

EARTHWORK BALANCE SHEET

Volumes in Cubic Yards

PROJECT: **R-5705B**

COUNTY: **Harnett**

DATE: **8/4/2022**

COMPILED BY: **DBE**

SHEET **__** OF **__** SHEETS

| STATION | STATION | EXCAVATION | | | | EMBANKMENT | | | | BORROW | WASTE | | | | |
|---------------------|----------------------------------|----------------|------|----------|------------------|-------------------|---------|------|---------|---------|--------------|-------|----------|---------|--------|
| | | TOTAL UNCLASS. | ROCK | UNDERCUT | UNSUIT. UNCLASS. | SUITABLE UNCLASS. | TOTAL | ROCK | EARTH | | EMBANK. +25% | ROCK | SUITABLE | UNSUIT. | TOTAL |
| 245+70.00 -L- | 274+00.00 -L- | 17,301 | | 8,743 | 11,108 | 6,193 | 34,041 | | 34,041 | 42,551 | 36,358 | | | 19,851 | 19,851 |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 17,301 | | 8,743 | 11,108 | 6,193 | 34,041 | | 34,041 | 42,551 | 36,358 | | | 19,851 | 19,851 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | | | | | |
| | SUMMARY AREA 1 - SUBTOTAL | 17,301 | | 8,743 | 11,108 | 6,193 | 34,041 | | 34,041 | 42,551 | 36,358 | | | 19,851 | 19,851 |
| 274+00.00 -L- | 303+00.00 -L- | 15,347 | | 3,912 | 12,129 | 3,218 | 164,085 | | 164,085 | 205,106 | 201,888 | | | 16,041 | 16,041 |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 15,347 | | 3,912 | 12,129 | 3,218 | 164,085 | | 164,085 | 205,106 | 201,888 | | | 16,041 | 16,041 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | | | | | |
| | SUMMARY AREA 2 - SUBTOTAL | 15,347 | | 3,912 | 12,129 | 3,218 | 164,085 | | 164,085 | 205,106 | 201,888 | | | 16,041 | 16,041 |
| 303+00.00 -L- | 313+25.00 -L- | 33,765 | | | | 33,765 | 21,536 | | 21,536 | 26,920 | | | 6,845 | | 6,845 |
| 12+25.00 -Y6- | 14+94.81 -Y6- | 177 | | | | 177 | 1,166 | | 1,166 | 1,458 | 1,281 | | | | |
| 15+85.18 -Y6- | 18+00.00 -Y6- | 1,160 | | | | 1,160 | 46 | | 46 | 58 | | | 1,103 | | 1,103 |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 35,102 | | | | 35,102 | 22,748 | | 22,748 | 28,436 | 1,281 | | 7,948 | | 7,948 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | -1,281 | | | | |
| | SUMMARY AREA 3 - SUBTOTAL | 35,102 | | | | 35,102 | 22,748 | | 22,748 | 28,436 | | | 6,667 | | 6,667 |
| 313+25.00 -L- | 332+50.00 -L- | 37,965 | | 1,968 | 1,862 | 36,103 | 54,405 | | 54,405 | 68,006 | 31,903 | | | 3,830 | 3,830 |
| 11+25.00 -Y7- | 12+76.80 -Y7- | 979 | | | | 979 | 65 | | 65 | 81 | | | 898 | | 898 |
| 13+55.18 -Y7- | 15+00.00 -Y7- | 524 | | | 524 | | 47 | | 47 | 59 | 59 | | | 524 | 524 |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 39,468 | | 1,968 | 2,386 | 37,082 | 54,517 | | 54,517 | 68,146 | 31,962 | | 898 | 4,354 | 5,252 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | -898 | | | | |
| | SUMMARY AREA 4 - SUBTOTAL | 39,468 | | 1,968 | 2,386 | 37,082 | 54,517 | | 54,517 | 68,146 | 31,064 | | | 4,354 | 4,354 |
| 332+50.00 -L- | 362+00.00 -L- | 25,806 | | 14,074 | 23,201 | 2,605 | 63,097 | | 63,097 | 78,871 | 76,266 | | | 37,275 | 37,275 |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 25,806 | | 14,074 | 23,201 | 2,605 | 63,097 | | 63,097 | 78,871 | 76,266 | | | 37,275 | 37,275 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | | | | | |
| | SUMMARY AREA 5 - SUBTOTAL | 25,806 | | 14,074 | 23,201 | 2,605 | 63,097 | | 63,097 | 78,871 | 76,266 | | | 37,275 | 37,275 |
| 362+00.00 -L- | 390+50.00 -L- | 6,066 | | 10,531 | 4,599 | 1,467 | 51,214 | | 51,214 | 64,018 | 62,551 | | | 15,130 | 15,130 |
| 10+43.50 -Y8- | 22+38.00 -Y8- | 601 | | | 598 | 3 | 8,241 | | 8,241 | 10,301 | 10,298 | | | 598 | 598 |
| 10+20.75 -Y22- | 17+74.03 -Y22- | 103 | | | | 103 | 1,995 | | 1,995 | 2,494 | 2,391 | | | | |
| 10+15.00 -Y23- | 12+33.87 -Y23- | 243 | | | | 243 | 94 | | 94 | 118 | | | 126 | | 126 |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 7,013 | | 10,531 | 5,197 | 1,816 | 61,544 | | 61,544 | 76,931 | 75,240 | | 126 | 15,728 | 15,854 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | -126 | | | | |
| | SUMMARY AREA 6 - SUBTOTAL | 7,013 | | 10,531 | 5,197 | 1,816 | 61,544 | | 61,544 | 76,931 | 75,115 | | | 15,728 | 15,728 |
| 390+50.00 -L- RT | 400+00.00 -L- RT | 138 | | 116 | 7 | 131 | 3,682 | | 3,682 | 4,603 | 4,472 | | | 123 | 123 |
| 400+00.00 -L- RT | 415+34.21 -L- RT | 166 | | | 58 | 109 | 4,744 | | 4,744 | 5,930 | 5,821 | | | 58 | 58 |
| 415+42.21 -L- RT | 440+00.00 -L- RT | 7,202 | | | 5,426 | 1,776 | 1,186 | | 1,186 | 1,483 | | 294 | 5,426 | 5,720 | |
| 440+00.00 -L- RT | 459+00.00 -L- RT | 232 | | | 61 | 171 | 2,315 | | 2,315 | 2,894 | 2,723 | | | 61 | 61 |
| 10+50.76 -Y20- | 11+48.00 -Y20- | 7 | | | | 7 | 171 | | 171 | 214 | 207 | | | | |
| 12+53.44 -Y9- | 15+25.00 -Y9- | 5 | | | 2 | 3 | 301 | | 301 | 376 | 373 | | | 2 | 2 |
| 10+37.50 -L- DRV 2- | 12+17.98 -L- DRV 2- | 35 | | | | 35 | 353 | | 353 | 441 | 406 | | | | |
| 10+49.63 -Y12 REV- | 19+47.59 -Y12 REV- | 2,594 | | | | 2,594 | 1,620 | | 1,620 | 2,025 | | 569 | | 569 | |
| 10+11.00 -Y12A REV- | 11+88.00 -Y12A REV- | 28 | | | | 28 | 31 | | 31 | 39 | 11 | | | | |
| 11+25.00 -Y14- | 12+32.84 -Y14- | 31 | | | 28 | 3 | 30 | | 30 | 38 | 35 | | | 28 | 28 |
| 12+67.78 -LDETNB- | 37+33.51 -LDETNB- | 2,649 | | | | 2,649 | 251 | | 251 | 314 | | 2,335 | | | |
| | | | | | | | | | | | | | | | |
| | SUBTOTAL | 13,087 | | 116 | 5,582 | 7,506 | 14,684 | | 14,684 | 18,357 | 14,048 | | 3,198 | 5,698 | 6,561 |
| | WASTE IN LIEU OF BORROW | | | | | | | | | | -3,198 | | | | |
| | SUMMARY AREA 7 - SUBTOTAL | 13,087 | | 116 | 5,582 | 7,506 | 14,684 | | 14,684 | 18,357 | 10,850 | | | 5,698 | 3,363 |

| STATION | STATION | EXCAVATION | | | | | EMBANKMENT | | | | BORROW | WASTE | | | |
|---|------------------|----------------|------|----------|------------------|-------------------|------------|------|---------|--------------|---------|-------|----------|---------|---------|
| | | TOTAL UNCLASS. | ROCK | UNDERCUT | UNSUIT. UNCLASS. | SUITABLE UNCLASS. | TOTAL | ROCK | EARTH | EMBANK. +25% | | ROCK | SUITABLE | UNSUIT. | TOTAL |
| 390+50.00 -L- LT | 400+00.00 -L- LT | 125 | | 155 | 15 | 110 | 626 | | 626 | 783 | 673 | | | 170 | 170 |
| 400+00.00 -L- LT | 415+34.21 -L- LT | 75 | | | 24 | 51 | 1,801 | | 1,801 | 2,251 | 2,200 | | | 24 | 24 |
| 415+42.21 -L- LT | 440+00.00 -L- LT | 2,383 | | | | 2,383 | 2,781 | | 2,781 | 3,476 | 1,093 | | | | |
| 440+00.00 -L- LT | 459+00.00 -L- LT | 2,142 | | | 1,029 | 1,113 | 3,495 | | 3,495 | 4,369 | 3,256 | | | 1,029 | 1,029 |
| 11+00.00 -Y19- | 11+62.11 -Y19- | 49 | | | | 49 | 27 | | 27 | 34 | | | 15 | | |
| 10+20.00 -Y9- | 11+77.58 -Y9- | 113 | | | 113 | | 44 | | 44 | 55 | 55 | | | 113 | 113 |
| 14+50.00 -Y10- | 15+02.10 -Y10- | 5 | | | | 5 | 92 | | 92 | 115 | 110 | | | | |
| 13+50.00 -Y11- | 14+50.59 -Y11- | 61 | | | | 61 | 71 | | 71 | 89 | 28 | | | | |
| 10+40.00 -Y13- | 12+72.43 -Y13- | 56 | | | | 56 | 215 | | 215 | 269 | 213 | | | | |
| 10+10.98 -Y13A- | 11+00.00 -Y13A- | 9 | | | | 9 | 41 | | 41 | 51 | 42 | | | | |
| 11+50.00 -Y15- | 12+37.50 -Y15- | 90 | | | | 90 | 15 | | 15 | 19 | | | 71 | | 71 |
| 10+05.00 -Y21- | 10+62.50 -Y21- | 23 | | | | 23 | 21 | | 21 | 26 | 3 | | | | |
| 10+37.71 -Y16- | 11+25.00 -Y16- | 1 | | | | 1 | 24 | | 24 | 30 | 29 | | | | |
| 10+75.00 -Y17- | 13+06.60 -Y17- | 71 | | | | 71 | 54 | | 54 | 68 | | | 4 | | 4 |
| SUBTOTAL | | 5,203 | | 155 | 1,181 | 4,022 | 9,307 | | 9,307 | 11,635 | 7,702 | | 90 | 1,336 | 1,411 |
| WASTE IN LIEU OF BORROW | | | | | | | | | | | -90 | | | | |
| SUMMARY AREA 8 - SUBTOTAL | | 5,203 | | 155 | 1,181 | 4,022 | 9,307 | | 9,307 | 11,635 | 7,612 | | | 1,336 | 1,321 |
| 459+00.00 -L- RT | 485+57.00 -L- RT | 2,734 | | 1,527 | 694 | 2,040 | 23,959 | | 23,959 | 29,949 | 27,909 | | | 2,221 | 2,221 |
| SUBTOTAL | | 2,735 | | 1,527 | 694 | 2,040 | 23,985 | | 23,959 | 29,949 | 27,909 | | | 2,221 | 2,221 |
| WASTE IN LIEU OF BORROW | | | | | | | | | | | | | | | |
| SUMMARY AREA 9 - SUBTOTAL | | 2,735 | | 1,527 | 694 | 2,040 | 23,985 | | 23,959 | 29,949 | 27,909 | | | 2,221 | 2,221 |
| 459+00.00 -L- LT | 485+57.00 -L- LT | 67,574 | | 1,371 | 3,514 | 64,060 | 1,366 | | 1,366 | 1,708 | | | 62,353 | 4,885 | 67,238 |
| SUBTOTAL | | 67,574 | | 1,371 | 3,514 | 64,060 | 1,366 | | 1,366 | 1,708 | | | 62,353 | 4,885 | 67,238 |
| WASTE IN LIEU OF BORROW | | | | | | | | | | | | | | | |
| SUMMARY AREA 10 - SUBTOTAL | | 67,574 | | 1,371 | 3,514 | 64,060 | 1,366 | | 1,366 | 1,708 | | | 62,353 | 4,885 | 67,238 |
| SUBTOTAL | | | | | | | | | | | | | | | |
| WASTE IN LIEU OF BORROW | | | | | | | | | | | | | | | |
| SUMMARY AREA - SUBTOTAL | | | | | | | | | | | | | | | |
| TOTAL AREAS 1-10 | | 228,636 | | 42,397 | 64,992 | 163,644 | 449,374 | | 449,348 | 561,690 | 467,062 | | 69,019 | 107,389 | 174,058 |
| MATERIAL FOR SHOULDER CONSTRUCTION | | | | | | | 6,860 | | 6,860 | 8,575 | 8,575 | | | | |
| LOSS DUE TO CLEARING & GRUBBING | | -9,800 | | | | -9,800 | | | | | 9,800 | | | | |
| ADDITIONAL UNDERCUT | | | | 3,700 | | | 3,700 | | 3,700 | 4,625 | 4,625 | | 3,700 | 3,700 | |
| GRADE POINT UNDERCUT | | | | 1,600 | | | 1,600 | | 1,600 | 2,000 | 2,000 | | 1,600 | 1,600 | |
| SELECT GRANULAR IN LIEU OF BORROW | | | | | | | -52,900 | | -52,900 | -66,125 | -66,125 | | | | |
| WASTE IN LIEU OF BORROW | | | | | | | | | | | | | -69,019 | | -69,019 |
| PROJECT TOTAL | | 218,836 | | 47,697 | 64,992 | 153,844 | 408,634 | | 408,608 | 510,765 | 425,937 | | | 112,689 | 110,339 |
| EST. 5% TO REPLACE TOP SOIL ON BORROW PIT | | | | | | | | | | | 21,297 | | | | |
| GRAND TOTAL | | 218,836 | | 47,697 | 64,992 | 153,844 | 408,634 | | 408,608 | 510,765 | 447,234 | | | 112,689 | 110,339 |
| SAY | | 221,100 | | 48,200 | | | | | | | 451,800 | | | | |

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

-L- PAVEMENT STRUCTURE VOLUME = 24,883 CY
ESTIMATED DDE = 5,410 CY

THE FOLLOWING QUANTITIES ARE PER THE "GEOTECHNICAL REPORT - ROADWAY DESIGN AND CONSTRUCTION RECOMMENDATIONS" LETTER DATED NOVEMBER 17, 2021

ESTIMATED UNCLASSIFIED EXCAVATION ACCEPTABLE BUT NOT TO BE USED IN THE TOP 3 FT OF EMBANKMENT OR BACKFILL = 34,300 CY

-L- 350+75 TO 356+75 (LT & RT), 'L- 454+25 TO 456+75 (LT & RT), 'L- 462+75 TO 472+25 (LT & RT),