

COMPUTED BY(UPDATED): JM DATE: 9/30/2021
 CHECKED BY: DMW 9/30/2021

PROJECT NO.
 R-5021

SHEET NO.
 3B-8

SUMMARY OF HYDRAULIC RIP RAP & DDE QUANTITIES

LINE	SIDE	STATION	STATION	RIP RAP CLASS				GEO (SY)	PSRM (SY)	DDE (CY)	DETAIL	COMMENT
				I	II	A	B					
-L-	LT	48+73	50+15	135				240			III	SPECIAL LATERAL DITCH
-L-	LT	51+00	65+00						9,401		A, I	SPECIAL LATERAL DITCH, LATERAL BASE DITCH
-L-	LT	59+50					8	21				AT OUTLET, 30" PIPE
-L-	LT	64+03	64+27	125				160	95		AA	CULVERT CHANNEL IMPROVEMENTS (DOWNSTREAM)
-L-	LT	65+26		11				22				AT OUTLET, 30" PIPE
-L-	LT	83+60	83+93	35				55	20		P	CULVERT CHANNEL IMPROVEMENTS (DOWNSTREAM)
-L-	LT	85+52					1	5				AT OUTLET, 15" PIPE
-L-	LT	86+49					5	12			N	VAR. WIDTH LATERAL BASE DITCH
-L-	LT	90+01					2	7				AT OUTLET, 15" PIPE
-L-	LT	100+59	100+70	15				30				AT OUTLETS, 18" & 36" PIPES
-L-	LT	106+19	106+36	15				30				AT OUTLET, 36" PIPE
-L-	LT	149+00	204+50						9,563		DD, GGGG, HHHH, IIII, JJJJ	LATERAL 'V' DITCH, LATERAL BASE DITCH
-L-	LT	167+88		25				45				AT OUTLET, 36" PIPE
-L-	LT	184+84		15				30				AT OUTLET, 36" PIPE
-L-	LT	193+43		15				30				AT OUTLET, 36" PIPE
-L-	LT	194+82		25				45				AT OUTLET, 36" PIPE
-L-	LT	203+73		20				39				AT OUTLET, 42" PIPE
-L-	LT	205+50		20				39				AT OUTLET, 42" PIPE
-L-	LT	205+50	210+00						1,193		JJJJ	LATERAL BASE DITCH
-L-	LT	206+00		25				45				AT OUTLET, 36" PIPE
-L-	LT	213+02	214+02	85				150			LLL	SLOPE PROTECTION
-L-	LT	215+00	217+50						878		JJJJ	LATERAL BASE DITCH
-L-	LT	215+01		26				50				AT OUTLET, 38" PIPE
-L-	LT	217+78		33				62				AT OUTLET, 54" PIPE
-L-	LT	221+00	225+50						1,543		Y, N	LATERAL 'V' DITCH, VAR. WIDTH LATERAL BASE DITCH
-L-	LT	225+66					5	12				VAR. WIDTH LATERAL BASE DITCH
-L-	LT	225+87					1	5				AT OUTLET, 15" PIPE
-L-	LT	226+05	226+45	45				75	40		S	CULVERT CHANNEL IMPROVEMENTS (UPSTREAM)
-L-	LT	228+00					5	12				VAR. WIDTH LATERAL BASE DITCH
-L-	LT	231+00					2	7				AT OUTLET, 15" PIPE
-L-	LT	232+20					3	10				AT OUTLET, 18" PIPE
-L-	LT	254+99	257+29				80	230			T	TOE PROTECTION
-L-	LT	265+00	267+00				70	180			T	TOE PROTECTION
-L-	LT	305+00	305+50						117			
-L-	LT	306+58		20				39				AT OUTLET, 42" PIPE
-L-	LT	304+86	305+54						1,183		FF	LATERAL BASE DITCH
-L-	LT	307+00	311+50						2,397		EEEE	THIS LATERAL BASE DITCH WAS REMOVED. TURN LANE CHANGED FROM SHLDR TO CG
-L-	LT	307+00	311+50						-2,397		EEEE	
-L-	LT	312+48		30				60				AT OUTLET, 48" PIPE
-L-	LT	312+50	318+00	220				380	2,678		OO, II	LATERAL BASE DITCH
-L-	LT	314+01		26				50				AT OUTLET, 48" PIPE
-L-	LT	316+18	316+63	65				100	25		KK	CULVERT CHANNEL IMPROVEMENTS (UPSTREAM)
-L-	LT	318+84	320+02	170				280			RR	SPECIAL CUT BASE DITCH
-L-	LT	324+13	324+37	80				140	25		QQQ	STANDARD BASE DITCH
-L-	LT	327+00					11	28				AT OUTLET, 36" PIPE
-L-	LT	329+50		10				23				AT OUTLET, 36" PIPE
-L-	LT	333+34					2	7				AT OUTLET, 15" PIPE
-L-	LT	343+50					3	7				AT OUTLET, 18" PIPE
-L-	LT	346+82					2	7				AT OUTLET, 15" PIPE
-L-	LT	366+73	368+83				85	240			T	TOE PROTECTION
-L-	LT	373+97		7				11				AT OUTLET, 30" PIPE
-L-	LT	382+50	382+82						60		VV	STANDARD BASE DITCH
-L-	LT	384+36					2	7				AT OUTLET, 15" PIPE
-L-	LT	392+50	397+50						1,378		HHH	LATERAL BASE DITCH
-L-	LT	393+38					2	7				AT OUTLET, 15" PIPE
-L-	LT	395+50					2	7				AT OUTLET, 15" PIPE
-L-	LT	397+50					2	7				AT OUTLET, 15" PIPE
-L-	LT	397+82	398+13						50		OOO	STANDARD BASE DITCH

LINE	SIDE	STATION	STATION	RIP RAP CLASS				GEO (SY)	PSRM (SY)	DDE (CY)	DETAIL	COMMENT
				I	II	A	B					
-L-	LT	399+44						2	7			AT OUTLET, 15" PIPE
-L-	LT	410+22	410+47							30	XXX	STANDARD 'V' DITCH
-L-	LT	412+78	412+95							10	XXX	STANDARD 'V' DITCH
-L-	LT	418+27	418+47							16	XXX	STANDARD 'V' DITCH
-L-	LT	428+33	428+71	110					175	80	NNN	STANDARD BASE DITCH
-L-	RT	49+00	66+00	180					250	10,240	AAAA, J, BBBB	LATERAL BASE DITCH
-L-	RT	63+99	64+32	90					140	85	BB	CULVERT CHANNEL IMPROVEMENTS (UPSTREAM)
-L-	RT	65+25					2	7				AT OUTLET, 15" PIPE
-L-	RT	67+25					2	7				AT OUTLET, 15" PIPE
-L-	RT	69+15					13	35				AT OUTLET, 15" PIPE
-L-	RT	72+50					2	7				AT OUTLET, 36" PIPE
-L-	RT	74+70					2	7				AT OUTLET, 36" PIPE
-L-	RT	83+51	83+99	135					120	35	Q	CULVERT CHANNEL IMPROVEMENTS (UPSTREAM)
-L-	RT	97+89	97+91							10	OOO	STANDARD BASE DITCH
-L-	RT	105+76					5	14				AT OUTLET, 24" PIPE
-L-	RT	106+00	116+00							1,180	G, H	SPECIAL LATERAL DITCH, LATERAL BASE DITCH
-L-	RT	107+16					8	21				AT OUTLET, 30" PIPE
-L-	RT	117+00	126+50					290	850		T	TOE PROTECTION
-L-	RT	145+52					2	7				AT OUTLET, 15" PIPE
-L-	RT	145+87					2	7				AT OUTLET, 15" PIPE
-L-	RT	150+44					2	7				AT OUTLET, 24" PIPE
-L-	RT	153+12					5	14				AT OUTLET, 24" PIPE
-L-	RT	153+50	154+00				24	64		60	I, MM	LATERAL BASE DITCH, VAR. WIDTH LATERAL BASE DITCH
-L-	RT	214+58					2	7				AT OUTLET, 15" PIPE
-L-	RT	215+00	216+00							399	Y, N	LATERAL 'V' DITCH, VAR. WIDTH LATERAL BASE DITCH
-L-	RT	216+50					5	12				VAR. WIDTH LATERAL BASE DITCH
-L-	RT	216+76	217+79	60					135		NN	TOE PROTECTION
-L-	RT	218+26		26					50			AT OUTLET, 38" PIPE
-L-	RT	221+00	221+50							325	BBBB	LATERAL BASE DITCH
-L-	RT	224+00	225+50	130					250	782	Z	LATERAL BASE DITCH
-L-	RT	225+56	225+96	90					130	20	B	CULVERT CHANNEL IMPROVEMENTS (DOWNSTREAM)
-L-	RT	226+49	226+80				15	40			T	TOE PROTECTION
-L-	RT	227+00	228+00							157	FFFF, Y	VAR. WIDTH LATERAL BASE DITCH, LATERAL 'V' DITCH
-L-	RT	229+59					3	10				AT OUTLET, 18" PIPE
-L-	RT	232+33					2	7				AT OUTLET, 15" PIPE
-L-	RT	234+50	235+50							137	Y	LATERAL 'V' DITCH
-L-	RT	240+25					3	10				AT OUTLET, 18" PIPE
-L-	RT	240+50	253+50							1,061	CCCC, DD, Z	
-L-	RT	241+00					2	7				AT OUTLET, 15" PIPE
-L-	RT	258+50	290+00							7,671	FF, GG, DDDD,	LATERAL BASE DITCH
-L-	RT	258+73		26					50			AT OUTLET, 48" PIPE
-L-	RT	265+93	266+07	15					30			AT OUTLET, 30" PIPE (2)
-L-	RT	270+52					2	7				AT OUTLET, 15" PIPE
-L-	RT	272+18					2	7				AT OUTLET, 15" PIPE
-L-	RT	288+78	289+00							12	OOO	STANDARD BASE DITCH
-L-	RT	288+80		26					50			AT OUTLET, 38" PIPE
-L-	RT	291+09		26					50			AT OUTLET, 48" PIPE
-L-	RT	291+50	294+50							553	FF	LATERAL BASE DITCH
-L-	RT	296+00	299+50							1,117	FF	LATERAL BASE DITCH
-L-	RT	296+00		26					50			AT OUTLET, 38" PIPE
-L-	RT	301+50	303+50							466	FF	LATERAL BASE DITCH
-L-	RT	301+50		26					50			AT OUTLET, 48" PIPE
-L-	RT	301+80					2	7				AT OUTLET, 15" PIPE
-L-	RT	304+40		26					50			AT OUTLET, 38" PIPE
-L-	RT	304+50	305+00							258		
3B-8 TOTAL:				2290	0	0	692	5796	0	52,953		