

# Earthwork Balance Sheet

Volumes in Cubic Yards

PROJECT: R-5705A NC 55 Bypass

COUNTY: Harnett

DATE: 8/10/2023

COMPILED BY: Kimley-Horn

SHEET 1 OF 5

STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE					
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +25%		ROCK	SUITABLE	UNSUIT.	TOTAL		
SECTION 1 (PHASE I)																	
-L- 21+21.92 (TEMP PVMT)	-L- 26+55.00 (TEMP PVMT)	56				56	387		387	484	428						
<b>SUBTOTAL</b>		<b>56</b>				<b>56</b>	<b>387</b>		<b>387</b>	<b>484</b>	<b>428</b>						
SECTION 2 (PHASE I)																	
-L- 15+58.00 (RT)	-L- 24+50.00 (RT)	2,816			650	2,166	3,143		3,143	3,929	1,763			650		650	
<b>SUBTOTAL</b>		<b>2,816</b>			<b>650</b>	<b>2,166</b>	<b>3,143</b>		<b>3,143</b>	<b>3,929</b>	<b>1,763</b>			<b>650</b>		<b>650</b>	
SECTION 3 (PHASE I)																	
-L- 24+50.00 (RT)	-L- 52+50.00 (RT)	3,990				3,990	24,648		24,648	30,810	26,820						
<b>SUBTOTAL</b>		<b>3,990</b>				<b>3,990</b>	<b>24,648</b>		<b>24,648</b>	<b>30,810</b>	<b>26,820</b>						
SECTION 4 (PHASE I)																	
-L- 52+50.00 (RT)	-L- 82+50.00 (RT)	3,122				3,122	10,842		10,842	13,553	10,431						
-Y2- 10+38.01	-Y2- 13+49.88	310				310	298		298	373	63						
<b>SUBTOTAL</b>		<b>3,432</b>				<b>3,432</b>	<b>11,140</b>		<b>11,140</b>	<b>13,925</b>	<b>10,493</b>						
SECTION 5 (PHASE I)																	
-L- 82+50.00 (RT)	-L- 94+50.00 (RT)	962				962	10,802		10,802	13,503	12,541						
<b>SUBTOTAL</b>		<b>962</b>				<b>962</b>	<b>10,802</b>		<b>10,802</b>	<b>13,503</b>	<b>12,541</b>						
SECTION 6 (PHASE I)																	
-LDET- 94+50.58	-LDET- 100+14.37	664				664	214		214	268				397		397	
<b>SUBTOTAL</b>		<b>664</b>				<b>664</b>	<b>214</b>		<b>214</b>	<b>268</b>				<b>397</b>		<b>397</b>	
SECTION 7 (PHASE I)																	
-L- 106+00.00	-L- 136+00.00	16,128		8,039	2,410	13,718	40,193		40,193	50,241	36,523			10,449		10,449	
POND AT -L- 110+50.00							420		420	525	525						
-Y4- 13+61.00 (LT)	-Y4- 18+42.99 (LT)	727				727	122		122	153				575		575	
-Y4- 19+20.49 (LT)	-Y4- 25+77.00 (LT)	1,423				1,423	6,047		6,047	7,559	6,136						
-Y4A- 19+50.00 (LT)	-Y4A- 20+08.00 (LT)						681		681	851	851						
-Y4B- 15+50.00 (RT)	-Y4B- 17+00.00 (RT)	19				19	36		36	45	26						
-Y5- 19+76.00	-Y5- 22+22.97	108				108	165		165	206	98						
-Y5A- 10+42.91	-Y5A- 13+64.00	68				68	982		982	1,228	1,160						
-Y5DET- 11+69.18	-Y5DET- 12+94.56	9				9	60		60	75	66						
-Y5DET- 14+10.49	-Y5DET- 15+88.94	56				56	163		163	204	148						
<b>SUBTOTAL</b>		<b>18,538</b>		<b>8,039</b>	<b>2,410</b>	<b>16,128</b>	<b>48,869</b>		<b>48,869</b>	<b>61,086</b>	<b>45,533</b>			<b>575</b>	<b>10,449</b>	<b>11,024</b>	
SECTION 8 (PHASE I)																	
-L- 136+00.00	-L- 165+00.00	9,988		10,071	1,680	8,308	47,231		47,231	59,039	50,731			11,751		11,751	
<b>SUBTOTAL</b>		<b>9,988</b>		<b>10,071</b>	<b>1,680</b>	<b>8,308</b>	<b>47,231</b>		<b>47,231</b>	<b>59,039</b>	<b>50,731</b>			<b>11,751</b>		<b>11,751</b>	
<b>SHEET TOTAL</b>		<b>40,446</b>		<b>18,110</b>	<b>4,740</b>	<b>35,706</b>	<b>146,434</b>		<b>146,434</b>	<b>183,044</b>	<b>148,309</b>			<b>972</b>	<b>22,850</b>	<b>23,822</b>	

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PROJECT: R-5705A NC 55 Bypass

COUNTY: Harnett

DATE: 8/10/2023

COMPILED BY: Kimley-Horn

SHEET 2 OF 5

STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE			
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +25%		ROCK	SUITABLE	UNSUIT.	TOTAL
SECTION 9 (PHASE I)															
-Y7DET1- 12+46.51	-Y7DET1- 27+86.59	233				233	519		519	649	416				
-Y7- 23+30.00 (LT)	-Y7- 32+60.28 (LT)	1,294			1,160	134	3,319		3,319	4,149	4,015		1,160	1,160	
-Y7- 33+40.63 (LT)	-Y7- 37+60.00 (LT)	1,142				1,142	226		226	283		860		860	
-Y7A- 46+91.77	-Y7A- 47+90.00	5				5	59		59	74	69				
	<b>SUBTOTAL</b>	2,674			1,160	1,514	4,123		4,123	5,154	4,499		860	1,160	2,020
SECTION 10 (PHASE II)															
-L- 15+58.00 (LT)	-L- 24+50 (LT)	1,311			190	1,121	744		744	930			191	190	381
	<b>SUBTOTAL</b>	1,311			190	1,121	744		744	930			191	190	381
SECTION 11 (PHASE II)															
-L- 24+50.00 (LT)	-L- 52+50.00 (LT)	4,509				4,509	801		801	1,001			3,508		3,508
-Y1- 10+50.00	-Y1- 14+50.00	224				224	192		192	240	16				
	<b>SUBTOTAL</b>	4,733				4,733	993		993	1,241	16		3,508		3,508
SECTION 12 (PHASE II)															
-L- 52+50.00 (LT)	-L- 82+50.00 (LT)	3,727			80	3,647	1,626		1,626	2,033			1,615	80	1,695
	<b>SUBTOTAL</b>	3,727			80	3,647	1,626		1,626	2,033			1,615	80	1,695
SECTION 13 (PHASE II)															
-L- 82+50.00 (LT)	-L- 94+50.00 (LT)	1,164				1,164	1,913		1,913	2,391	1,227				
-Y3- 10+88.00	-Y3- 13+36.74	240				240	419		419	524	284				
	<b>SUBTOTAL</b>	1,404				1,404	2,332		2,332	2,915	1,511				
SECTION 14 (PHASE II)															
-L- 94+50.00	-L- 100+00.00	2,110				2,110	810		810	1,013			1,098		1,098
-Y4B- TURN 10+02.00	-Y4B- TURN 11+10.00	64				64							64		64
	<b>SUBTOTAL</b>	2,174				2,174	810		810	1,013			1,162		1,162
SECTION 15 (PHASE II)															
-L- 100+00.00	-L- 106+00.00	7,012		3,201	750	6,262	3,636		3,636	4,545			1,717	3,951	5,668
	<b>SUBTOTAL</b>	7,012		3,201	750	6,262	3,636		3,636	4,545			1,717	3,951	5,668
SECTION 16 (PHASE II)															
-L- 165+00.00	-L- 181+00.00	5,078		1,752	1,360	3,718	29,111		29,111	36,389	32,671			3,112	3,112
POND AT -L- 180+50.00															
-Y6- 13+41.00	-Y6- 16+16.60	58				58	1,305		1,305	1,631	1,573				
-Y6- 16+95.86	-Y6- 22+44.00	854				854	129		129	161		693		693	
-Y6A- 10+12.69	-Y6A- 11+17.00	81				81	2		2	3		79		79	
-DRW2- 10+43.00	-DRW2- 12+00.00	15				15	507		507	634	619				
	<b>SUBTOTAL</b>	6,086		1,752	1,360	4,726	32,084		32,084	40,105	36,150		771	3,112	3,883
	<b>SHEET TOTAL</b>	29,121		4,953	3,540	25,581	46,348		46,348	57,936	42,176		9,824	8,493	18,317

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SHEET 3 OF 5

STATION	STATION	EXCAVATION				EMBANKMENT				BORROW	WASTE				
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH		EMBANK. +25%	ROCK	SUITABLE	UNSUIT.	TOTAL
SECTION 17 (PHASE II)															
-L- 184+00.00	-L- 198+50.00	21,055		3,142	4,800	16,255	22,243		22,243	27,804	11,549			7,942	7,942
POND AT -L- 197+00.00							3,100		3,100	3,875	3,875				
-DRW5- 10+43.00	-DRW5- 11+07.00	313				313							313		313
-DRW7- 10+43.00	-DRW7- 11+45.00	32				32	281		281	351	319				
<b>SUBTOTAL</b>		<b>21,400</b>		<b>3,142</b>	<b>4,800</b>	<b>16,600</b>	<b>25,624</b>		<b>25,624</b>	<b>32,030</b>	<b>15,743</b>		<b>313</b>	<b>7,942</b>	<b>8,255</b>
SECTION 18 (PHASE II)															
-L- 198+50.00	-L- 233+00.00	19,939		5,175	5,360	14,579	73,257		73,257	91,571	76,992			10,535	10,535
-Y7- 25+50.00 (RT)	-Y7- 37+60.00 (RT)	40				40	4,373		4,373	5,466	5,426				
-Y7C- 13+73.45	-Y7C- 16+50.00	473				473	45		45	56			417		417
-Y7C- TURN 19+84.00	-Y7C- TURN 20+84.00	18				18	16		16	20	2				
-Y7D- 13+30.00	-Y7D- 19+66.00	5,517				5,517	130		130	163			5,355		5,355
-DRW8- 10+28.00	-DRW8- 10+75.00	8				8	90		90	113	105				
-DRW10- 10+22.00	-DRW10- 10+85.00	9				9	74		74	93	84				
<b>SUBTOTAL</b>		<b>26,004</b>		<b>5,175</b>	<b>5,360</b>	<b>20,644</b>	<b>77,985</b>		<b>77,985</b>	<b>97,481</b>	<b>82,609</b>		<b>5,771</b>	<b>10,535</b>	<b>16,306</b>
SECTION 19 (PHASE II)															
-L- 233+00.00	-L- 246+00.00	7,282		3,432	1,820	5,462	15,139		15,139	18,924	13,462			5,252	5,252
<b>SUBTOTAL</b>		<b>7,282</b>		<b>3,432</b>	<b>1,820</b>	<b>5,462</b>	<b>15,139</b>		<b>15,139</b>	<b>18,924</b>	<b>13,462</b>			<b>5,252</b>	<b>5,252</b>
SECTION 20 (PHASE III)															
-L- 94+50.00	-L- 103+50.00	634				634	380		380	475			159		159
<b>SUBTOTAL</b>		<b>634</b>				<b>634</b>	<b>380</b>		<b>380</b>	<b>475</b>			<b>159</b>		<b>159</b>
SECTION 21 (PHASE III)															
-L- 172+00.00	-L- 181+00.00	2,240				2,240	8,799		8,799	10,999	8,759				
-Y6A- TURN 16+66.00	-Y6A- TURN 18+19.00	38				38	20		20	25			13		13
-DRW3- 10+43.00	-DRW3- 12+38.00	100				100	242		242	303	203				
-DRW4- 10+43.00	-DRW4- 11+26.90	164				164	1		1	1			163		163
<b>SUBTOTAL</b>		<b>2,542</b>				<b>2,542</b>	<b>9,062</b>		<b>9,062</b>	<b>11,328</b>	<b>8,961</b>		<b>176</b>		<b>176</b>
SECTION 22 (PHASE III)															
-L- 181+00.00	-L- 193+50.00	1,614				1,614	5,632		5,632	7,040	5,426				
-Y7B- TURN 18+00.00	-Y7B- TURN 19+00.00	36				36	16		16	20			16		16
<b>SUBTOTAL</b>		<b>1,650</b>				<b>1,650</b>	<b>5,648</b>		<b>5,648</b>	<b>7,060</b>	<b>5,426</b>		<b>16</b>		<b>16</b>
<b>SHEET TOTAL</b>		<b>59,512</b>		<b>11,749</b>	<b>11,980</b>	<b>47,532</b>	<b>133,838</b>		<b>133,838</b>	<b>167,298</b>	<b>126,201</b>		<b>6,435</b>	<b>23,729</b>	<b>30,164</b>

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SHEET 4 OF 5

STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE				
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +25%		ROCK	SUITABLE	UNSUIT.	TOTAL	
SECTION 23 (PHASE III)																
-Y4- 13+61.00 (RT)	-Y4- 15+00.00 (RT)	20				20	10		10	13				8		8
-Y4- 23+00.00 (RT)	-Y4- 25+77.00 (RT)	7				7	425		425	531	524					
-Y4A- 17+50.00 (RT)	-Y4A- 19+50.00 (RT)						366		366	458	458					
-Y4A- TURN 11+40.00	-Y4A- TURN 12+90.74	72				72	20		20	25				47		47
-Y4B- 15+50.00 (LT)	-Y4B- 16+50.00 (LT)	34				34								34		34
<b>SUBTOTAL</b>		<b>133</b>				<b>133</b>	<b>821</b>		<b>821</b>	<b>1,026</b>	<b>982</b>			<b>89</b>		<b>89</b>
SECTION 24 (PHASE III)																
-Y5- 21+00.00	-Y5- 21+78.82	28				28	1		1	1				27		27
-Y5B- TURN 12+15.00	-Y5B- TURN 13+19.00	75				75								75		75
<b>SUBTOTAL</b>		<b>103</b>				<b>103</b>	<b>1</b>		<b>1</b>	<b>1</b>				<b>102</b>		<b>102</b>
SECTION 25 (PHASE IV)																
-Y5- 21+00.00 (LT)	-Y5- 22+00.00 (LT)	48				48								48		48
-Y5A- 10+50.00 (RT)	-Y5A- 12+00.00 (RT)	91				91								91		91
<b>SUBTOTAL</b>		<b>139</b>				<b>139</b>								<b>139</b>		<b>139</b>
SECTION 26 (PHASE IV)																
-Y7- 23+30.00 (LT)	-Y7- 24+50.00 (LT)	125				125								125		125
<b>SUBTOTAL</b>		<b>125</b>				<b>125</b>								<b>125</b>		<b>125</b>
<b>SHEET TOTAL</b>		<b>500</b>				<b>500</b>	<b>822</b>		<b>822</b>	<b>1,027</b>	<b>982</b>			<b>455</b>		<b>455</b>

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SHEET 5 OF 5

STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE			
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +25%		ROCK	SUITABLE	UNSUIT.	TOTAL
	TOTAL FROM SHEET 1	40,446		18,110	4,740	35,706	146,434		146,434	183,044	148,309		972	22,850	23,822
	TOTAL FROM SHEET 2	29,121		4,953	3,540	25,581	46,348		46,348	57,936	42,176		9,824	8,493	18,317
	TOTAL FROM SHEET 3	59,512		11,749	11,980	47,532	133,838		133,838	167,298	126,201		6,435	23,729	30,164
	TOTAL FROM SHEET 4	500				500	822		822	1,027	982		455		455
	<b>TOTAL</b>	129,579		34,812	20,260	109,319	327,442		327,442	409,305	317,668		17,686	55,072	72,758
	MATERIAL FOR SHOULDER CONSTRUCTION						13,150		13,150	16,438	16,438				
	LOSS DUE TO CLEARING & GRUBBING	-12,000				-12,000					12,000				
	ADDITIONAL UNDERCUT FROM GEOTECH RECS			2,250			2,250		2,250	2,813	2,813		2,250	2,250	
	SELECT GRANULAR MATERIAL IN LIEU OF BORROW						-47,000		-47,000	-58,750	-58,750				
	WASTE IN LIEU OF BORROW										-17,686		-17,686	-17,686	
	<b>PROJECT TOTAL</b>	117,579		37,062	20,260	97,319	295,842		295,842	369,805	272,482			57,322	57,322
	EST. 5% TO REPLACE TOP SOIL ON BORROW PIT										13,624				
	<b>GRAND TOTAL</b>	117,579		37,062	20,260	97,319	295,842		295,842	369,805	286,106			57,322	57,322
	<b>SAY</b>	118,000		37,500							286,500				
EST. DDE = 3390 CUBIC YARDS															
EST. SHALLOW UNDERCUT = 1,120 CUBIC YARDS															
PAVEMENT STRUCTURE VOLUME = 6,600 SQUARE YARDS															
*ACCEPTABLE UNCLASSIFIED EXCAVATION NOT TO BE USED IN TOP 3FT OF EMBANKMENT OR BACKFILL = 7,100 CUBIC YARDS															
*-L- STA 70+25 TO 72+25, -L- STA 143+25 TO 146+75, -L- STA 185+25 TO 190+75, -L- STA 242+75 TO 246+00, -Y7- STA 33+75 TO 35+75															

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