6/21/00

COMPUTED BY: JCL DATE: 10/03/03
CHECKED BY: JDG DATE: 03/25/04

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

PROJECT REFERENCE NO.	SHEET NO.
B-3348	3-A

STATION	LOCATION (LT, RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 12"	15"	18"	24"	30"	36"	42"	48"	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHRWISE) 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL. "B") PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	REMARKS
11+00 -Y1-	C/L	1									40'																											BURY PIPE 1' IN GROUND
12+50 -Y1-	C/L	2									40'																											BURY PIPE 1' IN GROUND
15+50 -Y1-	C/L	3									36'																											BURY PIPE 1' IN GROUND
TOTAL											116'																											

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I. (N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUCTION BOX

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	SHOP CURVED	DOUBLE FACED	WARRANT POINT APPROACH END	TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH APPROACH END	TRAILING END	W APPROACH END	TRAILING END	ANCHORS XI MOD	XI	GRAU 350	TYPE 111 SHOP CURVED STRUCTURE ANCHOR UNIT	TYPE III	AT-1	VI MOD	BIC	CAT-1	IMPACT ATTENUATOR TYPE 350 EA	G	NG	REMARKS
-L-/-Y-	17+15.00 -L-	11+48.00 -Y-	Lt.	62.5'	37.5'		11+00.00 -Y-		5'	8'							1			1							
-Y-/-L-	10+55.00 -Y-	18+09.00 -L-	Lt.				18+09.00 -L-		6'	9'								1		1							SPECIAL BRIDGE ANCHOR UNITS ONLY
-Y1-/-L-	10+55.00 -Y1-	18+09.00 -L-	Rt.				18+09.00 -L-		6'	9'								1		1							SPECIAL BRIDGE ANCHOR UNITS ONLY
-L-	18+59.00	19+34.00	Rt.				18+59.00		6'	9'							1		1								
-L-	18+59.00	21+83.94	Lt.	325'			18+59.00	21+83.94	6'	9'									2								
-L-	19+71.44	21+83.94	Rt.	212.5'			19+71.44	21+83.94	6'	9'							1		1								
-L-	23+86.06	28+73.56	Lt.	487.5'			23+86.06		6'	9'									1								
-L-	23+86.06	25+23.56	Rt.	112.5'			23+86.06	23+86.06	6'	9'							1		1								
		TOTAL		1200'	37.5'												4	2	6	3							
DEDUCTION FOR ANCHOR UNITS																											
	3 AT-1 @ 6.25'			-18.75'																							
	4 GRAU-350 @ 50'			-200'																							
	6 TYPE III @ 18.75'			-112.5'																							
		GRAND TOTAL		868.75'	31.25'												4	2	6	3							
		SAY		900'	37.5'						ADDITIONAL GUARDRAIL POSTS	5 EACH															

SUMMARY OF EARTHWORK (IN CUBIC YARDS)

LOCATION	LOCATION	UNCL EXCAVATION	UNDERCUT	EMBANKMENT +%	BORROW	WASTE
-L- 10+00.00	18+09.00	0	3,005	5,655	5,655	3,005
-Y- 10+13.28	12+10.00	13		85	72	
-Y1- 10+11.23	12+60.00	35	634	1,242	1,207	634
SUBTOTAL		48	3,639	6,982	6,934	3,639
-L- 18+59.00	21+83.94	0	2,171	3,743	3,743	2,171
-DR- 10+13.00	11+40.00	3		268	265	
SUBTOTAL		3	2,171	4,011	4,011	2,171
-L- 23+86.06	31+29.51	5	2,181	3,500	3,495	2,181
SUBTOTAL		5	2,181	3,500	3,495	2,181
TOTAL		56	7,991	14,493	14,437	7,991
WETLAND GRADING		1,934		801		1,133
ADDITIONAL UNDERCUT			500	650	650	500
PROJECT TOTAL		1,990	8,491	15,944	15,087	9,624
DEDUCTION FOR SELECT MATERIAL					-11,038	
5% FOR BORROW PIT					202	
GRAND TOTAL		1,990	8,491	15,944	4,251	9,624
SAY		2,000	8,500		4,300	

NOTE: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing and Grubbing, and Removal of Existing Asphalt Pavement will be paid for at the contract lump sum price for "Grading."

PAVEMENT REMOVAL SUMMARY

STATION	STATION	LOCATION	ASPHALT REMOVAL	ASPHALT BREAKUP	CONCRETE REMOVAL	CONCRETE BREAKUP
12+22.00 -L-	17+50.00 -L-	-LT. -L-	540.6 SY			
10+25.00 -Y-	11+75.00 -Y-	-RT. -Y-	160.5 SY			
18+00.00 -L-	18+14.00 -L-	C/L -L-	77.6 SY			
18+50.00 -L-	22+01.50 -L-	-LT. -L-	604.0 SY			
22+54.60 -L-	28+20.00 -L-	-LT. -L-	743.5 SY			
	TOTAL		2126.2 SY			
	SAY		2130 SY			

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