

Table with columns: SLM, LEFT/RIGHT, INTERSECTION, A (FT), B (FT), C (FT), D (FT), AREA (SY). Includes subtotals for CRA-61-0.00 TO 0.588, CRA-61-7.08 TO 8.75, CRA-181-.702 TO 1.778, and RIC-181-0.00 TO 2.688, along with overall plan split and grand total intersection area.

WORK LOCATION(S) FOR PROPOSAL NOTE 420

Table with columns: COUNTY-ROUTE-SECTION and PROPOSAL NOTE 420 REQUIRED (YES OR NO). Lists sections like CRA-61-0.00 TO 0.688, CRA-61-7.08 TO 8.76, etc.

PAVEMENT CORING INFORMATION

Table with columns: COUNTY, ROUTE, SLM, ASPHALT (IN), CONCRETE (IN), BRICK (IN), LOCATION, DIRECTION, YEAR CORED. Lists coring details for CRA 61 and RIC 181 routes.

GUARDRAIL

LOCATIONS OF GUARDRAIL

THE GUARDRAIL PROTECTION PROVIDED IN THIS PLAN SHALL BE LOCATED IN THE FIELD TO ASSURE THAT THE INSTALLATION WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC. THIS LOCATION SHALL BE POSITIONED AS FAR AS POSSIBLE FROM THE EDGE OF PAVEMENT WHILE MAINTAINING PROPER GRADE IN FRONT OF GUARDRAIL AS PER STANDARD DRAWINGS AND PLAN DETAILS.

CONNECTING GUARDRAIL TO EXISTING RAIL

IN LOCATIONS WHERE TYPE 5 GUARDRAIL, TERMINAL ASSEMBLIES, ETC. ARE TO BE CONNECTED TO EXISTING RAIL SOME MODIFICATIONS MAY BE REQUIRED, INCLUDING EXTRA POSTS, DRILLING HOLES AND POSSIBLY PARTIAL SECTIONS OF ADDITIONAL RAIL ELEMENTS. THE COST OF THIS ADDITIONAL WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TYPE 5 GUARDRAIL. IF ADDITIONAL PORTIONS OF RAIL ELEMENT ARE USED THE LINEAL MEASUREMENT OF THIS ADDITIONAL PORTION SHALL BE ADDED FOR PAYMENT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL (R111)

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

SIGN REMOVAL & REERECTION

ANY EXISTING SIGN AND/OR SIGN SUPPORT THAT IMPEDES THE PROPOSED GUARDRAIL WORK SHALL BE TEMPORARILY REMOVED WHILE WORK IN THE IMMEDIATE AREA IS TAKING PLACE. PLACE TEMPORARY WORK ZONE SIGNS FOR ALL REGULATORY TYPE (I.E. SPEED LIMIT) SIGNS THAT ARE TEMPORARILY REMOVED. THESE WORK ZONE REGULATORY SIGNS SHALL BE PLACED BEFORE THE REMOVAL OF THE EXISTING SIGN(S). ANY AND ALL SIGNS TEMPORARILY REMOVED MUST BE REERECTED DURING THE SAME DAY. THE CONTRACTOR SHALL REMOVE SIGNS AND REERECT THE SIGNS IN KIND.

ALL COSTS, INCLUDING THE SIGN REMOVAL, SIGN REERECTION, POST REMOVAL, AND POST INSTALLATION SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN.

SUGGESTED SEQUENCE OF GUARDRAIL WORK

- 1. GUARDRAIL WORK IS TO BEGIN AFTER THE LINEAR GRADING IS COMPLETED AND THE 617 MATERIAL IS PLACED.
2. REMOVE THE GUARDRAIL.
3. PERFORM THE RESHAPING UNDER GUARDRAIL INCLUDING COMPLETING THE EMBANKMENT, AS PER PLAN.
4. REBUILD/CONSTRUCT THE GUARDRAIL RUN.
5. INSTALL BARRIER REFLECTORS.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTIN TYPE A ANCHOR ASSEMBLY INCLUDING ALL POSTS, HARDWARE, RAIL ELEMENTS, AND CONCRETE ANCHORS. ALL ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF.

THE EXISTING CONCRETE ANCHOR AND CONCRETE AT POSTS SHALL BE REMOVED ENTIRELY. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION. ALL FILL MATERIAL SHALL BE THOROUGHLY COMPACTED AND LEVELED, AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202, ANCHOR ASSEMBLY REMOVED, TYPE A.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE T

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING TYPE T, ANCHOR ASSEMBLY INCLUDING ALL POSTS, HARDWARE, RAIL ELEMENTS, AND CONCRETE ANCHORS. ALL ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF.

THE EXISTING CONCRETE ANCHOR AND CONCRETE AT POSTS SHALL BE REMOVED ENTIRELY. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION. ALL FILL MATERIAL SHALL BE THOROUGHLY COMPACTED AND LEVELED, AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TIME 202, ANCHOR ASSEMBLY REMOVED, TYPE T.

GENERAL NOTES

DESIGN AGENCY DISTRICT 3



ENGINEERING TEAM THREE

DESIGNER JDW

REVIEWER JSR 06/28/24


PROJECT ID 119425

SHEET TOTAL P.10 P.52

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8	13	14	20	21	38	43	44	45	01/S5K/05	02/STR/05	03/S50/05						
ROADWAY																			
						3					3			202	23000	3	SY	PAVEMENT REMOVED	
						8,196					8,196			202	30000	8,196	SF	WALK REMOVED	
						839					839			202	32000	839	FT	CURB REMOVED	
						117					117			202	32500	117	FT	CURB AND GUTTER REMOVED	
							312.5				100	212.5		202	38000	312.5	FT	GUARDRAIL REMOVED	
							7				4	3		202	42000	7	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
							2					2		202	42040	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
							4				4			202	47000	4	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
2											1	1		202	53100	2	EACH	MAILBOX REMOVED	
						32					32			203	20001	32	CY	EMBANKMENT, AS PER PLAN(CURB RAMPS)	
							76				6	40	30	203	20001	76	CY	EMBANKMENT, AS PER PLAN(GUARDRAIL)	
							6.9				3.5	3.4		209	15000	6.9	STA	RESHAPING UNDER GUARDRAIL	
							22.01				3.5	10.38	8.13	209	15001	22.01	STA	RESHAPING UNDER GUARDRAIL, AS PER PLAN	
					3.02						2.8	0.22		209	60500	3.02	MILE	LINEAR GRADING	
					7.33						2.12	4.75	0.46	209	72051	7.33	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	
38											13	24	1	209	80000	38	EACH	GRADING MAILBOX APPROACHES	
							62.5					62.5		606	15050	62.5	FT	GUARDRAIL, TYPE MGS	
							100					100		606	15100	100	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
							175				175			606	17000	175	FT	RAISING TYPE 5 GUARDRAIL	
							7				4	3		606	26150	7	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	
							2					2		606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
							4				4			606	35140	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	
						3,772					3,772			608	10000	3,772	SF	4" CONCRETE WALK	
						4,384					4,384			608	52000	4,384	SF	CURB RAMP	
						76					76			609	12000	76	FT	COMBINATION CURB AND GUTTER, TYPE 2	
						296					296			609	26000	296	FT	CURB, TYPE 6	
13											8	4	1	623	39501	13	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	
4											2	1	1	623	39601	4	EACH	MONUMENT ASSEMBLY RECONSTRUCTED TO GRADE, AS PER PLAN	
LS											LS	LS	LS	623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
5											2	2	1	SPECIAL	69050100	5	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	
EROSION CONTROL																			
											1,000	1,000	1,000	832	30000	3,000	EACH	EROSION CONTROL	
DRAINAGE																			
	27					2					25	2	2	611	98630	29	EACH	CATCH BASIN ADJUSTED TO GRADE	
		1				4					5			611	98635	5	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	
		2									2			611	99155	2	EACH	INLET RECONSTRUCTED TO GRADE, AS PER PLAN	
	24										24			611	99654	24	EACH	MANHOLE ADJUSTED TO GRADE	
	600										600			SPECIAL	61199820	600	LB	MISCELLANEOUS METAL	
PAVEMENT																			
		870									327	477	66	251	01042	870	CY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE)	
		165									33	117	15	253	02000	165	CY	PAVEMENT REPAIR	
					46,668						46,668			254	01000	46,668	SY	PAVEMENT PLANING, ASPHALT CONCRETE(1.5")	
					56,970						16,589	36,077	4,304	254	01000	56,970	SY	PAVEMENT PLANING, ASPHALT CONCRETE(3.0")	
					5,182						3,163	1,804	215	254	01600	5,182	SY	PATCHING PLANED SURFACE	
					11,171						5,899	4,712	560	407	20000	11,171	GAL	NON-TRACKING TACK COAT	
					4,859						2,311	2,334	214	408	10001	4,859	GAL	PRIME COAT, AS PER PLAN	
					2,038						593	1,293	152	442	00201	2,038	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN(1.25")(PG64-22)	
					1,950						1,950			442	00201	1,950	CY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN(1.5")(PG64-22)	
					2,800						815	1,775	210	442	20171	2,800	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (448), AS PER PLAN(1.75")(PG64-22)	
38					675						334	348	31	617	10100	713	CY	COMPACTED AGGREGATE	
					3,547						3,289	258		617	20000	3,547	SY	SHOULDER PREPARATION	
WATER WORK																			
	43					1					44			638	10800	44	EACH	VALVE BOX ADJUSTED TO GRADE	

GENERAL SUMMARY

DESIGN AGENCY
DISTRICT 3



ENGINEERING TEAM THREE

DESIGNER
JDW


REVIEWER
JSR 06/28/24

PROJECT ID
119425

SHEET TOTAL
 P.17 P.52

SHEET NUM.										PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
6	7	13	14	20	21	38	43	44	45	46	01/S5K/05	02/STR/05							03/S50/05
TRAFFIC CONTROL																			
								345			147	160	38	621	00100	345	EACH	RPM	
								322			124	160	38	621	54000	322	EACH	RAISED PAVEMENT MARKER REMOVED	
									42		28	14		626	00110	42	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	
											9.54	4.77	0.46	642	00104	9.54	MILE	EDGE LINE, 6", TYPE 1	
											0.48	0.48		642	00204	0.48	MILE	LANE LINE, 6", TYPE 1	
											5.69	2.39	0.23	642	00300	5.69	MILE	CENTER LINE, TYPE 1	
											43			642	01200	43	FT	PARKING LOT STALL MARKING, TYPE 1	
											426		77	644	00404	426	FT	CHANNELIZING LINE, 12"	
											671		136	644	00500	671	FT	STOP LINE	
											1,750			644	00620	1,750	FT	CROSSWALK LINE, 12"	
											55		55	644	00700	55	FT	TRANSVERSE/DIAGONAL LINE	
											2			644	01000	2	EACH	RAILROAD SYMBOL MARKING	
											2			644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
											13		4	644	01300	13	EACH	LANE ARROW	
											0.18			646	10110	0.18	MILE	LANE LINE, 6"	
											0.09			646	10200	0.09	MILE	CENTER LINE	
											STRUCTURE REPAIR (CRA-61-7.681 SFN 1702092)								
											105			202	98200	105	FT	REMOVAL MISC.: EXISTING JOINT SEAL	45
											105			409	30000	105	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	
											566			512	10050	566	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
											2,869			512	73500	2,869	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
											105			516	31000	105	FT	JOINT SEALER	
											117			519	11100	117	SF	PATCHING CONCRETE STRUCTURE	
											STRUCTURE REPAIR (CRA-181-1.725 SFN 1703404)								
											50			517	75600	50	FT	DEEP BEAM BRIDGE RETROFIT RAILING	
											STRUCTURE REPAIR (RIC-181-2.400 SFN 7001037)								
											90			409	30000	90	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	
											MAINTENANCE OF TRAFFIC								
											160		20	614	11110	160	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
											LS	LS	LS	614	12420	LS		DETOUR SIGNING	
											67		2	614	12460	67	EACH	WORK ZONE MARKING SIGN	
											75		25	614	13000	75	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
											4		2	614	18601	4	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	13
											1.93			614	20550	1.93	MILE	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	
											15.06	7.16	0.68	614	21550	15.06	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
											929		231	614	23690	929	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
											384		114	614	26610	384	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
											1,057			614	27250	1,057	FT	WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT	
											30		12	614	30650	30	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT	
											10,000			900	00100	10,000	EACH	RAILROAD FLAGGING SERVICES	
											INCIDENTALS								
											LS	LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
											3.29	2.38	0.33	619	16010	6	MNTH	FIELD OFFICE, TYPE B	
											LS	LS	LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS	LS	LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY		DISTRICT 3	
			
ENGINEERING TEAM THREE			
DESIGNER	JDW		
REVIEWER	JSR 06/28/24		
PROJECT ID	119425		
SHEET	TOTAL		
P.18	P.52		

AUXILIARY & LONG LINE MARKINGS

CRA/RIC SR 61/181 VAR

MODEL: PAVEMENT MARKING SUBSUMMARY PAPER SIZE: 34x22 (in.) DATE: 11/26/2024 TIME: 9:15:08 AM USER: jwade
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PARTICIPATION	COUNTY	ROUTE	STATION / SLM		HIGHWAY MILES	614							642, TYPE 1					644								646										
						WORK ZONE STOP LINE, CLASS III, 642 PAINT	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	WORK ZONE CROSSWALK LINE, CLASS III, 642 PAINT	WORK ZONE ARROW, CLASS III, 642 PAINT	6" EDGE LINE (WHITE)	CENTER LINE		PARKING LOT STALL MARKING	AUXILIARY MARKINGS (740.04)					LANE ARROW	6" EDGE LINE (WHITE)	CENTER LINE	6" LANE LINE												
													SOLID LINE EQUIVALENT	TOTAL (PAY QUANTITY)		6" LANE LINE	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE (YELLOW)					RAILROAD SYMBOL MARKING, 96"	SCHOOL SYMBOL MARKING, 96"	LEFT	RIGHT								
FROM	TO	MILE	FT	MILE	MILE	FT	FT	EACH	MILE	MILE	MILE	MILE	FT	FT	FT	FT	EACH	EACH	EACH	EACH	MILE	MILE	MILE													
01/S5K/05	CRA	61	0.000	0.588	0.59											84				1																
01/S5K/05	CRA	61	7.080	7.556	0.48											111	277																			
01/S5K/05	CRA	61	7.560	7.680	0.12																								0.09	0.18						
01/S5K/05	CRA	61	7.680	7.770	0.09																															
01/S5K/05	CRA	61	7.770	8.132	0.36	127	0.72	1.45	312	750	10		0.724	0.36	0.36	43	156	64	375		2	5														
01/S5K/05	CRA	61	8.130	8.210	0.08	83	0.16		386	307	8		0.160	0.08			193	42	307			4														
01/S5K/05	CRA	61	8.210	8.560	0.35		0.70						0.700	0.35				90	791																	
01/S5K/05	CRA	61	8.560	8.750	0.19																															
01/S5K/05	CRA	181	0.702	1.778	1.08	60	3.23						2.15	1.480	1.08				144		1															
01/S5K/05	RIC	181	0.00	0.013	0.01								0.03	0.026	0.01																					
02/STR/05	RIC	181	0.013	2.400	2.39								4.77	2.922	2.39																					
03/S50/05	RIC	181	2.400	2.460	0.06																															
03/S50/05	RIC	181	2.46	2.688	0.23	114	0.68		231		12		0.46	0.576	0.23		77	136		55				2	2											
SUBTOTALS CRA-61 (01/S5K/05)					2.26	210	3.95	1.93	698	1057	18		2.13	3.621	1.98	0.48	43	349	391	1750		1	2	9				0.09	0.18							
SUBTOTALS CRA-181 (01/S5K/05)					1.08	60	3.23						2.15	1.480	1.08				144		1															
SUBTOTALS RIC-181 (01/S5K/05)					0.01		0.04						0.03	0.026	0.01																					
SUBTOTALS RIC-181 (02/STR/05)					2.39		7.16						4.77	2.922	2.39																					
SUBTOTALS RIC-181 (03/S50/05)					0.29	114	0.68		231		12		0.46	0.576	0.23		77	136		55				2	2											
TOTALS TO GENERAL SUMMARY					6.02	384	15.06	1.93	929	1,057	30		9.54	8.63	5.69	0.48	43	426	671	1,750	55	2	2	11	2			0.09	0.18							

PAVEMENT MARKING SUBSUMMARY

DESIGN AGENCY
 DISTRICT 3

 ENGINEERING
 TEAM THREE
 DESIGNER
 JDW
 REVIEWER
 JSR 06/28/24
 PROJECT ID
 119425
 SHEET TOTAL
 P.43 P.52