

NOTE: Earthwork Quantities are calculated by the roadway designer. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

STATION	STATION	UNCL. EXCAV.	ROCK	EMBANK. +%	BORROW	WASTE
-L-						
17+84.00	28+83.64	54		38,716	38,662	
-ED-						
11+60.75	12+74.00	70		130	60	
SUBTOTALS:		124		38,846	38,722	
-L-						
30+69.21	42+80	53		73,428	73,375	
SUBTOTALS:		53		73,428	73,375	
-Y1- MED						
22+13.00	31+84.66	632		99		533
-Y1- RT						
22+86.09	24+69.06	134		5		129
SUBTOTALS:		766		104		662
-Y1- MED						
31+84.66	41+00.00	483		76		407
-Y1- LT						
38+91.61	40+69.57	145		0		145
SUBTOTALS:		628		76		552
TOTAL:		1,571		112,454	112,097	1,214
LOSS DUE TO CLEARING & GRUBBING						
WASTE IN LIEU OF BORROW					-3,214	-1,214
SURCHARGE		2,000			2,000	2,000
PROJECT TOTALS:		3,571		112,454	110,883	2,000
EST 5% TO REPLACE TOP SOIL ON BORROW PIT					5,544	
GRAND TOTALS:		3,571		112,454	116,427	2,000
SAY:		4,000			120,000	

EST DDE = 6190 CY

CONTINGENCY ITEMS

UNDERCUT EXCAVATION = 1,500 CY

SELECT GRANULAR MATERIAL = 1,500 CY

GEOTEXTILE FOR SOIL STABILIZATION = 1,500 SY

SHALLOW UNDERCUT = 100 CY

CLASS IV SUBGRADE STABILIZATION = 200 TON

GEOTEXTILE FOR SUBGRADE STABILIZATION = 300 SY

6" PERFORATED SUBDRAIN PIPE = 200 LF

SURVEY LINE	STATION	STATION	LENGTH
-L- LT	28+47.80	28+73.76	25.96'
-L- RT	28+47.80	28+69.52	21.72'
TOTAL:			47.68'
SAY:			48.00'

SURVEY LINE	STATION	STATION	LOCATION LT/ RT/ CL	SY
-Y1-	22+89	24+69	RT	184.94
-Y1-	22+69	28+44	CL	871.45
-Y1-	25+40	37+66	CL	1762.81
-Y1-	30+75	33+18	RT	152.14
-Y1-	30+55	32+78	LT	63.35
-Y1-	34+48	40+69	CL	936.74
-Y1-	38+95	40+66	LT	150.49
			TOTAL:	4,121.91
			SAY:	4,200

SURVEY LINE	STATION	STATION	LOCATION LT/ RT/ CL	SY
-L-	21+75	29+05	CL	2250.55
-L-	30+43	40+80	CL	2842.79
			TOTAL:	5,093.34
			SAY:	5,100

SURVEY LINE	STATION	STATION	47" FABRIC LF	4" POSTS	5" POSTS
-L-	23+62	27+08	360.00	19	12
-L-	32+59	38+00	556.00	32	14
-L-	22+00	26+81	483.00	29	11
-L-	32+15	38+00	585.00	35	12
		TOTAL:	1984	115	49
		SAY:	1990	115	49

SURVEY LINE	STATION	STATION	LENGTH	END ANCHOR UNIT	INTERMEDIATE ANCHOR UNIT	COMMENTS
-Y1-	22+06.77	30+39.58	835'	2		
-Y1-	33+28.79	41+56.61	830'	2		
-Y1-			100'			ADDITIONAL *
SUBTOTAL			1765'	4		
LESS TERMINAL ANCHOR UNITS			100.00'			
SUB TOTAL			1665'			
SAY			1670'	4		
ADDITIONAL GUIDERAIL POSTS			25			

* NOTE: ADDITIONAL CABLE GUIDERAIL QUANTITY INCLUDED TO ALLOW FOR FIELD ADJUSTMENTS TO CLOSE GAPS AS DIRECTED BY THE ENGINEER.

GUARDRAIL SUMMARY

"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

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS										IMPACT ATTENUATOR MASH TL-3			SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
				STRAIGHT	SHOP CURVED	FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END		GREU TL-2	GREU TL-3	B-77	CAT-1	TYPE III	TEMPORARY CRASH CUSHION				EA	G	NG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
-L-	22+82.80	28+80.68	RT	597.875'			25+15.00		6'	9'	50.0'		1.00'					1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

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