

# Earthwork Balance Sheet

Volumes in Cubic Yards

PROJECT: B-5980

COUNTY: Nash

DATE: 7/1/2019

COMPILED BY: Morgan Foster

SHEET\_1\_OF\_1\_SHEETS

STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE			
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +25%		ROCK	SUITABLE	UNSUIT.	TOTAL
<b>Phase I</b>															
-Y1- 15+00.00	41+72 +/- (BEGIN BRIDGE)	4,541		2,247	3,265	1,276	94,844		94,844	118,555	117,279	0	0	5,512	5,512
-Y1- 44+03 +/- (END BRIDGE)	45+00.00	23				23	4,230		4,230	5,288	5,264	0	0	0	0
-Y2- 10+12.00	13+59.00	56				56	1,194		1,194	1,492	1,436	0	0	0	0
-Y3- 21+28.22	26+38.18	310				310	231		231	289	0	0	21	0	21
-RPA- 23+00.00	31+43.86	168				168	38,748		38,748	48,435	48,268	0	0	0	0
-RPB- 16+50.00	23+60.76	147				147	30,383		30,383	37,979	37,832	0	0	0	0
-RPD- 15+90.00	18+50.00 (20%)	25				25	716		716	896	870	0	0	0	0
-DW1- 10+12.00	12+80.00	53			50	3	1,831		1,831	2,289	2,287	0	0	50	50
	<b>SUBTOTAL</b>	<b>5,323</b>	<b>0</b>	<b>2,247</b>	<b>3,315</b>	<b>2,008</b>	<b>172,179</b>	<b>0</b>	<b>172,179</b>	<b>215,223</b>	<b>213,237</b>	<b>0</b>	<b>21</b>	<b>5,562</b>	<b>5,583</b>
	<b>PHASE I - TOTAL</b>	<b>5,323</b>	<b>0</b>	<b>2,247</b>	<b>3,315</b>	<b>2,008</b>	<b>172,179</b>	<b>0</b>	<b>172,179</b>	<b>215,223</b>	<b>213,216</b>	<b>0</b>	<b>0</b>	<b>5,562</b>	<b>5,562</b>
<b>Phase II</b>															
-RPC DET 10+78.93	14+46.64	37				37	3,780		3,780	4,725	4,688	0	0	0	0
-RPD DET 10+56.17	13+67.94	0				0	1,742		1,742	2,177	2,177	0	0	0	0
-Y1- 45+00.00	52+50.00	1,549			780	769	3,386		3,386	4,232	3,463	0	0	780	780
-Y2- 13+59.00	24+85.00	113			60	53	306		306	383	330	0	0	60	60
-RPC- 14+00.00	21+57.92	181		905		181	2,612		2,612	3,265	3,084	0	0	905	905
Remove 'RPC DET-		2,864				2,864	0		0	0	0	0	2,864	0	2,864
	<b>SUBTOTAL</b>	<b>4,744</b>	<b>0</b>	<b>905</b>	<b>840</b>	<b>3,904</b>	<b>11,825</b>	<b>0</b>	<b>11,825</b>	<b>14,782</b>	<b>13,742</b>	<b>0</b>	<b>2,864</b>	<b>1,745</b>	<b>4,610</b>
	<b>PHASE II - TOTAL</b>	<b>4,744</b>	<b>0</b>	<b>905</b>	<b>840</b>	<b>3,904</b>	<b>11,825</b>	<b>0</b>	<b>11,825</b>	<b>14,782</b>	<b>13,742</b>	<b>0</b>	<b>2,864</b>	<b>1,745</b>	<b>4,610</b>
<b>Phase III</b>															
Remove 'RPD DET-		1,734				1,734	0		0	0	0	0	1,734	0	1,734
-L1- 27+17.92	43+50.00	7,649			4,800	2,849	1,270		1,270	1,587	0	0	1,262	4,800	6,062
-RPB- 14+60.11	16+50.00	726				726	389		389	486	0	0	239	0	239
	<b>SUBTOTAL</b>	<b>10,109</b>	<b>0</b>	<b>0</b>	<b>4,800</b>	<b>5,309</b>	<b>1,659</b>	<b>0</b>	<b>1,659</b>	<b>2,074</b>	<b>0</b>	<b>0</b>	<b>3,235</b>	<b>4,800</b>	<b>8,035</b>
	<b>PHASE III - TOTAL</b>	<b>10,109</b>	<b>0</b>	<b>0</b>	<b>4,800</b>	<b>5,309</b>	<b>1,659</b>	<b>0</b>	<b>1,659</b>	<b>2,074</b>	<b>0</b>	<b>0</b>	<b>3,235</b>	<b>4,800</b>	<b>8,035</b>
<b>Phase IV</b>															
-L- 60+35.90	64+50.07	406				406	35		35	44	0	0	363	0	363
-L1- 50+27.00	54+50.00	5,607				5,607	10,615		10,615	13,269	7,661	0	0	0	0
-RPD- 15+90.00	18+50.00 (80%)	101				101	2,866		2,866	3,582	3,481	0	0	0	0
-RPD- 18+50.00	21+25.00 (100%)	519				519	3,744		3,744	4,679	4,160	0	0	0	0
	<b>SUBTOTAL</b>	<b>6,634</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,634</b>	<b>17,259</b>	<b>0</b>	<b>17,259</b>	<b>21,574</b>	<b>15,301</b>	<b>0</b>	<b>362</b>	<b>0</b>	<b>363</b>
	<b>PHASE IV - TOTAL</b>	<b>6,634</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,634</b>	<b>17,259</b>	<b>0</b>	<b>17,259</b>	<b>21,574</b>	<b>14,939</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>TOTAL</b>	<b>26,810</b>	<b>0</b>	<b>3,153</b>	<b>8,955</b>	<b>17,855</b>	<b>202,922</b>	<b>0</b>	<b>202,922</b>	<b>253,653</b>	<b>241,897</b>	<b>0</b>	<b>6,099</b>	<b>12,107</b>	<b>18,207</b>
ESTIMATED SHOULDER MATERIAL							1,150			1,150	1,150				0
LOSS DUE TO CLEARING & GRUBBING		-10,000				-10,000	0			0	10,000		0		0
ADDITIONAL UNDERCUT				2,000			2,000		2,000	2,500	2,500			2,000	2,000
ROCK WASTE TO REPLACE BORROW								0	0	0	0	0			0
ADJUST FOR ROCK WASTE										0	0				0
WASTE IN LIEU OF BORROW		0					0				-6,099		-6,099		18,207
	<b>PROJECT TOTAL</b>	<b>16,810</b>	<b>0</b>	<b>5,153</b>	<b>8,955</b>	<b>7,855</b>	<b>206,071</b>	<b>0</b>	<b>204,921</b>	<b>257,303</b>	<b>249,448</b>	<b>0</b>	<b>0</b>	<b>14,107</b>	<b>20,207</b>
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT											12,472				
	<b>GRAND TOTAL</b>	<b>16,810</b>	<b>0</b>	<b>5,153</b>	<b>8,955</b>	<b>7,855</b>	<b>206,071</b>	<b>0</b>	<b>204,921</b>	<b>257,303</b>	<b>261,920</b>	<b>0</b>	<b>0</b>	<b>14,107</b>	<b>20,207</b>
		Unclassified Excavation		Undercut							Borrow				
(PART I: B-5980) SAY:		16,900		5,200							262,000				
(PART II: BR-0039) SAY:		320		400							56,000				
(PART III: BR-0036) SAY:		1,475		400							14,900				
<b>GRAND PROJECT TOTALS:</b>		<b>18,695</b>		<b>6,000</b>							<b>332,900</b>				

CONTINGENCY ITEMS PER B-5980 NCDOT GEOTECHNICAL REPORT - DESIGN AND CONSTRUCTION RECOMMENDATIONS, DATED JUNE 11,2019:

EST. DDE = 3,640 CUBIC YARDS

EST. SHALLOW UNDERCUT = 500 CUBIC YARDS

EST. SHALLOW UNDERCUT BY STATIONS = 1200 CUBIC YARDS

TOTAL SHALLOW UNDERCUT = 1700 CUBIC YARDS

EST. UNCLASSIFIED EXCAVATION - ACCEPTABLE (NOT TO BE USED IN THE TOP 3 FEET) BY STATIONS = 290 CUBIC YARDS

CLASS IV SUBGRADE STABILIZATION = 3200 TONS

PER GEOTECH RECOMMENDATION, ESTIMATED 2,000 CUBIC YARDS OF UNDERCUT TO BE USED AT THE DISCRETION OF THE RESIDENT ENGINEER.