

SUMMARY OF EARTHWORK

IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	UNDERCUT	EMBANK. + %	BORROW	WASTE
-L- 128 + 50	-L- 135 + 50	178		136		42
-Y- 106 + 00	-Y- 118 + 79.50 (BRIDGE)	997	2,150	19,841	18,844	2,150
-Y- 120 + 59.55 (BRIDGE)	-Y- 133 + 00	854	900	20,573	19,719	900
-Y2- 10 + 50	-Y2- 11 + 00	255		0		255
-Y3- 12 + 00	-Y3- 12 + 50	146		8		138
-Y4- 10 + 50	-Y4- 11 + 50	126		44		82
SUBTOTAL:		2,556	3,050	40,602	38,563	3,567
-RAMP A- 10 + 00	-RAMP A- 17 + 00	650		14,899	14,549	
-RAMP B- 10 + 00	-RAMP B- 19 + 00	862		3,275	2,413	
-RAMP C- 10 + 00	-RAMP C- 19 + 00	741		3,817	3,076	
-RAMP D- 10 + 00	-RAMP D- 21 + 00	382		11,228	10,846	
SUBTOTAL:		2,635	0	33,219	30,884	0
TOTALS:		5,191	3,050	73,821	69,447	3,567
LOSS DUE TO CLEARING & GRUBBING						
EARTH WASTE TO REPLACE BORROW					-517	-517
ADDITIONAL UNDERCUT			1,100	1,320	1,320	1,100
ESTIMATE FOR SHOULDER MATERIAL						
PROJECT TOTALS:		5,191	4,150	73,821	70,250	3,050
EST. 5% TO REPLACE BORROW PIT					3,513	
GRAND TOTALS:					73,762	
SAY:		5,200	4,150		74,000	

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	ASPHALT REMOVAL YD ³
-Y-	113 + 39	115 + 51	RT	392.61
-Y-	116 + 53	118 + 32	RT	385.28
-Y-	120 + 65	122 + 32	RT	222.30
-Y-	123 + 55	124 + 10	RT	23.77
			TOTAL:	1,023.96
			SAY:	1,030

EST. SHALLOW UNDERCUT = 200 CY
EST. SHALLOW UNDERCUT BY STATIONS = 1,280 CY
TOTAL SHALLOW UNDERCUT = 1,480 CY
CLASS IV SUBGRADE STABILIZATION = 2,805 TONS
PER GEOTECH RECOMMENDATION, ESTIMATED 1,100 CY
OF UNDERCUT TO BE USED IN THE DISCRETION OF
THE RESIDENT ENGINEER.

STATION TO STATION	LT. OR RT.	A	B	C	D	E	F
		FABRIC L.F.	END BRACE	CORNER BRACE	LINE BRACE	LINE POSTS	TERMINAL POSTS
-Y- 111+18.16 LT. TO -RAMP A- 15+52.00 RT.	LT	687.99	2	4	6	58.67	12
TOTAL		687.99				58.67	12
SAY		688				59	12

STATION TO STATION	LT. OR RT.	A	B	C	D	E	F
		FABRIC L.F.	END BRACE	CORNER BRACE	LINE BRACE	4" POSTS	5" POSTS
—RAMP D— 18 + 05.48 TO —RAMP D— 20 + 31.46	LT	227.13	2	1	4	6	19
TOTAL		227.13				6	19
SAY		230				6	19

GUARDRAIL SUMMARY

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS										IMPACT ATTENUATOR TYPE 350			REMOVE EXISTING GUARDRAIL	SINGLE FACED CONCRETE BARRIER RAIL		REMARKS		
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TL-3	TYPE-III	CAT-1	TL-2	B-77	TEMP TL-3							NO.					PERMITTED	
																																G	NG
-L-	128 + 60.00	133 + 16.25	RT	456.25			131 + 14.09 (WALL)		VAR.	VAR.	50		1		1		1												166.68				
-L-	130 + 55.00	135 + 30.00	LT	218.75			134 + 70.00	130 + 52.91 (WALL)	VAR.	VAR.	50		1		1		1												165.15				
-L-	128 + 00.00	133 + 55.77	RT	472.88					VAR.	VAR.								2											555.77	83	TIE TO EXISTING GUARDRAIL		
-L-	129 + 98.42	135 + 29.82	LT	448.46					VAR.	VAR.								2											531.40	83	TIE TO EXISTING GUARDRAIL		
-Y--RPA-	114 + 50.00	14 + 25.00	LT	256.25	250.00		14 + 75.00	114 + 62.00	VAR.	VAR.	50		1		1		1																
-Y-	116 + 76.25	118 + 62.07	RT	185.82				118 + 62.07 (BRIDGE)	12	15	50		1			1													312				
-Y-	117 + 17.50	118 + 97.02	LT	179.52			118 + 97.02 (BRIDGE)		12	15						1	1																
-Y-	120 + 77.02	122 + 81.19	LT	179.17	25.00		120 + 77.02 (BRIDGE)		12	15						1	1												322				
-RPD--Y-	15 + 25.00	124 + 27.00	LT	518.75	100.00			123 + 80.00	VAR.	VAR.							1	1															
-RPC-	15 + 25.00	18 + 85.00	RT	360.00			16 + 23.00	18 + 75.00	12	15	50		1		1		1																
			SUBTOTALS	3,275.85	375.00										4	3	7	2	4											2,053	166		
			ANCHOR DEDUCTION	441.50	0																												
			TOTAL	2,834.35	375.00																												
			SAY	2,837.50	387.50																												
TEMPORARY GUARDRAIL																																	
-L-	128 + 00.00	128 + 50.00	RT	50.00				128 + 50.00	VAR.	VAR.	50		1							1											TEMP TL-3 USED WITH EXISTING GUARDRAIL		
-L-	134 + 80.00	135 + 30.00	LT	50.00			134 + 80.00		VAR.	VAR.	50		1							1											TEMP TL-3 USED WITH EXISTING GUARDRAIL		
			SUBTOTALS	100.00																	2												
			ANCHOR DEDUCTION	100.00																													
			TOTAL	0																													
			SAY	0																													