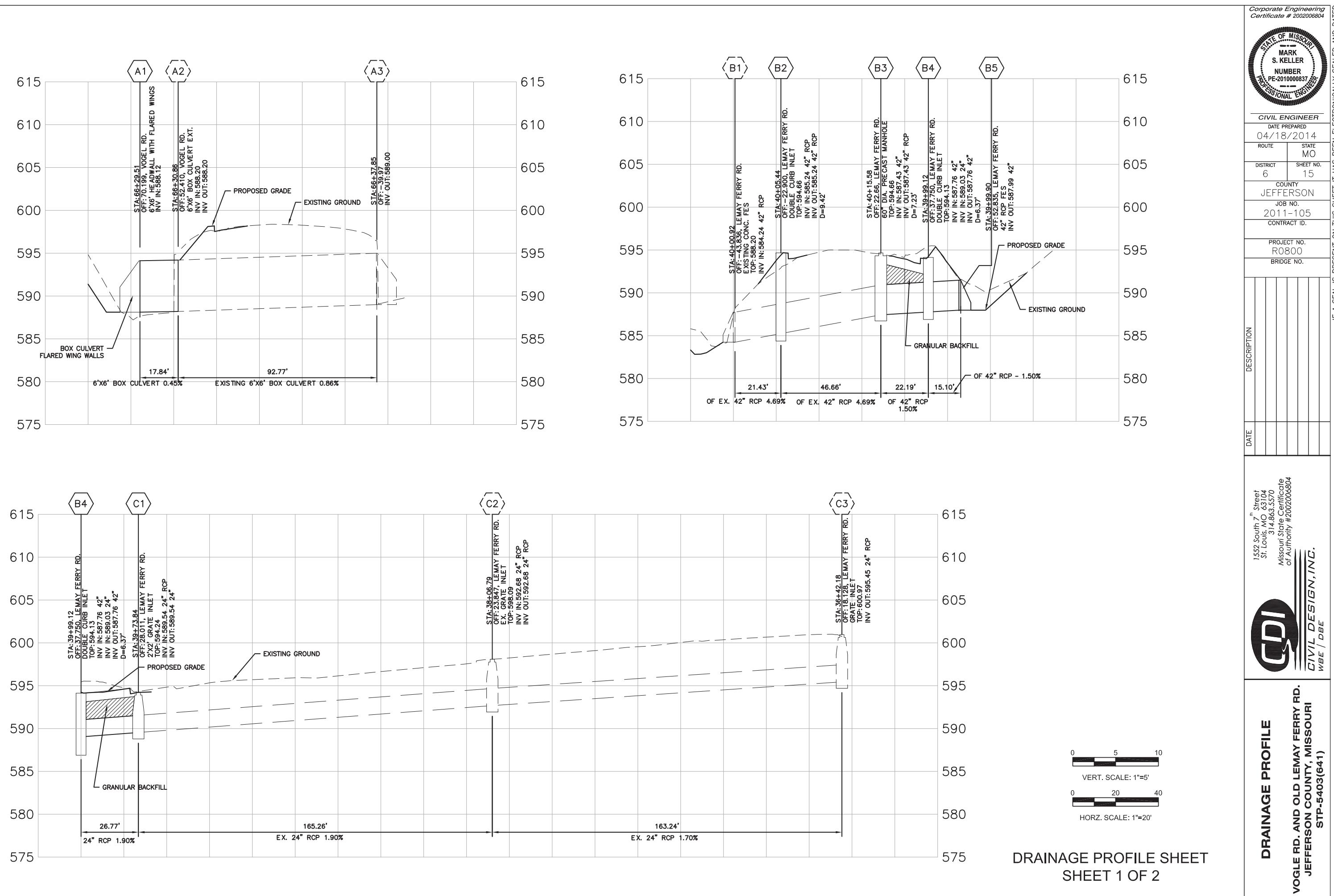


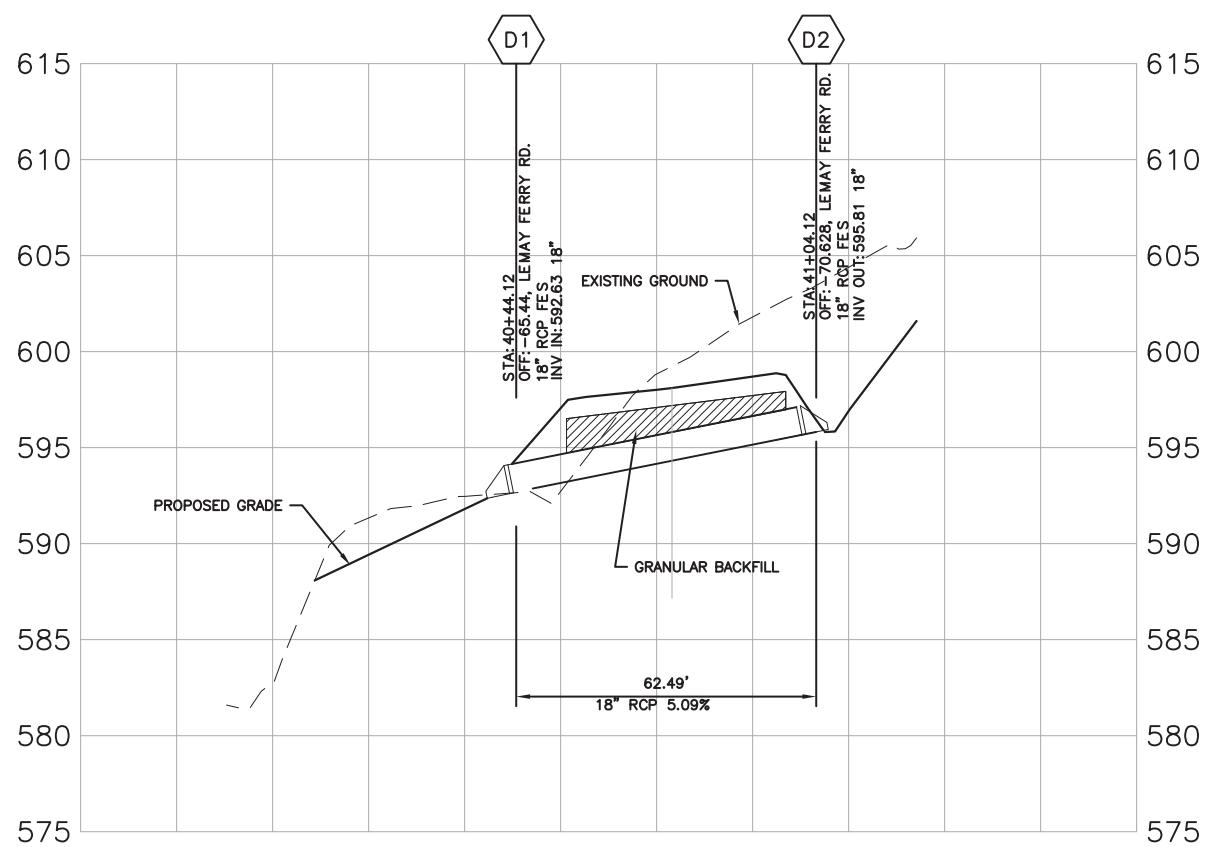
Corporate Engineering
Certificate # 200206804

STATE OF MISSOURI
MARK
S. KELLER
NUMBER
PE-201000037
PROFESSIONAL ENGINEER

CIVIL ENGINEER
DATE PREPARED
04/18/2014
ROUTE STATE
MO
DISTRICT SHEET NO.
6 15
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO. R0800
BRIDGE NO.

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

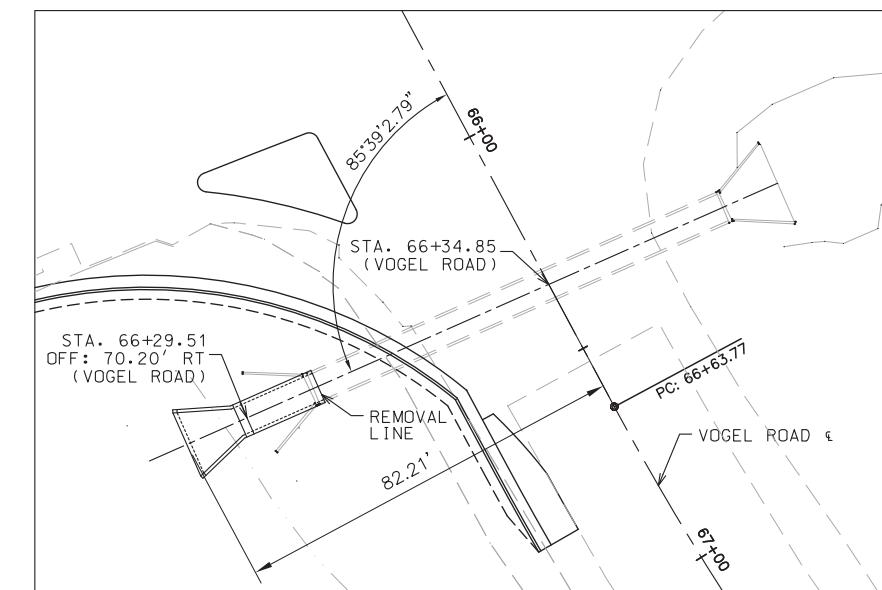
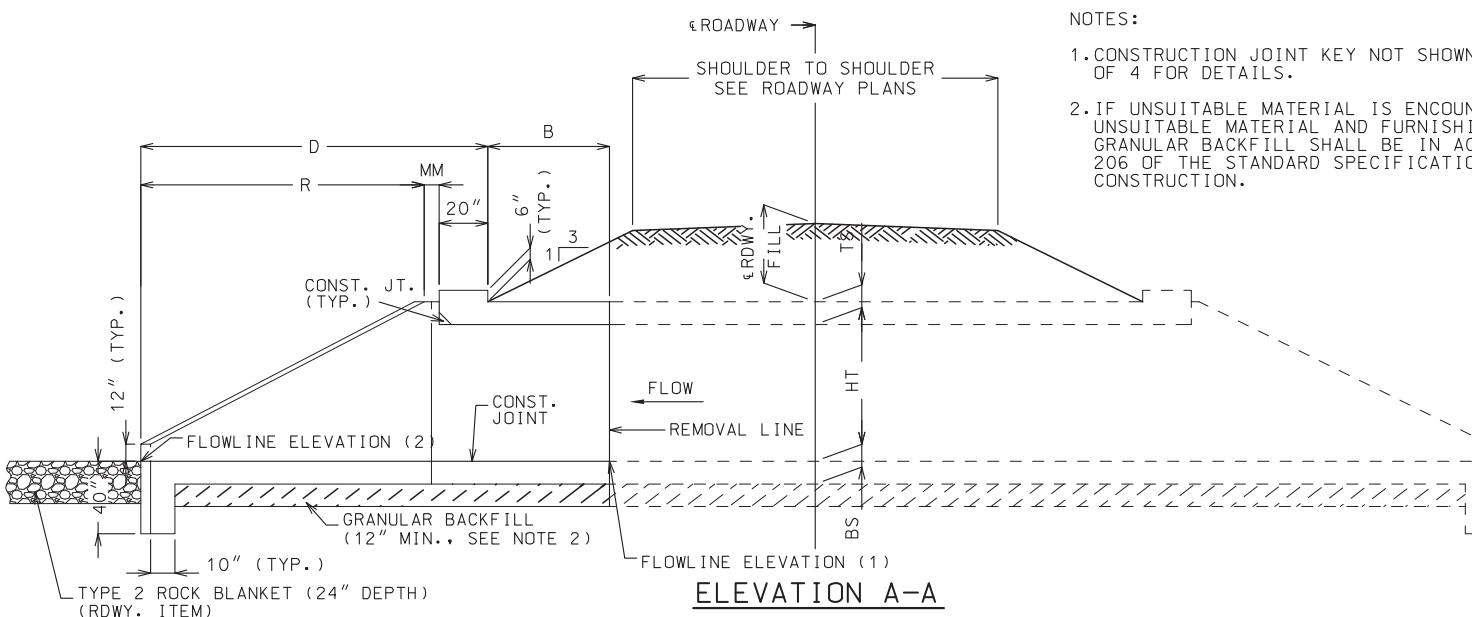




0 5 10
VERT. SCALE: 1"=5'
0 20 40
HORZ. SCALE: 1"=20'

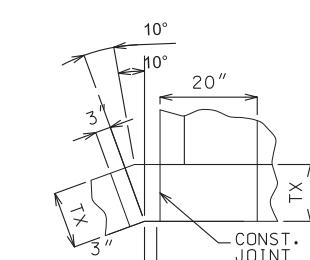
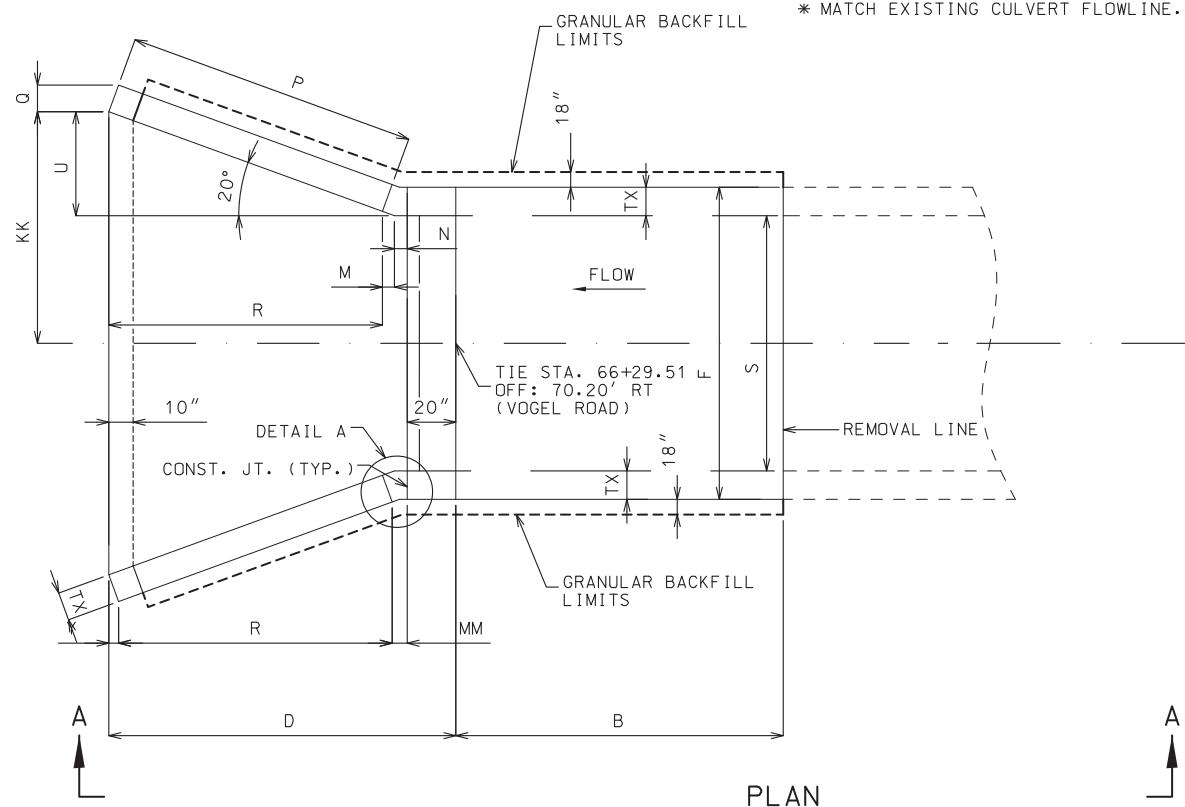
DRAINAGE PROFILE SHEET
SHEET 2 OF 2

CDI
CIVIL DESIGN, INC.
WB/E / DB/E
1552 South 7th Street
St. Louis, MO 63104
314.863.5570
Missouri State Certificate
of Authority #202006804



GENERAL DATA TABLE					
VARIABLE	EQUATION	DIM.	VARIABLE	DIMENSION	DIM.
S	---	6'-0"	P	2V(SEC 20°)	144-3/4"
HT	---	6'-0"	Q	TX(COS 20°)	7-1/2"
BS	---	8"	R	P(COS 20°)	136"
TX	---	8"	U	(R + M)(TAN 20°)	51"
TS	---	8"	V	HT + TS - 12"	68"
B	---	16'-2 1/2"	Y	TX(SIN 20°)	2-3/4"
D	Y + R + MM + 20"	164-9/16"	KK	S/2 + U	87"
F	S + 2TX	88"	MM	3" + 3"(COS 20°)	5-13/16"
M	N(COS 20°)	4-1/8"	TOE	MAX{(BS + 12"), 40"}	40"
N	3" + TX(TAN 10°)	4-7/16"	DESIGN FILL		48"
			FLOWLINE ELEV. (1)	588.20 *	
			FLOWLINE ELEV. (2)	588.12	

* MATCH EXISTING CULVERT FLOWLINE.



GENERAL NOTES:

DESIGN SPECIFICATIONS: 2010 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND 2010 INTERIM REVISIONS

DESIGN UNIT STRESSES: CLASS B-1 CONCRETE $f'c = 4,000$ PSI
REINFORCING STEEL (GRADE 60) $fy = 60,000$ PSI

DESIGN LOADS: VEHICULAR = HL-93 MINUS LANE LOAD
EARTH = 120 LB/CF
EQUIVALENT FLUID PRESSURE = 30 LB/CF (MIN.) - 60 LB/CF (MAX.)

FOR REINFORCEMENT DETAILS, SEE SHEET 2 OF 4. FOR SECTION DETAILS, SEE SHEET 3 OF 4. FOR MEMBER THICKNESS, SEE 703.17.

DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE $1 \frac{1}{2}$ ", UNLESS NOTED OTHERWISE.

TRAFFIC:

TRAFFIC OVER STRUCTURE TO BE MAINTAINED ON EXISTING ROADWAY DURING CONSTRUCTION.

MISCELLANEOUS:

EXISTING STRUCTURE IS INDICATED BY LIGHT DASHED LINES. HEAVY LINE INDICATE NEW WORK.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD BEFORE ORDERING NEW MATERIAL.

BARS BONDED IN OLD CONCRETE NOT REMOVED SHALL BE CLEANED AND STRIPPED AND EMBEDDED INTO NEW CONCRETE WHERE POSSIBLE. IF LENGTH IS AVAILABLE, OLD BARS SHALL EXTEND INTO NEW CONCRETE AT LEAST 40 DIAMETERS FOR SMOOTH BARS AND 30 DIAMETERS FOR DEFORMED BARS, UNLESS NOTED OTHERWISE.

PROVIDE GRADING OF THE CHANNEL BOTTOM WITHIN THE R/W LIMITS AS NEEDED FOR CULVERT FLOWLINE ELEVATIONS AND TRANSITION OF THE CHANNEL BED TO THE CULVERT OPENINGS. TAPER CHANNEL BANKS TO MATCH ENDS OF THE CULVERT OPENING AS REQUIRED (ROADWAY ITEM).

BOTTOM OF TOP SLAB, TOP OF BOTTOM SLAB, AND INSIDE FACES OF WALLS SHALL BE BUILT FLUSH WITH THE EXISTING STRUCTURE.

PRECAST OPTION:

WHEN ALTERNATE PRECAST CONCRETE BOX CULVERT SECTIONS ARE USED, THE MINIMUM DISTANCE FROM INSIDE FACE OF HEADWALLS TO PRECAST SECTIONS MEASURED ALONG THE SHORTEST WALL SHALL BE 3 FEET. REINFORCEMENT AND DIMENSIONS FOR WINGS AND HEADWALLS SHALL BE IN ACCORDANCE WITH MISSOURI STANDARD PLANS.

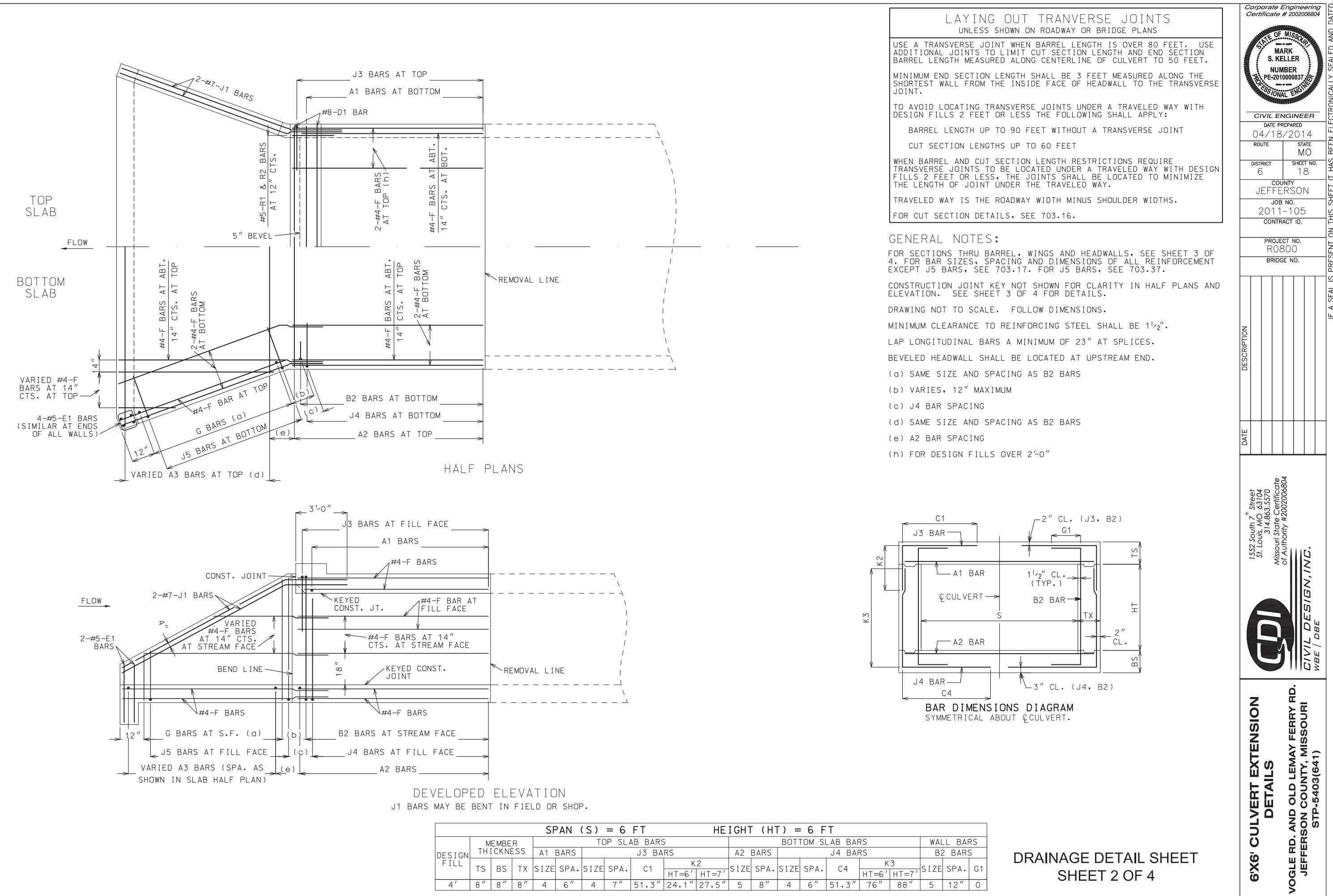
ESTIMATED QUANTITIES		FINAL QUANTITIES
CLASS 3 EXCAVATION (CY)		7
PARTIAL REMOVAL OF CULVERT CONCRETE (LS)		1
CLASS B-1 CONCRETE (CULVERTS-BRIDGE) (CY)		19.2
REINFORCING STEEL (CULVERTS-BRIDGE) (LB)		2,930

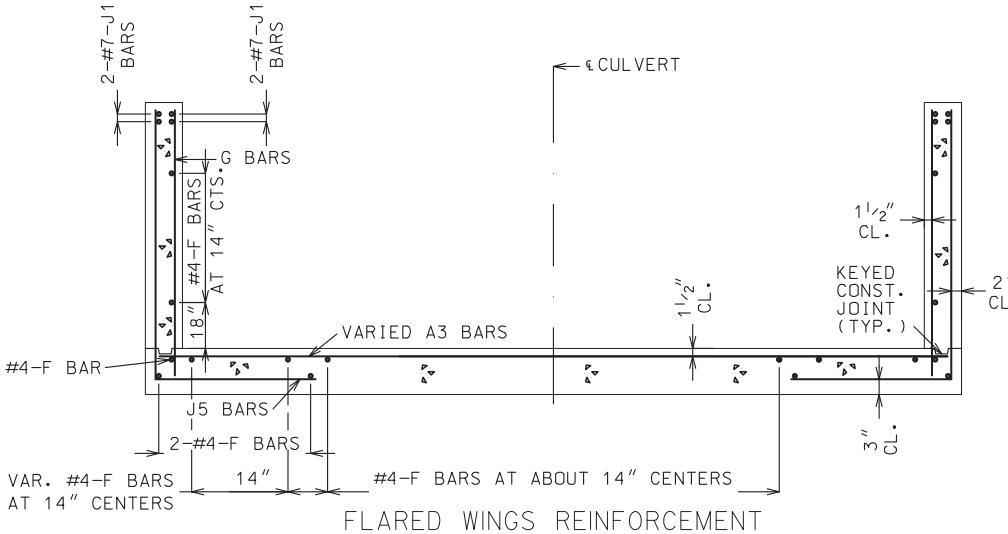
NOTES:

FOR DETAILS OF REMOVAL OF EXISTING CULVERT CONCRETE, SEE MODOT STD. 703.38A.

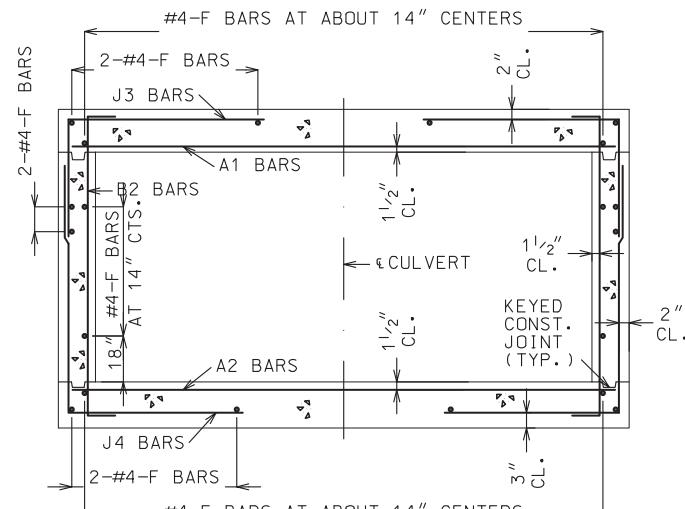
HYDROLOGIC DATA	
DRAINAGE AREA = 12.62 ACRES	
DESIGN HIGH WATER ELEV. = 590.22	
DESIGN HIGH WATER FREQUENCY = 50 YEAR	
DESIGN HIGH WATER DISCHARGE = 62.41 CFS	

DRAINAGE DETAIL SHEET
SHEET 1 OF 4

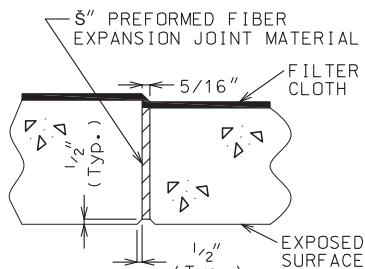




FLARED WINGS REINFORCEMENT



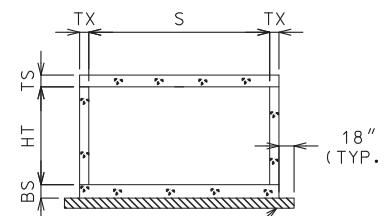
BARREL REINFORCEMENT
FOR DESIGN FILLS OVER 2'-0"



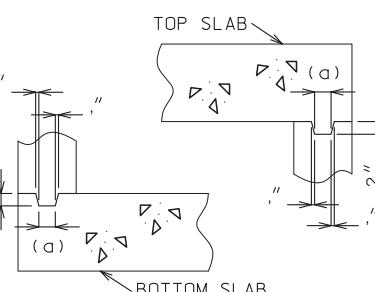
TRANSVERSE JOINT THRU BARREL

PREFORMED FIBER EXPANSION JOINT MATERIAL SHALL BE SECURELY STITCHED TO ONE FACE OF THE CONCRETE WITH NO. 10 GAGE COPPER WIRE OR NO. 12 GAGE SOFT DRAWN GALVANIZED STEEL WIRE.

FILTER CLOTH 3 FEET IN WIDTH AND DOUBLE THICKNESS SHALL BE CENTERED ON TRANSVERSE JOINTS IN TOP SLAB AND SIDEWALLS WITH EDGES SEALED WITH MASTIC OR TWO SIDED TAPE. FILTER CLOTH SHALL BE A SUBSURFACE DRAINAGE GEOTEXTILE IN ACCORDANCE WITH SECTION 1011 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. COST OF FURNISHING AND INSTALLING FILTER CLOTH WILL BE CONSIDERED COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR OTHER ITEMS.

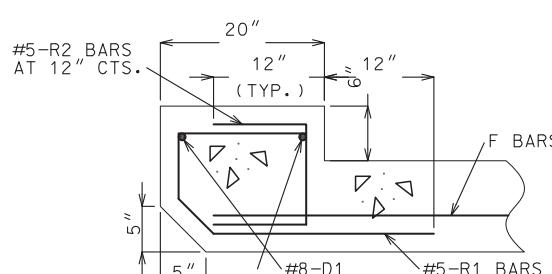


GRANULAR BACKFILL LIMITS
AND MEMBER DIMENSIONS



KEYED CONSTRUCTION JOINT

(a) APPROXIMATELY ONE-THIRD OF WALL THICKNESS



HEADWALL REINFORCEMENT

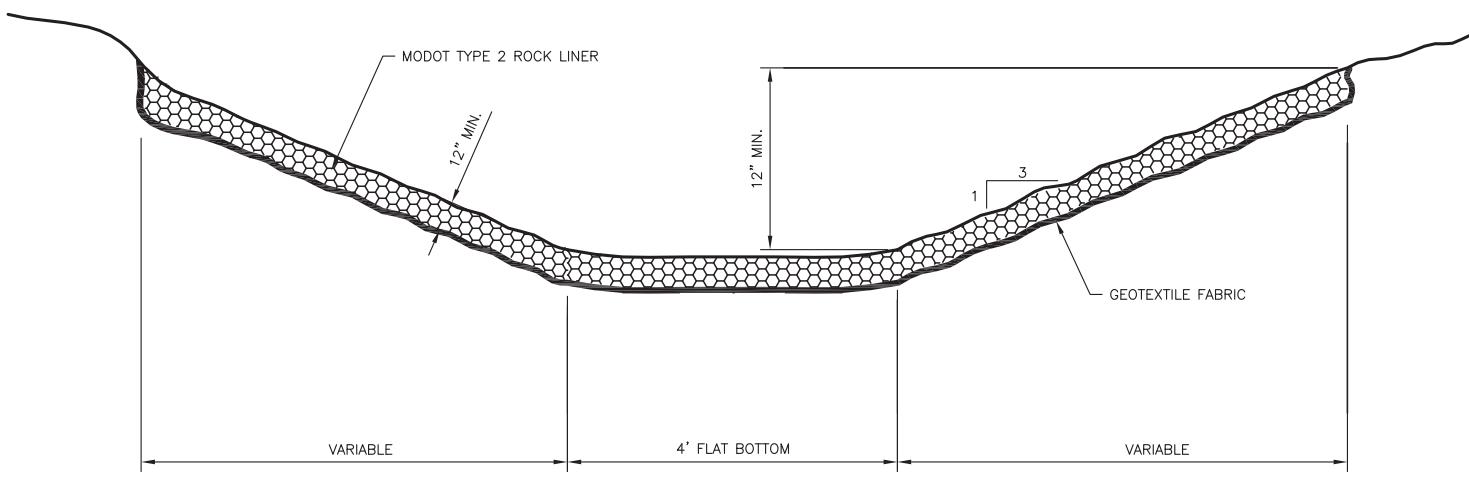
GENERAL NOTES:

FOR MEMBER THICKNESS AND FOR BAR SIZES, SPACING AND DIMENSIONS OF ALL REINFORCEMENT EXCEPT J5 BARS, SEE 703.17. FOR J5 BARS, SEE 703.37.

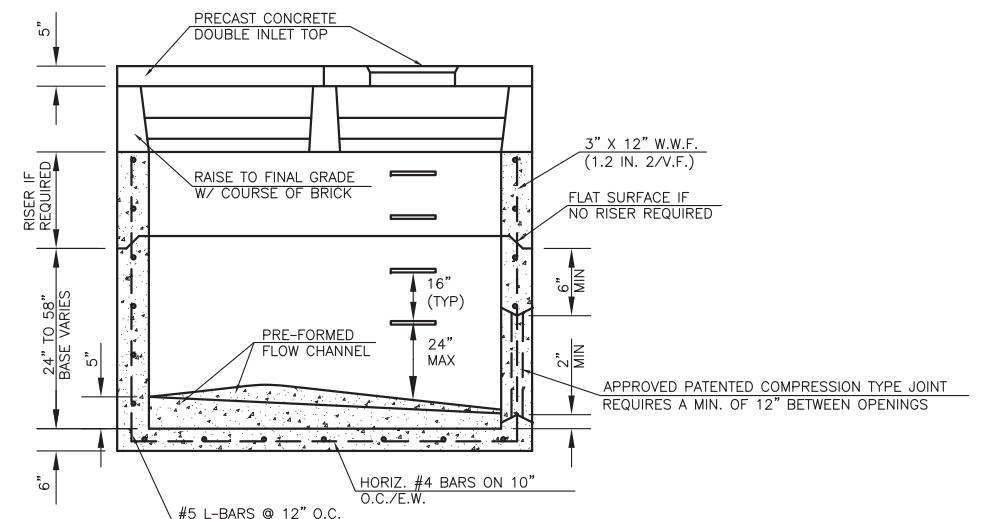
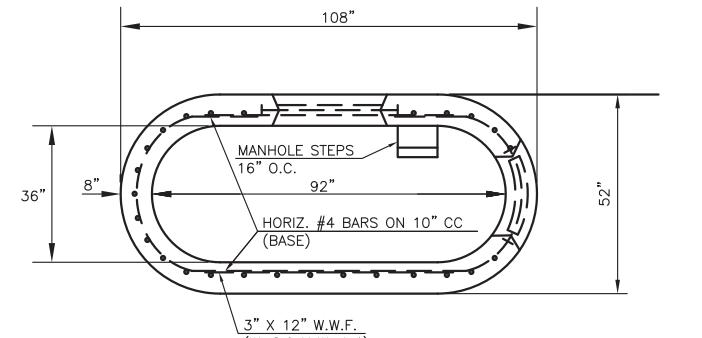
BARREL AND WINGS SECTIONS ARE SYMMETRICAL ABOUT AND NORMAL TO CULVERT. HEADWALL SECTIONS ARE NORMAL TO LONG DIRECTION OF HEADWALL.

DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

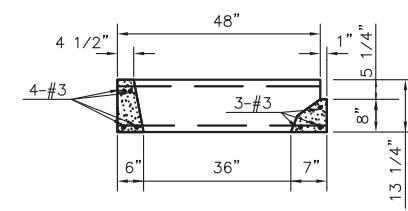
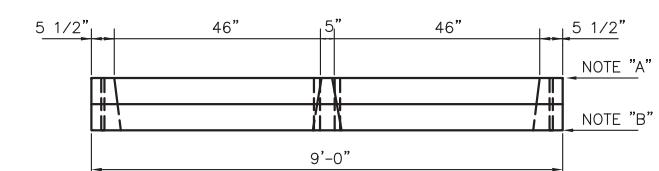
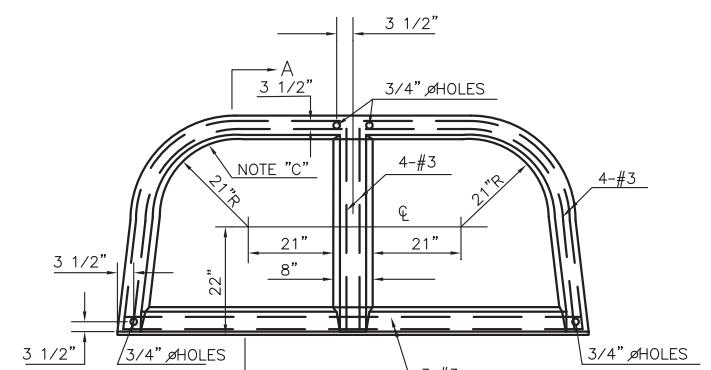
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2".



A FLAT BOTTOM DITCH ROCK LINER: DOWNSTREAM D1
NOT TO SCALE



B DOUBLE CURB INLET STRUCTURE
NOT TO SCALE

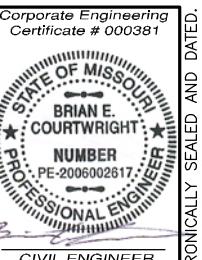


C DOUBLE CURB INLET TOP
NOT TO SCALE

DRAINAGE DETAIL SHEET
SHEET 4 OF 4

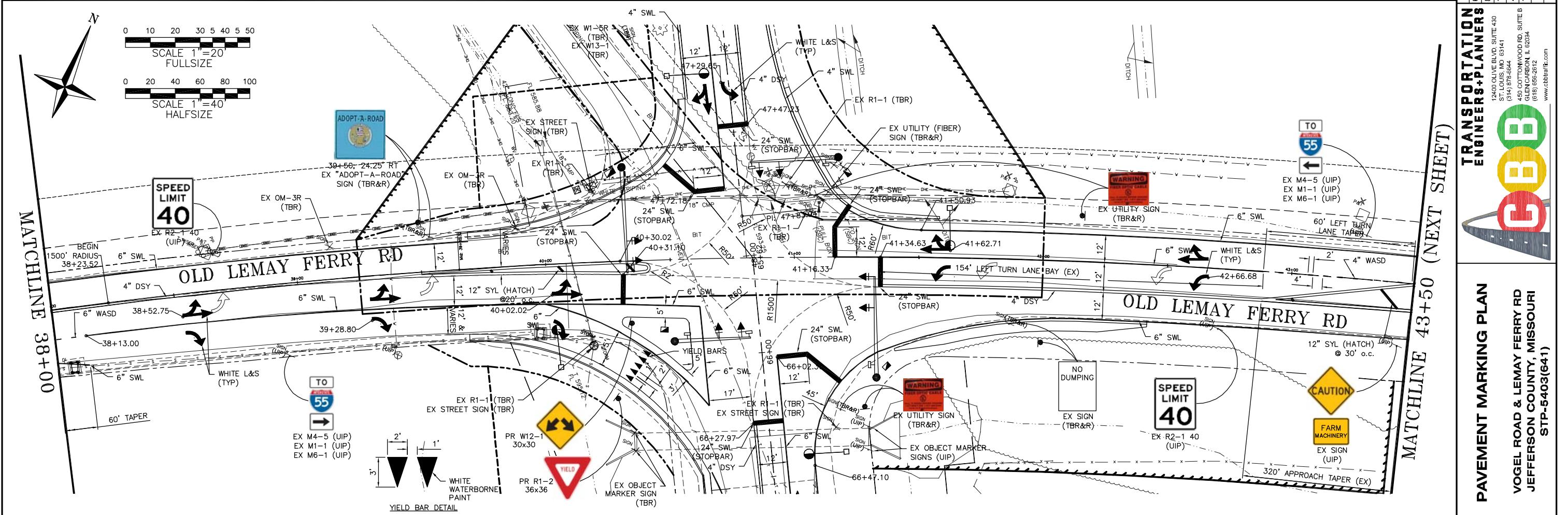
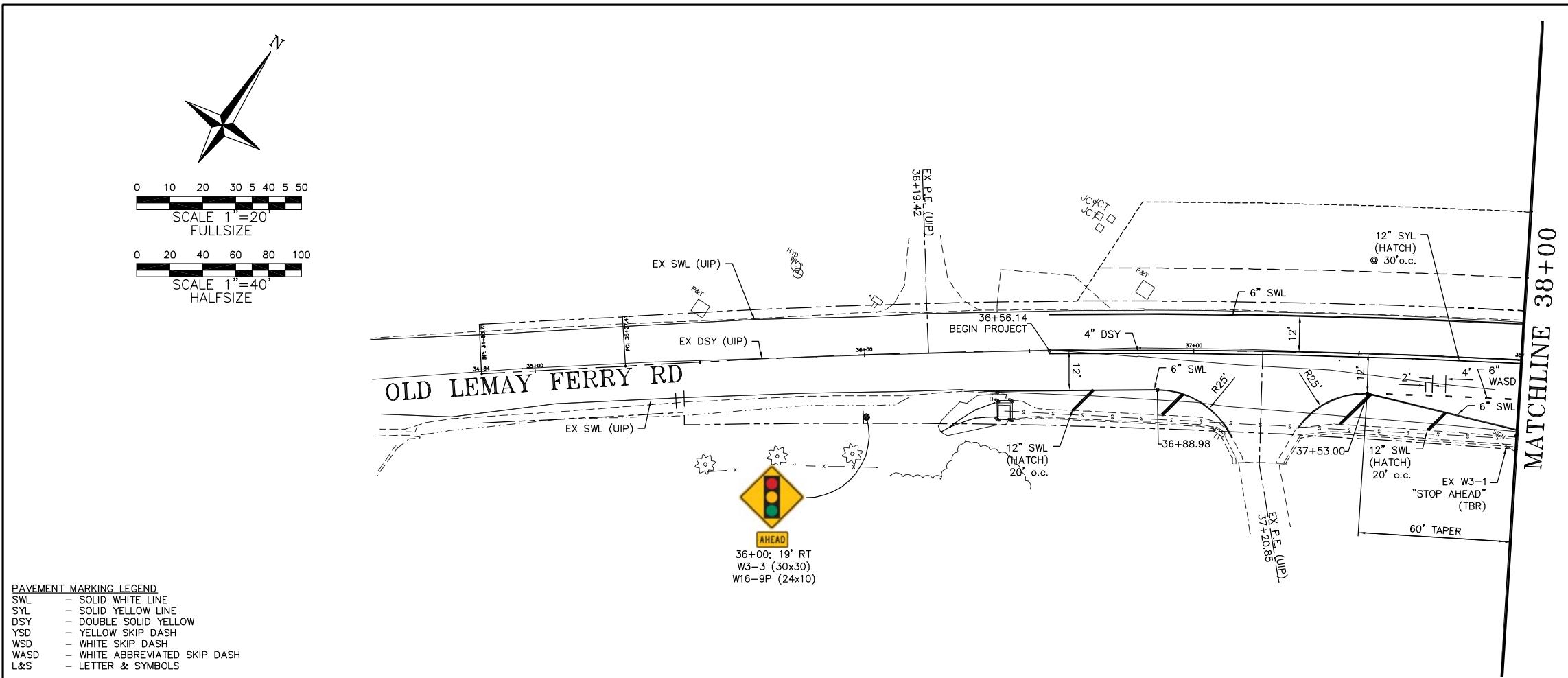
CDI
CIVIL DESIGN, INC.
WBE / DBE
1552 South 7th Street
St. Louis, MO 63104
314.863.5570
Missouri State Certificate
of Authority #202006804

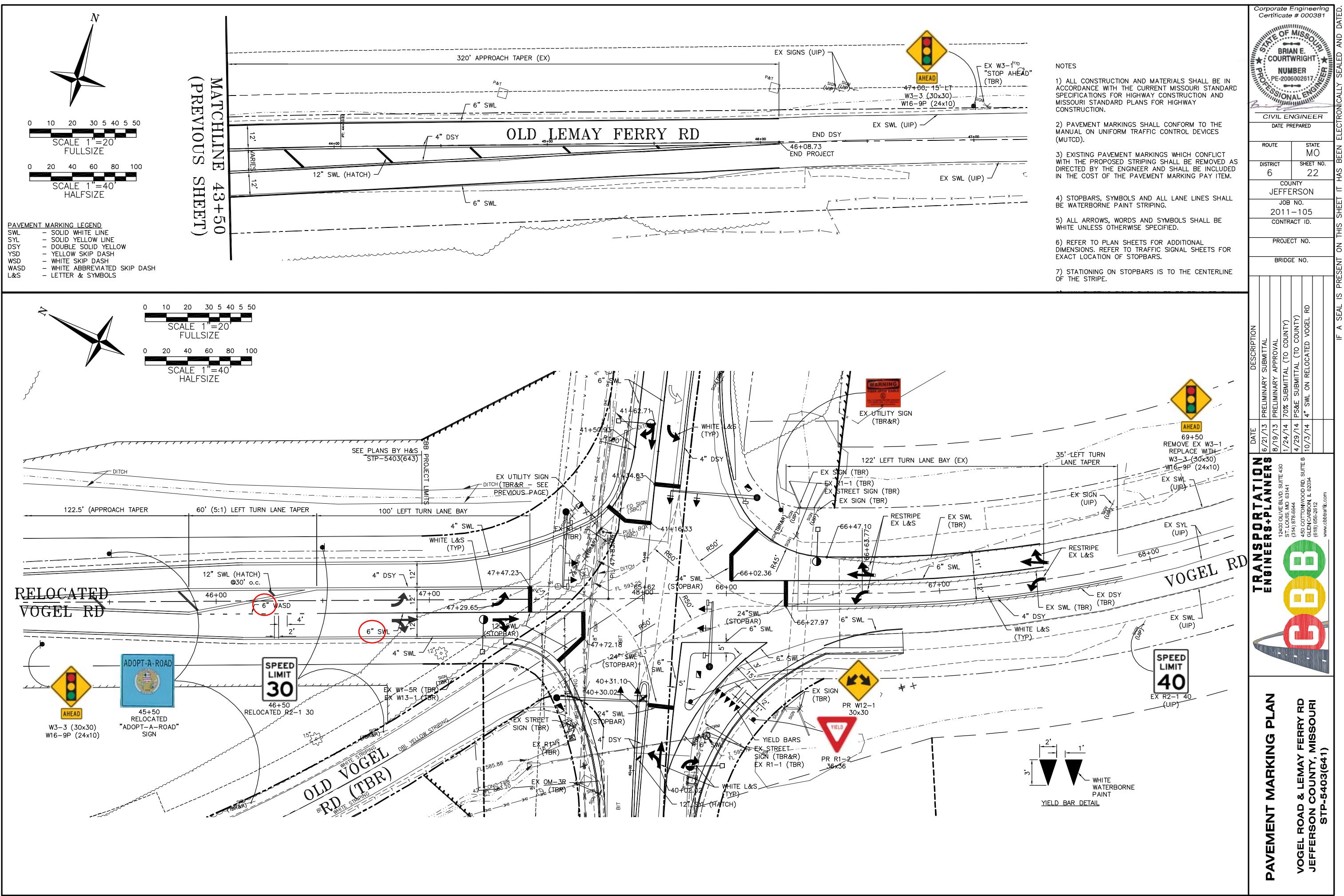
DRAINAGE DETAILS
VOGEL RD. AND OLD LEMAY FERRY RD.
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



Corporate Engineering
Certificate # 000381
STATE OF MISSOURI
BRIAN E. COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED
ROUTE STATE MO
DISTRICT SHEET NO. 21
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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





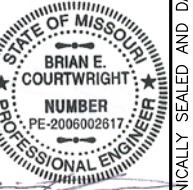


0 5 10 15 20 25

SCALE 1"=10'
(FULL SIZE)

0 10 20 30 40 50

SCALE 1"=20'
(HALF SIZE)



CIVIL ENGINEER

DATE PREPARED

ROUTE STATE MO

DISTRICT SHEET NO. 6 24

COUNTY JEFFERSON

JOB NO. 2011-105

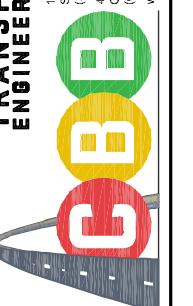
CONTRACT ID.

PROJECT NO.

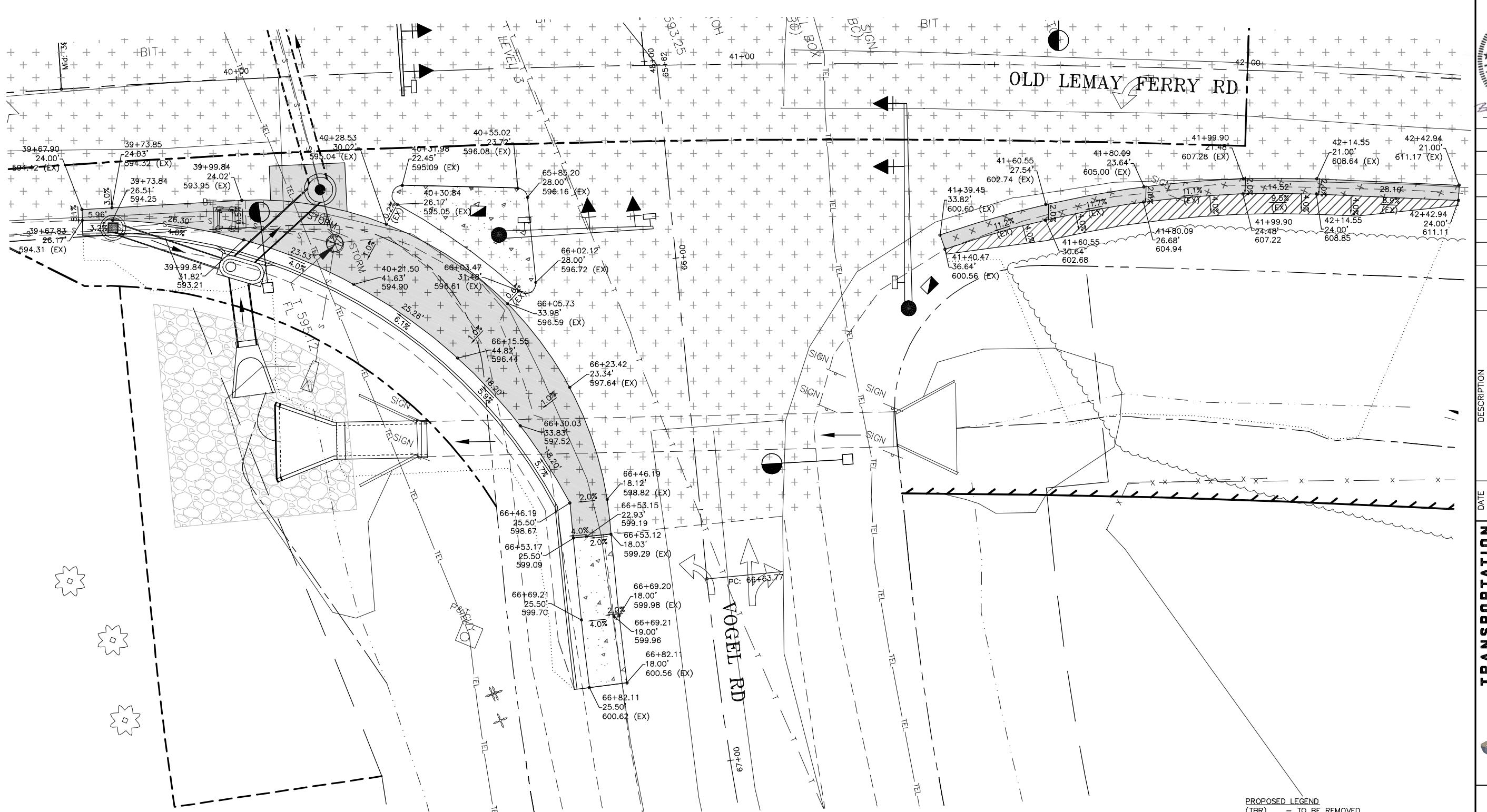
BRIDGE NO.

TRANSPORTATION		DESCRIPTION	DATE
ENGINEERS + PLANNERS		PRELIMINARY SUBMITTAL	6/21/13
		PRELIMINARY APPROVAL	8/19/13
		70% SUBMITTAL (TO COUNTY)	7/24/14
		PS&E SUBMITTAL (TO COUNTY)	4/29/14

www.ebtraffic.com



WARPING DETAIL
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



PROPOSED LEGEND

- (TBR) - TO BE REMOVED
- (TBR&R) - TO BE REMOVED AND REPLACED
- (UP) - USE IN PLACE
- CONC - CONCRETE
- TEMP - TEMPORARY
- PAV'T - PAVEMENT
- PR - PROPOSED
- EX - EXISTING

- PR BIT PAV'T W/ 2" SURFACE COURSE
 - PR PCC ITEM
 - PR BITUMINOUS SHOULDERS
 - PR 2" MILLING & 2" RESURFACING EX PAV'T
 - PR GRADING LIMITS
 - PR EDGE OF 1.5% SLOPE
 - ADJACENT PROJECT SEE STP-5403(643)

NOTES
1) ELEVATIONS SHOWN ARE AT THE
EDGE-OF-PAVEMENT.

2) SPACING BETWEEN ELEVATIONS IS TWENTY FEET
UNLESS SHOWN OTHERWISE.

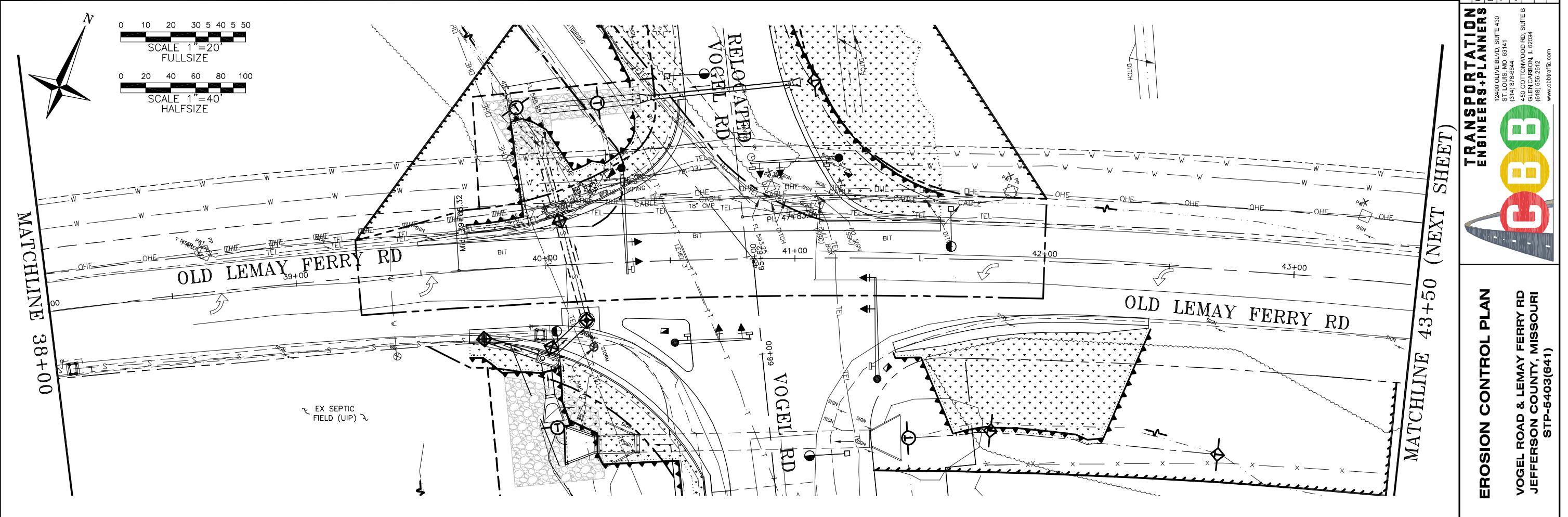
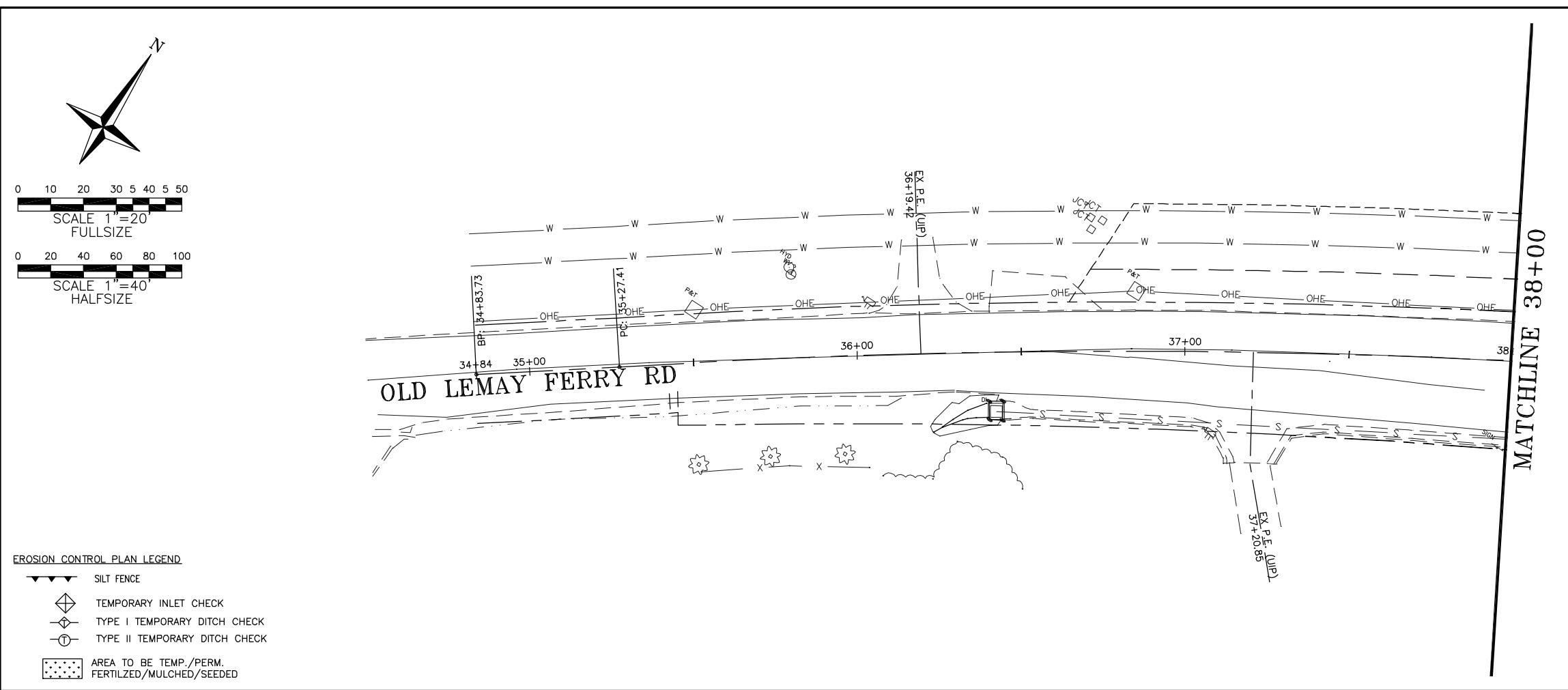
3) ELEVATIONS MAY BE ADJUSTED IN THE FIELD IF
APPROVAL IS FIRST OBTAINED FROM THE ENGINEER.

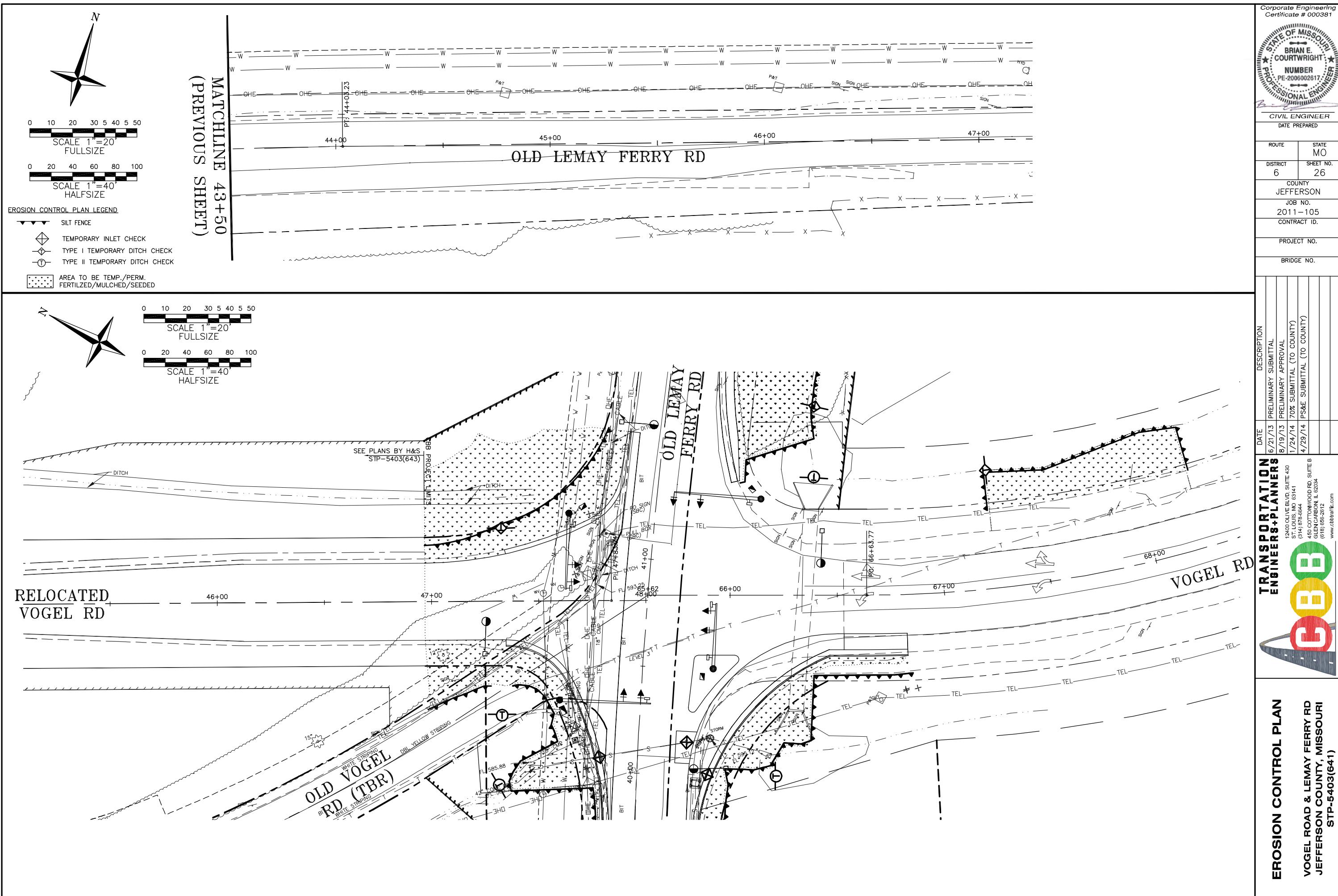
0 5 10 15 20 25
SCALE 1"=10'
(FULL SIZE)

0 10 20 30 40 50
SCALE 1"=20'
(HALF SIZE)

Corporate Engineering
Certificate # 000381
STATE OF MISSOURI
BRIAN E.
COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED
ROUTE STATE MO
DISTRICT 6 SHEET NO. 25
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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





Corporate Engineering
Certificate # 000381

STATE OF MISSOURI
BRIAN E. COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED
ROUTE STATE
MO
DISTRICT SHEET NO.
6 27
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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



TEP



CIVIL ENGINEER

DATE PREPARED

ROUTE STATE MO

DISTRICT 6 SHEET NO. 28

COUNTY JEFFERSON

JOB NO. 2011-105

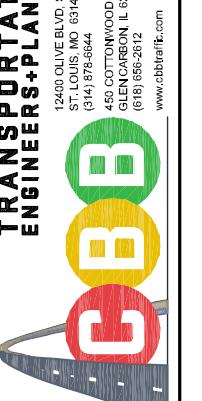
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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

TRANSPORTATION ENGINEERS+PLANNERS	DATE	DESCRIPTION
12400 OLIVE BLVD, SUITE 430 ST. LOUIS, MO 63141 (314) 375-6844	8/19/13	PRELIMINARY SUBMITTAL
450 COTTONWOOD RD, SUITE B GLEN CARSON, IL 62344 (618) 556-2812	4/20/14	70% SUBMITTAL (TO COUNTY)
	4/20/14	PS&E SUBMITTAL (TO COUNTY)
	10/3/14	"PHASE" TO "STAGE"



TRAFFIC CONTROL & STAGING	Stage II
<p>VOGEL ROAD & LEMAY FERRY RD JEFFERSON COUNTY, MISSOURI</p> <p>STP-5403(641)</p>	<p>TRAFFIC CONTROL / STAGING LEGEND</p> <p>Stage II</p> <ul style="list-style-type: none"> WORK AREA (Hatched area) TRAFFIC CONTROL BARREL OR DRUM (Black dot) TYPE III BARRICADE (Barrel icon) TRAFFIC CONTROL SIGN (Sign icon) OPEN LANE OF TRAFFIC (Arrow icon) FLAGGER (Flagger icon)

MATCHLINE 38+00 (NEXT SHEET)

STATE OF MISSOURI
BRIAN E. COURTWRIGHT
NUMBER PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER

DATE PREPARED

ROUTE STATE MO

DISTRICT 6 SHEET NO. 28

COUNTY JEFFERSON

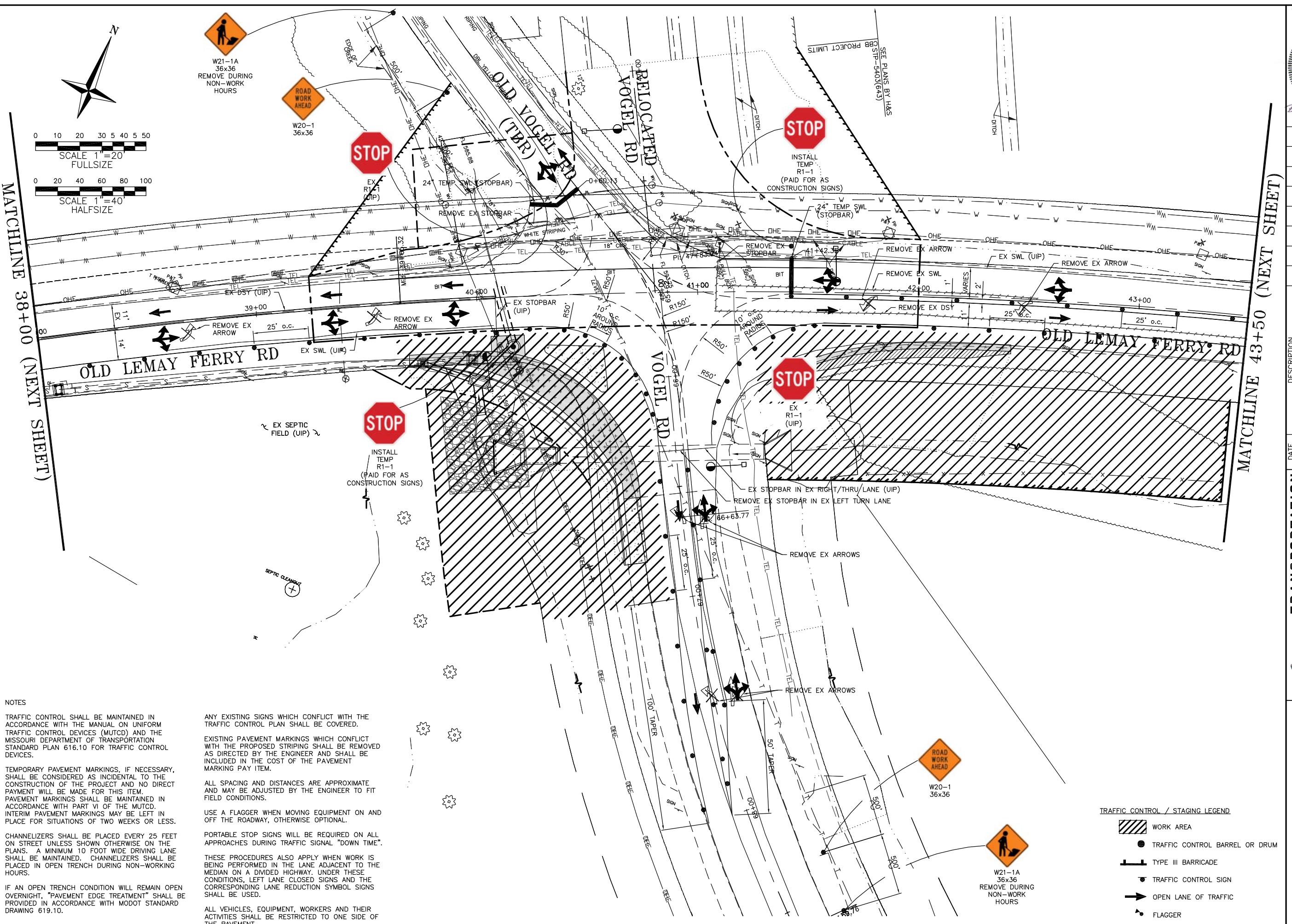
JOB NO. 2011-105

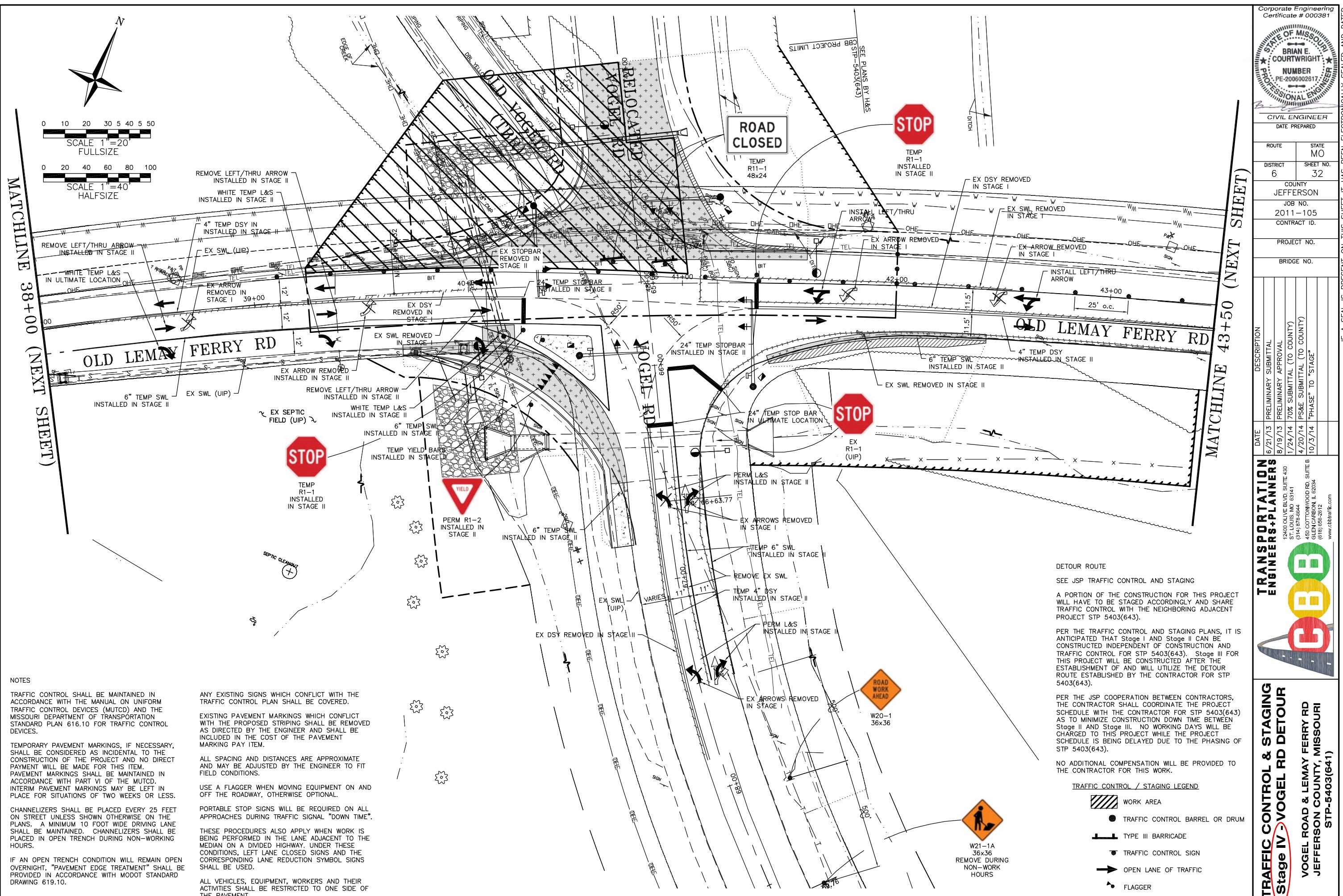
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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



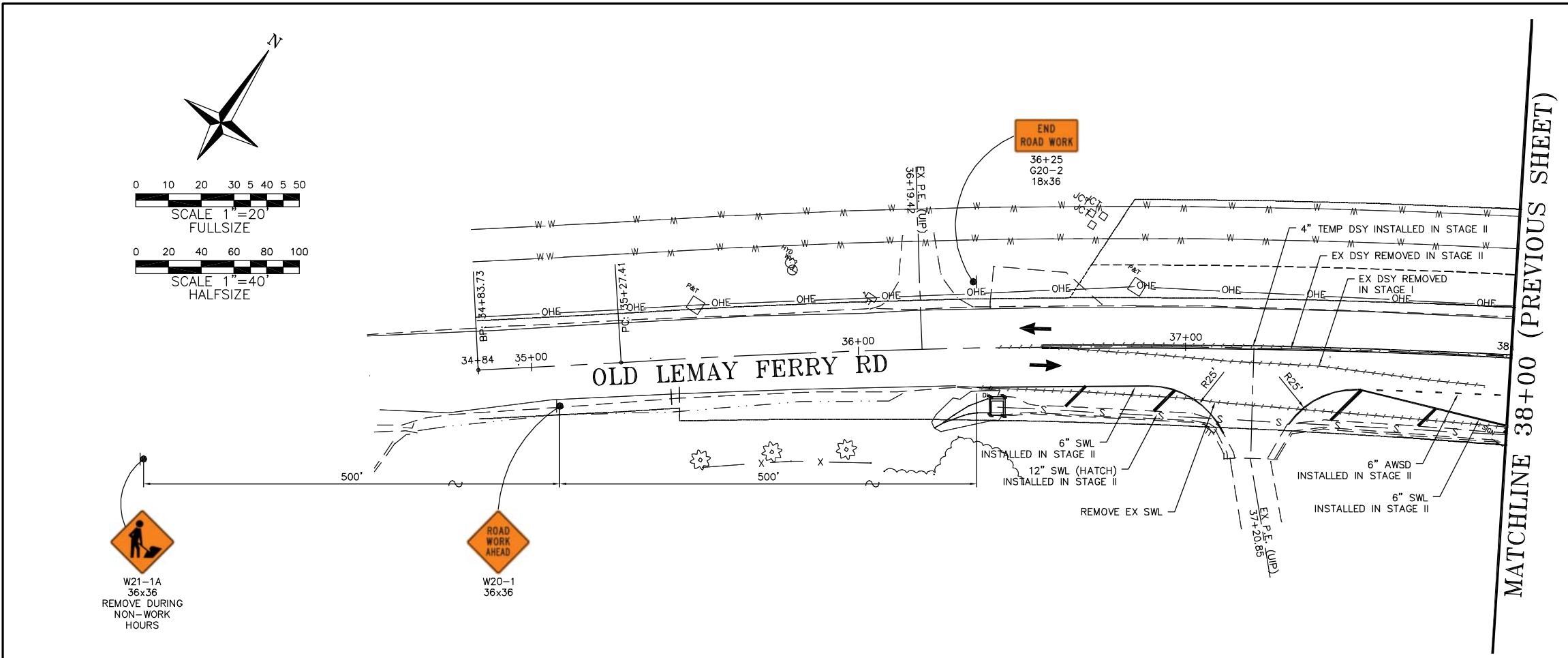


Corporate Engineering
Certificate # 000381

STATE OF MISSOURI
BRIAN E.
COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED

ROUTE	STATE
DISTRICT	MO
COUNTY	33
JOB NO.	JEFFERSON
CONTRACT ID.	2011-105
PROJECT NO.	
BRIDGE NO.	

If a seal is present on this sheet it has been electronically sealed and dated.



NOTES

TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE MISSOURI DEPARTMENT OF TRANSPORTATION STANDARD PLAN 616.10 FOR TRAFFIC CONTROL DEVICES.

TEMPORARY PAVEMENT MARKINGS, IF NECESSARY, SHALL BE CONSIDERED AS INCIDENTAL TO THE CONSTRUCTION OF THE PROJECT AND NO DIRECT PAYMENT WILL BE MADE FOR THIS ITEM. PAVEMENT MARKINGS SHALL BE MAINTAINED IN ACCORDANCE WITH PART VI OF THE MUTCD. INTERIM PAVEMENT MARKINGS MAY BE LEFT IN PLACE FOR SITUATIONS OF TWO WEEKS OR LESS.

CHANNELIZERS SHALL BE PLACED EVERY 25 FEET ON STREET UNLESS SHOWN OTHERWISE ON THE PLANS. A MINIMUM 10 FOOT WIDE DRIVING LANE SHALL BE MAINTAINED. CHANNELIZERS SHALL BE PLACED IN OPEN TRENCH DURING NON-WORKING HOURS.

IF AN OPEN TRENCH CONDITION WILL REMAIN OPEN OVERNIGHT, "PAVEMENT EDGE TREATMENT" SHALL BE PROVIDED IN ACCORDANCE WITH MODOT STANDARD DRAWING 619.10.

ANY EXISTING SIGNS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED.

EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE PROPOSED STRIPING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AND SHALL BE INCLUDED IN THE COST OF THE PAVEMENT MARKING PAY ITEM.

ALL SPACING AND DISTANCES ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

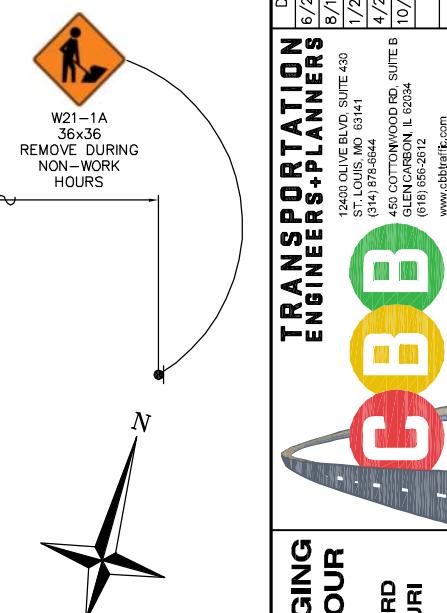
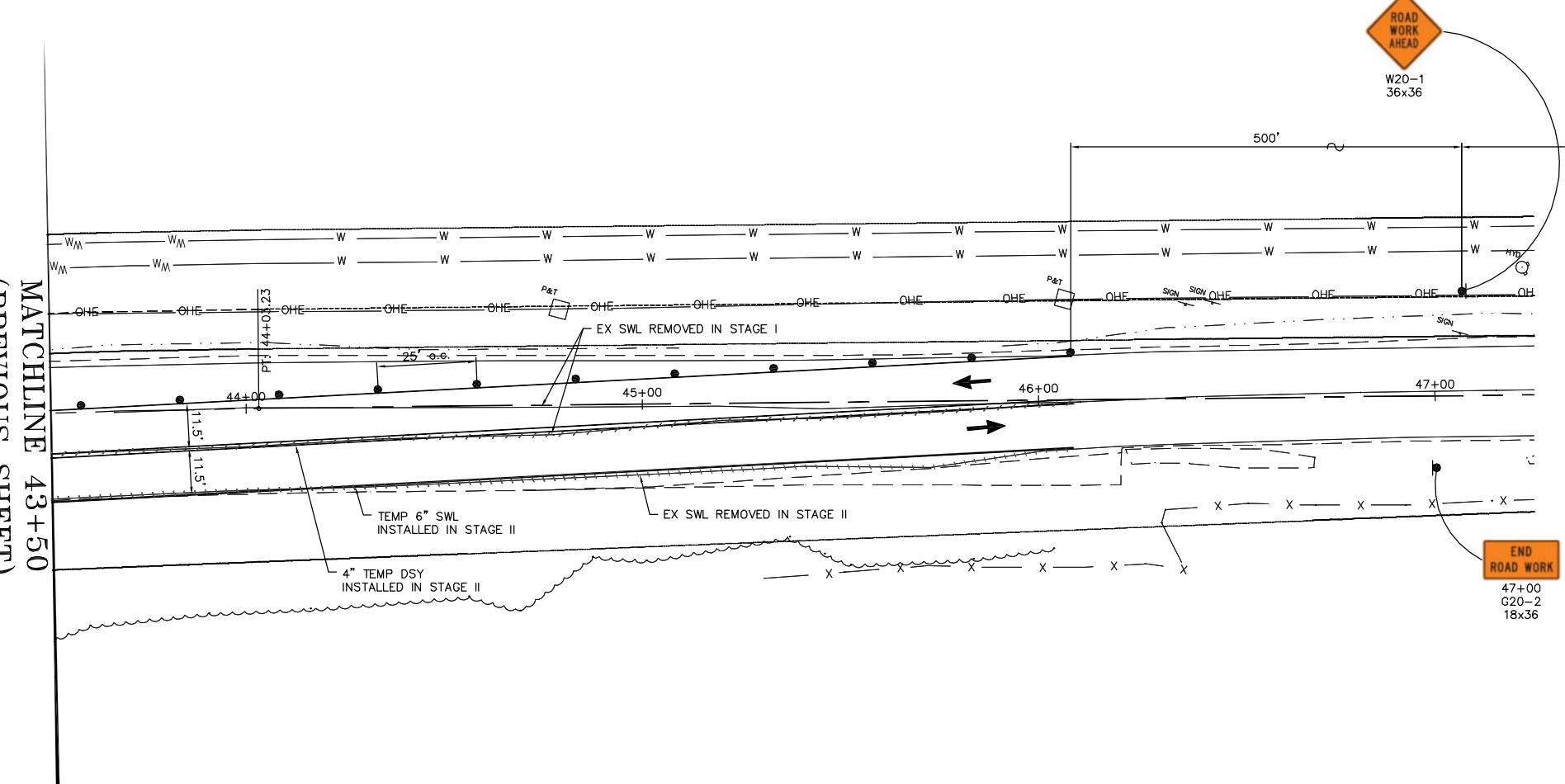
USE A FLAGGER WHEN MOVING EQUIPMENT ON AND OFF THE ROADWAY, OTHERWISE OPTIONAL.

PORTABLE STOP SIGNS WILL BE REQUIRED ON ALL APPROACHES DURING TRAFFIC SIGNAL "DOWN TIME".

THESE PROCEDURES ALSO APPLY WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY. UNDER THESE CONDITIONS, LEFT LANE CLOSED SIGNS AND THE CORRESPONDING LANE REDUCTION SYMBOL SIGNS SHALL BE USED.

ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES SHALL BE RESTRICTED TO ONE SIDE OF THE PAVEMENT.

MATCHLINE 43+50 (PREVIOUS SHEET)



0 10 20 30 5 40 5 50
SCALE 1"=20'
FULLSIZE

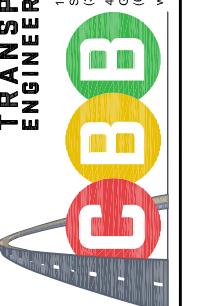
0 20 40 60 80 100
SCALE 1"=40'
HALFSIZE

TRAFFIC CONTROL & STAGING
Stage IV - VOGEL RD DETOUR
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



CIVIL ENGINEER
DATE PREPARED
10/3/14
ROUTE STATE
MO
DISTRICT SHEET NO.
34
COUNTY JEFFERSON
JOB NO.
105-11
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

AMEREN POWER POLE FOR SIGNAL AND LIGHTING SERVICE	DESCRIPTION
1/24/14 1st SUBMITTAL	
4/18/14 2nd SUBMITTAL	
10/3/14 3rd SUBMITTAL	
12400 OLIVE BLVD, SUITE 430 ST. LOUIS, MO 63141 (314) 975-6844	
450 COTTONWOOD RD, SUITE B GLEN CARBON, IL 62034 (618) 956-2012	
www.cbrainc.com	

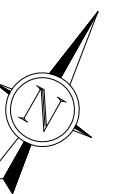


TRAFFIC SIGNAL PLAN SHEET
OLD LEMAY FERRY ROAD
AND VOGEL ROAD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

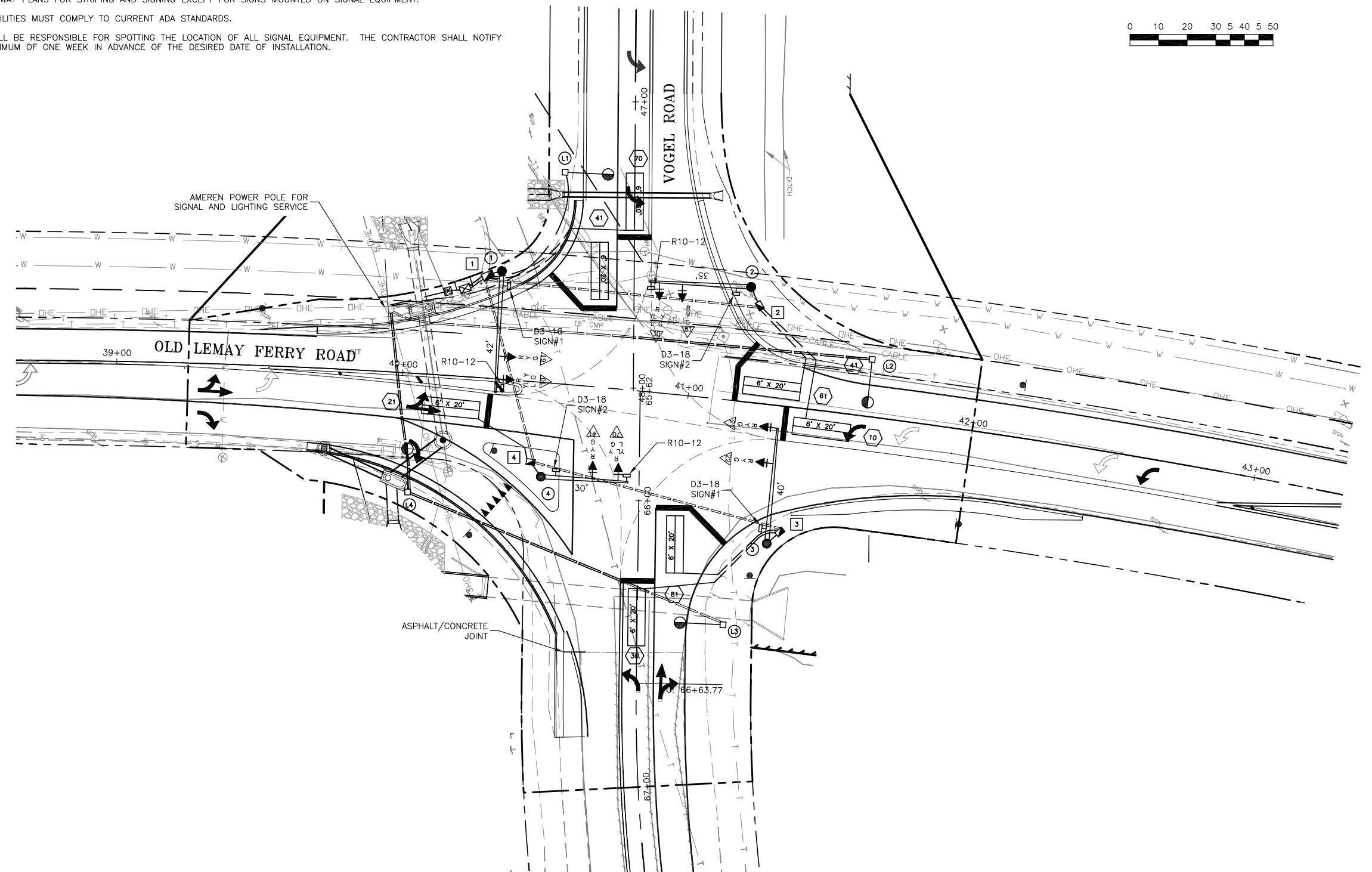
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

GENERAL NOTES:

1. THE INSTALLATION OF THE TRAFFIC SIGNALS SHALL BE IN ACCORDANCE WITH THE MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION'S STANDARD SPECIFICATIONS, 2011 EDITION.
2. EXISTING UNDERGROUND AND OVERHEAD FACILITIES, STRUCTURES AND UTILITIES IF SHOWN ON THESE PLANS, SHALL BE CONSIDERED APPROXIMATE ONLY. VERIFICATION OF THE LOCATIONS OF ALL EXISTING UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE VERIFIED PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. CALL MISSOURI ONE-CALL SYSTEM AT 1-800-DIG-RITE (344-7483).
3. TRAFFIC CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND MISSOURI DEPARTMENT OF TRANSPORTATION STANDARDS.
4. DIRECTIONAL BORING MAY BE USED INSTEAD OF TRENCHING OR PUSHING CONDUIT, HOWEVER, NO ADDITIONAL PAYMENT WILL BE MADE.
5. THE TRAFFIC SIGNAL CONSTRUCTION SHALL BE COORDINATED WITH THE ROADWAY CONSTRUCTION.
6. REFER TO THE ROADWAY PLANS FOR STRIPING AND SIGNING EXCEPT FOR SIGNS MOUNTED ON SIGNAL EQUIPMENT.
7. ALL PEDESTRIAN FACILITIES MUST COMPLY TO CURRENT ADA STANDARDS.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR SPOTTING THE LOCATION OF ALL SIGNAL EQUIPMENT. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR A MINIMUM OF ONE WEEK IN ADVANCE OF THE DESIRED DATE OF INSTALLATION.



0 10 20 30 5 40 5 50





ED.

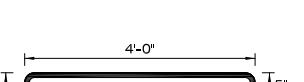
LEGEND

TOP MOUNT	
SIDE MOUNT	
SPANWIRE MOUNT	
MAST ARM MOUNT	
TOTAL	

REMARKS

ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
 ** SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.



Vogel Rd

BORDER 3.5" 41" 3.5"

R=2"
TH=1"

Panel Style: D3-18.sst
M.U.T.C.D.: 2009 Edition

SIGN #1
N.T.S.



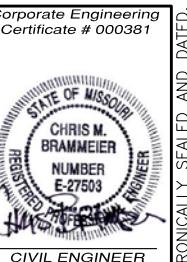
Old Lemay Ferry Rd

BORDER 3.7" 94.6" 3.7"

R=2"
TH=1"

Panel Style: D3-18.sst
M.U.T.C.D.: 2009 Edition

SIGN #2
N.T.S.



Corporate Engineering
Certificate # 000381

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

CONDUIT												CABLE (ALL CABLE SHALL CONFORM TO IMSA 20-1 STANDARDS)																					
FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET.	TRENCH				PUSHED			MEDIAN			ON STRUCTURE			REMARKS	FROM	TO	CENTER TO CENTER DISTANCE	POWER		CONTROL				CLOSED LOOP INTERCONNECT	LUMINARE		DETECTOR	FIBER		REMARKS
				1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"					1c #8	2c #16	5c #16	7c #16	3c #16	3 PAIR #16	1c #10	1c #14 IN DUCT	2c #14 LEAD-IN CABLE	SINGLE- MODE	MULTI- MODE		
Ø	☒			(INCLUDED IN COST OF POWER SUPPLY)													RIGID STEEL	Ø	☒														
☒	☒	8		16															☒	☒		72											3-1c#8
☒	☒	1			22													2-3" @ 11' EACH	☒	①												F-10	
①	①	8			11														☒	①													F-61
①	②	97				95													☒	②													F-30
②	①	8			11														☒	②													F-81
①	④	65				63													☒	③													F-21
④	④	6			9														☒	③													F-22
④	③	91				89													☒	④													F-70
③	③	6			9														☒	④													F-41
①	⑦⑦	35	34																☒	⑩													
①	④①	33	32																☒	⑥①													
②	⑩	28	27																☒	②①													
②	⑥①	25	24																☒	③①													
③	③⑩	30	29																☒	⑧①													
③	②⑨	28	27																☒	④①													
④	②①	6	5																☒	⑦⑦													
SUBTOTALS				178	16	62												SUBTOTALS	72														
TOTALS				178	16	62												TOTALS	80														

D37B - SUMMARY OF QUANTITIES
OLD LEMAY FERRY ROAD
AND VOGEL ROAD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



TRANSPORTATION
ENGINEERS + PLANNERS
12400 OLIVE BLVD, SUITE 430
ST. LOUIS, MO 63141
(314) 975-6844
450 COTTONWOOD RD, SUITE B
GLEN CARBON, IL 62034
(618) 956-2012
www.cobrancfc.com

DATE PREPARED	10/3/14
ROUTE	STATE MO
DISTRICT	SHEET NO. 36
COUNTY	JEFFERSON
JOB NO.	105-11
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	1/24/14
1st SUBMITTAL	4/18/14
2nd SUBMITTAL	10/3/14
3rd SUBMITTAL	



DATE PREPARED
10/3/14

ROUTE STATE
MO

DISTRICT SHEET NO.
37

COUNTY JEFFERSON

JOB NO.
105-11

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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

POWER SUPPLY												
LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*			LIGHTING CONTROL* (ON POWER SUPPLY)		SERVICE POLE		
APPROACH	STATION	OFFSET	DRAWING	CONTROLLER		POWER SUPPLY DISCONNECT		MAIN BREAKER	120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
				AUXILIARY BREAKER	CONT & SIGNAL LAMPS	SIGNALS	LIGHTING					
OLD LEMAY FERRY	40+14	29' L	1(3)	15 Amps	40 Amps	100 Amps	Amps	Amps	Amps	Amps	Cl. Ft.	Cl. Ft.
			Type									

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT															
LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *			TIME* CLOCK	NEMA CABINET TYPE *	170 CABINET TYPE *	170 SOFTWARE *
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I II	TYPE	12C/7C HARDWIRE (1)	TIME BASE	CLOSED LOOP	FIBER			
OLD LEMAY FERRY ROAD	40+20	30' L			1										

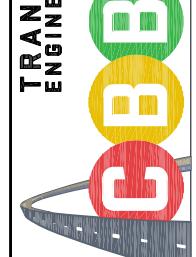
DETECTOR SCHEDULE													
DETECTOR NUMBER	APPROACH	TYPE										VIDEO	
		PUSH BUTTON(3)			INDUCTION LOOP (2)			STANDARD	DELAY/ EXTEND*	CALL UNIT*			
TOTAL													

NEMA DETECTOR ASSIGNMENT									
CARD POSITION									
	1	2	3	4	5	6	7	8	
CHANNEL	1	10 Ø1 WBL	21 Ø2 EB	30 Ø3 NBL	41 Ø4 SB	N/U	N/U	N/U	N/U
	2	61 Ø6 WB	N/U	81 Ø8 NB	70 Ø7 SBL	N/U	N/U	N/U	N/U

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = 4 (2)

NEMA LOAD SWITCH ASSIGNMENTS															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1 WBL	Ø2 EB	Ø3 NBL	Ø4 SB	Ø5 N/U	Ø6 WB	Ø7 SBL	Ø8 NB	OLA N/U	OLB N/U	OLC N/U	OLD N/U	2P N/U	4P N/U	6P N/U	8P N/U

D37C - POWER SUPPLY/CONTROLLER
OLD LEMAY FERRY ROAD
AND VOGEL ROAD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



12400 OLIVE BLVD, SUITE 430
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(314) 975-6844

450 COTTONWOOD RD, SUITE B
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www.abstranfc.com



DATE PREPARED

10/3/14

ROUTE STATE MO

DISTRICT SHEET NO. 38

COUNTY JEFFERSON

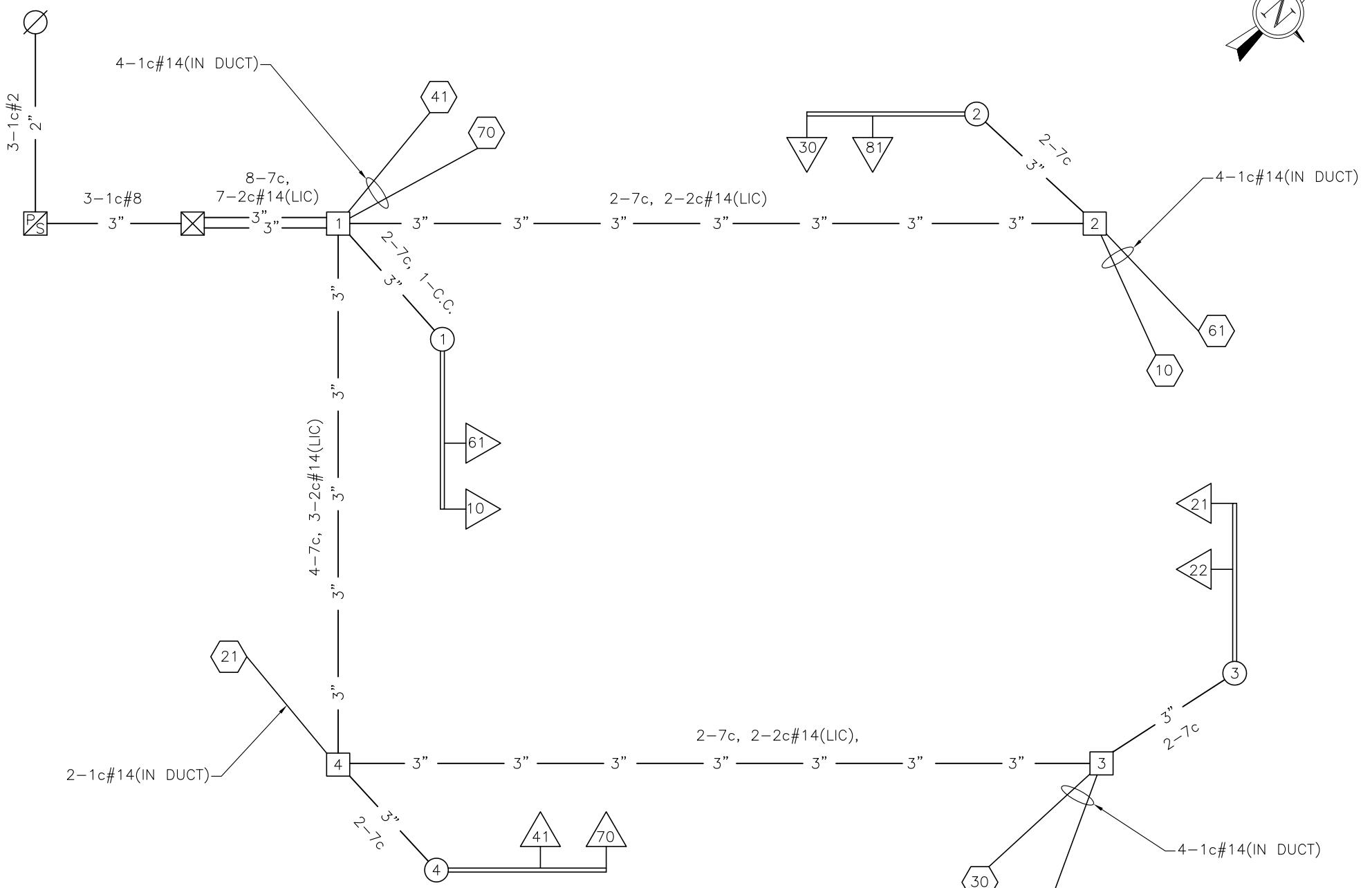
JOB NO. 105-11

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

WIRING DIAGRAM



LEGEND

- X" — CONDUIT CONTAINING CABLE WITH SIZE
- CABLE
- X-XC MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)
- LIC #14 AWG DETECTOR LEAD-IN CABLE (2C TWISTED SHIELDED)
- CC CAMERA CABLE
- PULL BOX WITH NUMBER
- POST WITH NUMBER
- POST WITH MAST ARM
- POST WITH MAST ARM AND LUMINAIRE
- DETECTOR WITH NUMBER
- △ SIGNAL HEAD WITH NUMBER
- SIGNAL CONTROLLER
- POWER SOURCE
- LIGHTING CONTROLLER
- POWER SUPPLY
- VIDEO DETECTION CAMERA
- ▼ PREEMPTION DETECTOR
- PEDESTAL MOUNT PREEMPTION CONTROL CABINET

*DASHED OR GRAY LINES INDICATE EXISTING EQUIPMENT

D37D - WIRING DIAGRAM
OLD LEMAY FERRY ROAD
AND VOGEL ROAD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)



TEP

TRANSPORTATION

ENGINEERS + PLANNERS

TEP

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(314) 975-6844

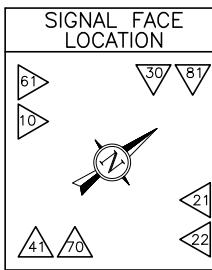
450 COTTONWOOD RD, SUITE B

GLEN CARON, IL 602634

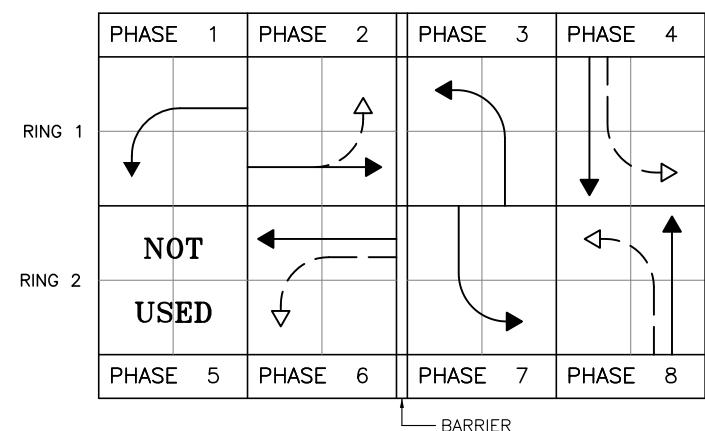
(618) 956-2012

www.coburrafc.com

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



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS																	
		PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	NOT USED							
CONTROL	FACE NUMBERS	10	21	30	41	61	70	81		OVERLAP	OVERLAP	OVERLAP	OVERLAP	PED 2P	PED 4P	PED 6P	PED 8P
		R	R	R	R	R	R	R									
LOAD SWITCH OUTPUTS																	
OVERLAP PARENT PHASES																	



RING STRUCTURE

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY, TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND	
→	ACTUATED VEHICULAR MOVEMENT
→	PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
→	NON-ACTUATED VEHICULAR MOVEMENT
→	PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
→	ACTUATED PEDESTRIAN MOVEMENT
→	PARTIALLY RESTRICTED PEDESTRIAN MOVEMENT
→	NON-ACTUATED PEDESTRIAN MOVEMENT
—	VEHICLE STOPPED
FDW	FLASHING DON'T WALK
R/W	RIGHT OF WAY INTERVAL
DW	DON'T WALK
RRt	RED RIGHT ARROW
YRt	YELLOW RIGHT ARROW
RT	GREEN RIGHT ARROW
W	WALK
RL	RED LEFT ARROW
YL	YELLOW LEFT ARROW
L	GREEN LEFT ARROW
G	GREEN STRAIGHT AHEAD ARROW
CG	CIRCULAR GREEN
Y	CIRCULAR YELLOW
R	CIRCULAR RED
Ø	TRAFFIC PHASE
AO	ALL OTHERS
FR	FLASHING RED
FY	FLASHING YELLOW
FYA	FLASHING ARROW INDICATION
FYL	FLASHING YELLOW LEFT
FYR	FLASHING YELLOW RIGHT

FLASHING OPERATION

OLD LEMAY FERRY ROAD	FR
VOGEL ROAD	FR

CONTROLLER TYPE NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION

D38A - SIGNAL PHASING
OLD LEMAY FERRY ROAD
AND VOGEL ROAD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

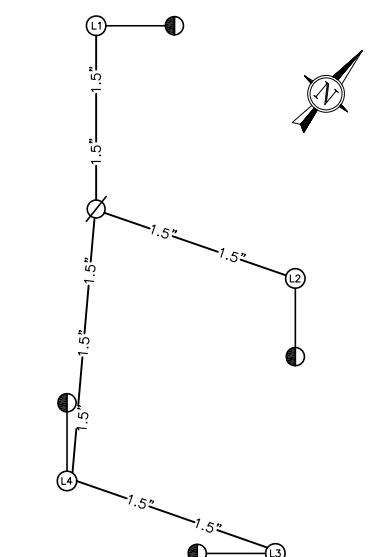
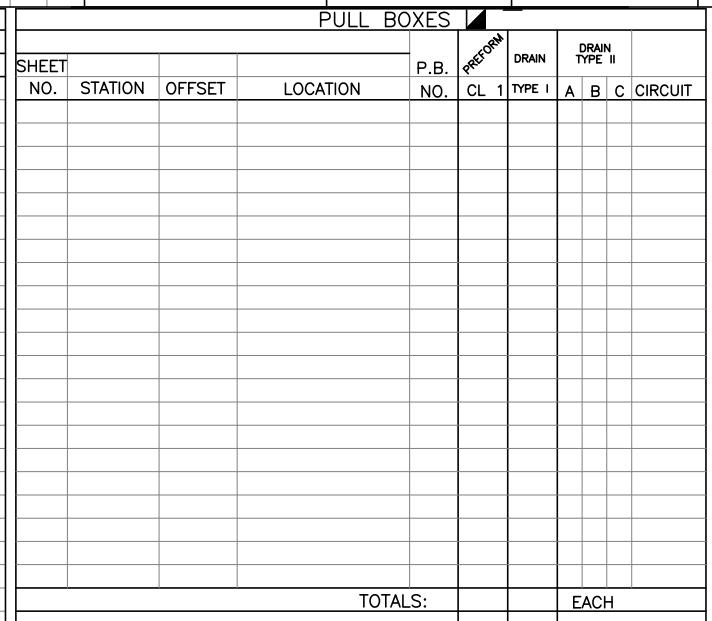


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MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

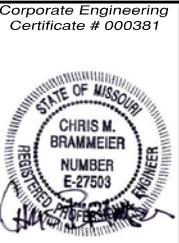
SUMMARY OF QUANTITIES



PRICE BID FOR POWER SUPPLY ASSEMBLY SHALL INCLUDE CABLE-CONDUIT, CONDUIT AND TRENCHING BETWEEN ASSEMBLY AND UTILITY CO. FACILITIES.

(1) LIGHT POLES, FOUNDATIONS, LUMINAIRES, WIRING, AND POWER SUPPLY WILL BE PROVIDED AND INSTALLED BY AMEREN UE FORCES. CONDUIT INSTALLATION SHALL BE COORDINATED WITH AMEREN UE. (CONTACTS: JAMES HOVIS 636-671-6155, MIKE TREACY 314-206-0272)

(2) CONDUIT TO BE INSTALLED TO A DEPTH OF 36", ENCASED IN CONCRETE AND IN COMPLIANCE WITH AMEREN UE STANDARDS & SPECIFICATIONS



LIGHTING QUANTITIES

OLD LEMAY FERRY ROAD
AND VOGEL ROAD

JEFFERSON COUNTY, MISSOURI

STP-5403(641)



Corporate Engineering
Certificate # 000381
STATE OF MISSOURI
BRIAN E. COURTWRIGHT
NUMBER
PE-200602617
PROFESSIONAL ENGINEER
CIVIL ENGINEER
DATE PREPARED

ROUTE STATE
MO
DISTRICT SHEET NO.
6 41
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION
DATE
PRELIMINARY SUBMITTAL
8/19/13
PRELIMINARY APPROVAL
8/24/14
70% SUBMITTAL (TO COUNTY)
4/29/14
PS&E SUBMITTAL (TO COUNTY)

12430 OLIVE BLVD, SUITE 430
(314) 375-6844
450 COTTONWOOD RD, SUITE B
GLEN CARSON, IL 62344
(618) 556-2912
www.cbbjafc.com



APPROVED RIGHT OF WAY
(FOR INFORMATION ONLY)
PARCEL 027.036.03001001
BURKARD, ALVIN J.
TRUSTEE
PARAGRAPH ONE
DB. 965, PG. 1944
STP-5403(641)

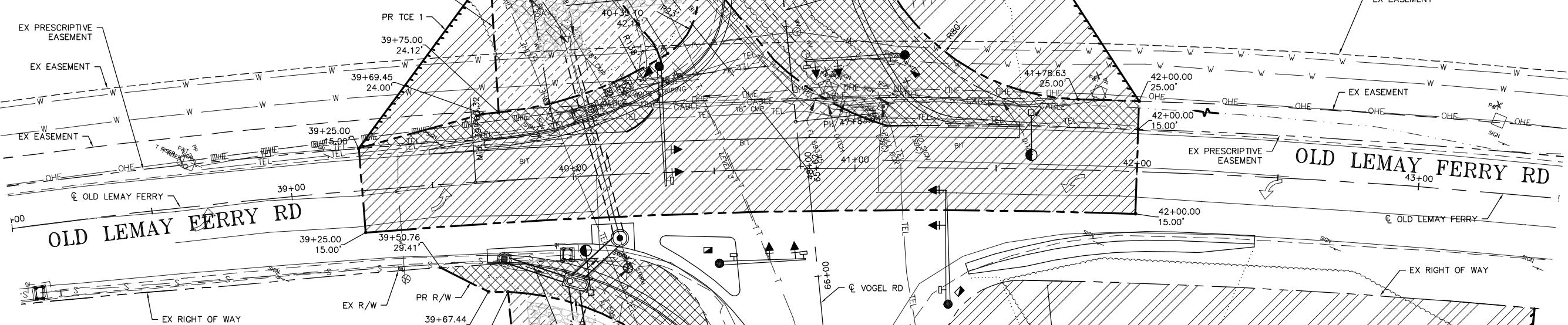
N/F
PARCEL 027.036.03001001
BURKARD, ALVIN J.
TRUSTEE
PARAGRAPH ONE
DB. 965, PG. 1944
①

N/F
PARCEL 027.036.03001001
BURKARD, ALVIN J.
TRUSTEE
PARAGRAPH ONE
DB. 965, PG. 1944
①

ORIGINAL AREA = 58.33 AC
PROPOSED RIGHT OF WAY = 0.200 AC
EXISTING DESCRIPTIVE EASEMENT TO BE TAKEN
AS PROPOSED RIGHT OF WAY = 0.234 AC
PROPOSED RIGHT OF WAY FROM STP 5403(643) = 0.922 AC
REMAINING AREA = 56.974 AC

PERMANENT DRAINAGE EASEMENT 1 = 0.063 AC (2,743 SQ FT)
PERMANENT DRAINAGE EASEMENT 2 = 0.064 AC (2,794 SQ FT)

TEMPORARY CONSTRUCTION EASEMENT 1 = 0.042 AC (1,820 SQ FT)
TEMPORARY CONSTRUCTION EASEMENT 2 = 0.005 AC (230 SQ FT)
TEMPORARY CONSTRUCTION EASEMENT 3 = 0.108 AC (4,716 SQ FT)
TEMPORARY CONSTRUCTION EASEMENT 4 = 0.213 AC (9,290 SQ FT)



N/F
PARCEL 027.036.03001001
BURKARD, ALVIN J.
TRUSTEE
PARAGRAPH ONE
DB. 965, PG. 1944
①

PROPOSED LEGEND:
(TBR) - TO BE REMOVED
(TBR&R) - TO BE REMOVED AND REPLACED
(UIP) - USE IN PLACE
CONC - CONCRETE
TEMP - TEMPORARY
PAV'T - PAVEMENT
PR - PROPOSED
EX - EXISTING

- - PR BIT PAV'T W/ 2" SURFACE COURSE
- - PR PCC ITEM
- - PR BITUMINOUS SHOULDERS
- - PR 2" MILLING & 2" RESURFACING EX PAV'T
- - PR GRADING LIMITS
- - PR EDGE OF 1.5% SLOPE
- - ADJACENT PROJECT SEE STP-5403(643)

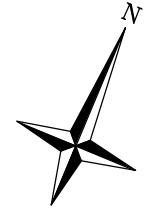
- RIGHT OF WAY LEGEND
- - EXISTING R. ROW or
DESCRIPTIVE EASEMENT
 - - PROPOSED ROW
 - - PROPOSED PERMANENT EASEMENT
 - - PROPOSED TEMPORARY
SLOPE EASEMENT
 - - PROPOSED RIGHT OF WAY AREA
 - - EXISTING DESCRIPTIVE
EASEMENT AREA TO BE CONVERTED TO
PROPOSED RIGHT OF WAY AREA
 - - PROPOSED DRAINAGE EASEMENT
 - - PROPOSED TEMPORARY
CONSTRUCTION EASEMENT (TCE)

N/F
PARCEL 027.036.03001001
BURKARD, ALVIN J.
TRUSTEE
PARAGRAPH ONE
DB. 965, PG. 1944
①

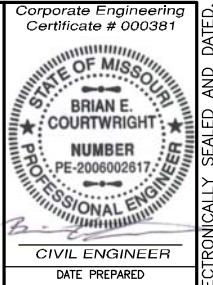
N/F
PARCEL 027.036.03001001
BURKARD, ALVIN J.
TRUSTEE
PARAGRAPH ONE
DB. 965, PG. 1944
①

0 10 20 30 40 50
SCALE 1"=20'
FULLSIZE

0 20 40 60 80 100
SCALE 1"=40'
HALFSIZE



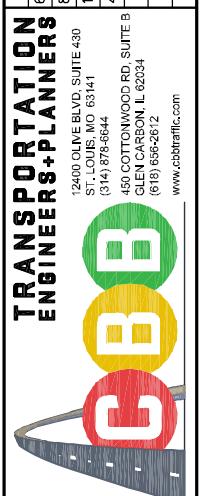
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CIVIL ENGINEER
DATE PREPARED

ROUTE	STATE
DISTRICT	MO
6	SHEET NO.
JEFFERSON	42
JOB NO.	2011-105
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

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CROSS SECTION
OLD LEMAY FERRY
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

DATE
6/21/13
PRELIMINARY SUBMITTAL

DATE
8/19/13
PRELIMINARY APPROVAL

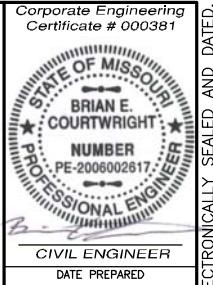
DATE
7/24/14
70% SUBMITTAL (TO COUNTY)

DATE
4/29/14
PS&E SUBMITTAL (TO COUNTY)

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ST. LOUIS, MO 63141
(314) 575-6844

450 COTTONWOOD RD, SUITE B
GLEN CARON, IL 62334
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Corporate Engineering
Certificate # 000381

STATE OF MISSOURI
BRIAN E. COURTWRIGHT
NUMBER PE-20060261
CIVIL ENGINEER
DATE PREPARED
ROUTE STATE
DISTRICT 6 MO
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

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TRANSPORTATION
ENGINEERS+PLANNERS



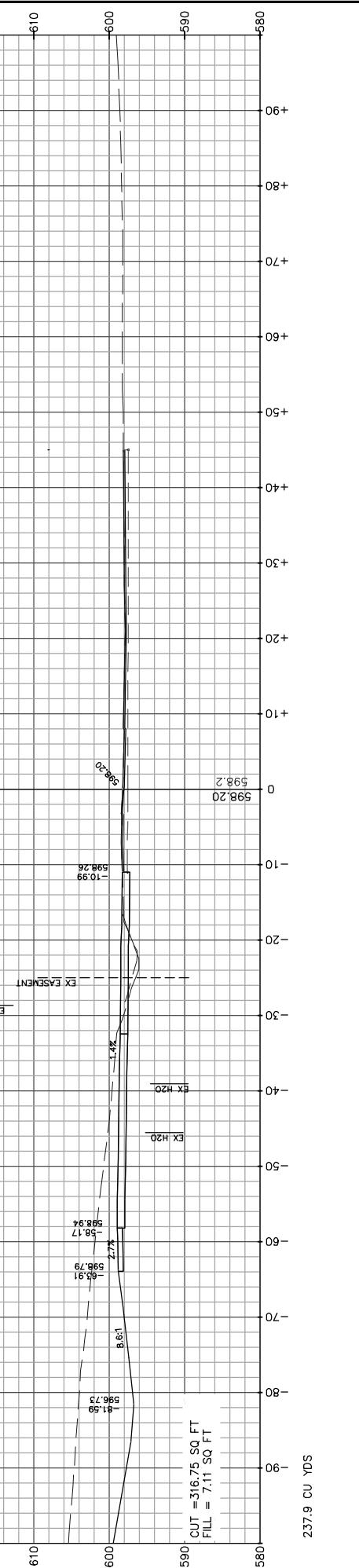
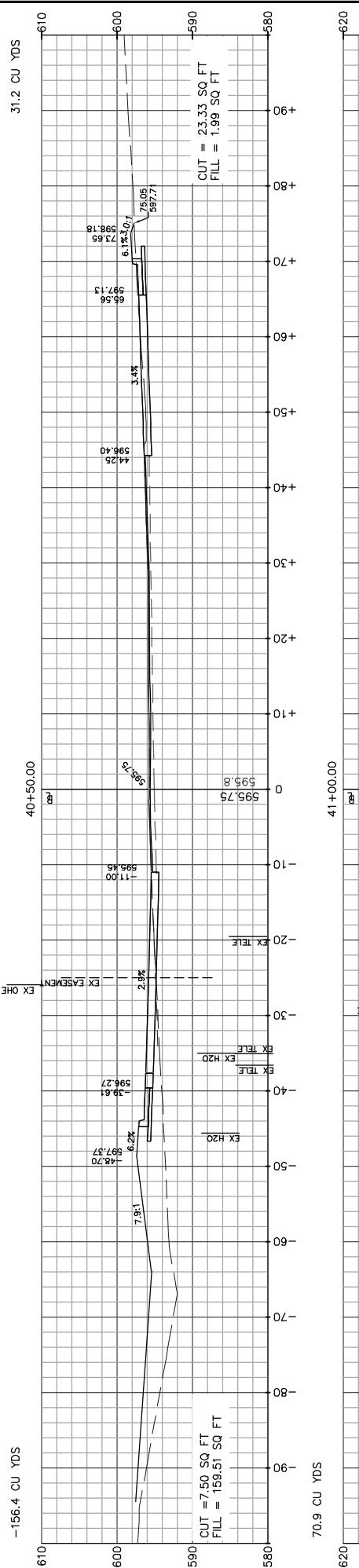
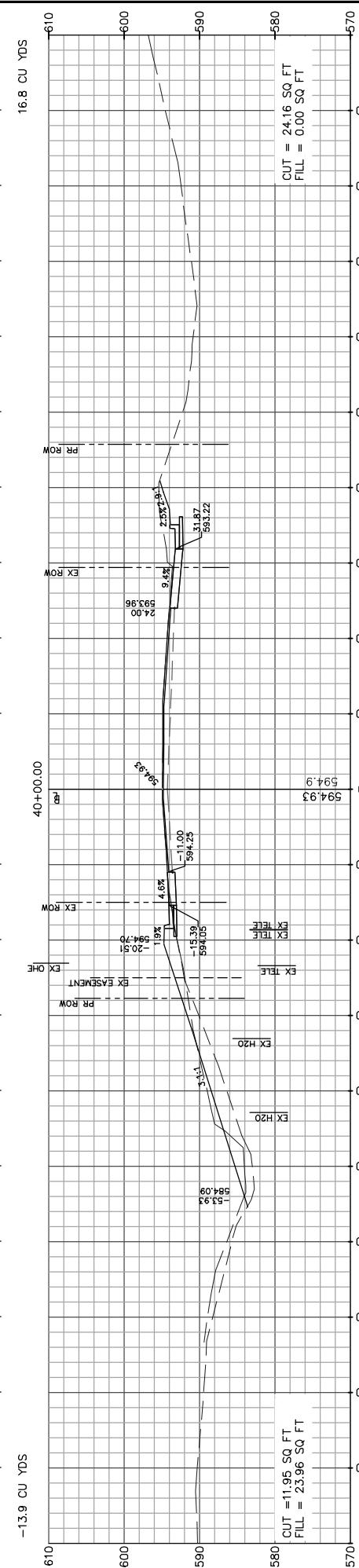
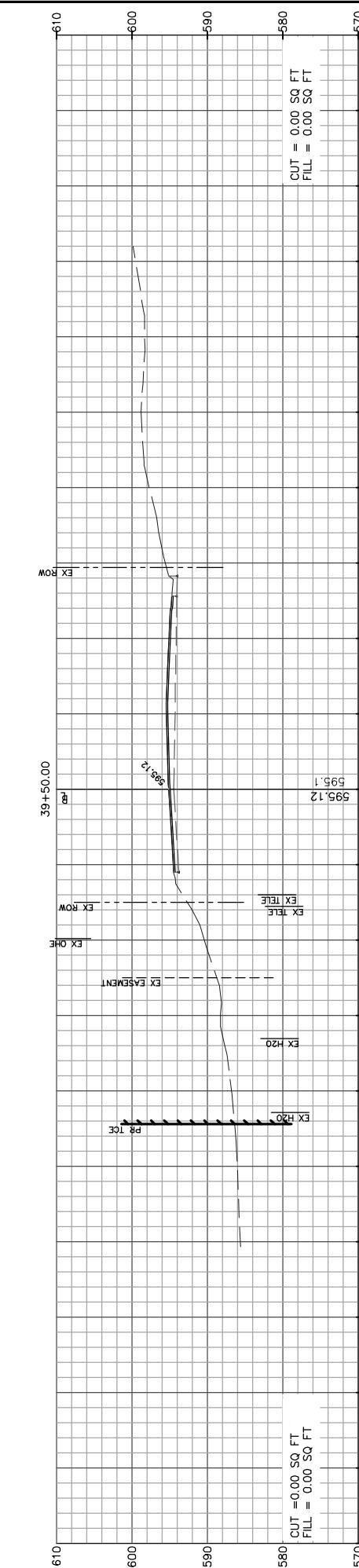
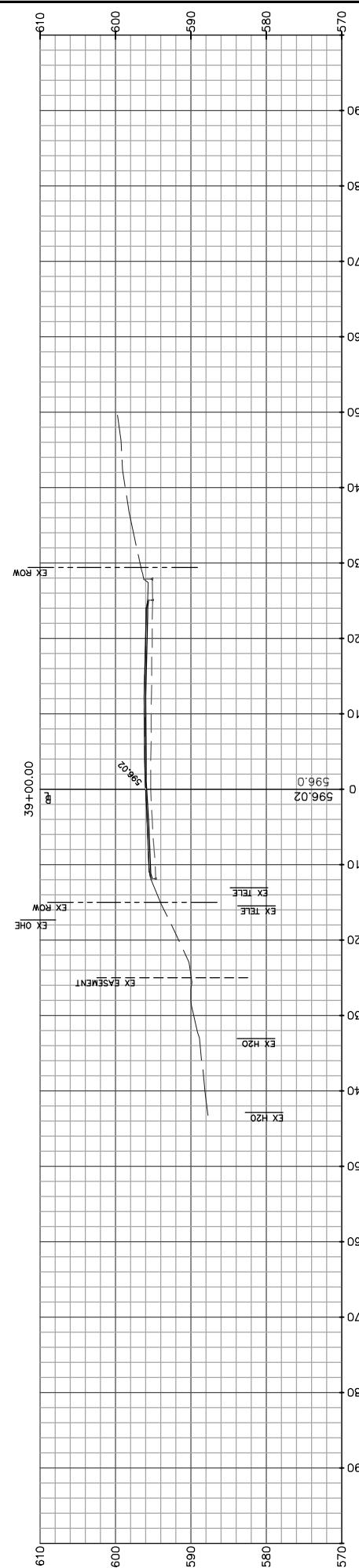
CROSS SECTION
OLD LEMAY FERRY
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

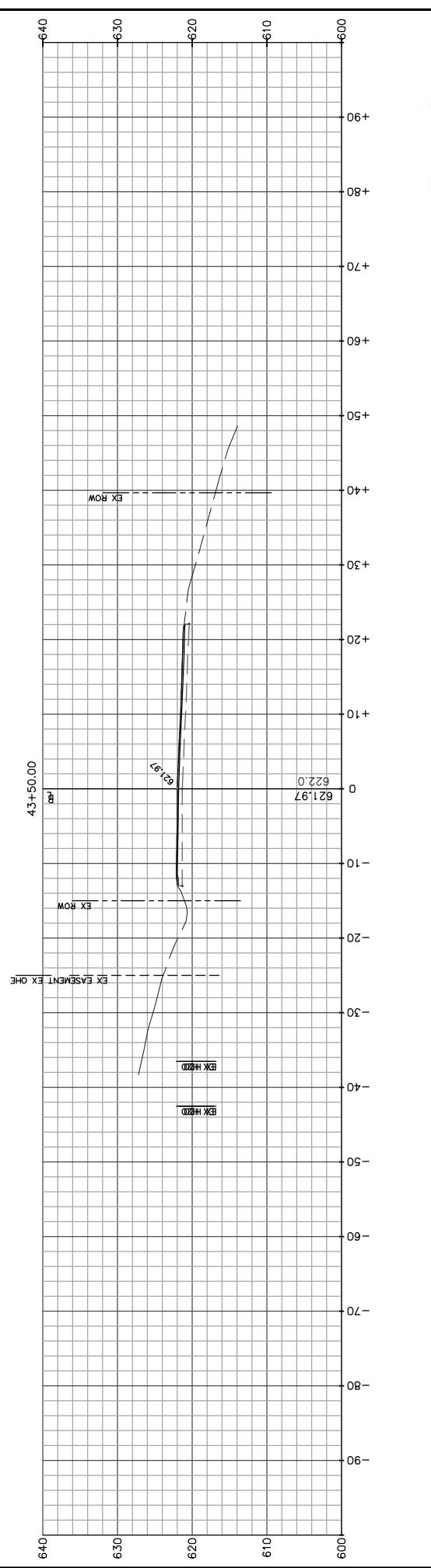
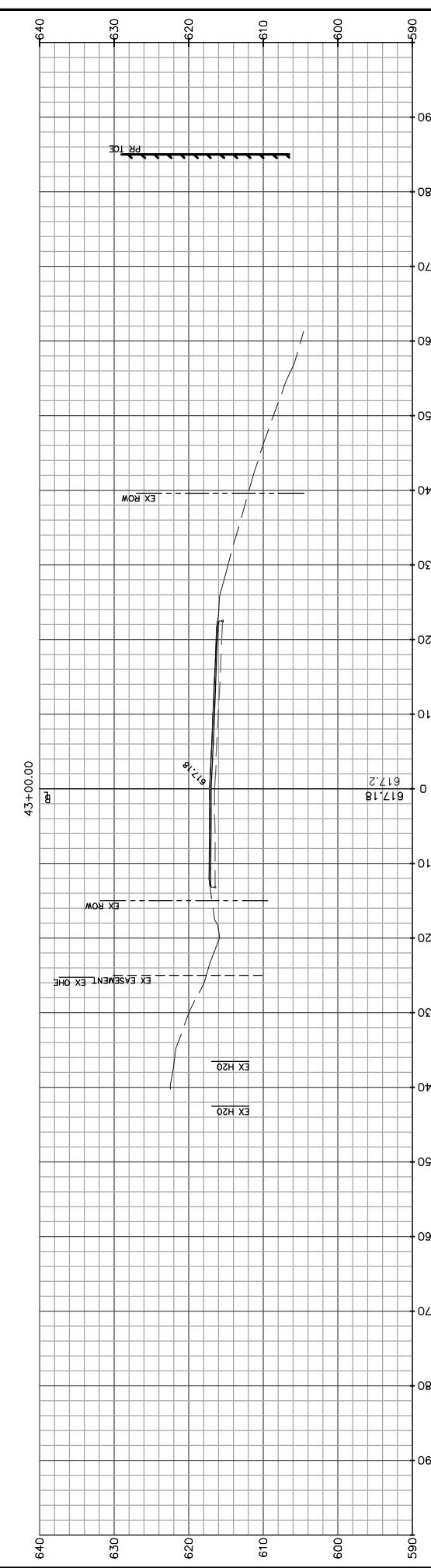
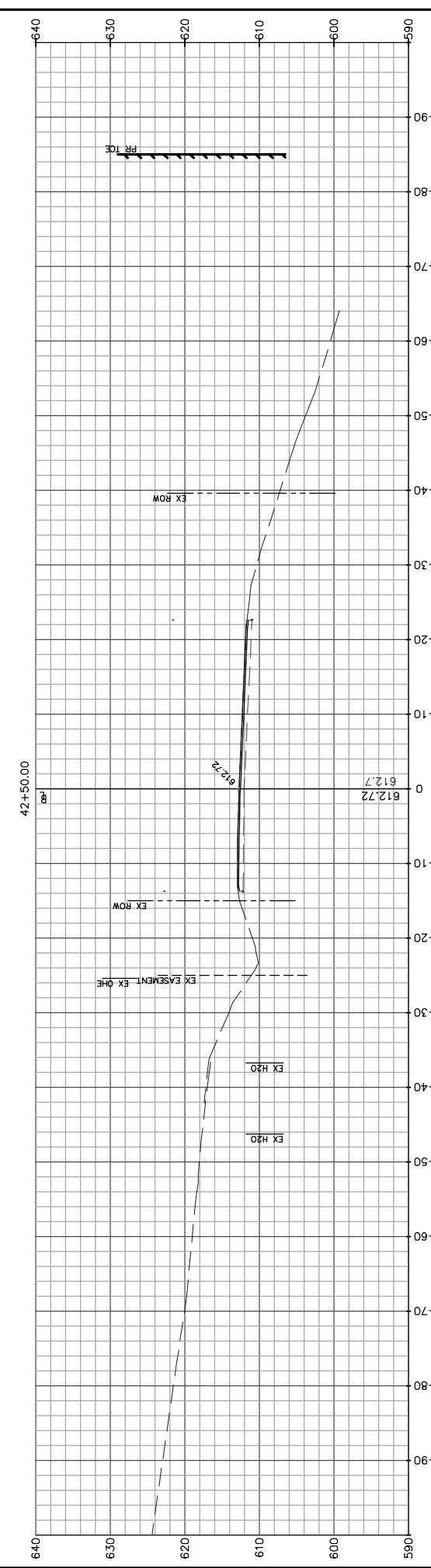
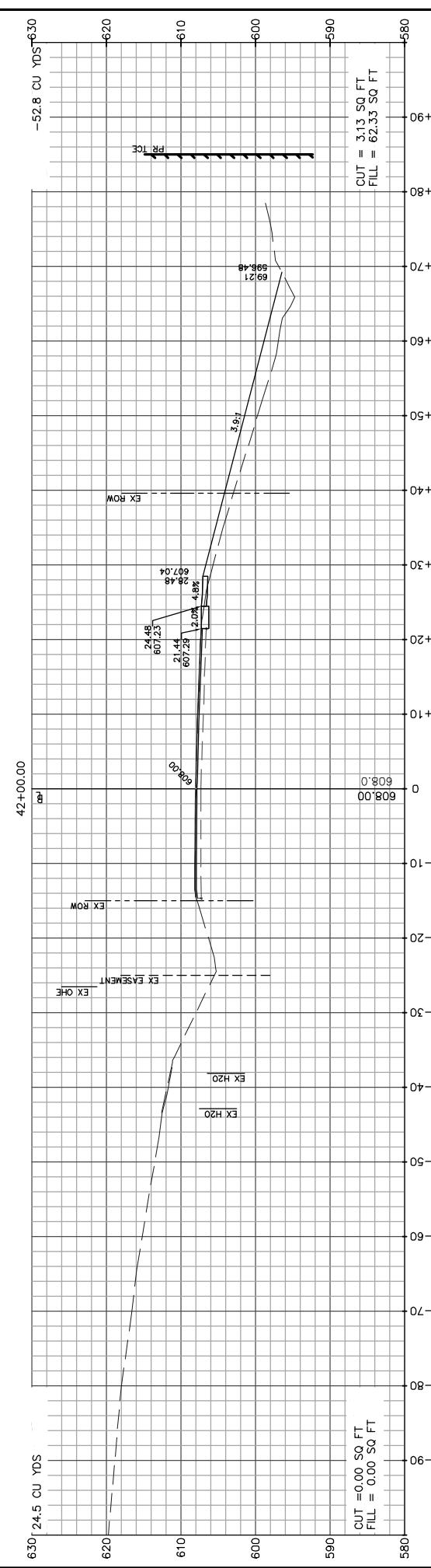
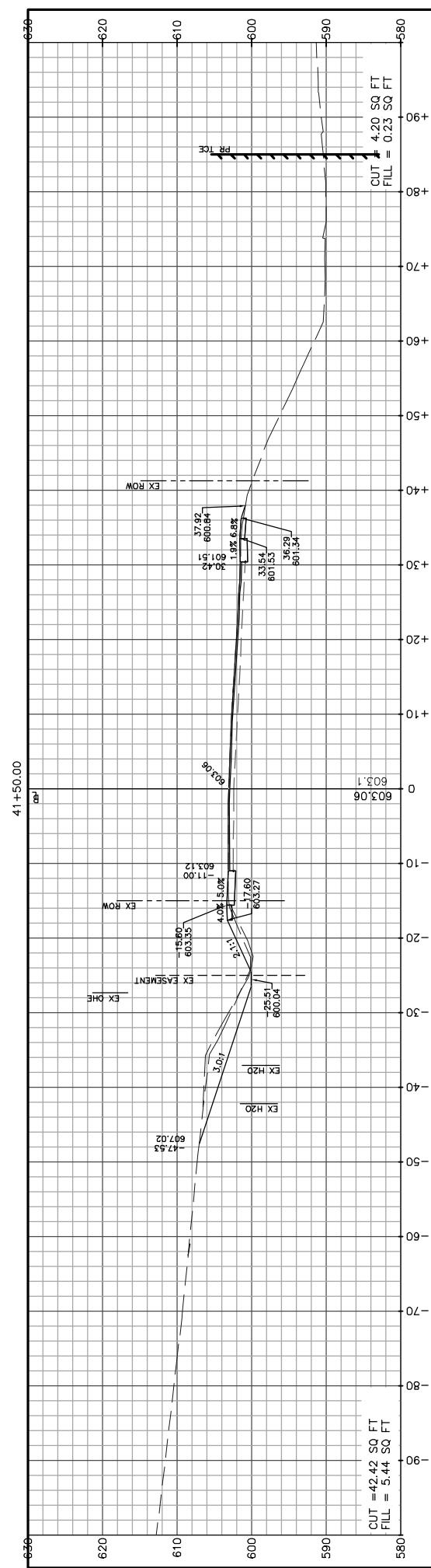
DATE
6/21/13
PRELIMINARY SUBMITTAL

DATE
8/19/13
PRELIMINARY APPROVAL

DATE
7/24/14
70% SUBMITTAL (TO COUNTY)

DATE
4/29/14
PS&E SUBMITTAL (TO COUNTY)

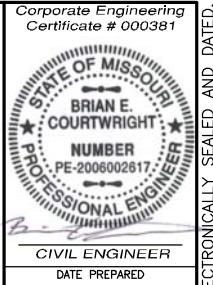




CRUSA SECTION
OLD LEMAY FERRY
VOGEL ROAD
VOGEL ROAD & LEMAY FERRY R.
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

Corporate Engineering Certificate # 000381	
 CIVIL ENGINEER	
DATE PREPARED	
ROUTE	STATE MO
DISTRICT 6	SHEET NO. 44
COUNTY JEFFERSON	
JOB NO. 2011-105	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
SECOND SIGNATURE	
13	PRELIMINARY SUBMITTAL
13	PRELIMINARY APPROVAL
14	70% SUBMITTAL (TO COUNTY)
14	PSAE SUBMITTAL (TO COUNTY)

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CIVIL ENGINEER
DATE PREPARED

ROUTE STATE
DISTRICT 6 MO
COUNTY JEFFERSON
JOB NO. 2011-105
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

PE-200602617
643.75
643.7
646.80
646.8
648.53
648.5

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(314) 575-6844
4/24/14 70% SUBMITTAL (TO COUNTY)
4/29/14 PS&E SUBMITTAL (TO COUNTY)

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(618) 565-2912
www.abotraffic.com

ABC

1

CROSS SECTION
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VOGEL ROAD
VOGEL ROAD & LEMAY FERRY RD
JEFFERSON COUNTY, MISSOURI
STP-5403(641)

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