

# Earthwork Balance Sheet

Volumes in Cubic Yards

PROJECT: BR-0041

COUNTY: Rockingham

DATE: 2/14/2023

COMPILED BY: AECOM

SHEET 1 OF 1 SHEET

STATION	STATION	EXCAVATION				EMBANKMENT				BORROW	WASTE							
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH		EMBANK. +20%	ROCK	SUITABLE	UNSUIT.	TOTAL			
-L- Sta. 16+00.00	-L- Sta. 33+83.50 (Begin Bridge)	1,213				1,213				4,999		4,999	5,999	4,786		0		0
-RPA- Sta. 12+50.00	-RPA- Sta. 13+51.82	265				265				0		0	0	0		265		265
-RPB- Sta. 15+00.00	-RPB- Sta. 16+31.73	629			270	359				20		20	24	0		335	270	605
-Y1- Sta. 10+24.00	-Y1- Sta. 12+19.22	57				57				18		18	22	0		35		35
		0										0	0	0		0		0
		0										0	0	0		0		0
		0										0	0	0		0		0
	<b>SUBTOTAL</b>	<b>2,164</b>			<b>270</b>	<b>1,894</b>				<b>5,037</b>		<b>5,037</b>	<b>6,044</b>	<b>4,786</b>		<b>635</b>	<b>270</b>	<b>905</b>
-L- Sta. 35+62.50 (End Bridge)	-L- Sta. 42+00.00	868				868				4,024		4,024	4,828	3,960		0		0
-RPC- Sta. 12+20.00	-RPC- Sta. 13+61.19	416				416				4		4	5	0		411		411
-RPD- Sta. 11+70.00	-RPD- Sta. 13+75.65	499				499				39		39	47	0		452		452
		0										0	0	0		0		0
		0										0	0	0		0		0
	<b>SUBTOTAL</b>	<b>1,783</b>				<b>1,783</b>				<b>4,067</b>		<b>4,067</b>	<b>4,880</b>	<b>3,960</b>		<b>863</b>		<b>863</b>
-Y- Sta. 15+00.00	-Y- Sta. 26+00.00	8,487				8,487				739		739	887	0		7,600	0	7,600
-W1- Sta. 00+00.00	-W1- Sta. 00+25.00	0		15								0	0	0		15		15
-W2- Sta. 00+00.0	-W2- Sta. 1+75.00	0		100								0	0	0		100		100
		0										0	0	0				
	<b>SUBTOTAL</b>	<b>8,487</b>		<b>115</b>		<b>8,487</b>				<b>739</b>		<b>739</b>	<b>887</b>	<b>0</b>		<b>7,600</b>	<b>115</b>	<b>7,715</b>
		0										0	0	0				
		0										0	0	0				
		0										0	0	0				
		0										0	0	0				
	<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>				<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>				
		0										0	0	0				
		0										0	0	0				
		0										0	0	0				
	<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>				<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>				
	<b>TOTAL</b>	<b>12,434</b>		<b>115</b>	<b>270</b>	<b>12,164</b>				<b>9,843</b>		<b>9,843</b>	<b>11,811</b>	<b>8,746</b>		<b>9,099</b>	<b>385</b>	<b>9,484</b>
LOSS DUE TO CLEARING & GRUBBING		-1,140				-1,140										-1,140		-1,140
ADDITIONAL UNDERCUT				575				575		575		575	690	690		575		575
MATERIAL FOR SHOULDER CONSTRUCTION								1,650		1,650		1,650	1,980	1,980				
WASTE IN LIEU OF BORROW														-7,959		-7,959		-7,959
<b>PROJECT TOTAL</b>		<b>11,294</b>		<b>690</b>	<b>270</b>	<b>11,024</b>				<b>12,068</b>		<b>12,068</b>	<b>14,481</b>	<b>3,457</b>		<b>0</b>	<b>960</b>	<b>960</b>
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT														173				
<b>GRAND TOTAL</b>		<b>11,294</b>		<b>690</b>	<b>270</b>	<b>11,024</b>				<b>12,068</b>		<b>12,068</b>	<b>14,481</b>	<b>3,630</b>			<b>960</b>	<b>960</b>
SAY		<b>11,300</b>		700										<b>3,700</b>				
Pavement Structure Volume = 8,000 CY																		

DDE = 10 CY

NOTE: THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

CONTINGENCY ITEMS PER NCDOT GEOTECHNICAL REPORT - ROADWAY DESIGN AND CONSTRUCTION RECOMMENDATIONS, DATED APRIL 8, 2022:

SELECT GRANULAR MATERIAL = 340 CY

GEOTEXTILE FOR SOIL STABILIZATION = 3,740 SY

SHALLOW UNDERCUT = 1,110 CY

CLASS IV SUBGRADE STABILIZATION = 2,200 TONS

\*PER GEOTECH RECOMMENDATION, UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3' OF EMBANKMENT OR BACKFILL -L- 18+25 TO 22+75 = 90 CY

BALANCE EARTHWORK CHECK			
TOTAL UNCL. EXC:	11,294	EMB+%:	14,481
UNDERCUT EXC:	690	TOTAL WASTE:	960
BORROW EXC:	3,457		
TOTAL	<b>15,441</b>		<b>15,441</b>