CULVERTS (INCLUDED IN CULVERT SUMMARY RECAP)

STATION	BASIC BID ITEMS													PIPE OPTIONS in			END SECTIONS		cu. yards					sq. yards	linear feet			REMARKS
		linear feet				cu. yards						sq. yards	each															
	CULVERT PIPE in	LENGTH OF PIPE	RELAY PIPE CULVERT	CLEAN CULVERT PIPE	REMOVE PIPE CULVERT	FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	SPECIAL BACKFILL	CULVERT INFILL	CONCRETE - CLASS GENERAL	FILL & ABANDON PIPE	GEOTEXT. STAB.	PLUG ENDS & ABANDON PIPE	STEEL - 2 2/3 X 1/2 CORR. CONCRETE ALUMINUM - 2 2/3 x 1/2 CORR.	CLASS OR THK.	COATING *	LEFT	RIGHT	FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	SPECIAL BACKFILL	CULVERT INFILL	CONCRETE - CLASS GENERAL	GEOTEXT. STAB.	HEIGHT OF COVER	SKEW ANGLE	CULVERT IN PL. in x ft	
TOTAL	~	~	0	0	0	0	0	0	0	0.0	0	0	0	~	~	~	~	~	~	~	~	~	~	~	~	~	~	

* SEE STANDARD SPEC. SEC. 709.05
Δ 3" x 1" CORR.
θ STEP BEVEL

CULVERTS (INCLUDED IN CULVERT SUMMARY RECAP)

STATION	BASIC BID ITEMS								PIPE OPTIONS in			END SECTIONS		cu. yards				sq. yards	linear feet	SKEW ANGLE	CULVERT IN PL. in x ft	REMARKS
	CULVERT PIPE in	linear feet		cu. yards				sq. yards														
		LENGTH OF PIPE	REMOVE PIPE CULVERT	FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	# BEDDING MATERIAL	CONCRETE - CLASS GENERAL	GEOTEXT. STAB.	STEEL - 2 2/3 X 1/2 CORR. CONCRETE ALUMINUM - 2 2/3 x 1/2 CORR.	CLASS OR THK.	COATING *	LEFT	RIGHT	FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	SPECIAL BACKFILL	CONCRETE - CLASS GENERAL	GEOTEXT. STAB.	HEIGHT OF COVER			
342+30	18	60							18 RCP	CL. 3	NONE	FETS	FETS						1.6			USED FOR CONDUIT
387+91	108	108		105	118		14.0	370	108 CSP Δ	0.138	YES	'2:1 θ	'2:1 θ						4.6	12° LT		CONCRETE CUTOFF WALLS AND EDGE PROTECTION AT INLET AND OUTLET
418+07	24	70							24 RCP	CL. 3	NONE	SSES	SSES						1.2	15° LT		DRAIN
425+88	216	172		285	461		27.9	940	216 SSPP ΔΔ	0.168	YES	2:1 θ	2:1 θ						9.9	12° RT		CONCRETE CUTOFF WALLS AT INLET AND OUTLET, CONCRETE EDGE PROTECTION AT INLET & OUTLET, BACKFILL RETAINER AT OUTLET, SEE DET. DWG., NBI # P00014084+08891
434+52	9' X 5'	78		88	44			307	9' X 5' RCB IRR.		NONE	##	¶						3.2		DBL. 4 X 3 RCP (SEE IRRIGATION STRUCTURES SUMMAR	IRR. CONCRETE CUTOFF WALL AT OUTLET FLAT BOTTOM CONCRETE TRANSITION AT INLET (SEE DETAIL)
461+30	18	170	102	60	75			243	18 SOLID WALL HDPE		NONE	SQ.	SEE DETAIL								18 X 102 CSP	65.7' LT, 12" PRECAST MITERED RCP BEND, FIELD CAST CONCRETE CONNECTION ON INLET, MODIFIED TYPE II DIVISION BOX ON OUTLET, SEE DETAIL
524+60			41																		24 X 41 RCP	
525+00	24	82							24 CSP 24 RCP 24 CAP	0.079 CL. 3 0.075	YES NONE NONE	FETS FETS FETS	FETS FETS FETS						2.8			DRAIN
538+60	36	110		47		23		189	36 CSP 36 RCP 36 CAP	0.079 CL. 2 0.075	YES NONE NONE	FETS FETS FETS	FETS FETS FETS	51 47		26 23		201 189	5.1	15° LT		DRAIN
538+73			41																		24 X 41 RCP	
545+72			51																		24 X 51 CMP	
546+00	36	100		41		21		169	36 CSP 36 RCP 36 CAP	0.079 CL. 2 0.075	YES NONE NONE	FETS FETS FETS	FETS FETS FETS	45 41		23 21		179 169	5.9			DRAIN
561+00	24	158							24 CSP 24 RCP 24 CAP	0.079 CL. 3 0.075	YES NONE NONE	FETS FETS FETS	FETS FETS FETS						10.0	37° LT		DRAIN
561+10			58																		24 X 58 RCP	
567+50	48	114		56		28		218	48 CSP 48 RCP 48 CAP Δ	0.079 CL. 2 0.075	YES NONE NONE	FETS FETS FETS	FETS FETS FETS	62 56		31 28		230 218	6.9			DRAIN
567+52			45																		18 X 45 RCP	
573+53			45																		18 X 45 RCP	
589+70	48 IN EQ DIA	86	89						57 X 38 CSPA 58.5 X 36 RCPA	0.109 CL. 3	YES NONE NONE	FETS FETS FETS	FETS FETS FETS						1.7		24 X 89 CMP	48 IN EQ DIA DR
TOTAL	~	~	472	682	698	72	41.9	2,436	~	~	~	~	~	~	~	~	~	~	~	~	~	

* SEE STANDARD SPEC. SEC. 709.05
\# INCLUDE IN THE COST OF NEW PIPE
30° FLAT TOP WINGWALLS
Δ 3" x 1" CORR.
ΔΔ 6" x 2" CORR.
¶ FLAT BOTTOM TRANSITION STRUCTURE (SEE DETAIL)
θ STEP BEVEL

CULVERTS (INCLUDED IN CULVERT SUMMARY RECAP)

STATION	BASIC BID ITEMS								PIPE OPTIONS in			END SECTIONS		cu. yards				sq. yards	linear feet	CULVERT IN PL. in x ft	REMARKS
	CULVERT PIPE in	linear feet		cu. yards				sq. yards						FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	CONCRETE - CLASS GENERAL	RANDOM RIPRAP	GEOTEXT. STAB.	HEIGHT OF COVER		
		LENGTH OF PIPE	REMOVE PIPE CULVERT	FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	CONCRETE - CLASS GENERAL	RANDOM RIP RAP CLASS 1	GEOTEXT. STAB.	STEEL - 2 2/3 X 1/2 CORR. CONCRETE ALUMINUM - 2 2/3 x 1/2 CORR.	CLASS OR THK.	COATING *	LEFT	RIGHT				CLASS 1				
146+92	24	134	68	27				171	24 RCP	CL. 3	NONE	FETS	FETS	27				171 INCL	9.7	24 X 68 RCP	DRAIN
203+86	66	184	188	64	128	8.6	21	429	66 CSP Δ 60 RCP 66 CAP Δ	0.079 CL. 2 0.075	YES NONE NONE	2:1 θ FETS 2:1 θ	2:1 θ FETS 2:1 θ	71 63	146 128	4.0 8.6	21 21	409 429	17.4	30 X 188 RCP	IRRIGATION
304+00	72 IN EQ DIA	100		40	79	8.6		261	81" S X 59"R CSPA Δ 88" S X 54"R RCPA	0.079 CL. 3	YES NONE	2:1 BEVEL FETS	2:1 BEVEL FETS	45	89	4.2		304	2.9		IRRIGATION - 72 IN EQ DIA 72 IN EQ DIA
370+08	54	142	92	49	99	3.6		326	54 RCP	CL. 2	NONE	FETS	FETS	49	99	3.6		326	7.7	56 X 92 CMP BIT COAT	DRAIN
426+75	48 IN EQ DIA RCPA	212		68				465	58 1/2" S X 36"R RCPA	CL. 3	NONE	FETS	FETS	68				465	11.4		DRAIN - 48 IN EQ DIA
427+66			188																	30 X 188 RCP W/37.5° ELBOW	REMOVE
452+68			80																	24 X 80 RCP	REMOVE
TOTAL	~	~	616	247	305	20.8	21	1,652	~	~	~	~	~	~	~	~	~	~	~	~	

* SEE STANDARD SPEC. SEC. 709.05
Δ 3" x 1" CORR.
θ STEP BEVEL

USE THIS EXAMPLE FOR: SIPHONS

CULVERTS (INCLUDED IN CULVERT SUMMARY RECAP)

STATION	BASIC BID ITEMS							PIPE OPTIONS in			END SECTIONS		cu. yards			sq. yards	linear feet	SKEW ANGLE	CULVERT IN PL. in x ft	REMARKS
	CULVERT PIPE in	linear feet		cu. yards			sq. yards	STEEL - 2 2/3 X 1/2 CORR. CONCRETE ALUMINUM - 2 2/3 x 1/2 CORR.	CLASS OR THK.	COATING *			FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	CONCRETE - CLASS GENERAL	GEOTEXT. STAB.	HEIGHT OF COVER			
		LENGTH OF PIPE	REMOVE PIPE CULVERT	FOUND-ATION MATERIAL	GRANULAR BEDDING MATERIAL	CONCRETE - CLASS GENERAL	GEOTEXT. STAB.				LEFT	RIGHT								
329+22	24 SIPHON	198						24 RCP IRR. SIPHON ***	CL. 3	NONE	##	##					4.9			IRR.
331+95	30 IRR	100	60					30 RCP IRR.	CL. 3	NONE	FETS	FETS					1.9		24 x 60 RCP	IRR.
337+85			113																24 x 113 CMP	REMOVE
338+00	24 SIPHON	162						24 RCP IRR. SIPHON ***	CL. 3	NONE	MOD. TYPE IV DIV. STR.	##					4.0			IRR.
343+18	84	174	116	141	155	11.2	499	84 CSP Δ 84 RCP	0.079 CL. 2	YES NONE	2:1 STEP FETS	2:1 STEP FETS	141	155	11.2	499	10.1	26° RT	84 x 116 CMP	DRAIN
345+16	24	122						24 CSP 24 RCP 24 CAP	0.079 CL. 3 0.075	YES NONE NONE	FETS FETS FETS	FETS FETS FETS					5.9	11° RT		DRAIN
347+15			81																24 x 81 RCP	REMOVE
355+61	24 SIPHON	172						24 RCP IRR. SIPHON ***	CL. 3	NONE	MOD. TYPE III DIV. STR.	##					4.1	20° RT		IRR.
TOTAL	~	~	**370**	**141**	**155**	**11.2**	**499**	~	~	~	~	~	~	~	~	~	~	~	~	

* SEE STANDARD SPEC. SEC. 709.05
Δ 3" x 1" CORR.
*** SEE IRRIGATION STRUCTURES FRAME
CONCRETE TRANSITION