Earthwork Balance Sheet

Volumes in Cubic Yards

PROJECT: HB-0002   COUNTY: Haywood   DATE: 3/13/2024   COMPILED BY: J. HEFNER

STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE			
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +15%		ROCK	SUITABLE	UNSUIT.	TOTAL
PHASE 1 (DET-WBL, Y2, & Y3)															
-L- 303+00.00 LT	-L- 316+00.00 LT	16,350				16,350	15,962		15,962	18,356	2,006				
-L- 316+00.00 LT	-L- 331+50.00 LT	641				641	17,614		17,614	20,256	19,615				
-Y2- 10+26.00	-Y2- 18+00.00	127				127	322		322	370	243				
-Y3- 23+00.00	-Y3- 26+85.00	44				44	1,677		1,677	1,929	1,885				
Stage 1 Culvert Surcharge Placement							5,339		5,339	6,140	6,140				
Stage 1 Culvert Surcharge Removal		6,140				6,140							6,140		6,140
	SUBTOTAL	23,302				23,302	40,914		40,914	47,051	29,889		6,140		6,140
PHASE 2 (DET-EBL)															
-L- 307+00.00	-L- 316+00.00	43				43	1,887		1,887	2,170	2,127				
-L- 316+00.00	-L- 328+00.00	208				208	3,975		3,975	4,571	4,363				
Stage 2 Culvert Surcharge Placement							5,043		5,043	5,800	5,800				
Stage 2 Culvert Surcharge Removal		5,800				5,800							5,800		5,800
	SUBTOTAL	6,051				6,051	10,905		10,905	12,541	12,290		5,800		5,800
PHASE 3 (-L- RT)															
-L- 303+00.00	-L- 316+50.00	482				482	10,542		10,542	12,123	11,641				
-L- 316+50.00	-L- 331+50.00	970				970	7,859		7,859	9,038	8,068				
-Y1- 7+00.00	-Y1- 12+78.00	90				90	285		285	328	238				
Stage 3 Culvert Surcharge Placement							7,043		7,043	8,100	8,100				
Stage 3 Culvert Surcharge Removal		8,100				8,100							8,100		8,100
	SUBTOTAL	9,642				9,642	25,729		25,729	29,589	28,047		8,100		8,100
PHASE 4 (-L- MEDIAN)															
-L- 306+50.00	-L- 316+00.00	218				218							218		218
-L-316+00.00	-L- 328+00.00	1,481				1,481	33		33	38			1,443		1,443
	SUBTOTAL	1,699				1,699	33		33	38			1,661		1,661
PHASE 5 (-L- LT)															
-L- 307+50.00	-L- 316+00.00	1,084				1,084							1,084		1,084
-L-316+00.00	-L- 325+50.00	1,033				1,033							1,033		1,033
	SUBTOTAL	2,117				2,117							2,117		2,117
	TOTAL	42,811				42,811	77,581		77,581	89,219	70,226		23,818		23,818
MATERIAL FOR SHOULDER CONSTRUCTION							4,773		4,773	5,489	5,489				
WASTE IN LIEU OF BORROW											-19,947		-19,947		-19,947
PROJECT TOTAL		42,811				42,811	82,354		82,354	94,708	55,768		3,871		3,871
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT											2,788				
GRAND TOTAL		42,811				42,811	82,354		82,354	94,708	58,556		3,871		3,871
SAY		45,000									62,000				

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.

PAVEMENT STRUCTURE VOLUME = 16,441 CUBIC YARDS

EST. DDE = 1,550 CUBIC YARDS

EST. SHALLOW UNDERCUT = 100 CUBIC YARDS

EST.SHALLOW UNDERCUT BY STATIONS = 0 CUBIC YARDS

TOTAL SHALLOW UNDERCUT = 100 CUBIC YARDS

CLASS IV SUBGRADE STABILIZATION = 200 TONS

PER GEOTECH RECOMMENDATION, EST. 450 CUBIC YARDS OF UNDERCUT TO BE USED IN THE DISCRETION OF THE RESIDENT ENGINEER.

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Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_L_Phase-1.inp
Output File: EW_L_Phase-1.log
 1      1       1
 1      2       2
 1      3       3 Earthwork
 1      4       4
 1      5       5 tolerance = 0.004
 1      6       6
 1      7       7 xs dgn = HB0002_rdy_xsc_L_phase-1.dgn
 1      8       8
 1      9       9 Proposed Finish Grade
 1     10      10 soil type = Suitable
 1     11      11 fill mult factor = 1.000000
 1     12      12 type = line, line_string
 1     13      13 lvname = Prop CMT Conc Surface
 1     14      14 lvname = Prop CMT Pvmt Surface*
 1     15      15 lvname = Prop CMT Slope Grass
 1     16      16 lvname = Prop CMT Shear Line
 1     17      17 lvname = Scratch_Level_8
 1     18      18 lvname = Prop CMT Concrete Wall Surface
 1     19      19
 1     20      20 Existing Ground Line
 1     21      21 soil type = Suitable
 1     22      22 type = line, line_string
 1     23      23 lvname = Exist XS Ground Line
 1     24      24
 1     25      25 existing suitable material
 1     26      26 soil type = Suitable
 1     27      27 fill mult factor = 1.00
 1     28      28 type = line, line_string
 1     29      29 lvname = WEI XS Soil-Suitable
 1     30      30
 1     31      31 existing suitable material
 1     32      32 soil type = Unsuitable
 1     33      33 fill mult factor = 1.00
 1     34      34 type = line, line_string
 1     35      35 lvname = WEI XS Soil-Unsuitable
 1     36      36
 1     37      37 existing suitable material
 1     38      38 soil type = UnsuitableMarginal
 1     39      39 fill mult factor = 1.00
 1     40      40 type = line, line_string
 1     41      41 lvname = WEI XS Soil-UnsuitableMarginal
 1     42      42
 1     43      43 existing suitable material
 1     44      44 soil type = DDE
 1     45      45 fill mult factor = 1.00
 1     46      46 type = line, line_string
 1     47      47 lvname = WEI XS Soil-DDE
 1     48      48
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1     49      49 existing suitable material
1     50      50 soil type = UnsuitableDDE
1     51      51 fill mult factor = 1.00
1     52      52 type = line, line_string
1     53      53 lvname = WEI XS Soil-UnsuitableDDE
1     54      54
1     55      55 existing unsuitable material
1     56      56 soil type = Undercut
1     57      57 fill mult factor = 1.00
1     58      58 type = line,line_string
1     59      59 lvname = WEI XS Soil-UnsuitableUndercut
1     60      60
1     61      61 Proposed Undercut
1     62      62 common exc only
1     63      63 soil type = ShoulderBorrow
1     64      64 fill mult factor = 1.00
1     65      65 type = line,line_string
1     66      66 lvname = Prop CMT Shoulder Borrow
1     67      67
1     68      68 Proposed Undercut
1     69      69 soil type = Suitable
1     70      70 fill mult factor = 1.00
1     71      71 type = line,line_string
1     72      72 lvname = WEI XS Fill-Suitable
1     73      73
1     74      74 Proposed Undercut
1     75      75 soil type = SelectMaterial
1     76      76 fill mult factor = 1.00
1     77      77 type = line,line_string
1     78      78 lvname = WEI XS Fill-SelectMaterial
1     79      79
1     80      80 Proposed Undercut
1     81      81 common exc only
1     82      82 soil type = S9.5C
1     83      83 fill mult factor = 1.00
1     84      84 type = line,line_string
1     85      85 lvname = Prop CMT Pvmt Course 1
1     86      86
1     87      87 Proposed Undercut
1     88      88 common exc only
1     89      89 soil type = I19.0C
1     90      90 fill mult factor = 1.00
1     91      91 type = line,line_string
1     92      92 lvname = Prop CMT Pvmt Course 2
1     93      93
1     94      94 Proposed Undercut
1     95      95 common exc only
1     96      96 soil type = B25.0C
1     97      97 fill mult factor = 1.00
1     98      98 type = line,line_string
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```
1    99      99 lvname = Prop CMT Pvmt Course 3
1   100     100
1   101     101 Proposed Undercut
1   102     102 common exc only
1   103     103 soil type = Wall
1   104     104 fill mult factor = 1.00
1   105     105 type = line,line_string
1   106     106 lvname = Prop CMT Concrete Wall
1   107     107
1   108     108 excavation limits
1   109     109 lvname = Prop XS Exc Vertical Line 1
1   110     110 type = line
1   111     111
1   112     112 Write Earthwork Shapes
1   113     113 plot param
1   114     114 lvname = WEI XS Earthwork
1   115     115 Stratify Shape Color
1   116     116
1   117     117 vertical search distance = 200
1   118     118
1   119     119 /*calculate only between excavation limits*/
1   120     120
1   121     121 End Area Decimal Places = 2
1   122     122
1   123     123 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\01-L-Phase1-30300-31600.txt
1   124     124
1   125     125 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1   126     126 column 1 number of decimal place = 0
1   127     127 column 1 total length = 10
1   128     128
1   129     129 column 2 formula = ["SUITABLE", Fill, unadj vol]
1   130     130 column 2 number of decimal place = 0
1   131     131 column 2 total length = 10
1   132     132
1   133     133 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1   134     134 column 3 number of decimal place = 0
1   135     135 column 3 total length = 10
1   136     136
1   137     137 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1   138     138 column 4 number of decimal place = 0
1   139     139 column 4 total length = 10
1   140     140
1   141     141 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1   142     142 column 5 number of decimal place = 2
1   143     143 column 5 total length = 10
1   144     144
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1    145    145 column 6 formula = ["S9.5C", Fill, End Area]
1    146    146 column 6 number of decimal place = 2
1    147    147 column 6 total length = 10
1    148    148
1    149    149 column 7 formula = ["I19.0C", Fill, End Area]
1    150    150 column 7 number of decimal place = 2
1    151    151 column 7 total length = 10
1    152    152
1    153    153 column 8 formula = ["B25.0C", Fill, End Area]
1    154    154 column 8 number of decimal place = 2
1    155    155 column 8 total length = 10
1    156    156
1    157    157 Process Earthwork for Baseline = L
1    158    158 job number = rdy
1    159    159
1    160    160 beg sta =   303+00.00
1    161    161 end sta =   316+00.00
1    162    162
1    163    163
1    164    164 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\01-L-Phase1-31600-33150.txt
1    165    165
1    166    166 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    167    167 column 1 number of decimal place = 0
1    168    168 column 1 total length = 10
1    169    169
1    170    170 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    171    171 column 2 number of decimal place = 0
1    172    172 column 2 total length = 10
1    173    173
1    174    174 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    175    175 column 3 number of decimal place = 0
1    176    176 column 3 total length = 10
1    177    177
1    178    178 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1    179    179 column 4 number of decimal place = 0
1    180    180 column 4 total length = 10
1    181    181
1    182    182 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    183    183 column 5 number of decimal place = 2
1    184    184 column 5 total length = 10
1    185    185
1    186    186 column 6 formula = ["S9.5C", Fill, End Area]
1    187    187 column 6 number of decimal place = 2
1    188    188 column 6 total length = 10
1    189    189
1    190    190 column 7 formula = ["I19.0C", Fill, End Area]
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```
1    191   191 column 7 number of decimal place = 2
1    192   192 column 7 total length = 10
1    193   193
1    194   194 column 8 formula = ["B25.0C", Fill, End Area]
1    195   195 column 8 number of decimal place = 2
1    196   196 column 8 total length = 10
1    197   197
1    198   198 Process Earthwork for Baseline = L
1    199   199 job number = rdy
1    200   200
1    201   201 beg sta =  316+00.00
1    202   202 end sta =  331+50.00
1    203   203
1    204   204
1    205   205
1    206   206
1    207   207
1    208   208
1    209   209
1    210   210
0     0    211 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
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⬆

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
303+00.00	SUITABLE					
	Common Exc	22.15	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	2.40	0	0	1.00	0
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	9.67	0	0	1.00	0
	S9.5C					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	2.81	0	0	1.00	0
	I19.0C					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	3.85	0	0	1.00	0

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        B25.0C
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill       13.33        0        0    1.00         0

303+50.00 SUITABLE
          Common Exc    557.32      537      537    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill        0.56        3        3    1.00       534
        SHOULDERBORROW
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill       13.97       22       22    1.00       512
        S9.5C
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill        2.93        5        5    1.00       507
        I19.0C
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill        4.01        7        7    1.00       500
        B25.0C
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill       13.84       25       25    1.00       475

304+00.00 SUITABLE
          Common Exc    643.48     1112     1112    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill        0.61        1        1    1.00      1586
        SHOULDERBORROW
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill       13.97       26       26    1.00      1560
        S9.5C
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
              Fill        2.87        5        5    1.00      1555
        I19.0C
          Common Exc      0.00        0        0    1.00
         Subgrade Exc     0.00        0        0    1.00
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```
        Subsoil Exc      0.00        0        0   1.00
            Fill         3.94        7        7   1.00        1548
      B25.0C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill        13.61       25       25   1.00        1523

304+50.00 SUITABLE
        Common Exc     752.50     1293     1293   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill         0.31        1        1   1.00        2815
      SHOULDERBORROW
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill        14.01       26       26   1.00        2789
      S9.5C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill         3.01        5        5   1.00        2784
      I19.0C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill         4.11        7        7   1.00        2777
      B25.0C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill        14.19       26       26   1.00        2751

305+00.00 SUITABLE
        Common Exc     843.13     1477     1477   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill         0.15        0        0   1.00        4228
      SHOULDERBORROW
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill        14.02       26       26   1.00        4202
      S9.5C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
            Fill         3.01        6        6   1.00        4196
      I19.0C
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              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill     4.12       8        8   1.00       4188
              B25.0C
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill    14.21      26       26   1.00       4162

305+50.00 SUITABLE
              Common Exc    885.19    1600     1600   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill     0.04       0        0   1.00       5762
              SHOULDERBORROW
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill    14.07      26       26   1.00       5736
              S9.5C
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill     2.88       5        5   1.00       5731
              I19.0C
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill     3.95       7        7   1.00       5724
              B25.0C
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill    13.65      26       26   1.00       5698

306+00.00 SUITABLE
              Common Exc    821.22    1580     1580   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill     0.38       0        0   1.00       7278
              SHOULDERBORROW
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
                     Fill    14.06      26       26   1.00       7252
              S9.5C
              Common Exc      0.00       0        0   1.00
              Subgrade Exc    0.00       0        0   1.00
              Subsoil Exc     0.00       0        0   1.00
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              Fill        2.82          5          5   1.00      7247
    I19.0C
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill        3.87          7          7   1.00      7240
    B25.0C
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill       13.39         25         25   1.00      7215

306+50.00 SUITABLE
      Common Exc        775.12       1478       1478   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill        0.15          0          0   1.00      8693
    SHOULDERBORROW
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill       14.03         26         26   1.00      8667
    S9.5C
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill        2.74          5          5   1.00      8662
    I19.0C
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill        3.76          7          7   1.00      8655
    B25.0C
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill       13.04         24         24   1.00      8631

307+00.00 SUITABLE
      Common Exc        715.64       1380       1380   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill        0.06          0          0   1.00     10011
    SHOULDERBORROW
      Common Exc          0.00          0          0   1.00
    Subgrade Exc          0.00          0          0   1.00
     Subsoil Exc          0.00          0          0   1.00
              Fill       14.00         26         26   1.00      9985
    S9.5C
      Common Exc          0.00          0          0   1.00
```

Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	2.78	5	5	1.00	9980
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	3.81	7	7	1.00	9973
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	13.22	24	24	1.00	9949
307+50.00 SUITABLE					
Common Exc	701.54	1312	1312	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	0	0	1.00	11261
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	13.93	26	26	1.00	11235
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	3.23	6	6	1.00	11229
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	4.42	8	8	1.00	11221
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	15.16	26	26	1.00	11195
308+00.00 SUITABLE					
Common Exc	660.33	1261	1261	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.08	0	0	1.00	12456
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	13.52	25	25	1.00	12431

```
       S9.5C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill         3.75        6        6   1.00     12425
       I19.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill         5.11        9        9   1.00     12416
       B25.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill        17.42       30       30   1.00     12386

308+50.00 SUITABLE
         Common Exc    445.45     1024     1024   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill         0.07        0        0   1.00     13410
       SHOULDERBORROW
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill        12.70       24       24   1.00     13386
       S9.5C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill         4.42        8        8   1.00     13378
       I19.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill         5.99       10       10   1.00     13368
       B25.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill        20.28       35       35   1.00     13333

309+00.00 SUITABLE
         Common Exc    328.76      717      717   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
            Fill         0.30        0        0   1.00     14050
       SHOULDERBORROW
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
```

Subsoil Exc	0.00	0	0	1.00	
Fill	9.96	21	21	1.00	14029

S9.5C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	5.19	9	9	1.00	14020

I19.0C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	7.02	12	12	1.00	14008

B25.0C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	23.61	41	41	1.00	13967

309+50.00 SUITABLE

Common Exc	298.27	581	581	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.82	1	1	1.00	14547

SHOULDERBORROW

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.30	18	18	1.00	14529

S9.5C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	6.18	11	11	1.00	14518

I19.0C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	8.35	14	14	1.00	14504

B25.0C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	27.92	48	48	1.00	14456

310+00.00 SUITABLE

Common Exc	247.10	505	505	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.26	2	2	1.00	14959

SHOULDERBORROW

```
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill        6.81       15       15    1.00      14944
        S9.5C
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill        7.37       13       13    1.00      14931
        I19.0C
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill        9.92       17       17    1.00      14914
        B25.0C
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill       33.03       56       56    1.00      14858

310+50.00 SUITABLE
             Common Exc    130.61      350      350    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill       11.62       12       12    1.00      15196
        SHOULDERBORROW
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill        2.59        9        9    1.00      15187
        S9.5C
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill        9.64       16       16    1.00      15171
        I19.0C
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill       10.55       19       19    1.00      15152
        B25.0C
             Common Exc      0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                 Fill       10.08       40       40    1.00      15112

311+00.00 SUITABLE
             Common Exc     11.52      132      132    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
```

Fill	25.29	34	34	1.00	15210
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.99	4	4	1.00	15206
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.10	17	17	1.00	15189
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	12.33	21	21	1.00	15168
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	15.33	24	24	1.00	15144

311+50.00 SUITABLE

Common Exc	0.00	11	11	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	216.46	224	224	1.00	14931
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	2	2	1.00	14929
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.10	17	17	1.00	14912
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	12.33	23	23	1.00	14889
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	18.51	31	31	1.00	14858

312+00.00 SUITABLE

Common Exc	0.00	0	0	1.00	

```
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill      587.95       745       745    1.00      14113
  S9.5C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill        9.10        17        17    1.00      14096
  I19.0C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill       12.33        23        23    1.00      14073
  B25.0C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill       15.72        32        32    1.00      14041

312+50.00 SUITABLE
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill      848.66      1330      1330    1.00      12711
  S9.5C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill        9.10        17        17    1.00      12694
  I19.0C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill       12.33        23        23    1.00      12671
  B25.0C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill       15.72        29        29    1.00      12642

313+00.00 SUITABLE
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill     1087.63      1793      1793    1.00      10849
  S9.5C
        Common Exc       0.00         0         0    1.00
       Subgrade Exc      0.00         0         0    1.00
       Subsoil Exc       0.00         0         0    1.00
             Fill        9.09        17        17    1.00      10832
```

```
I19.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     12.32         23         23   1.00    10809
B25.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     15.71         29         29   1.00    10780

313+50.00 SUITABLE
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill   1251.91       2166       2166   1.00     8614
S9.5C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill      9.08         17         17   1.00     8597
I19.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     12.30         23         23   1.00     8574
B25.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     15.69         29         29   1.00     8545

314+00.00 SUITABLE
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill   1376.01       2433       2433   1.00     6112
S9.5C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill      9.07         17         17   1.00     6095
I19.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     12.29         23         23   1.00     6072
B25.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
```

```
            Subsoil Exc      0.00         0         0   1.00
                Fill        15.67        29        29   1.00      6043

314+50.00 SUITABLE
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill       891.32      2099      2099   1.00      3944
            S9.5C
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill         9.07        17        17   1.00      3927
            I19.0C
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill        12.28        23        23   1.00      3904
            B25.0C
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill        15.67        29        29   1.00      3875
            WALL
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill        10.43        10        10   1.00      3865

315+00.00 SUITABLE
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill       884.37      1644      1644   1.00      2221
            S9.5C
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill         9.06        17        17   1.00      2204
            I19.0C
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill        12.28        23        23   1.00      2181
            B25.0C
             Common Exc      0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
                Fill        15.66        29        29   1.00      2152
            WALL
```

```
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill      12.19        21        21    1.00      2131

315+50.00 SUITABLE
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill    1283.87      2008      2008    1.00       123
          S9.5C
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill       9.06        17        17    1.00       106
          I19.0C
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill      12.28        23        23    1.00        83
          B25.0C
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill      15.66        29        29    1.00        54
          WALL
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill      13.21        24        24    1.00        30

316+00.00 SUITABLE
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill     298.91      1466      1466    1.00     -1436
          S9.5C
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill       9.06        17        17    1.00     -1453
          I19.0C
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
                    Fill      12.28        23        23    1.00     -1476
          B25.0C
              Common Exc       0.00         0         0    1.00
            Subgrade Exc       0.00         0         0    1.00
             Subsoil Exc       0.00         0         0    1.00
```

```
                    Fill      15.66         29          29    1.00     -1505
          WALL
            Common Exc     0.00          0           0    1.00
          Subgrade Exc     0.00          0           0    1.00
           Subsoil Exc     0.00          0           0    1.00
                  Fill     13.98         25          25    1.00     -1530
```

⬆   G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
SUITABLE			
Common Exc	16350	16350	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	15962	15962	1.00
SHOULDERBORROW			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	348	348	1.00
S9.5C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	297	297	1.00
I19.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	397	397	1.00
B25.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	796	796	1.00
WALL			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	80	80	1.00

⬆   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Mult Factor

```
          ---------------------------- ---------- ---------- -------------
------------- ------
        SUITABLE
                                Common Exc     16350      16350          0
0   1.00
                                Subgrade Exc       0          0          0
0   1.00
                                Subsoil Exc        0          0          0
0   1.00
                                Fill           15962      15962          0
0   1.00
        SHOULDERBORROW
                                Common Exc         0          0          0
0   1.00
                                Subgrade Exc       0          0          0
0   1.00
                                Subsoil Exc        0          0          0
0   1.00
                                Fill             348        348          0
0   1.00
        S9.5C
                                Common Exc         0          0          0
0   1.00
                                Subgrade Exc       0          0          0
0   1.00
                                Subsoil Exc        0          0          0
0   1.00
                                Fill             297        297          0
0   1.00
        I19.0C
                                Common Exc         0          0          0
0   1.00
                                Subgrade Exc       0          0          0
0   1.00
                                Subsoil Exc        0          0          0
0   1.00
                                Fill             397        397          0
0   1.00
        B25.0C
                                Common Exc         0          0          0
0   1.00
                                Subgrade Exc       0          0          0
0   1.00
                                Subsoil Exc        0          0          0
0   1.00
                                Fill             796        796          0
0   1.00
        WALL
                                Common Exc         0          0          0
```

	Material Name				
	Subgrade Exc	0	0	0	
0 1.00					
	Subsoil Exc	0	0	0	
0 1.00					
	Fill	80	80	0	
0 1.00					

♠   B A L A N C E   P O I N T   S U M M A R Y

Material Name	Cumulative		Incremental		Mult Factor
	Unadjusted	Adjusted	Unadjusted	Adjusted	
	Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	
----------------------------	----------	----------	----------	----------	------

Station = 315+50.96
    SUITABLE

Material Name	Unadj	Adj	Unadj	Adj	Mult Factor
Common Exc	16350	16350	16350	16350	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	14524	14524	14524	14524	1.00

    UNSUITABLE

Material Name	Unadj	Adj	Unadj	Adj	Mult Factor
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	0	0	0	0	1.00

    UNSUITABLEMARGINAL

Material Name	Unadj	Adj	Unadj	Adj	Mult Factor
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	0	0	0	0	1.00

    DDE

Material Name	Unadj	Adj	Unadj	Adj	Mult Factor
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	

1.00					
	Fill	0	0	0	0
1.00					
UNSUITABLEDDE					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
UNDERCUT					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
SHOULDERBORROW					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	348	348	348	348
1.00					
SELECTMATERIAL					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
S9.5C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	280	280	280	280
1.00					
I19.0C					
	Common Exc	0	0	0	0

```
1.00
                      Subgrade Exc          0          0          0          0
1.00
                      Subsoil Exc           0          0          0          0
1.00
                         Fill             374        374        374        374
1.00
        B25.0C
                      Common Exc            0          0          0          0
1.00
                      Subgrade Exc          0          0          0          0
1.00
                      Subsoil Exc           0          0          0          0
1.00
                         Fill             768        768        768        768
1.00
        WALL
                      Common Exc            0          0          0          0
1.00
                      Subgrade Exc          0          0          0          0
1.00
                      Subsoil Exc           0          0          0          0
1.00
                         Fill              55         55         55         55
1.00
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
⬆
            Material Name   End Areas  Unadjusted Adjusted   Mult   Mass
Station                                Volumes    Volumes    Factor Ordinate
                           (sq. ft.)  (cu. yd.)  (cu. yd.)
----------- ---------------- ---------- ---------- ---------- ------ --------
  316+00.00 SUITABLE
                Common Exc       0.00          0          0   1.00
                Subgrade Exc     0.00          0          0   1.00
                Subsoil Exc      0.00          0          0   1.00
                   Fill        298.91          0          0   1.00         0
            S9.5C
                Common Exc       0.00          0          0   1.00
                Subgrade Exc     0.00          0          0   1.00
                Subsoil Exc      0.00          0          0   1.00
                   Fill          9.06          0          0   1.00         0
            I19.0C
                Common Exc       0.00          0          0   1.00
                Subgrade Exc     0.00          0          0   1.00
                Subsoil Exc      0.00          0          0   1.00
                   Fill         12.28          0          0   1.00         0
            B25.0C
```

```
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      15.66        0        0   1.00          0
          WALL
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      13.98        0        0   1.00          0

316+50.00 SUITABLE
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill    1682.53     1835     1835   1.00      -1835
          S9.5C
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       9.06       17       17   1.00      -1852
          I19.0C
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      12.28       23       23   1.00      -1875
          B25.0C
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      15.66       29       29   1.00      -1904
          WALL
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      13.80       26       26   1.00      -1930

317+00.00 SUITABLE
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill    1035.44     2517     2517   1.00      -4447
          S9.5C
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       9.07       17       17   1.00      -4464
          I19.0C
              Common Exc        0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
```

```
              Fill         12.28        23       23    1.00    -4487
       B25.0C
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill         15.67        29       29    1.00    -4516
       WALL
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill         12.22        24       24    1.00    -4540

317+50.00 SUITABLE
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill        928.83      1819     1819    1.00    -6359
       S9.5C
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill          9.07        17       17    1.00    -6376
       I19.0C
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill         12.29        23       23    1.00    -6399
       B25.0C
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill         15.67        29       29    1.00    -6428
       WALL
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill         11.63        22       22    1.00    -6450

318+00.00 SUITABLE
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill        824.61      1624     1624    1.00    -8074
       S9.5C
          Common Exc        0.00         0        0    1.00
          Subgrade Exc      0.00         0        0    1.00
          Subsoil Exc       0.00         0        0    1.00
              Fill          9.07        17       17    1.00    -8091
       I19.0C
          Common Exc        0.00         0        0    1.00
```

```
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill        12.29       23       23    1.00      -8114
     B25.0C
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill        15.68       29       29    1.00      -8143
     WALL
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill        11.12       21       21    1.00      -8164

318+50.00 SUITABLE
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill       719.48     1430     1430    1.00      -9594
     S9.5C
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill         9.08       17       17    1.00      -9611
     I19.0C
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill        12.30       23       23    1.00      -9634
     B25.0C
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill        15.68       29       29    1.00      -9663
     WALL
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill        10.46       20       20    1.00      -9683

319+00.00 SUITABLE
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill       622.96     1243     1243    1.00     -10926
     S9.5C
          Common Exc         0.00        0        0    1.00
          Subgrade Exc       0.00        0        0    1.00
          Subsoil Exc        0.00        0        0    1.00
                Fill         9.08       17       17    1.00     -10943
```

```
I19.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     12.30       23       23   1.00      -10966
B25.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     15.69       29       29   1.00      -10995
WALL
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      9.98       19       19   1.00      -11014

319+50.00 SUITABLE
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill    533.54     1071     1071   1.00      -12085
S9.5C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      9.08       17       17   1.00      -12102
I19.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     12.31       23       23   1.00      -12125
B25.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     15.70       29       29   1.00      -12154
WALL
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      8.77       17       17   1.00      -12171

320+00.00 SUITABLE
    Common Exc      0.68        1        1   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill    510.02      966      966   1.00      -13136
S9.5C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
```

```
             Subsoil Exc      0.00         0          0   1.00
                 Fill         9.09        17         17   1.00      -13153
        I19.0C
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill        12.29        23         23   1.00      -13176
        B25.0C
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill        15.11        29         29   1.00      -13205
        WALL
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill         7.77        15         15   1.00      -13220

320+50.00 SUITABLE
             Common Exc       0.39         1          1   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill       485.81       922        922   1.00      -14141
        S9.5C
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill         9.34        17         17   1.00      -14158
        I19.0C
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill        11.67        22         22   1.00      -14180
        B25.0C
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill        13.48        26         26   1.00      -14206
        WALL
             Common Exc       0.00         0          0   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill         6.26        13         13   1.00      -14219

321+00.00 SUITABLE
             Common Exc       0.67         1          1   1.00
             Subgrade Exc     0.00         0          0   1.00
             Subsoil Exc      0.00         0          0   1.00
                 Fill       431.06       849        849   1.00      -15067
        S9.5C
```

```
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill       9.41        17        17   1.00     -15084
         I19.0C
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill      10.43        20        20   1.00     -15104
         B25.0C
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill      12.13        24        24   1.00     -15128
         WALL
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill       4.59        10        10   1.00     -15138

321+50.00 SUITABLE
              Common Exc      0.54         1         1   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill     338.16       712       712   1.00     -15849
         S9.5C
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill       9.13        17        17   1.00     -15866
         I19.0C
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill       9.52        18        18   1.00     -15884
         B25.0C
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill      10.74        21        21   1.00     -15905
         WALL
              Common Exc      0.00         0         0   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
                   Fill       0.00         4         4   1.00     -15909

322+00.00 SUITABLE
              Common Exc      1.94         2         2   1.00
              Subgrade Exc    0.00         0         0   1.00
              Subsoil Exc     0.00         0         0   1.00
```

```
              Fill       276.00       569          569    1.00    -16476
       S9.5C
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill         8.50        16           16    1.00    -16492
       I19.0C
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill         7.63        16           16    1.00    -16508
       B25.0C
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill         9.26        19           19    1.00    -16527

322+50.00 SUITABLE
          Common Exc      19.54        20           20    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill       223.86       463          463    1.00    -16970
       SHOULDERBORROW
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill         2.74         3            3    1.00    -16973
       S9.5C
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill         7.34        15           15    1.00    -16988
       I19.0C
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill         9.88        16           16    1.00    -17004
       B25.0C
          Common Exc       0.00         0            0    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill        32.85        39           39    1.00    -17043

323+00.00 SUITABLE
          Common Exc      17.73        35           35    1.00
        Subgrade Exc       0.00         0            0    1.00
         Subsoil Exc       0.00         0            0    1.00
              Fill       203.07       395          395    1.00    -17403
       SHOULDERBORROW
          Common Exc       0.00         0            0    1.00
```

```
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill         2.75          5          5     1.00    -17408
       S9.5C
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill         6.60         13         13     1.00    -17421
       I19.0C
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill         8.90         17         17     1.00    -17438
       B25.0C
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill        29.67         58         58     1.00    -17496

323+50.00 SUITABLE
          Common Exc         17.40         33         33     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill       157.06        333        333     1.00    -17796
       SHOULDERBORROW
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill         2.75          5          5     1.00    -17801
       S9.5C
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill         5.89         12         12     1.00    -17813
       I19.0C
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill         7.94         16         16     1.00    -17829
       B25.0C
          Common Exc          0.00          0          0     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill        26.56         52         52     1.00    -17881

324+00.00 SUITABLE
          Common Exc         17.67         32         32     1.00
          Subgrade Exc        0.00          0          0     1.00
          Subsoil Exc         0.00          0          0     1.00
                 Fill       118.95        256        256     1.00    -18105
```

```
SHOULDERBORROW
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill      2.75         5         5   1.00      -18110
S9.5C
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill      5.17        10        10   1.00      -18120
I19.0C
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill      6.99        14        14   1.00      -18134
B25.0C
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill     23.46        46        46   1.00      -18180

324+50.00 SUITABLE
        Common Exc     17.24        32        32   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill     76.40       181       181   1.00      -18329
SHOULDERBORROW
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill      2.76         5         5   1.00      -18334
S9.5C
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill      4.58         9         9   1.00      -18343
I19.0C
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill      6.20        12        12   1.00      -18355
B25.0C
        Common Exc      0.00         0         0   1.00
      Subgrade Exc      0.00         0         0   1.00
       Subsoil Exc      0.00         0         0   1.00
              Fill     20.90        41        41   1.00      -18396

325+00.00 SUITABLE
        Common Exc     15.78        31        31   1.00
      Subgrade Exc      0.00         0         0   1.00
```

```
          Subsoil Exc      0.00         0         0    1.00
             Fill         63.05       129       129    1.00    -18494
SHOULDERBORROW
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill          2.74         5         5    1.00    -18499
S9.5C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill          4.13         8         8    1.00    -18507
I19.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill          5.60        11        11    1.00    -18518
B25.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill         18.95        37        37    1.00    -18555

325+50.00 SUITABLE
          Common Exc      15.62        29        29    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill         43.83        99        99    1.00    -18625
SHOULDERBORROW
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill          4.17         6         6    1.00    -18631
S9.5C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill          3.60         7         7    1.00    -18638
I19.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill          4.89        10        10    1.00    -18648
B25.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
             Fill         16.64        33        33    1.00    -18681


326+00.00 SUITABLE
```

```
          Common Exc     16.99      30        30     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill       35.58      74        74     1.00     -18725
       SHOULDERBORROW
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill        5.49       9         9     1.00     -18734
       S9.5C
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill        3.45       7         7     1.00     -18741
       I19.0C
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill        4.70       9         9     1.00     -18750
       B25.0C
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill       16.01      30        30     1.00     -18780

326+50.00 SUITABLE
          Common Exc     22.13      36        36     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill       11.33      43        43     1.00     -18787
       SHOULDERBORROW
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill        5.49      10        10     1.00     -18797
       S9.5C
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill        3.51       6         6     1.00     -18803
       I19.0C
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill        4.77       9         9     1.00     -18812
       B25.0C
          Common Exc      0.00       0         0     1.00
          Subgrade Exc    0.00       0         0     1.00
          Subsoil Exc     0.00       0         0     1.00
              Fill       16.27      30        30     1.00     -18842
```

```
327+00.00 SUITABLE
            Common Exc      21.33       40       40    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         7.43       17       17    1.00    -18819
            SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         5.50       10       10    1.00    -18829
            S9.5C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         3.50        6        6    1.00    -18835
            I19.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         4.76        9        9    1.00    -18844
            B25.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill        16.22       30       30    1.00    -18874

327+50.00 SUITABLE
            Common Exc      24.69       43       43    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         2.94       10       10    1.00    -18841
            SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         5.51       10       10    1.00    -18851
            S9.5C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         3.55        7        7    1.00    -18858
            I19.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                Fill         4.83        9        9    1.00    -18867
            B25.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
```

```
            Subsoil Exc      0.00        0        0    1.00
            Fill            16.46       30       30    1.00    -18897

328+00.00 SUITABLE
            Common Exc      19.49       41       41    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             1.36        4        4    1.00    -18860
      SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             5.51       10       10    1.00    -18870
      S9.5C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             3.49        7        7    1.00    -18877
      I19.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             4.74        9        9    1.00    -18886
      B25.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill            16.18       30       30    1.00    -18916

328+50.00 SUITABLE
            Common Exc      20.33       37       37    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             4.71        6        6    1.00    -18885
      SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             5.51       10       10    1.00    -18895
      S9.5C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             3.43        6        6    1.00    -18901
      I19.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
            Fill             4.67        9        9    1.00    -18910
      B25.0C
```

```
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill          15.94       30       30    1.00     -18940

329+00.00 SUITABLE
              Common Exc    17.74       35       35    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           5.47        9        9    1.00     -18914
          SHOULDERBORROW
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           5.51       10       10    1.00     -18924
          S9.5C
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           3.33        6        6    1.00     -18930
          I19.0C
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           4.54        9        9    1.00     -18939
          B25.0C
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill          15.51       29       29    1.00     -18968

329+50.00 SUITABLE
              Common Exc    17.73       33       33    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           4.32        9        9    1.00     -18944
          SHOULDERBORROW
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           5.50       10       10    1.00     -18954
          S9.5C
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
              Fill           3.36        6        6    1.00     -18960
          I19.0C
              Common Exc     0.00        0        0    1.00
              Subgrade Exc   0.00        0        0    1.00
              Subsoil Exc    0.00        0        0    1.00
```

```
              Fill        4.57        8        8    1.00    -18968
      B25.0C
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill       15.62       29       29    1.00    -18997

330+00.00 SUITABLE
         Common Exc     17.44       33       33    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        3.87        8        8    1.00    -18972
      SHOULDERBORROW
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        5.51       10       10    1.00    -18982
      S9.5C
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        3.35        6        6    1.00    -18988
      I19.0C
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        4.56        8        8    1.00    -18996
      B25.0C
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill       15.57       29       29    1.00    -19025

330+50.00 SUITABLE
         Common Exc     17.41       32       32    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        3.82        7        7    1.00    -19000
      SHOULDERBORROW
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        5.51       10       10    1.00    -19010
      S9.5C
         Common Exc      0.00        0        0    1.00
       Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc      0.00        0        0    1.00
              Fill        3.35        6        6    1.00    -19016
      I19.0C
         Common Exc      0.00        0        0    1.00
```

```
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        4.57      8       8   1.00   -19024
      B25.0C
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill       15.59     29      29   1.00   -19053

331+00.00 SUITABLE
         Common Exc     16.81     32      32   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        4.49      8       8   1.00   -19029
      SHOULDERBORROW
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        5.50     10      10   1.00   -19039
      S9.5C
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        3.37      6       6   1.00   -19045
      I19.0C
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        4.59      8       8   1.00   -19053
      B25.0C
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill       15.69     29      29   1.00   -19082

331+50.00 SUITABLE
         Common Exc     16.92     31      31   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        1.79      6       6   1.00   -19057
      SHOULDERBORROW
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        5.53     10      10   1.00   -19067
      S9.5C
         Common Exc      0.00      0       0   1.00
         Subgrade Exc    0.00      0       0   1.00
         Subsoil Exc     0.00      0       0   1.00
             Fill        2.78      6       6   1.00   -19073
```

```
         I19.0C
            Common Exc      0.00              0              0   1.00
           Subgrade Exc     0.00              0              0   1.00
            Subsoil Exc     0.00              0              0   1.00
                   Fill     3.79              8              8   1.00    -19081
         B25.0C
            Common Exc      0.00              0              0   1.00
           Subgrade Exc     0.00              0              0   1.00
            Subsoil Exc     0.00              0              0   1.00
                   Fill    13.02             27             27   1.00    -19108
```

🠉   G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
SUITABLE			
Common Exc	641	641	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	17614	17614	1.00
SHOULDERBORROW			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	153	153	1.00
S9.5C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	352	352	1.00
I19.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	459	459	1.00
B25.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	980	980	1.00
WALL			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	191	191	1.00

🠉   S P L I T   S U M M A R Y   T O T A L S

	XS Quant	XS Quant	Add/Sub Quant	Add/Sub Quant
Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted

	Mult Factor		Volume (cu. yd.)	Volume (cu. yd.)	Volume (cu. yd.)	Volume (cu. yd.)
		---------------------------	----------	----------	-------------	
-------------	------					
SUITABLE						
		Common Exc	641	641	0	
0	1.00					
		Subgrade Exc	0	0	0	
0	1.00					
		Subsoil Exc	0	0	0	
0	1.00					
		Fill	17614	17614	0	
0	1.00					
SHOULDERBORROW						
		Common Exc	0	0	0	
0	1.00					
		Subgrade Exc	0	0	0	
0	1.00					
		Subsoil Exc	0	0	0	
0	1.00					
		Fill	153	153	0	
0	1.00					
S9.5C						
		Common Exc	0	0	0	
0	1.00					
		Subgrade Exc	0	0	0	
0	1.00					
		Subsoil Exc	0	0	0	
0	1.00					
		Fill	352	352	0	
0	1.00					
I19.0C						
		Common Exc	0	0	0	
0	1.00					
		Subgrade Exc	0	0	0	
0	1.00					
		Subsoil Exc	0	0	0	
0	1.00					
		Fill	459	459	0	
0	1.00					
B25.0C						
		Common Exc	0	0	0	
0	1.00					
		Subgrade Exc	0	0	0	
0	1.00					
		Subsoil Exc	0	0	0	
0	1.00					

	Fill	980	980	0
0	1.00			
WALL				
	Common Exc	0	0	0
0	1.00			
	Subgrade Exc	0	0	0
0	1.00			
	Subsoil Exc	0	0	0
0	1.00			
	Fill	191	191	0
0	1.00			

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_L_Phase-2.inp
Output File: EW_L_Phase-2.log
 1      1       1
 1      2       2
 1      3       3 Earthwork
 1      4       4
 1      5       5 tolerance = 0.004
 1      6       6
 1      7       7 xs dgn = HB0002_rdy_xsc_L_phase-2.dgn
 1      8       8
 1      9       9 Proposed Finish Grade
 1     10      10 soil type = Suitable
 1     11      11 fill mult factor = 1.000000
 1     12      12 type = line, line_string
 1     13      13 lvname = Prop CMT Conc Surface
 1     14      14 lvname = Prop CMT Pvmt Surface*
 1     15      15 lvname = Prop CMT Slope Grass
 1     16      16 lvname = Prop CMT Shear Line
 1     17      17 lvname = Scratch_Level_8
 1     18      18
 1     19      19 Existing Ground Line
 1     20      20 soil type = Suitable
 1     21      21 type = line, line_string
 1     22      22 lvname = Exist XS Ground Line
 1     23      23
 1     24      24 existing suitable material
 1     25      25 soil type = Suitable
 1     26      26 fill mult factor = 1.00
 1     27      27 type = line, line_string
 1     28      28 lvname = WEI XS Soil-Suitable
 1     29      29
 1     30      30 existing suitable material
 1     31      31 soil type = Unsuitable
 1     32      32 fill mult factor = 1.00
 1     33      33 type = line, line_string
 1     34      34 lvname = WEI XS Soil-Unsuitable
 1     35      35
 1     36      36 existing suitable material
 1     37      37 soil type = UnsuitableMarginal
 1     38      38 fill mult factor = 1.00
 1     39      39 type = line, line_string
 1     40      40 lvname = WEI XS Soil-UnsuitableMarginal
 1     41      41
 1     42      42 existing suitable material
 1     43      43 soil type = DDE
 1     44      44 fill mult factor = 1.00
 1     45      45 type = line, line_string
 1     46      46 lvname = WEI XS Soil-DDE
 1     47      47
 1     48      48 existing suitable material
```

```
1    49      49 soil type = UnsuitableDDE
1    50      50 fill mult factor = 1.00
1    51      51 type = line, line_string
1    52      52 lvname = WEI XS Soil-UnsuitableDDE
1    53      53
1    54      54 existing unsuitable material
1    55      55 soil type = Undercut
1    56      56 fill mult factor = 1.00
1    57      57 type = line,line_string
1    58      58 lvname = WEI XS Soil-UnsuitableUndercut
1    59      59
1    60      60 Proposed Undercut
1    61      61 common exc only
1    62      62 soil type = ShoulderBorrow
1    63      63 fill mult factor = 1.00
1    64      64 type = line,line_string
1    65      65 lvname = Prop CMT Shoulder Borrow
1    66      66
1    67      67 Proposed Undercut
1    68      68 soil type = Suitable
1    69      69 fill mult factor = 1.00
1    70      70 type = line,line_string
1    71      71 lvname = WEI XS Fill-Suitable
1    72      72
1    73      73 Proposed Undercut
1    74      74 soil type = SelectMaterial
1    75      75 fill mult factor = 1.00
1    76      76 type = line,line_string
1    77      77 lvname = WEI XS Fill-SelectMaterial
1    78      78
1    79      79 Proposed Undercut
1    80      80 common exc only
1    81      81 soil type = S9.5C
1    82      82 fill mult factor = 1.00
1    83      83 type = line,line_string
1    84      84 lvname = Prop CMT Pvmt Course 1
1    85      85
1    86      86 Proposed Undercut
1    87      87 common exc only
1    88      88 soil type = I19.0C
1    89      89 fill mult factor = 1.00
1    90      90 type = line,line_string
1    91      91 lvname = Prop CMT Pvmt Course 2
1    92      92
1    93      93 Proposed Undercut
1    94      94 common exc only
1    95      95 soil type = B25.0C
1    96      96 fill mult factor = 1.00
1    97      97 type = line,line_string
1    98      98 lvname = Prop CMT Pvmt Course 3
```

```
1    99    99
1   100   100 excavation limits
1   101   101 lvname = Prop XS Exc Vertical Line 1
1   102   102 type = line
1   103   103
1   104   104 Write Earthwork Shapes
1   105   105 plot param
1   106   106 lvname = WEI XS Earthwork
1   107   107 Stratify Shape Color
1   108   108
1   109   109 vertical search distance = 200
1   110   110
1   111   111 /*calculate only between excavation limits*/
1   112   112
1   113   113 End Area Decimal Places = 2
1   114   114
1   115   115 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\02-L-Phase2-30700-31600.txt
1   116   116
1   117   117 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1   118   118 column 1 number of decimal place = 0
1   119   119 column 1 total length = 10
1   120   120
1   121   121 column 2 formula = ["SUITABLE", Fill, unadj vol]
1   122   122 column 2 number of decimal place = 0
1   123   123 column 2 total length = 10
1   124   124
1   125   125 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1   126   126 column 3 number of decimal place = 0
1   127   127 column 3 total length = 10
1   128   128
1   129   129 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1   130   130 column 4 number of decimal place = 0
1   131   131 column 4 total length = 10
1   132   132
1   133   133 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1   134   134 column 5 number of decimal place = 2
1   135   135 column 5 total length = 10
1   136   136
1   137   137 column 6 formula = ["S9.5C", Fill, End Area]
1   138   138 column 6 number of decimal place = 2
1   139   139 column 6 total length = 10
1   140   140
1   141   141 column 7 formula = ["I19.0C", Fill, End Area]
1   142   142 column 7 number of decimal place = 2
1   143   143 column 7 total length = 10
1   144   144
```

```
1    145    145 column 8 formula = ["B25.0C", Fill, End Area]
1    146    146 column 8 number of decimal place = 2
1    147    147 column 8 total length = 10
1    148    148
1    149    149 Process Earthwork for Baseline = L
1    150    150 job number = rdy
1    151    151
1    152    152 beg sta =   307+00.00
1    153    153 end sta =   316+00.00
1    154    154
1    155    155 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\02-L-Phase2-31600-32800.txt
1    156    156
1    157    157 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    158    158 column 1 number of decimal place = 0
1    159    159 column 1 total length = 10
1    160    160
1    161    161 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    162    162 column 2 number of decimal place = 0
1    163    163 column 2 total length = 10
1    164    164
1    165    165 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    166    166 column 3 number of decimal place = 0
1    167    167 column 3 total length = 10
1    168    168
1    169    169 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1    170    170 column 4 number of decimal place = 0
1    171    171 column 4 total length = 10
1    172    172
1    173    173 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    174    174 column 5 number of decimal place = 2
1    175    175 column 5 total length = 10
1    176    176
1    177    177 column 6 formula = ["S9.5C", Fill, End Area]
1    178    178 column 6 number of decimal place = 2
1    179    179 column 6 total length = 10
1    180    180
1    181    181 column 7 formula = ["I19.0C", Fill, End Area]
1    182    182 column 7 number of decimal place = 2
1    183    183 column 7 total length = 10
1    184    184
1    185    185 column 8 formula = ["B25.0C", Fill, End Area]
1    186    186 column 8 number of decimal place = 2
1    187    187 column 8 total length = 10
1    188    188
1    189    189 Process Earthwork for Baseline = L
1    190    190 job number = rdy
```

```
 1   191   191
 1   192   192 beg sta =  316+00.00
 1   193   193 end sta =  328+00.00
 1   194   194
 1   195   195
 1   196   196
 1   197   197
 1   198   198
 1   199   199
 1   200   200
 1   201   201
 0     0   202 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
```
⬆

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
307+00.00	SUITABLE					
	Common Exc	0.29	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	0
	S9.5C					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.61	0	0	1.00	0
307+50.00	SUITABLE					
	Common Exc	0.23	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	0
	S9.5C					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.58	1	1	1.00	-1
308+00.00	SUITABLE					
	Common Exc	0.25	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	-1
	S9.5C					
	Common Exc	0.00	0	0	1.00	

```
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       0.58          1          1    1.00            -2

308+50.00 SUITABLE
             Common Exc       2.65          3          3    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       0.00          0          0    1.00             1
          S9.5C
             Common Exc       0.00          0          0    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       1.27          2          2    1.00            -1

309+00.00 SUITABLE
             Common Exc       3.38          6          6    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       0.00          0          0    1.00             5
          S9.5C
             Common Exc       0.00          0          0    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       1.58          3          3    1.00             2

309+50.00 SUITABLE
             Common Exc       4.85          8          8    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       0.00          0          0    1.00            10
          S9.5C
             Common Exc       0.00          0          0    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       2.00          3          3    1.00             7

310+00.00 SUITABLE
             Common Exc       4.99          9          9    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       0.00          0          0    1.00            16
          S9.5C
             Common Exc       0.00          0          0    1.00
            Subgrade Exc      0.00          0          0    1.00
            Subsoil Exc       0.00          0          0    1.00
                   Fill       2.50          4          4    1.00            12

310+50.00 SUITABLE
             Common Exc       2.37          7          7    1.00
```

```
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          0.00        0        0   1.00          19
                S9.5C
                  Common Exc          0.00        0        0   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          3.11        5        5   1.00          14

311+00.00 SUITABLE
                  Common Exc          0.52        3        3   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          0.00        0        0   1.00          17
                S9.5C
                  Common Exc          0.00        0        0   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          6.49        9        9   1.00           8
                I19.0C
                  Common Exc          0.00        0        0   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          0.68        1        1   1.00           7

311+50.00 SUITABLE
                  Common Exc          1.57        2        2   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          0.00        0        0   1.00           9
                S9.5C
                  Common Exc          0.00        0        0   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          8.06       13       13   1.00          -4
                I19.0C
                  Common Exc          0.00        0        0   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          4.85        5        5   1.00          -9
                B25.0C
                  Common Exc          0.00        0        0   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
                        Fill          2.03        2        2   1.00         -11

312+00.00 SUITABLE
                  Common Exc          2.12        3        3   1.00
                  Subgrade Exc        0.00        0        0   1.00
                  Subsoil Exc         0.00        0        0   1.00
```

```
            Fill          0.00        0        0    1.00        -8
       SHOULDERBORROW
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill       1.99        2        2    1.00       -10
       S9.5C
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill       9.53       16       16    1.00       -26
       I19.0C
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill       8.49       12       12    1.00       -38
       B25.0C
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill      12.85       14       14    1.00       -52

312+50.00 SUITABLE
         Common Exc        0.16        2        2    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill       3.17        3        3    1.00       -53
       SHOULDERBORROW
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill       0.00        2        2    1.00       -55
       S9.5C
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill       9.39       18       18    1.00       -73
       I19.0C
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill      12.48       19       19    1.00       -92
       B25.0C
         Common Exc        0.00        0        0    1.00
       Subgrade Exc        0.00        0        0    1.00
        Subsoil Exc        0.00        0        0    1.00
               Fill      22.74       33       33    1.00      -125

313+00.00 SUITABLE
         Common Exc        0.00        0        0    1.00
```

```
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        12.06       14       14   1.00      -139
     S9.5C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         9.09       17       17   1.00      -156
     I19.0C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        12.32       23       23   1.00      -179
     B25.0C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        33.40       52       52   1.00      -231

313+50.00 SUITABLE
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        41.32       49       49   1.00      -280
     S9.5C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         9.08       17       17   1.00      -297
     I19.0C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        12.30       23       23   1.00      -320
     B25.0C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        29.05       58       58   1.00      -378

314+00.00 SUITABLE
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        87.33      119      119   1.00      -497
     S9.5C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         9.07       17       17   1.00      -514
```

```
I19.0C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill     12.29        23        23    1.00       -537
B25.0C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill     15.67        41        41    1.00       -578

314+50.00 SUITABLE
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill    123.97       196       196    1.00       -774
S9.5C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill      9.07        17        17    1.00       -791
I19.0C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill     12.28        23        23    1.00       -814
B25.0C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill     15.67        29        29    1.00       -843

315+00.00 SUITABLE
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill    150.27       254       254    1.00      -1097
S9.5C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill      9.06        17        17    1.00      -1114
I19.0C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
    Subsoil Exc      0.00         0         0    1.00
           Fill     12.28        23        23    1.00      -1137
B25.0C
     Common Exc      0.00         0         0    1.00
   Subgrade Exc      0.00         0         0    1.00
```

```
            Subsoil Exc      0.00        0          0   1.00
               Fill         15.66       29         29   1.00     -1166

315+50.00 SUITABLE
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill        536.35      636        636   1.00     -1802
            S9.5C
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill          9.06       17         17   1.00     -1819
            I19.0C
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill         12.28       23         23   1.00     -1842
            B25.0C
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill         15.66       29         29   1.00     -1871

316+00.00 SUITABLE
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill        129.08      616        616   1.00     -2487
            S9.5C
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill          9.06       17         17   1.00     -2504
            I19.0C
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill         12.28       23         23   1.00     -2527
            B25.0C
            Common Exc       0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
               Fill         15.66       29         29   1.00     -2556
```
⬆   G R A N D   S U M M A R Y   T O T A L S
            Material Name   Unadjusted Adjusted   Mult
                                  Volumes   Volumes   Factor
                                  (cu. yd.) (cu. yd.)

```
        ---------------------------- ---------- ---------- ------
        SUITABLE
```

	Common Exc	43	43	1.00
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	1887	1887	1.00
SHOULDERBORROW				
	Common Exc	0	0	1.00
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	4	4	1.00
S9.5C				
	Common Exc	0	0	1.00
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	194	194	1.00
I19.0C				
	Common Exc	0	0	1.00
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	198	198	1.00
B25.0C				
	Common Exc	0	0	1.00
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	316	316	1.00

⮝   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Mult Factor
SUITABLE					
Common Exc	43	43	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	1887	1887	0	0	1.00
SHOULDERBORROW					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00

	Subsoil Exc	0	0	0
0	1.00			
	Fill	4	4	0
0	1.00			

S9.5C

	Common Exc	0	0	0
0	1.00			
	Subgrade Exc	0	0	0
0	1.00			
	Subsoil Exc	0	0	0
0	1.00			
	Fill	194	194	0
0	1.00			

I19.0C

	Common Exc	0	0	0
0	1.00			
	Subgrade Exc	0	0	0
0	1.00			
	Subsoil Exc	0	0	0
0	1.00			
	Fill	198	198	0
0	1.00			

B25.0C

	Common Exc	0	0	0
0	1.00			
	Subgrade Exc	0	0	0
0	1.00			
	Subsoil Exc	0	0	0
0	1.00			
	Fill	316	316	0
0	1.00			

B A L A N C E   P O I N T   S U M M A R Y

| Material Name | Cumulative | | Incremental | | Mult Factor |
| | Unadjusted | Adjusted | Unadjusted | Adjusted | |
	Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	

Station = 308+66.67

SUITABLE

Common Exc	5	5	5	5
1.00				
Subgrade Exc	0	0	0	0
1.00				
Subsoil Exc	0	0	0	0
1.00				
Fill	0	0	0	0
1.00				

UNSUITABLE

	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					

UNSUITABLEMARGINAL

	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					

DDE

	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					

UNSUITABLEDDE

	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					

UNDERCUT

	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					

SHOULDERBORROW

	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					

	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
SELECTMATERIAL					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
S9.5C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	5	5	5	5
1.00					
I19.0C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
B25.0C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
Station = 311+19.44					
SUITABLE					
	Common Exc	37	37	32	32
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					

UNSUITABLE						
	Common Exc	0	0	0	0	
1.00						
	Subgrade Exc	0	0	0	0	
1.00						
	Subsoil Exc	0	0	0	0	
1.00						
	Fill	0	0	0	0	
1.00						
UNSUITABLEMARGINAL						
	Common Exc	0	0	0	0	
1.00						
	Subgrade Exc	0	0	0	0	
1.00						
	Subsoil Exc	0	0	0	0	
1.00						
	Fill	0	0	0	0	
1.00						
DDE						
	Common Exc	0	0	0	0	
1.00						
	Subgrade Exc	0	0	0	0	
1.00						
	Subsoil Exc	0	0	0	0	
1.00						
	Fill	0	0	0	0	
1.00						
UNSUITABLEDDE						
	Common Exc	0	0	0	0	
1.00						
	Subgrade Exc	0	0	0	0	
1.00						
	Subsoil Exc	0	0	0	0	
1.00						
	Fill	0	0	0	0	
1.00						
UNDERCUT						
	Common Exc	0	0	0	0	
1.00						
	Subgrade Exc	0	0	0	0	
1.00						
	Subsoil Exc	0	0	0	0	
1.00						
	Fill	0	0	0	0	
1.00						
SHOULDERBORROW						
	Common Exc	0	0	0	0	
1.00						
	Subgrade Exc	0	0	0	0	
1.00						

	Material Name				
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
SELECTMATERIAL					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
S9.5C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	33	33	28	28
1.00					
I19.0C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	3	3	3	3
1.00					
B25.0C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	1	1	1	1
1.00					

COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
↟

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
316+00.00	SUITABLE					

```
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill      129.08         0          0    1.00          0
      S9.5C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill        9.06         0          0    1.00          0
      I19.0C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill       12.28         0          0    1.00          0
      B25.0C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill       15.66         0          0    1.00          0

316+50.00 SUITABLE
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill      979.73      1027       1027    1.00      -1027
      S9.5C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill        9.06        17         17    1.00      -1044
      I19.0C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill       12.28        23         23    1.00      -1067
      B25.0C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill       15.66        29         29    1.00      -1096

317+00.00 SUITABLE
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
                  Fill      191.06      1084       1084    1.00      -2180
      S9.5C
            Common Exc        0.00         0          0    1.00
          Subgrade Exc        0.00         0          0    1.00
           Subsoil Exc        0.00         0          0    1.00
```

```
            Fill         9.07      17        17     1.00     -2197
   I19.0C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill        12.28      23        23     1.00     -2220
   B25.0C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill        15.67      29        29     1.00     -2249

317+50.00 SUITABLE
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill       168.95     333       333     1.00     -2582
   S9.5C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill         9.07      17        17     1.00     -2599
   I19.0C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill        12.29      23        23     1.00     -2622
   B25.0C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill        15.67      29        29     1.00     -2651

318+00.00 SUITABLE
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill       147.97     293       293     1.00     -2944
   S9.5C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill         9.07      17        17     1.00     -2961
   I19.0C
      Common Exc         0.00       0         0     1.00
    Subgrade Exc         0.00       0         0     1.00
     Subsoil Exc         0.00       0         0     1.00
            Fill        12.29      23        23     1.00     -2984
   B25.0C
      Common Exc         0.00       0         0     1.00
```

```
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill      15.68        29         29    1.00      -3013

318+50.00 SUITABLE
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill     120.06       248        248    1.00      -3261
         S9.5C
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill       9.08        17         17    1.00      -3278
         I19.0C
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill      12.30        23         23    1.00      -3301
         B25.0C
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill      15.68        29         29    1.00      -3330

319+00.00 SUITABLE
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill      92.60       197        197    1.00      -3527
         S9.5C
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill       9.08        17         17    1.00      -3544
         I19.0C
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill      12.30        23         23    1.00      -3567
         B25.0C
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
                   Fill      15.69        29         29    1.00      -3596

319+50.00 SUITABLE
            Common Exc        0.00         0          0    1.00
            Subgrade Exc      0.00         0          0    1.00
            Subsoil Exc       0.00         0          0    1.00
```

Fill	71.14	152	152	1.00	-3748
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.09	17	17	1.00	-3765
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	12.31	23	23	1.00	-3788
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	15.70	29	29	1.00	-3817

320+00.00 SUITABLE

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	17.88	82	82	1.00	-3899
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.09	17	17	1.00	-3916
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	12.32	23	23	1.00	-3939
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	50.44	61	61	1.00	-4000

320+50.00 SUITABLE

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	18.98	34	34	1.00	-4034
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.10	17	17	1.00	-4051
I19.0C					
Common Exc	0.00	0	0	1.00	

```
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        12.33       23       23   1.00        -4074
        B25.0C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        41.70       85       85   1.00        -4159

321+00.00 SUITABLE
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        16.93       33       33   1.00        -4192
        S9.5C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill         9.52       17       17   1.00        -4209
        I19.0C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        12.89       23       23   1.00        -4232
        B25.0C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        41.44       77       77   1.00        -4309

321+50.00 SUITABLE
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        25.79       40       40   1.00        -4349
        S9.5C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill         9.11       17       17   1.00        -4366
        I19.0C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        12.35       23       23   1.00        -4389
        B25.0C
            Common Exc       0.00        0        0   1.00
           Subgrade Exc      0.00        0        0   1.00
           Subsoil Exc       0.00        0        0   1.00
                Fill        32.04       68       68   1.00        -4457
```

```
322+00.00 SUITABLE
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     28.82         51         51   1.00      -4508
          S9.5C
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill      9.12         17         17   1.00      -4525
          I19.0C
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     12.36         23         23   1.00      -4548
          B25.0C
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     27.80         55         55   1.00      -4603

322+50.00 SUITABLE
            Common Exc      7.79          7          7   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     32.60         57         57   1.00      -4653
          S9.5C
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill      9.13         17         17   1.00      -4670
          I19.0C
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     12.37         23         23   1.00      -4693
          B25.0C
            Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     24.86         49         49   1.00      -4742

323+00.00 SUITABLE
            Common Exc      8.14         15         15   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     39.23         67         67   1.00      -4794
          S9.5C
            Common Exc      0.00          0          0   1.00
```

```
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill          9.10       17        17   1.00       -4811
      I19.0C
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill         12.23       23        23   1.00       -4834
      B25.0C
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill         20.80       42        42   1.00       -4876

323+50.00 SUITABLE
          Common Exc        6.52       14        14   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill         43.21       76        76   1.00       -4938
      S9.5C
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill          8.40       16        16   1.00       -4954
      I19.0C
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill         10.33       21        21   1.00       -4975
      B25.0C
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill         13.06       31        31   1.00       -5006

324+00.00 SUITABLE
          Common Exc        9.25       15        15   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill         24.77       63        63   1.00       -5054
      SHOULDERBORROW
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill          5.46        5         5   1.00       -5059
      S9.5C
          Common Exc        0.00        0         0   1.00
          Subgrade Exc      0.00        0         0   1.00
          Subsoil Exc       0.00        0         0   1.00
              Fill          6.63       14        14   1.00       -5073
```

```
            I19.0C
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill      8.46         17         17    1.00      -5090
            B25.0C
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill     28.24         38         38    1.00      -5128

324+50.00 SUITABLE
          Common Exc      9.84         18         18    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill     20.60         42         42    1.00      -5152
        SHOULDERBORROW
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill      5.45         10         10    1.00      -5162
            S9.5C
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill      5.46         11         11    1.00      -5173
            I19.0C
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill      6.87         14         14    1.00      -5187
            B25.0C
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill     23.07         48         48    1.00      -5235

325+00.00 SUITABLE
          Common Exc      9.91         18         18    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill     25.03         42         42    1.00      -5259
        SHOULDERBORROW
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
         Subsoil Exc      0.00          0          0    1.00
                Fill      5.45         10         10    1.00      -5269
            S9.5C
          Common Exc      0.00          0          0    1.00
        Subgrade Exc      0.00          0          0    1.00
```

```
                Subsoil Exc      0.00         0          0   1.00
                    Fill         4.34         9          9   1.00      -5278
        I19.0C
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill         5.35        11         11   1.00      -5289
        B25.0C
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill        18.11        38         38   1.00      -5327


325+50.00 SUITABLE
                Common Exc      11.99        20         20   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill        13.26        35         35   1.00      -5342
        SHOULDERBORROW
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill         5.44        10         10   1.00      -5352
        S9.5C
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill         3.43         7          7   1.00      -5359
        I19.0C
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill         4.19         9          9   1.00      -5368
        B25.0C
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill        14.34        30         30   1.00      -5398


326+00.00 SUITABLE
                Common Exc      12.74        23         23   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill         3.73        16         16   1.00      -5391
        SHOULDERBORROW
                Common Exc       0.00         0          0   1.00
                Subgrade Exc     0.00         0          0   1.00
                Subsoil Exc      0.00         0          0   1.00
                    Fill         5.45        10         10   1.00      -5401
        S9.5C
```

```
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       2.57        6        6    1.00      -5407
      I19.0C
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       2.98        7        7    1.00      -5414
      B25.0C
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill      10.42       23       23    1.00      -5437

326+50.00 SUITABLE
          Common Exc     14.64       25       25    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       0.01        3        3    1.00      -5415
      SHOULDERBORROW
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       5.44       10       10    1.00      -5425
      S9.5C
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       1.92        4        4    1.00      -5429
      I19.0C
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       2.06        5        5    1.00      -5434
      B25.0C
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       7.44       17       17    1.00      -5451

327+00.00 SUITABLE
          Common Exc      9.15       22       22    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
               Fill       0.00        0        0    1.00      -5429
      SHOULDERBORROW
          Common Exc      0.00        0        0    1.00
          Subgrade Exc    0.00        0        0    1.00
          Subsoil Exc     0.00        0        0    1.00
```

Fill	5.26	10	10	1.00	-5439
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.50	3	3	1.00	-5442
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.54	3	3	1.00	-5445
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	5.73	12	12	1.00	-5457
327+50.00 SUITABLE					
Common Exc	8.39	16	16	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	0	0	1.00	-5441
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	4.53	9	9	1.00	-5450
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.24	3	3	1.00	-5453
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.20	3	3	1.00	-5456
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	4.62	10	10	1.00	-5466
328+00.00 SUITABLE					
Common Exc	8.11	15	15	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	0	0	1.00	-5451
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	

```
        Subgrade Exc      0.00           0           0  1.00
         Subsoil Exc      0.00           0           0  1.00
                Fill      4.55           8           8  1.00      -5459
      S9.5C
          Common Exc      0.00           0           0  1.00
        Subgrade Exc      0.00           0           0  1.00
         Subsoil Exc      0.00           0           0  1.00
                Fill      1.15           2           2  1.00      -5461
      I19.0C
          Common Exc      0.00           0           0  1.00
        Subgrade Exc      0.00           0           0  1.00
         Subsoil Exc      0.00           0           0  1.00
                Fill      1.10           2           2  1.00      -5463
      B25.0C
          Common Exc      0.00           0           0  1.00
        Subgrade Exc      0.00           0           0  1.00
         Subsoil Exc      0.00           0           0  1.00
                Fill      4.32           8           8  1.00      -5471
```

G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
SUITABLE			
Common Exc	208	208	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	3975	3975	1.00
SHOULDERBORROW			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	82	82	1.00
S9.5C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	313	313	1.00
I19.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	414	414	1.00
B25.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	895	895	1.00

S P L I T   S U M M A R Y   T O T A L S

Quant Mult Factor	Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Adjusted Volume (cu. yd.)
	SUITABLE				
1.00	Common Exc	208	208	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	3975	3975	0	0
	SHOULDERBORROW				
1.00	Common Exc	0	0	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	82	82	0	0
	S9.5C				
1.00	Common Exc	0	0	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	313	313	0	0
	I19.0C				
1.00	Common Exc	0	0	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	414	414	0	0
	B25.0C				
1.00	Common Exc	0	0	0	0
	Subgrade Exc	0	0	0	0

0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	895	895	0
0	1.00				

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_L_Phase-3.inp
Output File: EW_L_Phase-3.log
 1      1        1
 1      2        2
 1      3        3 Earthwork
 1      4        4
 1      5        5 tolerance = 0.004
 1      6        6
 1      7        7 xs dgn = HB0002_rdy_xsc_L_phase-3.dgn
 1      8        8
 1      9        9 Proposed Finish Grade
 1     10       10 soil type = Suitable
 1     11       11 fill mult factor = 1.000000
 1     12       12 type = line, line_string
 1     13       13 lvname = Prop CMT Conc Surface
 1     14       14 lvname = Prop CMT Pvmt Surface*
 1     15       15 lvname = Prop CMT Slope Grass
 1     16       16 lvname = Prop CMT Shear Line
 1     17       17 lvname = Scratch_Level_8
 1     18       18 lvname = Prop CMT Concrete Wall Surface
 1     19       19
 1     20       20 Existing Ground Line
 1     21       21 soil type = Suitable
 1     22       22 type = line, line_string
 1     23       23 lvname = Exist XS Ground Line
 1     24       24
 1     25       25 existing suitable material
 1     26       26 soil type = Suitable
 1     27       27 fill mult factor = 1.00
 1     28       28 type = line, line_string
 1     29       29 lvname = WEI XS Soil-Suitable
 1     30       30
 1     31       31 existing suitable material
 1     32       32 soil type = Unsuitable
 1     33       33 fill mult factor = 1.00
 1     34       34 type = line, line_string
 1     35       35 lvname = WEI XS Soil-Unsuitable
 1     36       36
 1     37       37 existing suitable material
 1     38       38 soil type = UnsuitableMarginal
 1     39       39 fill mult factor = 1.00
 1     40       40 type = line, line_string
 1     41       41 lvname = WEI XS Soil-UnsuitableMarginal
 1     42       42
 1     43       43 existing suitable material
 1     44       44 soil type = DDE
 1     45       45 fill mult factor = 1.00
 1     46       46 type = line, line_string
 1     47       47 lvname = WEI XS Soil-DDE
 1     48       48
```

```
1     49      49 existing suitable material
1     50      50 soil type = UnsuitableDDE
1     51      51 fill mult factor = 1.00
1     52      52 type = line, line_string
1     53      53 lvname = WEI XS Soil-UnsuitableDDE
1     54      54
1     55      55 existing unsuitable material
1     56      56 soil type = Undercut
1     57      57 fill mult factor = 1.00
1     58      58 type = line,line_string
1     59      59 lvname = WEI XS Soil-UnsuitableUndercut
1     60      60
1     61      61 Proposed Undercut
1     62      62 common exc only
1     63      63 soil type = ShoulderBorrow
1     64      64 fill mult factor = 1.00
1     65      65 type = line,line_string
1     66      66 lvname = Prop CMT Shoulder Borrow
1     67      67
1     68      68 Proposed Undercut
1     69      69 soil type = Suitable
1     70      70 fill mult factor = 1.00
1     71      71 type = line,line_string
1     72      72 lvname = WEI XS Fill-Suitable
1     73      73
1     74      74 Proposed Undercut
1     75      75 soil type = SelectMaterial
1     76      76 fill mult factor = 1.00
1     77      77 type = line,line_string
1     78      78 lvname = WEI XS Fill-SelectMaterial
1     79      79
1     80      80 Proposed Undercut
1     81      81 common exc only
1     82      82 soil type = S9.5C
1     83      83 fill mult factor = 1.00
1     84      84 type = line,line_string
1     85      85 lvname = Prop CMT Pvmt Course 1
1     86      86
1     87      87 Proposed Undercut
1     88      88 common exc only
1     89      89 soil type = I19.0C
1     90      90 fill mult factor = 1.00
1     91      91 type = line,line_string
1     92      92 lvname = Prop CMT Pvmt Course 2
1     93      93
1     94      94 Proposed Undercut
1     95      95 common exc only
1     96      96 soil type = B25.0C
1     97      97 fill mult factor = 1.00
1     98      98 type = line,line_string
```

```
1    99     99 lvname = Prop CMT Pvmt Course 3
1   100    100
1   101    101 Proposed Undercut
1   102    102 common exc only
1   103    103 soil type = ABC
1   104    104 fill mult factor = 1.00
1   105    105 type = line,line_string
1   106    106 lvname = Prop CMT Pvmt Course 4
1   107    107
1   108    108 Proposed Undercut
1   109    109 common exc only
1   110    110 soil type = Wall
1   111    111 fill mult factor = 1.00
1   112    112 type = line,line_string
1   113    113 lvname = Prop CMT Concrete Wall
1   114    114
1   115    115 excavation limits
1   116    116 lvname = Prop XS Exc Vertical Line 1
1   117    117 type = line
1   118    118
1   119    119 Write Earthwork Shapes
1   120    120 plot param
1   121    121 lvname = WEI XS Earthwork
1   122    122 Stratify Shape Color
1   123    123
1   124    124 vertical search distance = 200
1   125    125
1   126    126 /*calculate only between excavation limits*/
1   127    127
1   128    128 End Area Decimal Places = 2
1   129    129
1   130    130 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\03-L-Phase3-30300-31650.txt
1   131    131
1   132    132 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1   133    133 column 1 number of decimal place = 0
1   134    134 column 1 total length = 10
1   135    135
1   136    136 column 2 formula = ["SUITABLE", Fill, unadj vol]
1   137    137 column 2 number of decimal place = 0
1   138    138 column 2 total length = 10
1   139    139
1   140    140 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1   141    141 column 3 number of decimal place = 0
1   142    142 column 3 total length = 10
1   143    143
1   144    144 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
```

```
1    145    145 column 4 number of decimal place = 0
1    146    146 column 4 total length = 10
1    147    147
1    148    148 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    149    149 column 5 number of decimal place = 2
1    150    150 column 5 total length = 10
1    151    151
1    152    152 column 6 formula = ["S9.5C", Fill, End Area]
1    153    153 column 6 number of decimal place = 2
1    154    154 column 6 total length = 10
1    155    155
1    156    156 column 7 formula = ["I19.0C", Fill, End Area]
1    157    157 column 7 number of decimal place = 2
1    158    158 column 7 total length = 10
1    159    159
1    160    160 column 8 formula = ["B25.0C", Fill, End Area]
1    161    161 column 8 number of decimal place = 2
1    162    162 column 8 total length = 10
1    163    163
1    164    164 column 9 formula = ["ABC", Fill, End Area]
1    165    165 column 9 number of decimal place = 2
1    166    166 column 9 total length = 10
1    167    167
1    168    168 Process Earthwork for Baseline = L
1    169    169 job number = rdy
1    170    170
1    171    171 beg sta =  303+00.00
1    172    172 end sta =  316+50.00
1    173    173
1    174    174 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\03-L-Phase3-31650-33150.txt
1    175    175
1    176    176 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    177    177 column 1 number of decimal place = 0
1    178    178 column 1 total length = 10
1    179    179
1    180    180 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    181    181 column 2 number of decimal place = 0
1    182    182 column 2 total length = 10
1    183    183
1    184    184 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    185    185 column 3 number of decimal place = 0
1    186    186 column 3 total length = 10
1    187    187
1    188    188 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1    189    189 column 4 number of decimal place = 0
1    190    190 column 4 total length = 10
```

```
1    191    191
1    192    192 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    193    193 column 5 number of decimal place = 2
1    194    194 column 5 total length = 10
1    195    195
1    196    196 column 6 formula = ["S9.5C", Fill, End Area]
1    197    197 column 6 number of decimal place = 2
1    198    198 column 6 total length = 10
1    199    199
1    200    200 column 7 formula = ["I19.0C", Fill, End Area]
1    201    201 column 7 number of decimal place = 2
1    202    202 column 7 total length = 10
1    203    203
1    204    204 column 8 formula = ["B25.0C", Fill, End Area]
1    205    205 column 8 number of decimal place = 2
1    206    206 column 8 total length = 10
1    207    207
1    208    208 column 9 formula = ["ABC", Fill, End Area]
1    209    209 column 9 number of decimal place = 2
1    210    210 column 9 total length = 10
1    211    211
1    212    212 Process Earthwork for Baseline = L
1    213    213 job number = rdy
1    214    214
1    215    215 beg sta =  316+50.00
1    216    216 end sta =  331+50.00
1    217    217
1    218    218
1    219    219
1    220    220
1    221    221
1    222    222
1    223    223
0     0     224 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
⬆
              Material Name   End Areas  Unadjusted Adjusted   Mult    Mass
Station                                  Volumes    Volumes    Factor Ordinate
                             (sq. ft.)  (cu. yd.)  (cu. yd.)
----------- ---------------- ---------- ---------- ---------- ------ --------
  303+00.00 SUITABLE
                Common Exc     28.87          0          0   1.00
               Subgrade Exc     0.00          0          0   1.00
                Subsoil Exc     0.00          0          0   1.00
                      Fill      2.11          0          0   1.00          0
            SHOULDERBORROW
                Common Exc      0.00          0          0   1.00
```

```
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        9.10        0          0    1.00           0
        S9.5C
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        6.87        0          0    1.00           0
        I19.0C
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        4.43        0          0    1.00           0
        B25.0C
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill       15.16        0          0    1.00           0

303+50.00 SUITABLE
             Common Exc        25.49       50         50    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        3.39        5          5    1.00          45
        SHOULDERBORROW
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        8.80       17         17    1.00          28
        S9.5C
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        6.85       13         13    1.00          15
        I19.0C
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        4.33        8          8    1.00           7
        B25.0C
             Common Exc         0.00        0          0    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill       14.84       28         28    1.00         -21

304+00.00 SUITABLE
             Common Exc        22.52       44         44    1.00
             Subgrade Exc       0.00        0          0    1.00
             Subsoil Exc        0.00        0          0    1.00
                    Fill        6.03        9          9    1.00          14
```

```
SHOULDERBORROW
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        7.77        15        15    1.00         -1
S9.5C
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        6.84        13        13    1.00        -14
I19.0C
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        4.30         8         8    1.00        -22
B25.0C
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill       14.73        27        27    1.00        -49

304+50.00 SUITABLE
    Common Exc     19.70        39        39    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        9.71        15        15    1.00        -25
SHOULDERBORROW
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        6.93        14        14    1.00        -39
S9.5C
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        6.85        13        13    1.00        -52
I19.0C
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill        4.33         8         8    1.00        -60
B25.0C
    Common Exc      0.00         0         0    1.00
    Subgrade Exc    0.00         0         0    1.00
    Subsoil Exc     0.00         0         0    1.00
        Fill       14.80        27        27    1.00        -87

305+00.00 SUITABLE
    Common Exc     19.64        36        36    1.00
    Subgrade Exc    0.00         0         0    1.00
```

```
            Subsoil Exc       0.00          0          0   1.00
               Fill          11.18         19         19   1.00         -70
SHOULDERBORROW
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill           6.57         13         13   1.00         -83
S9.5C
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill           6.87         13         13   1.00         -96
I19.0C
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill           4.39          8          8   1.00        -104
B25.0C
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill          14.98         28         28   1.00        -132

305+50.00 SUITABLE
            Common Exc       19.50         36         36   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill          12.18         22         22   1.00        -118
SHOULDERBORROW
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill           6.57         12         12   1.00        -130
S9.5C
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill           6.86         13         13   1.00        -143
I19.0C
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill           4.36          8          8   1.00        -151
B25.0C
            Common Exc        0.00          0          0   1.00
           Subgrade Exc       0.00          0          0   1.00
            Subsoil Exc       0.00          0          0   1.00
               Fill          14.90         28         28   1.00        -179


306+00.00 SUITABLE
```

```
          Common Exc      19.18      36        36     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill         11.61      22        22     1.00      -165
       SHOULDERBORROW
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill          6.57      12        12     1.00      -177
       S9.5C
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill          6.91      13        13     1.00      -190
       I19.0C
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill          4.46       8         8     1.00      -198
       B25.0C
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill         15.21      28        28     1.00      -226

306+50.00 SUITABLE
          Common Exc      16.64      33        33     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill         13.64      23        23     1.00      -216
       SHOULDERBORROW
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill          6.57      12        12     1.00      -228
       S9.5C
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill          7.69      14        14     1.00      -242
       I19.0C
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill          5.44       9         9     1.00      -251
       B25.0C
          Common Exc       0.00       0         0     1.00
          Subgrade Exc     0.00       0         0     1.00
          Subsoil Exc      0.00       0         0     1.00
             Fill         18.39      31        31     1.00      -282
```

```
307+00.00 SUITABLE
            Common Exc      14.89       29       29    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill         15.36       27       27    1.00      -280
          SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill          7.36       13       13    1.00      -293
          S9.5C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill          7.43       14       14    1.00      -307
          I19.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill          5.11       10       10    1.00      -317
          B25.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill         17.35       33       33    1.00      -350

307+50.00 SUITABLE
            Common Exc      14.67       27       27    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill         14.96       28       28    1.00      -351
          SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill          7.67       14       14    1.00      -365
          S9.5C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill          7.39       14       14    1.00      -379
          I19.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
               Fill          5.08        9        9    1.00      -388
          B25.0C
            Common Exc       0.00        0        0    1.00
            Subgrade Exc     0.00        0        0    1.00
```

```
              Subsoil Exc      0.00        0         0    1.00
              Fill            17.22       32        32    1.00      -420

308+00.00 SUITABLE
              Common Exc      13.84       26        26    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill             9.20       22        22    1.00      -416
          SHOULDERBORROW
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill             7.46       14        14    1.00      -430
          S9.5C
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill             9.33       15        15    1.00      -445
          I19.0C
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill             4.94        9         9    1.00      -454
          B25.0C
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill            16.79       31        31    1.00      -485

308+50.00 SUITABLE
              Common Exc      12.14       24        24    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill            12.21       20        20    1.00      -481
          SHOULDERBORROW
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill             7.30       14        14    1.00      -495
          S9.5C
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill            11.17       19        19    1.00      -514
          I19.0C
              Common Exc       0.00        0         0    1.00
              Subgrade Exc     0.00        0         0    1.00
              Subsoil Exc      0.00        0         0    1.00
              Fill             4.73        9         9    1.00      -523
          B25.0C
```

```
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill     16.12       30       30   1.00       -553

309+00.00 SUITABLE
              Common Exc     11.79       22       22   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill     14.70       25       25   1.00       -556
          SHOULDERBORROW
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill      6.89       13       13   1.00       -569
          S9.5C
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill      8.56       18       18   1.00       -587
          I19.0C
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill     11.03       15       15   1.00       -602
          B25.0C
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill     15.94       30       30   1.00       -632

309+50.00 SUITABLE
              Common Exc     10.82       21       21   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill     20.58       33       33   1.00       -644
          SHOULDERBORROW
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill      6.10       12       12   1.00       -656
          S9.5C
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
                    Fill      8.56       16       16   1.00       -672
          I19.0C
              Common Exc      0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
             Subsoil Exc      0.00        0        0   1.00
```

```
              Fill         14.79        24         24   1.00      -696
        B25.0C
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         17.50        31         31   1.00      -727

310+00.00 SUITABLE
          Common Exc      6.64        16         16   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         37.32        54         54   1.00      -765
        SHOULDERBORROW
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         6.48        12         12   1.00      -777
        S9.5C
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         8.56        16         16   1.00      -793
        I19.0C
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         11.62        24         24   1.00      -817
        B25.0C
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         29.34        43         43   1.00      -860

310+50.00 SUITABLE
          Common Exc      0.02         6          6   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         43.98        75         75   1.00      -929
        SHOULDERBORROW
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         6.57        12         12   1.00      -941
        S9.5C
          Common Exc      0.00         0          0   1.00
          Subgrade Exc    0.00         0          0   1.00
          Subsoil Exc     0.00         0          0   1.00
              Fill         8.56        16         16   1.00      -957
        I19.0C
          Common Exc      0.00         0          0   1.00
```

```
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill        11.62       22       22    1.00        -979
   B25.0C
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill        40.68       65       65    1.00       -1044

311+00.00 SUITABLE
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill        73.70      109      109    1.00       -1153
   SHOULDERBORROW
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill         6.57       12       12    1.00       -1165
   S9.5C
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill         8.56       16       16    1.00       -1181
   I19.0C
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill        11.61       22       22    1.00       -1203
   B25.0C
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill        60.17       93       93    1.00       -1296

311+50.00 SUITABLE
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill        97.64      159      159    1.00       -1455
   SHOULDERBORROW
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill         6.57       12       12    1.00       -1467
   S9.5C
      Common Exc        0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
      Subsoil Exc       0.00        0        0    1.00
           Fill         8.56       16       16    1.00       -1483
```

```
          I19.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill         11.61       22       22    1.00      -1505
          B25.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill         78.81      129      129    1.00      -1634

312+00.00 SUITABLE
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill        140.13      220      220    1.00      -1854
          SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill          6.57       12       12    1.00      -1866
          S9.5C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill          9.56       17       17    1.00      -1883
          I19.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill         12.95       23       23    1.00      -1906
          B25.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill        107.55      173      173    1.00      -2079

312+50.00 SUITABLE
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill        237.01      349      349    1.00      -2428
          SHOULDERBORROW
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
           Subsoil Exc       0.00        0        0    1.00
               Fill          7.93       13       13    1.00      -2441
          S9.5C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
```

```
        Subsoil Exc      0.00         0          0   1.00
            Fill        12.40        20         20   1.00      -2461
    I19.0C
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      17.98        29         29   1.00      -2490
    B25.0C
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      46.59       143        143   1.00      -2633
    ABC
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      30.68        28         28   1.00      -2661


313+00.00 SUITABLE
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill     283.23       482        482   1.00      -3143
    SHOULDERBORROW
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill       7.93        15         15   1.00      -3158
    S9.5C
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      13.59        24         24   1.00      -3182
    I19.0C
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      19.56        35         35   1.00      -3217
    B25.0C
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      63.06       102        102   1.00      -3319
    ABC
        Common Exc       0.00         0          0   1.00
      Subgrade Exc       0.00         0          0   1.00
       Subsoil Exc       0.00         0          0   1.00
              Fill      30.68        57         57   1.00      -3376


313+50.00 SUITABLE
```

```
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill       393.32      626        626   1.00      -4002
        SHOULDERBORROW
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill         7.93       15         15   1.00      -4017
        S9.5C
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill        14.59       26         26   1.00      -4043
        I19.0C
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill        20.91       37         37   1.00      -4080
        B25.0C
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill        82.00      134        134   1.00      -4214
        ABC
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill        30.69       57         57   1.00      -4271

314+00.00 SUITABLE
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill       492.76      820        820   1.00      -5091
        SHOULDERBORROW
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill         7.93       15         15   1.00      -5106
        S9.5C
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill        15.47       28         28   1.00      -5134
        I19.0C
          Common Exc       0.00        0          0   1.00
          Subgrade Exc     0.00        0          0   1.00
          Subsoil Exc      0.00        0          0   1.00
              Fill        22.09       40         40   1.00      -5174
```

```
        B25.0C
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill            50.88         123         123    1.00        -5297
        ABC
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill            46.80          72          72    1.00        -5369

314+50.00 SUITABLE
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill           541.32         957         957    1.00        -6326
        SHOULDERBORROW
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill             8.00          15          15    1.00        -6341
        S9.5C
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill            16.20          29          29    1.00        -6370
        I19.0C
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill            23.08          42          42    1.00        -6412
        B25.0C
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill            52.98          96          96    1.00        -6508
        ABC
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill            48.31          88          88    1.00        -6596

315+00.00 SUITABLE
            Common Exc          0.38           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
            Subsoil Exc         0.00           0           0    1.00
               Fill           610.84        1067        1067    1.00        -7663
        SHOULDERBORROW
            Common Exc          0.00           0           0    1.00
           Subgrade Exc         0.00           0           0    1.00
```

```
              Subsoil Exc       0.00        0        0    1.00
                  Fill          8.01       15       15    1.00    -7678
S9.5C
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         16.78       31       31    1.00    -7709
I19.0C
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         23.88       43       43    1.00    -7752
B25.0C
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         54.41       99       99    1.00    -7851
ABC
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         49.46       91       91    1.00    -7942

315+50.00 SUITABLE
              Common Exc       18.23       17       17    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill        927.06     1424     1424    1.00    -9349
SHOULDERBORROW
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill          8.01       15       15    1.00    -9364
S9.5C
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         17.22       31       31    1.00    -9395
I19.0C
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         24.44       45       45    1.00    -9440
B25.0C
              Common Exc        0.00        0        0    1.00
              Subgrade Exc      0.00        0        0    1.00
              Subsoil Exc       0.00        0        0    1.00
                  Fill         55.39      102      102    1.00    -9542
ABC
              Common Exc        0.00        0        0    1.00
```

```
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       50.32       92       92   1.00      -9634

316+00.00 SUITABLE
          Common Exc        1.12       18       18   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill     1386.66     2142     2142   1.00     -11758
          SHOULDERBORROW
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       12.15       19       19   1.00     -11777
          S9.5C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       17.54       32       32   1.00     -11809
          I19.0C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       24.76       46       46   1.00     -11855
          B25.0C
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       56.07      103      103   1.00     -11958
          ABC
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       50.93       94       94   1.00     -12052
          WALL
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       10.47       10       10   1.00     -12062

316+50.00 SUITABLE
          Common Exc        1.18        2        2   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill      544.70     1788     1788   1.00     -13848
          SHOULDERBORROW
          Common Exc        0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
                 Fill       43.14       51       51   1.00     -13899
```

```
S9.5C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     17.71         33         33   1.00   -13932
I19.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     24.96         46         46   1.00   -13978
B25.0C
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     56.52        104        104   1.00   -14082
ABC
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill     51.33         95         95   1.00   -14177
WALL
     Common Exc      0.00          0          0   1.00
   Subgrade Exc      0.00          0          0   1.00
    Subsoil Exc      0.00          0          0   1.00
           Fill      3.51         13         13   1.00   -14190
```

✆   G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
SUITABLE			
Common Exc	482	482	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	10542	10542	1.00
SHOULDERBORROW			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	408	408	1.00
S9.5C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	523	523	1.00
I19.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	609	609	1.00

B25.0C

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	1893	1893	1.00

ABC

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	674	674	1.00

WALL

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	23	23	1.00

⬆   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Mult Factor
SUITABLE					
Common Exc	482	482	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	10542	10542	0	0	1.00
SHOULDERBORROW					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	408	408	0	0	1.00
S9.5C					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00

	Subsoil Exc	0	0	0
0 1.00				
	Fill	523	523	0
0 1.00				
I19.0C				
	Common Exc	0	0	0
0 1.00				
	Subgrade Exc	0	0	0
0 1.00				
	Subsoil Exc	0	0	0
0 1.00				
	Fill	609	609	0
0 1.00				
B25.0C				
	Common Exc	0	0	0
0 1.00				
	Subgrade Exc	0	0	0
0 1.00				
	Subsoil Exc	0	0	0
0 1.00				
	Fill	1893	1893	0
0 1.00				
ABC				
	Common Exc	0	0	0
0 1.00				
	Subgrade Exc	0	0	0
0 1.00				
	Subsoil Exc	0	0	0
0 1.00				
	Fill	674	674	0
0 1.00				
WALL				
	Common Exc	0	0	0
0 1.00				
	Subgrade Exc	0	0	0
0 1.00				
	Subsoil Exc	0	0	0
0 1.00				
	Fill	23	23	0
0 1.00				

COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
⬆

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
316+50.00	SUITABLE					

```
           Common Exc      1.18          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill    544.70          0          0   1.00           0
       SHOULDERBORROW
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     43.14          0          0   1.00           0
       S9.5C
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     17.71          0          0   1.00           0
       I19.0C
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     24.96          0          0   1.00           0
       B25.0C
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     56.52          0          0   1.00           0
       ABC
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     51.33          0          0   1.00           0
       WALL
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill      3.51          0          0   1.00           0

317+00.00 SUITABLE
           Common Exc      1.00          2          2   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill    778.53       1225       1225   1.00       -1223
       SHOULDERBORROW
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill      8.86         48         48   1.00       -1271
       S9.5C
           Common Exc      0.00          0          0   1.00
          Subgrade Exc      0.00          0          0   1.00
           Subsoil Exc      0.00          0          0   1.00
                  Fill     17.74         33         33   1.00       -1304
```

```
I19.0C
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     25.06         46         46    1.00       -1350
B25.0C
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     56.74        105        105    1.00       -1455
ABC
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     51.53         95         95    1.00       -1550
WALL
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     12.21         15         15    1.00       -1565

317+50.00 SUITABLE
      Common Exc      0.77          2          2    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill    511.03       1194       1194    1.00       -2757
SHOULDERBORROW
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill      8.01         16         16    1.00       -2773
S9.5C
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     17.65         33         33    1.00       -2806
I19.0C
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     24.99         46         46    1.00       -2852
B25.0C
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
            Fill     56.65        105        105    1.00       -2957
ABC
      Common Exc      0.00          0          0    1.00
    Subgrade Exc      0.00          0          0    1.00
     Subsoil Exc      0.00          0          0    1.00
```

```
              Fill       51.45       95       95    1.00    -3052
        WALL
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill        0.00       11       11    1.00    -3063

318+00.00 SUITABLE
          Common Exc      0.60        1        1    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill      470.91      909      909    1.00    -3971
        SHOULDERBORROW
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill        8.01       15       15    1.00    -3986
        S9.5C
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill       17.46       33       33    1.00    -4019
        I19.0C
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill       24.75       46       46    1.00    -4065
        B25.0C
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill       56.21      105      105    1.00    -4170
        ABC
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill       51.05       95       95    1.00    -4265

318+50.00 SUITABLE
          Common Exc      0.37        1        1    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill      464.28      866      866    1.00    -5130
        SHOULDERBORROW
          Common Exc      0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc      0.00        0        0    1.00
              Fill        8.01       15       15    1.00    -5145
        S9.5C
          Common Exc      0.00        0        0    1.00
```

Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	17.14	32	32	1.00	-5177
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	24.32	45	45	1.00	-5222
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	55.46	103	103	1.00	-5325
ABC					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	50.39	94	94	1.00	-5419
319+00.00 SUITABLE					
Common Exc	7.45	7	7	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	158.36	577	577	1.00	-5989
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	7.16	14	14	1.00	-6003
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	16.71	31	31	1.00	-6034
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	23.74	45	45	1.00	-6079
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	54.32	102	102	1.00	-6181
ABC					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	49.41	92	92	1.00	-6273

```
319+50.00 SUITABLE
            Common Exc      16.19        22         22     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill     150.46       286        286     1.00      -6537
          SHOULDERBORROW
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      19.10        24         24     1.00      -6561
          S9.5C
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      10.94        26         26     1.00      -6587
          I19.0C
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      14.79        36         36     1.00      -6623
          B25.0C
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      34.12        82         82     1.00      -6705
          ABC
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      31.97        75         75     1.00      -6780

320+00.00 SUITABLE
            Common Exc       0.00        15         15     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill     277.44       396        396     1.00      -7161
          SHOULDERBORROW
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      15.95        32         32     1.00      -7193
          S9.5C
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
                  Fill      10.94        20         20     1.00      -7213
          I19.0C
            Common Exc       0.00         0          0     1.00
          Subgrade Exc       0.00         0          0     1.00
           Subsoil Exc       0.00         0          0     1.00
```

```
            Fill        14.79        27        27     1.00     -7240
        B25.0C
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill       104.65       128       128     1.00     -7368
        ABC
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill         0.00        30        30     1.00     -7398

320+50.00 SUITABLE
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill       257.75       496       496     1.00     -7894
        SHOULDERBORROW
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill        15.96        30        30     1.00     -7924
        S9.5C
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill        10.94        20        20     1.00     -7944
        I19.0C
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill        14.79        27        27     1.00     -7971
        B25.0C
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill        89.81       180       180     1.00     -8151

321+00.00 SUITABLE
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill       203.38       427       427     1.00     -8578
        SHOULDERBORROW
          Common Exc      0.00         0         0     1.00
        Subgrade Exc      0.00         0         0     1.00
         Subsoil Exc      0.00         0         0     1.00
            Fill        15.96        30        30     1.00     -8608
        S9.5C
          Common Exc      0.00         0         0     1.00
```

```
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        10.94       20       20    1.00      -8628
      I19.0C
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        14.79       27       27    1.00      -8655
      B25.0C
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        74.36      152      152    1.00      -8807

321+50.00 SUITABLE
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill       158.31      335      335    1.00      -9142
      SHOULDERBORROW
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        15.96       30       30    1.00      -9172
      S9.5C
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        10.94       20       20    1.00      -9192
      I19.0C
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        14.79       27       27    1.00      -9219
      B25.0C
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        60.71      125      125    1.00      -9344

322+00.00 SUITABLE
         Common Exc        2.39        2        2    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill       115.13      253      253    1.00      -9595
      SHOULDERBORROW
         Common Exc        0.00        0        0    1.00
         Subgrade Exc      0.00        0        0    1.00
         Subsoil Exc       0.00        0        0    1.00
              Fill        16.46       30       30    1.00      -9625
```

```
        S9.5C
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         10.94          20          20    1.00      -9645
        I19.0C
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         14.79          27          27    1.00      -9672
        B25.0C
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         45.78          99          99    1.00      -9771

322+50.00 SUITABLE
          Common Exc        6.56           8           8    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         98.54         198         198    1.00      -9961
        SHOULDERBORROW
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill          6.63          21          21    1.00      -9982
        S9.5C
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill          9.57          19          19    1.00     -10001
        I19.0C
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         12.95          26          26    1.00     -10027
        B25.0C
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         29.19          69          69    1.00     -10096

323+00.00 SUITABLE
          Common Exc       11.14          16          16    1.00
         Subgrade Exc       0.00           0           0    1.00
          Subsoil Exc       0.00           0           0    1.00
              Fill         73.40         159         159    1.00     -10239
        SHOULDERBORROW
          Common Exc        0.00           0           0    1.00
         Subgrade Exc       0.00           0           0    1.00
```

```
          Subsoil Exc      0.00         0         0    1.00
              Fill         6.63        12        12    1.00    -10251
    S9.5C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill         9.57        18        18    1.00    -10269
    I19.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        16.56        27        27    1.00    -10296
    B25.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        16.28        42        42    1.00    -10338

323+50.00 SUITABLE
          Common Exc      18.25        27        27    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        56.64       120       120    1.00    -10431
    SHOULDERBORROW
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill         6.63        12        12    1.00    -10443
    S9.5C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        11.94        20        20    1.00    -10463
    I19.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill         4.44        19        19    1.00    -10482
    B25.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        15.24        29        29    1.00    -10511

324+00.00 SUITABLE
          Common Exc      24.09        39        39    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        43.38        93        93    1.00    -10565
    SHOULDERBORROW
```

```
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill      6.63         12         12     1.00      -10577
       S9.5C
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill      6.68         17         17     1.00      -10594
       I19.0C
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill      4.49          8          8     1.00      -10602
       B25.0C
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill     15.41         28         28     1.00      -10630

324+50.00 SUITABLE
          Common Exc      29.12         49         49     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill     34.06         72         72     1.00      -10653
       SHOULDERBORROW
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill      6.64         12         12     1.00      -10665
       S9.5C
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill      5.90         12         12     1.00      -10677
       I19.0C
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill      4.47          8          8     1.00      -10685
       B25.0C
          Common Exc       0.00          0          0     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
                 Fill     15.33         28         28     1.00      -10713

325+00.00 SUITABLE
          Common Exc      30.11         55         55     1.00
          Subgrade Exc     0.00          0          0     1.00
          Subsoil Exc      0.00          0          0     1.00
```

```
            Fill          22.51        52        52     1.00     -10710
  SHOULDERBORROW
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill           6.64        12        12     1.00     -10722
  S9.5C
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill           5.90        11        11     1.00     -10733
  I19.0C
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill           4.47         8         8     1.00     -10741
  B25.0C
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill          15.34        28        28     1.00     -10769

325+50.00 SUITABLE
       Common Exc         31.74        57        57     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill          31.78        50        50     1.00     -10762
  SHOULDERBORROW
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill           6.65        12        12     1.00     -10774
  S9.5C
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill           5.89        11        11     1.00     -10785
  I19.0C
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill           4.44         8         8     1.00     -10793
  B25.0C
       Common Exc          0.00         0         0     1.00
     Subgrade Exc          0.00         0         0     1.00
      Subsoil Exc          0.00         0         0     1.00
            Fill          15.25        28        28     1.00     -10821

326+00.00 SUITABLE
       Common Exc         30.21        57        57     1.00
```

```
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill     17.52       46       46    1.00    -10810
SHOULDERBORROW
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill      6.64       12       12    1.00    -10822
S9.5C
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill      5.89       11       11    1.00    -10833
I19.0C
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill      4.43        8        8    1.00    -10841
B25.0C
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill     15.19       28       28    1.00    -10869

326+50.00 SUITABLE
        Common Exc     29.08       55       55    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill     15.52       31       31    1.00    -10845
SHOULDERBORROW
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill      6.64       12       12    1.00    -10857
S9.5C
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill      5.90       11       11    1.00    -10868
I19.0C
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill      4.46        8        8    1.00    -10876
B25.0C
        Common Exc      0.00        0        0    1.00
      Subgrade Exc      0.00        0        0    1.00
       Subsoil Exc      0.00        0        0    1.00
              Fill     15.29       28       28    1.00    -10904
```

```
327+00.00 SUITABLE
            Common Exc      25.20        50        50   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill            10.64        24        24   1.00    -10878
         SHOULDERBORROW
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill             6.66        12        12   1.00    -10890
         S9.5C
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill             5.88        11        11   1.00    -10901
         I19.0C
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill             4.40         8         8   1.00    -10909
         B25.0C
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill            15.11        28        28   1.00    -10937

327+50.00 SUITABLE
            Common Exc      26.39        48        48   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill            10.79        20        20   1.00    -10909
         SHOULDERBORROW
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill             6.63        12        12   1.00    -10921
         S9.5C
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill             5.88        11        11   1.00    -10932
         I19.0C
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
            Fill             4.39         8         8   1.00    -10940
         B25.0C
            Common Exc       0.00         0         0   1.00
            Subgrade Exc     0.00         0         0   1.00
            Subsoil Exc      0.00         0         0   1.00
```

```
              Fill          15.09          28          28     1.00     -10968

328+00.00 SUITABLE
              Common Exc     31.46          54          54     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill           6.10           16          16     1.00     -10930
         SHOULDERBORROW
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill          15.45          20          20     1.00     -10950
         S9.5C
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill           5.87          11          11     1.00     -10961
         I19.0C
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill           4.39           8           8     1.00     -10969
         B25.0C
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill          15.08          28          28     1.00     -10997

328+50.00 SUITABLE
              Common Exc     58.48          83          83     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill           0.23           6           6     1.00     -10920
         SHOULDERBORROW
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill          13.92          27          27     1.00     -10947
         S9.5C
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill           5.61          11          11     1.00     -10958
         I19.0C
              Common Exc      0.00           0           0     1.00
              Subgrade Exc    0.00           0           0     1.00
              Subsoil Exc     0.00           0           0     1.00
              Fill           3.70           7           7     1.00     -10965
         B25.0C
              Common Exc      0.00           0           0     1.00
```

```
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill       12.82       26        26    1.00    -10991

329+00.00 SUITABLE
             Common Exc        25.07       77        77    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        1.70        2         2    1.00    -10916
          SHOULDERBORROW
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        8.97       21        21    1.00    -10937
          S9.5C
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        6.27       11        11    1.00    -10948
          I19.0C
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        3.70        7         7    1.00    -10955
          B25.0C
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill       12.83       24        24    1.00    -10979

329+50.00 SUITABLE
             Common Exc        26.03       47        47    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        1.59        3         3    1.00    -10935
          SHOULDERBORROW
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        9.01       17        17    1.00    -10952
          S9.5C
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        6.31       12        12    1.00    -10964
          I19.0C
             Common Exc         0.00        0         0    1.00
             Subgrade Exc       0.00        0         0    1.00
             Subsoil Exc        0.00        0         0    1.00
                    Fill        3.72        7         7    1.00    -10971
```

```
        B25.0C
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill        12.89        24        24    1.00      -10995

330+00.00 SUITABLE
          Common Exc     27.57        50        50    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill         0.10         2         2    1.00      -10947
        SHOULDERBORROW
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill        11.25        19        19    1.00      -10966
        S9.5C
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill         6.33        12        12    1.00      -10978
        I19.0C
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill         3.75         7         7    1.00      -10985
        B25.0C
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill        13.00        24        24    1.00      -11009

330+50.00 SUITABLE
          Common Exc     26.21        50        50    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill         0.22         0         0    1.00      -10959
        SHOULDERBORROW
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill        11.21        21        21    1.00      -10980
        S9.5C
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
          Subsoil Exc     0.00         0         0    1.00
             Fill         6.30        12        12    1.00      -10992
        I19.0C
          Common Exc      0.00         0         0    1.00
          Subgrade Exc    0.00         0         0    1.00
```

```
        Subsoil Exc      0.00        0        0   1.00
           Fill          3.68        7        7   1.00    -10999
   B25.0C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill         12.75       24       24   1.00    -11023

331+00.00 SUITABLE
        Common Exc      26.07       48       48   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill          0.33        1        1   1.00    -10976
   SHOULDERBORROW
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill         11.33       21       21   1.00    -10997
   S9.5C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill          6.25       12       12   1.00    -11009
   I19.0C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill          3.62        7        7   1.00    -11016
   B25.0C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill         12.56       23       23   1.00    -11039

331+50.00 SUITABLE
        Common Exc      25.93       48       48   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill          0.05        0        0   1.00    -10991
   SHOULDERBORROW
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill         10.47       20       20   1.00    -11011
   S9.5C
        Common Exc       0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
        Subsoil Exc      0.00        0        0   1.00
           Fill          6.24       12       12   1.00    -11023
   I19.0C
```

```
        Common Exc       0.00          0           0   1.00
      Subgrade Exc       0.00          0           0   1.00
       Subsoil Exc       0.00          0           0   1.00
             Fill       3.62          7           7   1.00   -11030
    B25.0C
        Common Exc       0.00          0           0   1.00
      Subgrade Exc       0.00          0           0   1.00
       Subsoil Exc       0.00          0           0   1.00
             Fill      12.56         23          23   1.00   -11053
⬧        G R A N D    S U M M A R Y    T O T A L S
         Material Name          Unadjusted Adjusted   Mult
                                Volumes    Volumes    Factor
                                (cu. yd.)  (cu. yd.)
    ----------------------------  ----------  ---------- ------
    SUITABLE
                Common Exc          970        970    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill         7859       7859    1.00
    SHOULDERBORROW
                Common Exc            0          0    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill          591        591    1.00
    S9.5C
                Common Exc            0          0    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill          533        533    1.00
    I19.0C
                Common Exc            0          0    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill          592        592    1.00
    B25.0C
                Common Exc            0          0    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill         1846       1846    1.00
    ABC
                Common Exc            0          0    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill          576        576    1.00
    WALL
                Common Exc            0          0    1.00
              Subgrade Exc            0          0    1.00
               Subsoil Exc            0          0    1.00
                     Fill           26         26    1.00
⬧                S P L I T    S U M M A R Y    T O T A L S
```

Quant Mult Factor	Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Adjusted Volume (cu. yd.)
	SUITABLE				
1.00	Common Exc	970	970	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	7859	7859	0	0
	SHOULDERBORROW				
1.00	Common Exc	0	0	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	591	591	0	0
	S9.5C				
1.00	Common Exc	0	0	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	533	533	0	0
	I19.0C				
1.00	Common Exc	0	0	0	0
1.00	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	592	592	0	0
	B25.0C				
1.00	Common Exc	0	0	0	0

		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	1846	1846	0
0	1.00				
	ABC				
		Common Exc	0	0	0
0	1.00				
		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	576	576	0
0	1.00				
	WALL				
		Common Exc	0	0	0
0	1.00				
		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	26	26	0
0	1.00				

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_L_Phase-4.inp
Output File: EW_L_Phase-4.log
  1      1       1
  1      2       2
  1      3       3 Earthwork
  1      4       4
  1      5       5 tolerance = 0.004
  1      6       6
  1      7       7 xs dgn = HB0002_rdy_xsc_L_phase-4.dgn
  1      8       8
  1      9       9 Proposed Finish Grade
  1     10      10 soil type = Suitable
  1     11      11 fill mult factor = 1.000000
  1     12      12 type = line, line_string
  1     13      13 lvname = Prop CMT Conc Surface
  1     14      14 lvname = Prop CMT Pvmt Surface*
  1     15      15 lvname = Prop CMT Slope Grass
  1     16      16 lvname = Prop CMT Shear Line
  1     17      17 lvname = Scratch_Level_8
  1     18      18 lvname = Prop CMT Concrete Wall Surface
  1     19      19
  1     20      20 Existing Ground Line
  1     21      21 soil type = Suitable
  1     22      22 type = line, line_string
  1     23      23 lvname = Exist XS Ground Line
  1     24      24
  1     25      25 existing suitable material
  1     26      26 soil type = Suitable
  1     27      27 fill mult factor = 1.00
  1     28      28 type = line, line_string
  1     29      29 lvname = WEI XS Soil-Suitable
  1     30      30
  1     31      31 existing suitable material
  1     32      32 soil type = Unsuitable
  1     33      33 fill mult factor = 1.00
  1     34      34 type = line, line_string
  1     35      35 lvname = WEI XS Soil-Unsuitable
  1     36      36
  1     37      37 existing suitable material
  1     38      38 soil type = UnsuitableMarginal
  1     39      39 fill mult factor = 1.00
  1     40      40 type = line, line_string
  1     41      41 lvname = WEI XS Soil-UnsuitableMarginal
  1     42      42
  1     43      43 existing suitable material
  1     44      44 soil type = DDE
  1     45      45 fill mult factor = 1.00
  1     46      46 type = line, line_string
  1     47      47 lvname = WEI XS Soil-DDE
  1     48      48
```

```
1      49      49 existing suitable material
1      50      50 soil type = UnsuitableDDE
1      51      51 fill mult factor = 1.00
1      52      52 type = line, line_string
1      53      53 lvname = WEI XS Soil-UnsuitableDDE
1      54      54
1      55      55 existing unsuitable material
1      56      56 soil type = Undercut
1      57      57 fill mult factor = 1.00
1      58      58 type = line,line_string
1      59      59 lvname = WEI XS Soil-UnsuitableUndercut
1      60      60
1      61      61 Proposed Undercut
1      62      62 common exc only
1      63      63 soil type = ShoulderBorrow
1      64      64 fill mult factor = 1.00
1      65      65 type = line,line_string
1      66      66 lvname = Prop CMT Shoulder Borrow
1      67      67
1      68      68 Proposed Undercut
1      69      69 soil type = Suitable
1      70      70 fill mult factor = 1.00
1      71      71 type = line,line_string
1      72      72 lvname = WEI XS Fill-Suitable
1      73      73
1      74      74 Proposed Undercut
1      75      75 soil type = SelectMaterial
1      76      76 fill mult factor = 1.00
1      77      77 type = line,line_string
1      78      78 lvname = WEI XS Fill-SelectMaterial
1      79      79
1      80      80 Proposed Undercut
1      81      81 common exc only
1      82      82 soil type = S9.5C
1      83      83 fill mult factor = 1.00
1      84      84 type = line,line_string
1      85      85 lvname = Prop CMT Pvmt Course 1
1      86      86
1      87      87 Proposed Undercut
1      88      88 common exc only
1      89      89 soil type = I19.0C
1      90      90 fill mult factor = 1.00
1      91      91 type = line,line_string
1      92      92 lvname = Prop CMT Pvmt Course 2
1      93      93
1      94      94 Proposed Undercut
1      95      95 common exc only
1      96      96 soil type = B25.0C
1      97      97 fill mult factor = 1.00
1      98      98 type = line,line_string
```

```
1    99     99 lvname = Prop CMT Pvmt Course 3
1   100    100
1   101    101 Proposed Undercut
1   102    102 common exc only
1   103    103 soil type = ABC
1   104    104 fill mult factor = 1.00
1   105    105 type = line,line_string
1   106    106 lvname = Prop CMT Pvmt Course 4
1   107    107
1   108    108 Proposed Undercut
1   109    109 common exc only
1   110    110 soil type = Wall
1   111    111 fill mult factor = 1.00
1   112    112 type = line,line_string
1   113    113 lvname = Prop CMT Concrete Wall
1   114    114
1   115    115 excavation limits
1   116    116 lvname = Prop XS Exc Vertical Line 1
1   117    117 type = line
1   118    118
1   119    119 Write Earthwork Shapes
1   120    120 plot param
1   121    121 lvname = WEI XS Earthwork
1   122    122 Stratify Shape Color
1   123    123
1   124    124 vertical search distance = 200
1   125    125
1   126    126 /*calculate only between excavation limits*/
1   127    127
1   128    128 End Area Decimal Places = 2
1   129    129
1   130    130 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\01-L-Phase4-30300-31600.txt
1   131    131
1   132    132 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1   133    133 column 1 number of decimal place = 0
1   134    134 column 1 total length = 10
1   135    135
1   136    136 column 2 formula = ["SUITABLE", Fill, unadj vol]
1   137    137 column 2 number of decimal place = 0
1   138    138 column 2 total length = 10
1   139    139
1   140    140 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1   141    141 column 3 number of decimal place = 0
1   142    142 column 3 total length = 10
1   143    143
1   144    144 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
```

```
1    145    145 column 4 number of decimal place = 0
1    146    146 column 4 total length = 10
1    147    147
1    148    148 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    149    149 column 5 number of decimal place = 2
1    150    150 column 5 total length = 10
1    151    151
1    152    152 column 6 formula = ["S9.5C", Fill, End Area]
1    153    153 column 6 number of decimal place = 2
1    154    154 column 6 total length = 10
1    155    155
1    156    156 column 7 formula = ["I19.0C", Fill, End Area]
1    157    157 column 7 number of decimal place = 2
1    158    158 column 7 total length = 10
1    159    159
1    160    160 column 8 formula = ["B25.0C", Fill, End Area]
1    161    161 column 8 number of decimal place = 2
1    162    162 column 8 total length = 10
1    163    163
1    164    164 column 9 formula = ["ABC", Fill, End Area]
1    165    165 column 9 number of decimal place = 2
1    166    166 column 9 total length = 10
1    167    167
1    168    168 Process Earthwork for Baseline = L
1    169    169 job number = rdy
1    170    170
1    171    171 beg sta =   303+00.00
1    172    172 end sta =   316+00.00
1    173    173
1    174    174 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\04-L-Phase4-31600-33150.txt
1    175    175
1    176    176 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    177    177 column 1 number of decimal place = 0
1    178    178 column 1 total length = 10
1    179    179
1    180    180 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    181    181 column 2 number of decimal place = 0
1    182    182 column 2 total length = 10
1    183    183
1    184    184 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    185    185 column 3 number of decimal place = 0
1    186    186 column 3 total length = 10
1    187    187
1    188    188 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1    189    189 column 4 number of decimal place = 0
1    190    190 column 4 total length = 10
```

```
1    191    191
1    192    192 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    193    193 column 5 number of decimal place = 2
1    194    194 column 5 total length = 10
1    195    195
1    196    196 column 6 formula = ["S9.5C", Fill, End Area]
1    197    197 column 6 number of decimal place = 2
1    198    198 column 6 total length = 10
1    199    199
1    200    200 column 7 formula = ["I19.0C", Fill, End Area]
1    201    201 column 7 number of decimal place = 2
1    202    202 column 7 total length = 10
1    203    203
1    204    204 column 8 formula = ["B25.0C", Fill, End Area]
1    205    205 column 8 number of decimal place = 2
1    206    206 column 8 total length = 10
1    207    207
1    208    208 column 9 formula = ["ABC", Fill, End Area]
1    209    209 column 9 number of decimal place = 2
1    210    210 column 9 total length = 10
1    211    211
1    212    212 Process Earthwork for Baseline = L
1    213    213 job number = rdy
1    214    214
1    215    215 beg sta =   316+00.00
1    216    216 end sta =   331+50.00
1    217    217
1    218    218
1    219    219
1    220    220
1    221    221
1    222    222
1    223    223
0    0      224 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
```

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
306+50.00	SUITABLE					
	Common Exc	3.81	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	0
	S9.5C					
	Common Exc	0.00	0	0	1.00	

```
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      5.17       0       0   1.00          0

307+00.00 SUITABLE
              Common Exc      3.81       7       7   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      0.00       0       0   1.00          7
           S9.5C
              Common Exc      0.00       0       0   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      4.70       9       9   1.00         -2

307+50.00 SUITABLE
              Common Exc      3.81       7       7   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      0.00       0       0   1.00          5
           S9.5C
              Common Exc      0.00       0       0   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      6.03      10      10   1.00         -5

308+00.00 SUITABLE
              Common Exc      3.87       7       7   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      0.00       0       0   1.00          2
           S9.5C
              Common Exc      0.00       0       0   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      6.47      12      12   1.00        -10

308+50.00 SUITABLE
              Common Exc      3.39       7       7   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      0.00       0       0   1.00         -3
           S9.5C
              Common Exc      0.00       0       0   1.00
             Subgrade Exc     0.00       0       0   1.00
             Subsoil Exc      0.00       0       0   1.00
                    Fill      8.18      14      14   1.00        -17
           I19.0C
              Common Exc      0.00       0       0   1.00
             Subgrade Exc     0.00       0       0   1.00
```

```
          Subsoil Exc      0.00        0        0   1.00
              Fill         5.36        5        5   1.00      -22

309+00.00 SUITABLE
          Common Exc       4.67        7        7   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill         0.01        0        0   1.00      -15
        S9.5C
          Common Exc       0.00        0        0   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill        10.12       17       17   1.00      -32
        I19.0C
          Common Exc       0.00        0        0   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill         6.65       11       11   1.00      -43

309+50.00 SUITABLE
          Common Exc       7.37       11       11   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill         0.00        0        0   1.00      -32
        S9.5C
          Common Exc       0.00        0        0   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill        11.06       20       20   1.00      -52
        I19.0C
          Common Exc       0.00        0        0   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill         5.53       11       11   1.00      -63
        B25.0C
          Common Exc       0.00        0        0   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill         6.97        6        6   1.00      -69

310+00.00 SUITABLE
          Common Exc       9.05       15       15   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill         0.00        0        0   1.00      -54
        S9.5C
          Common Exc       0.00        0        0   1.00
         Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc      0.00        0        0   1.00
              Fill        11.14       21       21   1.00      -75
```

```
I19.0C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     11.00        15        15    1.00        -90
B25.0C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     10.72        16        16    1.00       -106

310+50.00 SUITABLE
    Common Exc     10.08        18        18    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill      0.00         0         0    1.00        -88
S9.5C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     10.21        20        20    1.00       -108
I19.0C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     15.33        24        24    1.00       -132
B25.0C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     14.70        24        24    1.00       -156

311+00.00 SUITABLE
    Common Exc      9.40        18        18    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill      0.00         0         0    1.00       -138
S9.5C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     10.37        19        19    1.00       -157
I19.0C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
   Subsoil Exc      0.00         0         0    1.00
          Fill     15.03        28        28    1.00       -185
B25.0C
    Common Exc      0.00         0         0    1.00
  Subgrade Exc      0.00         0         0    1.00
```

```
            Subsoil Exc      0.00        0        0    1.00
                  Fill      24.09       36       36    1.00      -221

311+50.00 SUITABLE
            Common Exc       0.01        9        9    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill       0.00        0        0    1.00      -212
            S9.5C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill      11.46       20       20    1.00      -232
            I19.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill      18.32       31       31    1.00      -263
            B25.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill      27.23       48       48    1.00      -311

312+00.00 SUITABLE
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill       0.00        0        0    1.00      -311
            S9.5C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill      10.58       20       20    1.00      -331
            I19.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill      17.20       33       33    1.00      -364
            B25.0C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill      23.52       47       47    1.00      -411

312+50.00 S9.5C
            Common Exc       0.00        0        0    1.00
           Subgrade Exc      0.00        0        0    1.00
            Subsoil Exc      0.00        0        0    1.00
                  Fill       6.91       16       16    1.00      -427
```

```
        I19.0C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill        9.21       24       24   1.00      -451
        B25.0C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill       16.40       37       37   1.00      -488

313+00.00 S9.5C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill        5.99       12       12   1.00      -500
        I19.0C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill        7.98       16       16   1.00      -516
        B25.0C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill       16.27       30       30   1.00      -546

313+50.00 S9.5C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill        4.64       10       10   1.00      -556
        I19.0C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill        6.19       13       13   1.00      -569
        B25.0C
          Common Exc        0.00        0        0   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill       12.73       27       27   1.00      -596

314+00.00 SUITABLE
          Common Exc        9.91        9        9   1.00
        Subgrade Exc        0.00        0        0   1.00
         Subsoil Exc        0.00        0        0   1.00
                Fill        0.00        0        0   1.00      -587
        SHOULDERBORROW
          Common Exc        0.00        0        0   1.00
```

```
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          6.82        6         6    1.00        -593
    S9.5C
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          7.52       11        11    1.00        -604
    I19.0C
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          8.06       13        13    1.00        -617
    B25.0C
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          6.26       18        18    1.00        -635

314+50.00 SUITABLE
        Common Exc       16.34       24        24    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          0.00        0         0    1.00        -611
    SHOULDERBORROW
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          4.22       10        10    1.00        -621
    S9.5C
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          6.93       13        13    1.00        -634
    I19.0C
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          5.99       13        13    1.00        -647
    B25.0C
        Common Exc        0.00        0         0    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          1.36        7         7    1.00        -654

315+00.00 SUITABLE
        Common Exc       12.58       27        27    1.00
        Subgrade Exc      0.00        0         0    1.00
        Subsoil Exc       0.00        0         0    1.00
            Fill          0.00        0         0    1.00        -627
```

```
SHOULDERBORROW
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        7.50         11         11   1.00        -638
S9.5C
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        7.10         13         13   1.00        -651
I19.0C
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        2.53          8          8   1.00        -659
B25.0C
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        0.00          1          1   1.00        -660

315+50.00 SUITABLE
     Common Exc     12.84         24         24   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        0.00          0          0   1.00        -636
SHOULDERBORROW
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        7.57         14         14   1.00        -650
S9.5C
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        5.96         12         12   1.00        -662
I19.0C
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        0.00          2          2   1.00        -664

316+00.00 SUITABLE
     Common Exc     17.49         28         28   1.00
    Subgrade Exc     0.00          0          0   1.00
     Subsoil Exc     0.00          0          0   1.00
         Fill        0.00          0          0   1.00        -636
SHOULDERBORROW
     Common Exc      0.00          0          0   1.00
    Subgrade Exc     0.00          0          0   1.00
```

```
        Subsoil Exc       0.00           0           0   1.00
             Fill          4.00          11          11   1.00       -647
        S9.5C
          Common Exc       0.00           0           0   1.00
        Subgrade Exc       0.00           0           0   1.00
         Subsoil Exc       0.00           0           0   1.00
             Fill          3.27           9           9   1.00       -656
```

G R A N D   S U M M A R Y   T O T A L S

```
        Material Name            Unadjusted Adjusted   Mult
                                 Volumes    Volumes    Factor
                                 (cu. yd.)  (cu. yd.)
        --------------------------- ---------- ---------- ------
        SUITABLE
                        Common Exc      218         218   1.00
                      Subgrade Exc        0           0   1.00
                       Subsoil Exc        0           0   1.00
                              Fill        0           0   1.00
        SHOULDERBORROW
                        Common Exc        0           0   1.00
                      Subgrade Exc        0           0   1.00
                       Subsoil Exc        0           0   1.00
                              Fill       52          52   1.00
        S9.5C
                        Common Exc        0           0   1.00
                      Subgrade Exc        0           0   1.00
                       Subsoil Exc        0           0   1.00
                              Fill      278         278   1.00
        I19.0C
                        Common Exc        0           0   1.00
                      Subgrade Exc        0           0   1.00
                       Subsoil Exc        0           0   1.00
                              Fill      247         247   1.00
        B25.0C
                        Common Exc        0           0   1.00
                      Subgrade Exc        0           0   1.00
                       Subsoil Exc        0           0   1.00
                              Fill      297         297   1.00
```

⬆   S P L I T   S U M M A R Y   T O T A L S

```
                                 XS Quant    XS Quant   Add/Sub Quant Add/Sub
Quant
        Material Name            Unadjusted  Adjusted   Unadjusted    Adjusted
  Mult
                                 Volume      Volume     Volume        Volume
  Factor
                                 (cu. yd.)   (cu. yd.) (cu. yd.)      (cu. yd.)

        --------------------------- ---------- ---------- --------------
------------- ------
        SUITABLE
```

```
                              Common Exc        218        218            0
0   1.00
                              Subgrade Exc        0          0            0
0   1.00
                              Subsoil Exc         0          0            0
0   1.00
                              Fill                0          0            0
0   1.00
          SHOULDERBORROW
                              Common Exc          0          0            0
0   1.00
                              Subgrade Exc        0          0            0
0   1.00
                              Subsoil Exc         0          0            0
0   1.00
                              Fill               52         52            0
0   1.00
          S9.5C
                              Common Exc          0          0            0
0   1.00
                              Subgrade Exc        0          0            0
0   1.00
                              Subsoil Exc         0          0            0
0   1.00
                              Fill              278        278            0
0   1.00
          I19.0C
                              Common Exc          0          0            0
0   1.00
                              Subgrade Exc        0          0            0
0   1.00
                              Subsoil Exc         0          0            0
0   1.00
                              Fill              247        247            0
0   1.00
          B25.0C
                              Common Exc          0          0            0
0   1.00
                              Subgrade Exc        0          0            0
0   1.00
                              Subsoil Exc         0          0            0
0   1.00
                              Fill              297        297            0
0   1.00
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
⬆
          Material Name    End Areas  Unadjusted Adjusted   Mult   Mass
```

```
Station                        Volumes   Volumes    Factor Ordinate
                     (sq. ft.) (cu. yd.) (cu. yd.)
----------- ---------------- ---------- ---------- ---------- ------ --------
 316+00.00 SUITABLE
          Common Exc    17.49         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     0.00         0          0   1.00         0
          SHOULDERBORROW
          Common Exc     0.00         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     4.00         0          0   1.00         0
          S9.5C
          Common Exc     0.00         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     3.27         0          0   1.00         0

 316+50.00 SUITABLE
          Common Exc    18.19        33         33   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     0.00         0          0   1.00        33
          SHOULDERBORROW
          Common Exc     0.00         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     3.49         7          7   1.00        26
          S9.5C
          Common Exc     0.00         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     3.15         6          6   1.00        20

 317+00.00 SUITABLE
          Common Exc    15.61        31         31   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     0.00         0          0   1.00        51
          SHOULDERBORROW
          Common Exc     0.00         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     3.66         7          7   1.00        44
          S9.5C
          Common Exc     0.00         0          0   1.00
          Subgrade Exc   0.00         0          0   1.00
          Subsoil Exc    0.00         0          0   1.00
                Fill     4.22         7          7   1.00        37
```

```
317+50.00 SUITABLE
           Common Exc      12.90       26       26    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         0.00        0        0    1.00         63
           SHOULDERBORROW
           Common Exc       0.00        0        0    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         3.82        7        7    1.00         56
           S9.5C
           Common Exc       0.00        0        0    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         7.05       10       10    1.00         46

318+00.00 SUITABLE
           Common Exc      10.11       21       21    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         0.00        0        0    1.00         67
           SHOULDERBORROW
           Common Exc       0.00        0        0    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         3.72        7        7    1.00         60
           S9.5C
           Common Exc       0.00        0        0    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         9.42       15       15    1.00         45
           I19.0C
           Common Exc       0.00        0        0    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         0.99        1        1    1.00         44

318+50.00 SUITABLE
           Common Exc       4.31       13       13    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         0.00        0        0    1.00         57
           SHOULDERBORROW
           Common Exc       0.00        0        0    1.00
           Subgrade Exc     0.00        0        0    1.00
           Subsoil Exc      0.00        0        0    1.00
               Fill         4.27        7        7    1.00         50
           S9.5C
           Common Exc       0.00        0        0    1.00
```

```
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          9.88        18        18    1.00          32
          I19.0C
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          6.12         7         7    1.00          25

319+00.00 SUITABLE
              Common Exc        1.27         5         5    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          0.00         0         0    1.00          30
          SHOULDERBORROW
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          2.36         6         6    1.00          24
          S9.5C
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          9.33        18        18    1.00           6
          I19.0C
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill         12.44        17        17    1.00         -11

319+50.00 SUITABLE
              Common Exc        0.00         1         1    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          5.20         5         5    1.00         -15
          SHOULDERBORROW
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          5.36         7         7    1.00         -22
          S9.5C
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill          7.81        16        16    1.00         -38
          I19.0C
              Common Exc        0.00         0         0    1.00
              Subgrade Exc      0.00         0         0    1.00
              Subsoil Exc       0.00         0         0    1.00
                  Fill         13.62        24        24    1.00         -62
```

```
       B25.0C
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        8.48          8          8    1.00        -70

320+00.00 SUITABLE
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        4.88          9          9    1.00        -79
       SHOULDERBORROW
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        6.37         11         11    1.00        -90
       S9.5C
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        7.81         14         14    1.00       -104
       I19.0C
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill       13.69         25         25    1.00       -129
       B25.0C
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        4.03         12         12    1.00       -141

320+50.00 SUITABLE
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        4.87          9          9    1.00       -150
       SHOULDERBORROW
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        3.81          9          9    1.00       -159
       S9.5C
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
         Subsoil Exc        0.00          0          0    1.00
                Fill        7.81         14         14    1.00       -173
       I19.0C
          Common Exc        0.00          0          0    1.00
        Subgrade Exc        0.00          0          0    1.00
```

```
              Subsoil Exc      0.00         0         0   1.00
                  Fill        11.17        23        23   1.00       -196
          B25.0C
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         0.00         4         4   1.00       -200

321+00.00 SUITABLE
              Common Exc       6.46         6         6   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         0.00         5         5   1.00       -199
          SHOULDERBORROW
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         6.46        10        10   1.00       -209
          S9.5C
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill        14.20        20        20   1.00       -229
          I19.0C
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         2.65        13        13   1.00       -242

321+50.00 SUITABLE
              Common Exc      12.58        18        18   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         0.00         0         0   1.00       -224
          SHOULDERBORROW
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill        10.92        16        16   1.00       -240
          S9.5C
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         5.74        18        18   1.00       -258
          I19.0C
              Common Exc       0.00         0         0   1.00
            Subgrade Exc       0.00         0         0   1.00
              Subsoil Exc      0.00         0         0   1.00
                  Fill         1.70         4         4   1.00       -262
          B25.0C
```

```
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       7.70        7         7   1.00      -269

322+00.00 SUITABLE
          Common Exc      18.66       29        29   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       2.12        2         2   1.00      -242
          SHOULDERBORROW
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       5.80       15        15   1.00      -257
          S9.5C
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       5.38       10        10   1.00      -267
          I19.0C
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       3.95        5         5   1.00      -272
          B25.0C
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill      13.79       20        20   1.00      -292

322+50.00 SUITABLE
          Common Exc      60.88       74        74   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       0.00        2         2   1.00      -220
          SHOULDERBORROW
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill      27.32       31        31   1.00      -251
          S9.5C
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
                Fill       9.19       13        13   1.00      -264
          I19.0C
          Common Exc       0.00        0         0   1.00
          Subgrade Exc     0.00        0         0   1.00
          Subsoil Exc      0.00        0         0   1.00
```

```
              Fill          12.45         15          15     1.00      -279
        B25.0C
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill          31.96         42          42     1.00      -321

323+00.00 SUITABLE
          Common Exc        78.34        129         129     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill           0.00          0           0     1.00      -192
        SHOULDERBORROW
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill          32.10         55          55     1.00      -247
        S9.5C
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill           9.19         17          17     1.00      -264
        I19.0C
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill          12.45         23          23     1.00      -287
        B25.0C
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill          24.47         52          52     1.00      -339

323+50.00 SUITABLE
          Common Exc        76.12        143         143     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill           0.00          0           0     1.00      -196
        SHOULDERBORROW
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill          22.23         50          50     1.00      -246
        S9.5C
          Common Exc         0.00          0           0     1.00
          Subgrade Exc       0.00          0           0     1.00
          Subsoil Exc        0.00          0           0     1.00
              Fill          10.19         18          18     1.00      -264
        I19.0C
          Common Exc         0.00          0           0     1.00
```

```
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        16.73       27       27   1.00       -291
          B25.0C
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        12.60       34       34   1.00       -325

324+00.00 SUITABLE
           Common Exc      86.36      150      150   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         0.00        0        0   1.00       -175
          SHOULDERBORROW
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        22.53       41       41   1.00       -216
          S9.5C
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         9.19       18       18   1.00       -234
          I19.0C
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        14.14       29       29   1.00       -263
          B25.0C
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        13.62       24       24   1.00       -287

324+50.00 SUITABLE
           Common Exc      87.70      161      161   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         0.00        0        0   1.00       -126
          SHOULDERBORROW
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill        22.70       42       42   1.00       -168
          S9.5C
           Common Exc       0.00        0        0   1.00
          Subgrade Exc      0.00        0        0   1.00
          Subsoil Exc       0.00        0        0   1.00
               Fill         9.68       17       17   1.00       -185
```

I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.56	22	22	1.00	-207
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	11.43	23	23	1.00	-230
325+00.00 SUITABLE					
Common Exc	80.07	155	155	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	0	0	1.00	-75
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	22.70	42	42	1.00	-117
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.18	17	17	1.00	-134
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	3.55	12	12	1.00	-146
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	11.61	21	21	1.00	-167
325+50.00 SUITABLE					
Common Exc	63.03	132	132	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	0	0	1.00	-35
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	11.67	32	32	1.00	-67
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	

```
              Subsoil Exc      0.00        0         0   1.00
                  Fill         5.55       14        14   1.00        -81
       I19.0C
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill         3.05        6         6   1.00        -87
       B25.0C
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill        11.49       21        21   1.00       -108

326+00.00 SUITABLE
              Common Exc      45.29      100       100   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill         0.00        0         0   1.00         -8
       SHOULDERBORROW
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill        12.31       22        22   1.00        -30
       S9.5C
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill         0.99        6         6   1.00        -36
       I19.0C
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill         3.03        6         6   1.00        -42
       B25.0C
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill        11.42       21        21   1.00        -63

326+50.00 SUITABLE
              Common Exc      37.91       77        77   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill         0.00        0         0   1.00         14
       SHOULDERBORROW
              Common Exc       0.00        0         0   1.00
              Subgrade Exc     0.00        0         0   1.00
              Subsoil Exc      0.00        0         0   1.00
                  Fill        13.56       24        24   1.00        -10
       S9.5C
```

```
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill        0.97      2      2    1.00       -12
        I19.0C
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill        2.97      6      6    1.00       -18
        B25.0C
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill       11.22     21     21    1.00       -39

327+00.00 SUITABLE
          Common Exc     32.33     65     65    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill        0.41      0      0    1.00        26
        SHOULDERBORROW
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill       10.73     22     22    1.00         4
        S9.5C
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill        0.94      2      2    1.00         2
        I19.0C
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill        2.82      5      5    1.00        -3
        B25.0C
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill       13.07     22     22    1.00       -25

327+50.00 SUITABLE
          Common Exc     31.97     60     60    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
              Fill        0.23      1      1    1.00        34
        SHOULDERBORROW
          Common Exc      0.00      0      0    1.00
          Subgrade Exc    0.00      0      0    1.00
          Subsoil Exc     0.00      0      0    1.00
```

Fill	13.53	22	22	1.00	12
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.92	2	2	1.00	10
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	2.87	5	5	1.00	5
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	10.91	22	22	1.00	-17
328+00.00 SUITABLE					
Common Exc	24.02	52	52	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	0	0	1.00	35
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	10.54	22	22	1.00	13
S9.5C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	1	1	1.00	12
I19.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	2.16	5	5	1.00	7
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	7.78	17	17	1.00	-10

G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
SUITABLE			
Common Exc	1481	1481	1.00
Subgrade Exc	0	0	1.00

```
                          Subsoil Exc          0          0   1.00
                                Fill         33         33   1.00
            SHOULDERBORROW
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                                Fill        514        514   1.00
            S9.5C
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                                Fill        293        293   1.00
            I19.0C
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                                Fill        280        280   1.00
            B25.0C
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                                Fill        371        371   1.00
```

✦   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Quant Mult Factor
SUITABLE					
Common Exc	1481	1481	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	33	33	0	0	1.00
SHOULDERBORROW					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00

	Fill	514	514	0

0   1.00
        S9.5C

| | Common Exc | 0 | 0 | 0 |

0   1.00

| | Subgrade Exc | 0 | 0 | 0 |

0   1.00

| | Subsoil Exc | 0 | 0 | 0 |

0   1.00

| | Fill | 293 | 293 | 0 |

0   1.00
        I19.0C

| | Common Exc | 0 | 0 | 0 |

0   1.00

| | Subgrade Exc | 0 | 0 | 0 |

0   1.00

| | Subsoil Exc | 0 | 0 | 0 |

0   1.00

| | Fill | 280 | 280 | 0 |

0   1.00
        B25.0C

| | Common Exc | 0 | 0 | 0 |

0   1.00

| | Subgrade Exc | 0 | 0 | 0 |

0   1.00

| | Subsoil Exc | 0 | 0 | 0 |

0   1.00

| | Fill | 371 | 371 | 0 |

0   1.00

⬧   B A L A N C E   P O I N T   S U M M A R Y

| Material Name | Cumulative | | Incremental | |

Mult

| | Unadjusted | Adjusted | Unadjusted | Adjusted |

Factor

| | Volumes | Volumes | Volumes | Volumes |
	(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

  Station = 318+84.72
        SUITABLE

| | Common Exc | 127 | 127 | 127 | 127 |

1.00

| | Subgrade Exc | 0 | 0 | 0 | 0 |

1.00

| | Subsoil Exc | 0 | 0 | 0 | 0 |

1.00

| | Fill | 0 | 0 | 0 | 0 |

1.00
        UNSUITABLE

| | Common Exc | 0 | 0 | 0 | 0 |

1.00				
	Subgrade Exc	0	0	0	0
1.00				
	Subsoil Exc	0	0	0	0
1.00				
	Fill	0	0	0	0
1.00				

UNSUITABLEMARGINAL

	Common Exc	0	0	0	0
1.00				
	Subgrade Exc	0	0	0	0
1.00				
	Subsoil Exc	0	0	0	0
1.00				
	Fill	0	0	0	0
1.00				

DDE

	Common Exc	0	0	0	0
1.00				
	Subgrade Exc	0	0	0	0
1.00				
	Subsoil Exc	0	0	0	0
1.00				
	Fill	0	0	0	0
1.00				

UNSUITABLEDDE

	Common Exc	0	0	0	0
1.00				
	Subgrade Exc	0	0	0	0
1.00				
	Subsoil Exc	0	0	0	0
1.00				
	Fill	0	0	0	0
1.00				

UNDERCUT

	Common Exc	0	0	0	0
1.00				
	Subgrade Exc	0	0	0	0
1.00				
	Subsoil Exc	0	0	0	0
1.00				
	Fill	0	0	0	0
1.00				

SHOULDERBORROW

	Common Exc	0	0	0	0
1.00				
	Subgrade Exc	0	0	0	0
1.00				
	Subsoil Exc	0	0	0	0
1.00				

	Fill	39	39	39	39
1.00					
SELECTMATERIAL					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
S9.5C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	69	69	69	69
1.00					
I19.0C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	20	20	20	20
1.00					
B25.0C					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
ABC					
	Common Exc	0	0	0	0
1.00					
	Subgrade Exc	0	0	0	0
1.00					
	Subsoil Exc	0	0	0	0
1.00					
	Fill	0	0	0	0
1.00					
WALL					
	Common Exc	0	0	0	0
1.00					

	Subgrade Exc	0	0	0	0
1.00	Subsoil Exc	0	0	0	0
1.00	Fill	0	0	0	0
1.00					

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_L_Phase-5.inp
Output File: EW_L_Phase-5.log
 1     1      1
 1     2      2
 1     3      3 Earthwork
 1     4      4
 1     5      5 tolerance = 0.004
 1     6      6
 1     7      7 xs dgn = HB0002_rdy_xsc_L_phase-5.dgn
 1     8      8
 1     9      9 Proposed Finish Grade
 1    10     10 soil type = Suitable
 1    11     11 fill mult factor = 1.000000
 1    12     12 type = line, line_string
 1    13     13 lvname = Prop CMT Conc Surface
 1    14     14 lvname = Prop CMT Pvmt Surface*
 1    15     15 lvname = Prop CMT Slope Grass
 1    16     16 lvname = Prop CMT Shear Line
 1    17     17 lvname = Scratch_Level_8
 1    18     18 lvname = Prop CMT Concrete Wall Surface
 1    19     19
 1    20     20 Existing Ground Line
 1    21     21 soil type = Suitable
 1    22     22 type = line, line_string
 1    23     23 lvname = Exist XS Ground Line
 1    24     24
 1    25     25 existing suitable material
 1    26     26 soil type = Suitable
 1    27     27 fill mult factor = 1.00
 1    28     28 type = line, line_string
 1    29     29 lvname = WEI XS Soil-Suitable
 1    30     30
 1    31     31 existing suitable material
 1    32     32 soil type = Unsuitable
 1    33     33 fill mult factor = 1.00
 1    34     34 type = line, line_string
 1    35     35 lvname = WEI XS Soil-Unsuitable
 1    36     36
 1    37     37 existing suitable material
 1    38     38 soil type = UnsuitableMarginal
 1    39     39 fill mult factor = 1.00
 1    40     40 type = line, line_string
 1    41     41 lvname = WEI XS Soil-UnsuitableMarginal
 1    42     42
 1    43     43 existing suitable material
 1    44     44 soil type = DDE
 1    45     45 fill mult factor = 1.00
 1    46     46 type = line, line_string
 1    47     47 lvname = WEI XS Soil-DDE
 1    48     48
```

```
1     49      49 existing suitable material
1     50      50 soil type = UnsuitableDDE
1     51      51 fill mult factor = 1.00
1     52      52 type = line, line_string
1     53      53 lvname = WEI XS Soil-UnsuitableDDE
1     54      54
1     55      55 existing unsuitable material
1     56      56 soil type = Undercut
1     57      57 fill mult factor = 1.00
1     58      58 type = line,line_string
1     59      59 lvname = WEI XS Soil-UnsuitableUndercut
1     60      60
1     61      61 Proposed Undercut
1     62      62 common exc only
1     63      63 soil type = ShoulderBorrow
1     64      64 fill mult factor = 1.00
1     65      65 type = line,line_string
1     66      66 lvname = Prop CMT Shoulder Borrow
1     67      67
1     68      68 Proposed Undercut
1     69      69 soil type = Suitable
1     70      70 fill mult factor = 1.00
1     71      71 type = line,line_string
1     72      72 lvname = WEI XS Fill-Suitable
1     73      73
1     74      74 Proposed Undercut
1     75      75 soil type = SelectMaterial
1     76      76 fill mult factor = 1.00
1     77      77 type = line,line_string
1     78      78 lvname = WEI XS Fill-SelectMaterial
1     79      79
1     80      80 Proposed Undercut
1     81      81 common exc only
1     82      82 soil type = S9.5C
1     83      83 fill mult factor = 1.00
1     84      84 type = line,line_string
1     85      85 lvname = Prop CMT Pvmt Course 1
1     86      86
1     87      87 Proposed Undercut
1     88      88 common exc only
1     89      89 soil type = I19.0C
1     90      90 fill mult factor = 1.00
1     91      91 type = line,line_string
1     92      92 lvname = Prop CMT Pvmt Course 2
1     93      93
1     94      94 Proposed Undercut
1     95      95 common exc only
1     96      96 soil type = B25.0C
1     97      97 fill mult factor = 1.00
1     98      98 type = line,line_string
```

```
1     99      99 lvname = Prop CMT Pvmt Course 3
1    100     100
1    101     101 Proposed Undercut
1    102     102 common exc only
1    103     103 soil type = ABC
1    104     104 fill mult factor = 1.00
1    105     105 type = line,line_string
1    106     106 lvname = Prop CMT Pvmt Course 4
1    107     107
1    108     108 Proposed Undercut
1    109     109 common exc only
1    110     110 soil type = Wall
1    111     111 fill mult factor = 1.00
1    112     112 type = line,line_string
1    113     113 lvname = Prop CMT Concrete Wall
1    114     114
1    115     115 excavation limits
1    116     116 lvname = Prop XS Exc Vertical Line 1
1    117     117 type = line
1    118     118
1    119     119 Write Earthwork Shapes
1    120     120 plot param
1    121     121 lvname = WEI XS Earthwork
1    122     122 Stratify Shape Color
1    123     123
1    124     124 vertical search distance = 200
1    125     125
1    126     126 /*calculate only between excavation limits*/
1    127     127
1    128     128 End Area Decimal Places = 2
1    129     129
1    130     130 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\05-L-Phase5-30300-31600.txt
1    131     131
1    132     132 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    133     133 column 1 number of decimal place = 0
1    134     134 column 1 total length = 10
1    135     135
1    136     136 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    137     137 column 2 number of decimal place = 0
1    138     138 column 2 total length = 10
1    139     139
1    140     140 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    141     141 column 3 number of decimal place = 0
1    142     142 column 3 total length = 10
1    143     143
1    144     144 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
```

```
1    145    145 column 4 number of decimal place = 0
1    146    146 column 4 total length = 10
1    147    147
1    148    148 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    149    149 column 5 number of decimal place = 2
1    150    150 column 5 total length = 10
1    151    151
1    152    152 column 6 formula = ["S9.5C", Fill, End Area]
1    153    153 column 6 number of decimal place = 2
1    154    154 column 6 total length = 10
1    155    155
1    156    156 column 7 formula = ["I19.0C", Fill, End Area]
1    157    157 column 7 number of decimal place = 2
1    158    158 column 7 total length = 10
1    159    159
1    160    160 column 8 formula = ["B25.0C", Fill, End Area]
1    161    161 column 8 number of decimal place = 2
1    162    162 column 8 total length = 10
1    163    163
1    164    164 column 9 formula = ["ABC", Fill, End Area]
1    165    165 column 9 number of decimal place = 2
1    166    166 column 9 total length = 10
1    167    167
1    168    168 Process Earthwork for Baseline = L
1    169    169 job number = rdy
1    170    170
1    171    171 beg sta =   303+00.00
1    172    172 end sta =   316+00.00
1    173    173
1    174    174 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\05-L-Phase5-31600-33150.txt
1    175    175
1    176    176 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    177    177 column 1 number of decimal place = 0
1    178    178 column 1 total length = 10
1    179    179
1    180    180 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    181    181 column 2 number of decimal place = 0
1    182    182 column 2 total length = 10
1    183    183
1    184    184 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    185    185 column 3 number of decimal place = 0
1    186    186 column 3 total length = 10
1    187    187
1    188    188 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1    189    189 column 4 number of decimal place = 0
1    190    190 column 4 total length = 10
```

```
1   191   191
1   192   192 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1   193   193 column 5 number of decimal place = 2
1   194   194 column 5 total length = 10
1   195   195
1   196   196 column 6 formula = ["S9.5C", Fill, End Area]
1   197   197 column 6 number of decimal place = 2
1   198   198 column 6 total length = 10
1   199   199
1   200   200 column 7 formula = ["I19.0C", Fill, End Area]
1   201   201 column 7 number of decimal place = 2
1   202   202 column 7 total length = 10
1   203   203
1   204   204 column 8 formula = ["B25.0C", Fill, End Area]
1   205   205 column 8 number of decimal place = 2
1   206   206 column 8 total length = 10
1   207   207
1   208   208 column 9 formula = ["ABC", Fill, End Area]
1   209   209 column 9 number of decimal place = 2
1   210   210 column 9 total length = 10
1   211   211
1   212   212 Process Earthwork for Baseline = L
1   213   213 job number = rdy
1   214   214
1   215   215 beg sta =  316+00.00
1   216   216 end sta =  331+50.00
1   217   217
1   218   218
1   219   219
1   220   220
1   221   221
1   222   222
1   223   223
1   224   224
0     0   225 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
⬆
```

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
307+50.00	SUITABLE					
	Common Exc	9.49	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	0
	SHOULDERBORROW					

```
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      8.55        0          0    1.00        0
  S9.5C
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      3.01        0          0    1.00        0

308+00.00 SUITABLE
         Common Exc     13.12       21         21    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      0.00        0          0    1.00       21
  SHOULDERBORROW
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill     12.90       20         20    1.00        1
  S9.5C
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      4.30        7          7    1.00       -6

308+50.00 SUITABLE
         Common Exc     16.23       27         27    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      0.00        0          0    1.00       21
  SHOULDERBORROW
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill     18.72       29         29    1.00       -8
  S9.5C
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      4.36        8          8    1.00      -16

309+00.00 SUITABLE
         Common Exc     23.72       37         37    1.00
       Subgrade Exc      0.00        0          0    1.00
        Subsoil Exc      0.00        0          0    1.00
               Fill      0.00        0          0    1.00       21
  SHOULDERBORROW
         Common Exc      0.00        0          0    1.00
       Subgrade Exc      0.00        0          0    1.00
```

```
          Subsoil Exc      0.00        0        0     1.00
             Fill         25.65       41       41     1.00      -20
   S9.5C
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          2.75        7        7     1.00      -27
   I19.0C
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          3.70        3        3     1.00      -30

309+50.00 SUITABLE
          Common Exc      31.03       51       51     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          0.00        0        0     1.00       21
   SHOULDERBORROW
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill         34.77       56       56     1.00      -35
   S9.5C
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          2.75        5        5     1.00      -40
   I19.0C
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          4.49        8        8     1.00      -48

310+00.00 SUITABLE
          Common Exc      40.92       67       67     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          0.00        0        0     1.00       19
   SHOULDERBORROW
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill         48.92       77       77     1.00      -58
   S9.5C
          Common Exc       0.00        0        0     1.00
          Subgrade Exc     0.00        0        0     1.00
          Subsoil Exc      0.00        0        0     1.00
             Fill          2.75        5        5     1.00      -63
   I19.0C
```

```
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       3.67          8            8    1.00         -71
       B25.0C
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       5.93          5            5    1.00         -76

310+50.00 SUITABLE
          Common Exc       24.77         61           61    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       0.00          0            0    1.00         -15
       SHOULDERBORROW
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill      34.73         77           77    1.00         -92
       S9.5C
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       2.75          5            5    1.00         -97
       I19.0C
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       8.92         12           12    1.00        -109
       B25.0C
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       0.00          5            5    1.00        -114

311+00.00 SUITABLE
          Common Exc       38.70         59           59    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill       0.00          0            0    1.00         -55
       SHOULDERBORROW
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
                 Fill      15.45         46           46    1.00        -101
       S9.5C
          Common Exc        0.00          0            0    1.00
         Subgrade Exc       0.00          0            0    1.00
          Subsoil Exc       0.00          0            0    1.00
```

```
            Fill          3.07        5        5   1.00      -106
    I19.0C
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          7.12       15       15   1.00      -121

311+50.00 SUITABLE
       Common Exc        28.07       62       62   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          0.00        0        0   1.00       -59
    SHOULDERBORROW
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill         26.71       39       39   1.00       -98
    S9.5C
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          1.97        5        5   1.00      -103
    I19.0C
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          3.99       10       10   1.00      -113

312+00.00 SUITABLE
       Common Exc        33.56       57       57   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          0.00        0        0   1.00       -56
    SHOULDERBORROW
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill         27.12       50       50   1.00      -106
    S9.5C
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          1.85        4        4   1.00      -110
    I19.0C
       Common Exc         0.00        0        0   1.00
      Subgrade Exc        0.00        0        0   1.00
      Subsoil Exc         0.00        0        0   1.00
            Fill          2.73        6        6   1.00      -116
    B25.0C
       Common Exc         0.00        0        0   1.00
```

```
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       3.15        3        3   1.00        -119

312+50.00 SUITABLE
               Common Exc      37.32       66       66   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       0.00        0        0   1.00         -53
          SHOULDERBORROW
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      28.31       51       51   1.00        -104
          S9.5C
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       2.69        4        4   1.00        -108
          I19.0C
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       6.07        8        8   1.00        -116
          B25.0C
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       1.49        4        4   1.00        -120

313+00.00 SUITABLE
               Common Exc      40.46       72       72   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       0.00        0        0   1.00         -48
          SHOULDERBORROW
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill      31.49       55       55   1.00        -103
          S9.5C
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       2.45        5        5   1.00        -108
          I19.0C
               Common Exc      0.00        0        0   1.00
              Subgrade Exc      0.00        0        0   1.00
              Subsoil Exc       0.00        0        0   1.00
                     Fill       5.14       10       10   1.00        -118
```

```
          B25.0C
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      0.00          1          1    1.00        -119

313+50.00 SUITABLE
            Common Exc     47.08         81         81    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      0.00          0          0    1.00         -38
          SHOULDERBORROW
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill     38.81         65         65    1.00        -103
          S9.5C
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      2.87          5          5    1.00        -108
          I19.0C
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      5.16         10         10    1.00        -118

314+00.00 SUITABLE
            Common Exc     37.43         78         78    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      0.00          0          0    1.00         -40
          SHOULDERBORROW
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill     31.46         65         65    1.00        -105
          S9.5C
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      0.00          3          3    1.00        -108
          I19.0C
            Common Exc      0.00          0          0    1.00
          Subgrade Exc      0.00          0          0    1.00
           Subsoil Exc      0.00          0          0    1.00
                  Fill      0.00          5          5    1.00        -113

314+50.00 SUITABLE
            Common Exc     53.35         84         84    1.00
```

```
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill       0.00      0       0   1.00      -29
        SHOULDERBORROW
              Common Exc       0.00      0       0   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill      24.81     52      52   1.00      -81
        WALL
              Common Exc       0.00      0       0   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill       9.35      9       9   1.00      -90

315+00.00 SUITABLE
              Common Exc      46.41     92      92   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill       0.00      0       0   1.00        2
        SHOULDERBORROW
              Common Exc       0.00      0       0   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill      28.48     49      49   1.00      -47
        WALL
              Common Exc       0.00      0       0   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill      14.31     22      22   1.00      -69

315+50.00 SUITABLE
              Common Exc      44.21     84      84   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill       0.00      0       0   1.00       15
        SHOULDERBORROW
              Common Exc       0.00      0       0   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill      36.11     60      60   1.00      -45
        WALL
              Common Exc       0.00      0       0   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
                    Fill      15.24     27      27   1.00      -72

316+00.00 SUITABLE
              Common Exc      47.64     85      85   1.00
             Subgrade Exc      0.00      0       0   1.00
             Subsoil Exc       0.00      0       0   1.00
```

Fill	0.00	0	0	1.00	13

SHOULDERBORROW

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	49.64	79	79	1.00	-66

WALL

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	7.24	21	21	1.00	-87

⬆ G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor

SUITABLE

Common Exc	1084	1084	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	0	0	1.00

SHOULDERBORROW

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	911	911	1.00

S9.5C

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	68	68	1.00

I19.0C

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	95	95	1.00

B25.0C

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	18	18	1.00

WALL

Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	79	79	1.00

⬆ S P L I T   S U M M A R Y   T O T A L S

XS Quant	XS Quant	Add/Sub Quant	Add/Sub Quant

	Material Name	Unadjusted Volume (cu. yd.)	Adjusted Volume (cu. yd.)	Unadjusted Volume (cu. yd.)	Adjusted Volume (cu. yd.)		Mult Factor
	----------------------------	----------	----------	-------------	-------------	------	
SUITABLE							
	Common Exc	1084	1084	0		0	1.00
	Subgrade Exc	0	0	0		0	1.00
	Subsoil Exc	0	0	0		0	1.00
	Fill	0	0	0		0	1.00
SHOULDERBORROW							
	Common Exc	0	0	0		0	1.00
	Subgrade Exc	0	0	0		0	1.00
	Subsoil Exc	0	0	0		0	1.00
	Fill	911	911	0		0	1.00
S9.5C							
	Common Exc	0	0	0		0	1.00
	Subgrade Exc	0	0	0		0	1.00
	Subsoil Exc	0	0	0		0	1.00
	Fill	68	68	0		0	1.00
I19.0C							
	Common Exc	0	0	0		0	1.00
	Subgrade Exc	0	0	0		0	1.00
	Subsoil Exc	0	0	0		0	1.00
	Fill	95	95	0		0	1.00
B25.0C							
	Common Exc	0	0	0		0	1.00
	Subgrade Exc	0	0	0		0	1.00
	Subsoil Exc	0	0	0			

```
0    1.00
                              Fill              18          18                    0
0    1.00
        WALL
                        Common Exc              0           0                     0
0    1.00
                      Subgrade Exc              0           0                     0
0    1.00
                       Subsoil Exc              0           0                     0
0    1.00
                              Fill             79          79                     0
0    1.00
COMPUTING EARTHWORKS FOR BASELINE = L
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
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Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
316+00.00	SUITABLE					
	Common Exc	47.64	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	0
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	49.64	0	0	1.00	0
	WALL					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	7.24	0	0	1.00	0
316+50.00	SUITABLE					
	Common Exc	38.65	80	80	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.00	80
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	49.46	92	92	1.00	-12
	WALL					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	

```
         Subsoil Exc      0.00        0         0   1.00
            Fill         13.69       19        19   1.00        -31

317+00.00 SUITABLE
         Common Exc      38.59       72        72   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill          0.00        0         0   1.00         41
      SHOULDERBORROW
         Common Exc       0.00        0         0   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill         57.30       99        99   1.00        -58
      WALL
         Common Exc       0.00        0         0   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill         12.12       24        24   1.00        -82

317+50.00 SUITABLE
         Common Exc      38.87       72        72   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill          0.00        0         0   1.00        -10
      SHOULDERBORROW
         Common Exc       0.00        0         0   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill         63.46      112       112   1.00       -122
      WALL
         Common Exc       0.00        0         0   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill         11.54       22        22   1.00       -144

318+00.00 SUITABLE
         Common Exc      39.55       73        73   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill          0.00        0         0   1.00        -71
      SHOULDERBORROW
         Common Exc       0.00        0         0   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill         69.91      123       123   1.00       -194
      WALL
         Common Exc       0.00        0         0   1.00
        Subgrade Exc      0.00        0         0   1.00
         Subsoil Exc      0.00        0         0   1.00
            Fill         11.04       21        21   1.00       -215
```

```
318+50.00 SUITABLE
            Common Exc      39.35         73         73   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill       0.00          0          0   1.00       -142
          SHOULDERBORROW
            Common Exc       0.00          0          0   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill      72.07        131        131   1.00       -273
          WALL
            Common Exc       0.00          0          0   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill      10.38         20         20   1.00       -293

319+00.00 SUITABLE
            Common Exc      39.68         73         73   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill       0.00          0          0   1.00       -220
          SHOULDERBORROW
            Common Exc       0.00          0          0   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill      78.78        140        140   1.00       -360
          WALL
            Common Exc       0.00          0          0   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill       9.90         19         19   1.00       -379

319+50.00 SUITABLE
            Common Exc      36.78         71         71   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill       0.00          0          0   1.00       -308
          SHOULDERBORROW
            Common Exc       0.00          0          0   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill      80.44        147        147   1.00       -455
          S9.5C
            Common Exc       0.00          0          0   1.00
          Subgrade Exc       0.00          0          0   1.00
           Subsoil Exc       0.00          0          0   1.00
                  Fill       3.25          3          3   1.00       -458
          I19.0C
            Common Exc       0.00          0          0   1.00
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```
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           3.91        4        4   1.00       -462
        B25.0C
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           2.33        2        2   1.00       -464
        WALL
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           8.70       17       17   1.00       -481

320+00.00 SUITABLE
            Common Exc       36.81       68       68   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           0.00        0        0   1.00       -413
        SHOULDERBORROW
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill          78.28      147      147   1.00       -560
        S9.5C
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           3.25        6        6   1.00       -566
        I19.0C
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           3.90        7        7   1.00       -573
        B25.0C
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           6.45        8        8   1.00       -581
        WALL
            Common Exc        0.00        0        0   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           7.72       15       15   1.00       -596

320+50.00 SUITABLE
            Common Exc       37.15       68       68   1.00
            Subgrade Exc      0.00        0        0   1.00
            Subsoil Exc       0.00        0        0   1.00
               Fill           0.00        0        0   1.00       -528
```

```
SHOULDERBORROW
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     76.98      144      144   1.00        -672
S9.5C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      3.25        6        6   1.00        -678
I19.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      3.89        7        7   1.00        -685
B25.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     10.97       16       16   1.00        -701
WALL
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      6.22       13       13   1.00        -714

321+00.00 SUITABLE
    Common Exc     22.59       55       55   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      0.01        0        0   1.00        -659
SHOULDERBORROW
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill     45.73      114      114   1.00        -773
S9.5C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      3.25        6        6   1.00        -779
I19.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
          Fill      4.33        8        8   1.00        -787
B25.0C
    Common Exc      0.00        0        0   1.00
  Subgrade Exc      0.00        0        0   1.00
   Subsoil Exc      0.00        0        0   1.00
```

```
               Fill        25.30         34          34    1.00     -821
         WALL
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill         4.56         10          10    1.00     -831

321+50.00 SUITABLE
            Common Exc     19.29         39          39    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill         0.00          0           0    1.00     -792
         SHOULDERBORROW
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill        37.93         77          77    1.00     -869
         S9.5C
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill         3.62          6           6    1.00     -875
         I19.0C
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill         4.83          8           8    1.00     -883
         B25.0C
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill        24.46         46          46    1.00     -929
         WALL
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill         0.00          4           4    1.00     -933

322+00.00 SUITABLE
            Common Exc     16.22         33          33    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill         0.00          0           0    1.00     -900
         SHOULDERBORROW
            Common Exc      0.00          0           0    1.00
          Subgrade Exc      0.00          0           0    1.00
           Subsoil Exc      0.00          0           0    1.00
               Fill        30.85         64          64    1.00     -964
         S9.5C
            Common Exc      0.00          0           0    1.00
```

```
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill         3.25        6        6    1.00      -970
     I19.0C
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill         4.33        8        8    1.00      -978
     B25.0C
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill        19.40       41       41    1.00     -1019

322+50.00 SUITABLE
        Common Exc       30.36       43       43    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill         0.00        0        0    1.00      -976
     SHOULDERBORROW
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill        36.38       62       62    1.00     -1038
     S9.5C
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill         3.25        6        6    1.00     -1044
     I19.0C
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill         4.33        8        8    1.00     -1052
     B25.0C
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill        15.75       33       33    1.00     -1085

323+00.00 SUITABLE
        Common Exc       24.95       51       51    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill         0.00        0        0    1.00     -1034
     SHOULDERBORROW
        Common Exc        0.00        0        0    1.00
        Subgrade Exc      0.00        0        0    1.00
        Subsoil Exc       0.00        0        0    1.00
             Fill        29.84       61       61    1.00     -1095
```

```
      S9.5C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       3.25        6        6   1.00      -1101
      I19.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       4.33        8        8   1.00      -1109
      B25.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill      13.30       27       27   1.00      -1136

323+50.00 SUITABLE
         Common Exc     20.09       42       42   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       0.00        0        0   1.00      -1094
      SHOULDERBORROW
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill      23.64       50       50   1.00      -1144
      S9.5C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       3.25        6        6   1.00      -1150
      I19.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       4.33        8        8   1.00      -1158
      B25.0C
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       9.93       22       22   1.00      -1180

324+00.00 SUITABLE
         Common Exc     15.28       33       33   1.00
        Subgrade Exc     0.00        0        0   1.00
         Subsoil Exc     0.00        0        0   1.00
              Fill       0.00        0        0   1.00      -1147
      SHOULDERBORROW
         Common Exc      0.00        0        0   1.00
        Subgrade Exc     0.00        0        0   1.00
```

```
        Subsoil Exc      0.00        0         0    1.00
           Fill         19.20       40        40    1.00        -1187
     S9.5C
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          3.25        6         6    1.00        -1193
     I19.0C
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          4.33        8         8    1.00        -1201
     B25.0C
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          8.82       17        17    1.00        -1218

324+50.00 SUITABLE
        Common Exc      10.97       24        24    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          0.00        0         0    1.00        -1194
     SHOULDERBORROW
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill         15.10       32        32    1.00        -1226
     S9.5C
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          3.28        6         6    1.00        -1232
     I19.0C
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          4.37        8         8    1.00        -1240
     B25.0C
        Common Exc       0.00        0         0    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          7.08       15        15    1.00        -1255

325+00.00 SUITABLE
        Common Exc       7.98       18        18    1.00
        Subgrade Exc     0.00        0         0    1.00
        Subsoil Exc      0.00        0         0    1.00
           Fill          0.00        0         0    1.00        -1237
     SHOULDERBORROW
```

```
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      9.74       23          23    1.00      -1260
    S9.5C
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      3.25        6           6    1.00      -1266
    I19.0C
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      4.46        8           8    1.00      -1274
    B25.0C
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      0.00        7           7    1.00      -1281

325+50.00 SUITABLE
        Common Exc      8.69       15          15    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      0.00        0           0    1.00      -1266
    SHOULDERBORROW
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      7.26       16          16    1.00      -1282
    S9.5C
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      2.89        6           6    1.00      -1288
    I19.0C
        Common Exc      0.00        0           0    1.00
        Subgrade Exc    0.00        0           0    1.00
        Subsoil Exc     0.00        0           0    1.00
              Fill      0.00        4           4    1.00      -1292
        G R A N D    S U M M A R Y    T O T A L S
        Material Name        Unadjusted Adjusted   Mult
                             Volumes    Volumes    Factor
                             (cu. yd.)  (cu. yd.)
     --------------------------- ---------- ---------- ------
     SUITABLE
              Common Exc       1003        1003   1.00
            Subgrade Exc          0           0   1.00
             Subsoil Exc          0           0   1.00
                    Fill          0           0   1.00
```

```
          SHOULDERBORROW
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                          Fill             1674       1674   1.00
          S9.5C
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                          Fill               75         75   1.00
          I19.0C
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                          Fill               94         94   1.00
          B25.0C
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                          Fill              268        268   1.00
          WALL
                          Common Exc          0          0   1.00
                          Subgrade Exc        0          0   1.00
                          Subsoil Exc         0          0   1.00
                          Fill              184        184   1.00
```

♠   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Mult Factor
SUITABLE					
Common Exc	1003	1003	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	0	0	0	0	1.00
SHOULDERBORROW					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0		

0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	1674	1674	0
0	1.00				
	S9.5C				
		Common Exc	0	0	0
0	1.00				
		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	75	75	0
0	1.00				
	I19.0C				
		Common Exc	0	0	0
0	1.00				
		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	94	94	0
0	1.00				
	B25.0C				
		Common Exc	0	0	0
0	1.00				
		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	268	268	0
0	1.00				
	WALL				
		Common Exc	0	0	0
0	1.00				
		Subgrade Exc	0	0	0
0	1.00				
		Subsoil Exc	0	0	0
0	1.00				
		Fill	184	184	0
0	1.00				

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_Y1.inp
Output File: EW_Y1.log
 1      1       1
 1      2       2
 1      3       3 Earthwork
 1      4       4
 1      5       5 tolerance = 0.004
 1      6       6
 1      7       7 xs dgn = HB0002_rdy_xsc_Y1.dgn
 1      8       8
 1      9       9 Proposed Finish Grade
 1     10      10 soil type = Suitable
 1     11      11 fill mult factor = 1.000000
 1     12      12 type = line, line_string
 1     13      13 lvname = Prop CMT Conc Surface
 1     14      14 lvname = Prop CMT Pvmt Surface*
 1     15      15 lvname = Prop CMT Slope Grass
 1     16      16 lvname = Prop CMT Shear Line
 1     17      17 lvname = Scratch_Level_8
 1     18      18 lvname = Prop CMT Concrete Wall Surface
 1     19      19
 1     20      20 Existing Ground Line
 1     21      21 soil type = Suitable
 1     22      22 type = line, line_string
 1     23      23 lvname = Exist XS Ground Line
 1     24      24
 1     25      25 existing suitable material
 1     26      26 soil type = Suitable
 1     27      27 fill mult factor = 1.00
 1     28      28 type = line, line_string
 1     29      29 lvname = WEI XS Soil-Suitable
 1     30      30
 1     31      31 existing suitable material
 1     32      32 soil type = Unsuitable
 1     33      33 fill mult factor = 1.00
 1     34      34 type = line, line_string
 1     35      35 lvname = WEI XS Soil-Unsuitable
 1     36      36
 1     37      37 existing suitable material
 1     38      38 soil type = UnsuitableMarginal
 1     39      39 fill mult factor = 1.00
 1     40      40 type = line, line_string
 1     41      41 lvname = WEI XS Soil-UnsuitableMarginal
 1     42      42
 1     43      43 existing suitable material
 1     44      44 soil type = DDE
 1     45      45 fill mult factor = 1.00
 1     46      46 type = line, line_string
 1     47      47 lvname = WEI XS Soil-DDE
 1     48      48
```

```
1    49    49 existing suitable material
1    50    50 soil type = UnsuitableDDE
1    51    51 fill mult factor = 1.00
1    52    52 type = line, line_string
1    53    53 lvname = WEI XS Soil-UnsuitableDDE
1    54    54
1    55    55 existing unsuitable material
1    56    56 soil type = Undercut
1    57    57 fill mult factor = 1.00
1    58    58 type = line,line_string
1    59    59 lvname = WEI XS Soil-UnsuitableUndercut
1    60    60
1    61    61 Proposed Undercut
1    62    62 common exc only
1    63    63 soil type = ShoulderBorrow
1    64    64 fill mult factor = 1.00
1    65    65 type = line,line_string
1    66    66 lvname = Prop CMT Shoulder Borrow
1    67    67
1    68    68 Proposed Undercut
1    69    69 soil type = Suitable
1    70    70 fill mult factor = 1.00
1    71    71 type = line,line_string
1    72    72 lvname = WEI XS Fill-Suitable
1    73    73
1    74    74 Proposed Undercut
1    75    75 soil type = SelectMaterial
1    76    76 fill mult factor = 1.00
1    77    77 type = line,line_string
1    78    78 lvname = WEI XS Fill-SelectMaterial
1    79    79
1    80    80 Proposed Undercut
1    81    81 common exc only
1    82    82 soil type = S9.5B
1    83    83 fill mult factor = 1.00
1    84    84 type = line,line_string
1    85    85 lvname = Prop CMT Pvmt Course 1
1    86    86
1    87    87 Proposed Undercut
1    88    88 common exc only
1    89    89 soil type = B25.0C
1    90    90 fill mult factor = 1.00
1    91    91 type = line,line_string
1    92    92 lvname = Prop CMT Pvmt Course 2
1    93    93
1    94    94 Proposed Undercut
1    95    95 common exc only
1    96    96 soil type = Wall
1    97    97 fill mult factor = 1.00
1    98    98 type = line,line_string
```

```
1    99     99 lvname = Prop CMT Concrete Wall
1   100    100 lvname = Prop CMT Concrete Structures
1   101    101
1   102    102 excavation limits
1   103    103 lvname = Prop XS Exc Vertical Line 1
1   104    104 type = line
1   105    105
1   106    106 Write Earthwork Shapes
1   107    107 plot param
1   108    108 lvname = WEI XS Earthwork
1   109    109 Stratify Shape Color
1   110    110
1   111    111 vertical search distance = 200
1   112    112
1   113    113 /*calculate only between excavation limits*/
1   114    114
1   115    115 End Area Decimal Places = 2
1   116    116
1   117    117 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\06-Y1.txt
1   118    118
1   119    119 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1   120    120 column 1 number of decimal place = 0
1   121    121 column 1 total length = 10
1   122    122
1   123    123 column 2 formula = ["SUITABLE", Fill, unadj vol]
1   124    124 column 2 number of decimal place = 0
1   125    125 column 2 total length = 10
1   126    126
1   127    127 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1   128    128 column 3 number of decimal place = 0
1   129    129 column 3 total length = 10
1   130    130
1   131    131 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1   132    132 column 4 number of decimal place = 0
1   133    133 column 4 total length = 10
1   134    134
1   135    135 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1   136    136 column 5 number of decimal place = 2
1   137    137 column 5 total length = 10
1   138    138
1   139    139 column 6 formula = ["S9.5B", Fill, End Area]
1   140    140 column 6 number of decimal place = 2
1   141    141 column 6 total length = 10
1   142    142
1   143    143 column 7 formula = ["B25.0C", Fill, End Area]
1   144    144 column 7 number of decimal place = 2
```

```
1    145    145 column 7 total length = 10
1    146    146
1    147    147 Process Earthwork for Baseline = Y1
1    148    148 job number = rdy
1    149    149
1    150    150 beg sta =   7+00.00
1    151    151 end sta =  12+78.00
1    152    152
1    153    153
1    154    154
1    155    155
1    156    156
1    157    157
1    158    158
1    159    159
1    160    160
0      0    161 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = Y1
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
```

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
7+00.00	SUITABLE					
	Common Exc	4.92	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.82	0	0	1.00	0
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.12	0	0	1.00	0
	S9.5B					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	5.57	0	0	1.00	0
7+50.00	SUITABLE					
	Common Exc	0.95	5	5	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	4.13	5	5	1.00	0
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	

```
        Subsoil Exc      0.00         0         0   1.00
            Fill         0.20         0         0   1.00          0
    S9.5B
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill         5.99        11        11   1.00        -11


8+00.00 SUITABLE
        Common Exc      24.58        24        24   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill        11.60        15        15   1.00         -2
    SHOULDERBORROW
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill         0.75         1         1   1.00         -3
    S9.5B
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill         9.79        15        15   1.00        -18
    B25.0C
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill        15.03        14        14   1.00        -32


8+43.00 SUITABLE
        Common Exc       0.32        20        20   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill        22.36        27        27   1.00        -39
    SHOULDERBORROW
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill         0.00         1         1   1.00        -40
    S9.5B
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill        12.10        17        17   1.00        -57
    B25.0C
        Common Exc       0.00         0         0   1.00
        Subgrade Exc     0.00         0         0   1.00
        Subsoil Exc      0.00         0         0   1.00
            Fill        24.48        31        31   1.00        -88
    WALL
```

```
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       11.64        9          9   1.00        -97

8+50.00 SUITABLE
             Common Exc      0.13        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       23.32        6          6   1.00       -103
        S9.5B
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       12.10        3          3   1.00       -106
        B25.0C
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       24.22        6          6   1.00       -112
        WALL
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       11.64        3          3   1.00       -115

9+00.00 SUITABLE
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       33.63       53         53   1.00       -168
        S9.5B
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       12.10       22         22   1.00       -190
        B25.0C
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       28.90       49         49   1.00       -239
        WALL
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
            Subsoil Exc      0.00        0          0   1.00
                 Fill       11.64       22         22   1.00       -261

9+50.00 SUITABLE
             Common Exc      0.00        0          0   1.00
            Subgrade Exc     0.00        0          0   1.00
```

```
          Subsoil Exc      0.00         0         0    1.00
              Fill        25.49        55        55    1.00      -316
     S9.5B
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        12.10        22        22    1.00      -338
     B25.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        23.79        49        49    1.00      -387
     WALL
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        11.64        22        22    1.00      -409

10+00.00 SUITABLE
          Common Exc       0.99         1         1    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        16.78        39        39    1.00      -447
     S9.5B
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        12.10        22        22    1.00      -469
     B25.0C
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        18.74        39        39    1.00      -508
     WALL
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill        11.64        22        22    1.00      -530

10+42.68 SUITABLE
          Common Exc       3.01         3         3    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill         6.55        18        18    1.00      -545
     SHOULDERBORROW
          Common Exc       0.00         0         0    1.00
         Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc      0.00         0         0    1.00
              Fill         0.33         0         0    1.00      -545
     S9.5B
```

```
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill      12.66      20       20   1.00      -565
        B25.0C
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill      14.87      27       27   1.00      -592
        WALL
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill       0.00       9        9   1.00      -601

10+50.00 SUITABLE
           Common Exc       0.99       1        1   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill       7.43       2        2   1.00      -602
        SHOULDERBORROW
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill       0.63       0        0   1.00      -602
        S9.5B
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill      12.05       3        3   1.00      -605
        B25.0C
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill       8.89       3        3   1.00      -608

11+00.00 SUITABLE
           Common Exc       3.19       4        4   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill      16.39      22       22   1.00      -626
        SHOULDERBORROW
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
                 Fill       0.63       1        1   1.00      -627
        S9.5B
           Common Exc       0.00       0        0   1.00
           Subgrade Exc     0.00       0        0   1.00
           Subsoil Exc      0.00       0        0   1.00
```

```
              Fill       18.95       29         29    1.00      -656
        B25.0C
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill       12.23       20         20    1.00      -676


11+50.00 SUITABLE
           Common Exc      6.40        9          9    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        4.28       19         19    1.00      -686
        SHOULDERBORROW
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        0.62        1          1    1.00      -687
        S9.5B
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill       10.67       27         27    1.00      -714
        B25.0C
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        5.03       16         16    1.00      -730


12+00.00 SUITABLE
           Common Exc      3.43        9          9    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        9.54       13         13    1.00      -734
        SHOULDERBORROW
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        0.61        1          1    1.00      -735
        S9.5B
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        8.67       18         18    1.00      -753
        B25.0C
           Common Exc      0.00        0          0    1.00
           Subgrade Exc    0.00        0          0    1.00
           Subsoil Exc     0.00        0          0    1.00
              Fill        4.55        9          9    1.00      -762


12+50.00 SUITABLE
```

```
               Common Exc      7.50        10          10    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      0.75        10          10    1.00      -762
          SHOULDERBORROW
               Common Exc      0.00         0           0    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      0.60         1           1    1.00      -763
          S9.5B
               Common Exc      0.00         0           0    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      6.66        14          14    1.00      -777
          B25.0C
               Common Exc      0.00         0           0    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      2.26         6           6    1.00      -783

 12+78.00 SUITABLE
               Common Exc      0.00         4           4    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      1.40         1           1    1.00      -780
          SHOULDERBORROW
               Common Exc      0.00         0           0    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      0.24         0           0    1.00      -780
          S9.5B
               Common Exc      0.00         0           0    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      7.05         7           7    1.00      -787
          B25.0C
               Common Exc      0.00         0           0    1.00
               Subgrade Exc    0.00         0           0    1.00
               Subsoil Exc     0.00         0           0    1.00
                     Fill      3.82         3           3    1.00      -790
 ↑        G R A N D    S U M M A R Y    T O T A L S
          Material Name        Unadjusted Adjusted    Mult
                               Volumes    Volumes     Factor
                               (cu. yd.)  (cu. yd.)
          -------------------------- ---------- ---------- ------
          SUITABLE
                    Common Exc        90         90    1.00
                  Subgrade Exc         0          0    1.00
                   Subsoil Exc         0          0    1.00
                         Fill        285        285    1.00
```

```
        SHOULDERBORROW
                          Common Exc        0         0   1.00
                          Subgrade Exc      0         0   1.00
                          Subsoil Exc       0         0   1.00
                          Fill              6         6   1.00
        S9.5B
                          Common Exc        0         0   1.00
                          Subgrade Exc      0         0   1.00
                          Subsoil Exc       0         0   1.00
                          Fill            230       230   1.00
        B25.0C
                          Common Exc        0         0   1.00
                          Subgrade Exc      0         0   1.00
                          Subsoil Exc       0         0   1.00
                          Fill            272       272   1.00
        WALL
                          Common Exc        0         0   1.00
                          Subgrade Exc      0         0   1.00
                          Subsoil Exc       0         0   1.00
                          Fill             87        87   1.00
 ♠                    S P L I T    S U M M A R Y    T O T A L S
```

	Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Mult Factor
	----------------------------	----------	----------	--------------	-------------	------
	SUITABLE					
	Common Exc	90	90	0	0	1.00
	Subgrade Exc	0	0	0	0	1.00
	Subsoil Exc	0	0	0	0	1.00
	Fill	285	285	0	0	1.00
	SHOULDERBORROW					
	Common Exc	0	0	0	0	1.00
	Subgrade Exc	0	0	0	0	1.00
	Subsoil Exc	0	0	0	0	1.00
	Fill	6	6	0	0	1.00

	S9.5B			
	Common Exc	0	0	0
0 1.00	Subgrade Exc	0	0	0
0 1.00	Subsoil Exc	0	0	0
0 1.00	Fill	230	230	0
0 1.00	B25.0C			
	Common Exc	0	0	0
0 1.00	Subgrade Exc	0	0	0
0 1.00	Subsoil Exc	0	0	0
0 1.00	Fill	272	272	0
0 1.00	WALL			
	Common Exc	0	0	0
0 1.00	Subgrade Exc	0	0	0
0 1.00	Subsoil Exc	0	0	0
0 1.00	Fill	87	87	0
0 1.00				

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_Y2.inp
Output File: EW_Y2.log
 1     1     1
 1     2     2
 1     3     3 Earthwork
 1     4     4
 1     5     5 tolerance = 0.004
 1     6     6
 1     7     7 xs dgn = HB0002_rdy_xsc_Y2.dgn
 1     8     8
 1     9     9 Proposed Finish Grade
 1    10    10 soil type = Suitable
 1    11    11 fill mult factor = 1.000000
 1    12    12 type = line, line_string
 1    13    13 lvname = Prop CMT Conc Surface
 1    14    14 lvname = Prop CMT Pvmt Surface*
 1    15    15 lvname = Prop CMT Slope Grass
 1    16    16 lvname = Prop CMT Shear Line
 1    17    17 lvname = Scratch_Level_8
 1    18    18 lvname = Prop CMT Concrete Wall Surface
 1    19    19
 1    20    20 Existing Ground Line
 1    21    21 soil type = Suitable
 1    22    22 type = line, line_string
 1    23    23 lvname = Exist XS Ground Line
 1    24    24
 1    25    25 existing suitable material
 1    26    26 soil type = Suitable
 1    27    27 fill mult factor = 1.00
 1    28    28 type = line, line_string
 1    29    29 lvname = WEI XS Soil-Suitable
 1    30    30
 1    31    31 existing suitable material
 1    32    32 soil type = Unsuitable
 1    33    33 fill mult factor = 1.00
 1    34    34 type = line, line_string
 1    35    35 lvname = WEI XS Soil-Unsuitable
 1    36    36
 1    37    37 existing suitable material
 1    38    38 soil type = UnsuitableMarginal
 1    39    39 fill mult factor = 1.00
 1    40    40 type = line, line_string
 1    41    41 lvname = WEI XS Soil-UnsuitableMarginal
 1    42    42
 1    43    43 existing suitable material
 1    44    44 soil type = DDE
 1    45    45 fill mult factor = 1.00
 1    46    46 type = line, line_string
 1    47    47 lvname = WEI XS Soil-DDE
 1    48    48
```

```
1    49    49 existing suitable material
1    50    50 soil type = UnsuitableDDE
1    51    51 fill mult factor = 1.00
1    52    52 type = line, line_string
1    53    53 lvname = WEI XS Soil-UnsuitableDDE
1    54    54
1    55    55 existing unsuitable material
1    56    56 soil type = Undercut
1    57    57 fill mult factor = 1.00
1    58    58 type = line,line_string
1    59    59 lvname = WEI XS Soil-UnsuitableUndercut
1    60    60
1    61    61 Proposed Undercut
1    62    62 common exc only
1    63    63 soil type = ShoulderBorrow
1    64    64 fill mult factor = 1.00
1    65    65 type = line,line_string
1    66    66 lvname = Prop CMT Shoulder Borrow
1    67    67
1    68    68 Proposed Undercut
1    69    69 soil type = Suitable
1    70    70 fill mult factor = 1.00
1    71    71 type = line,line_string
1    72    72 lvname = WEI XS Fill-Suitable
1    73    73
1    74    74 Proposed Undercut
1    75    75 soil type = SelectMaterial
1    76    76 fill mult factor = 1.00
1    77    77 type = line,line_string
1    78    78 lvname = WEI XS Fill-SelectMaterial
1    79    79
1    80    80 Proposed Undercut
1    81    81 common exc only
1    82    82 soil type = S9.5B
1    83    83 fill mult factor = 1.00
1    84    84 type = line,line_string
1    85    85 lvname = Prop CMT Pvmt Course 1
1    86    86
1    87    87 Proposed Undercut
1    88    88 common exc only
1    89    89 soil type = B25.0C
1    90    90 fill mult factor = 1.00
1    91    91 type = line,line_string
1    92    92 lvname = Prop CMT Pvmt Course 2
1    93    93
1    94    94 Proposed Undercut
1    95    95 common exc only
1    96    96 soil type = Wall
1    97    97 fill mult factor = 1.00
1    98    98 type = line,line_string
```

```
1    99     99 lvname = Prop CMT Concrete Wall
1   100    100 lvname = Prop CMT Concrete Structures
1   101    101
1   102    102 excavation limits
1   103    103 lvname = Prop XS Exc Vertical Line 1
1   104    104 type = line
1   105    105
1   106    106 Write Earthwork Shapes
1   107    107 plot param
1   108    108 lvname = WEI XS Earthwork
1   109    109 Stratify Shape Color
1   110    110
1   111    111 vertical search distance = 200
1   112    112
1   113    113 /*calculate only between excavation limits*/
1   114    114
1   115    115 End Area Decimal Places = 2
1   116    116
1   117    117 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\07-Y2.txt
1   118    118
1   119    119 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1   120    120 column 1 number of decimal place = 0
1   121    121 column 1 total length = 10
1   122    122
1   123    123 column 2 formula = ["SUITABLE", Fill, unadj vol]
1   124    124 column 2 number of decimal place = 0
1   125    125 column 2 total length = 10
1   126    126
1   127    127 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1   128    128 column 3 number of decimal place = 0
1   129    129 column 3 total length = 10
1   130    130
1   131    131 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1   132    132 column 4 number of decimal place = 0
1   133    133 column 4 total length = 10
1   134    134
1   135    135 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1   136    136 column 5 number of decimal place = 2
1   137    137 column 5 total length = 10
1   138    138
1   139    139 column 6 formula = ["S9.5B", Fill, End Area]
1   140    140 column 6 number of decimal place = 2
1   141    141 column 6 total length = 10
1   142    142
1   143    143 column 7 formula = ["B25.0C", Fill, End Area]
1   144    144 column 7 number of decimal place = 2
```

```
1    145    145 column 7 total length = 10
1    146    146
1    147    147
1    148    148 Process Earthwork for Baseline = Y2
1    149    149 job number = rdy
1    150    150
1    151    151 beg sta =   10+26.00
1    152    152 end sta =   18+00.00
1    153    153
1    154    154
1    155    155
1    156    156
1    157    157
1    158    158
1    159    159
1    160    160
1    161    161
0      0    162 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = Y2
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
```

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
10+26.00	SUITABLE					
	Common Exc	13.12	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	37.70	0	0	1.00	0
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.36	0	0	1.00	0
	S9.5B					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	10.09	0	0	1.00	0
	B25.0C					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	19.90	0	0	1.00	0
	WALL					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	

```
             Subsoil Exc      0.00        0         0    1.00
                 Fill         6.10        0         0    1.00           0

10+50.00 SUITABLE
             Common Exc      37.04       22        22    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         6.74       20        20    1.00           2
         SHOULDERBORROW
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         0.35        0         0    1.00           2
         S9.5B
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         6.53        7         7    1.00          -5
         B25.0C
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill        10.40       13        13    1.00         -18
         WALL
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         3.94        4         4    1.00         -22

11+00.00 SUITABLE
             Common Exc      20.40       53        53    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         8.92       15        15    1.00          16
         SHOULDERBORROW
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         0.35        1         1    1.00          15
         S9.5B
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         7.81       13        13    1.00           2
         B25.0C
             Common Exc       0.00        0         0    1.00
            Subgrade Exc      0.00        0         0    1.00
             Subsoil Exc      0.00        0         0    1.00
                 Fill         6.53       16        16    1.00         -14
         WALL
```

```
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      3.56        7         7    1.00         -21

11+50.00 SUITABLE
            Common Exc      0.49       19        19    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      8.30       16        16    1.00         -18
         SHOULDERBORROW
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      0.35        1         1    1.00         -19
         S9.5B
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      9.07       16        16    1.00         -35
         B25.0C
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      2.36        8         8    1.00         -43
         WALL
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      3.56        7         7    1.00         -50

12+00.00 SUITABLE
            Common Exc      1.47        2         2    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      1.99       10        10    1.00         -58
         SHOULDERBORROW
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      0.35        1         1    1.00         -59
         S9.5B
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      9.14       17        17    1.00         -76
         B25.0C
            Common Exc      0.00        0         0    1.00
           Subgrade Exc     0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
```

```
                  Fill        1.66        4         4    1.00      -80
        WALL
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      3.56        7         7    1.00      -87

12+50.00 SUITABLE
            Common Exc      1.00        2         2    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      1.47        3         3    1.00      -88
        SHOULDERBORROW
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      0.35        1         1    1.00      -89
        S9.5B
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill     10.08       18        18    1.00     -107
        B25.0C
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      1.58        3         3    1.00     -110
        WALL
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      3.56        7         7    1.00     -117

13+00.00 SUITABLE
            Common Exc      1.68        2         2    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      0.34        2         2    1.00     -117
        SHOULDERBORROW
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      0.35        1         1    1.00     -118
        S9.5B
            Common Exc      0.00        0         0    1.00
          Subgrade Exc      0.00        0         0    1.00
           Subsoil Exc      0.00        0         0    1.00
                  Fill      9.72       18        18    1.00     -136
        B25.0C
            Common Exc      0.00        0         0    1.00
```

```
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          1.83        3          3    1.00       -139
             WALL
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          3.56        7          7    1.00       -146

13+50.00 SUITABLE
                Common Exc        0.86        2          2    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          2.59        3          3    1.00       -147
             SHOULDERBORROW
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          0.35        1          1    1.00       -148
             S9.5B
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          9.08       17         17    1.00       -165
             B25.0C
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          1.88        3          3    1.00       -168
             WALL
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          3.56        7          7    1.00       -175

14+00.00 SUITABLE
                Common Exc        1.69        2          2    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          2.80        5          5    1.00       -178
             SHOULDERBORROW
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          0.35        1          1    1.00       -179
             S9.5B
                Common Exc        0.00        0          0    1.00
                Subgrade Exc      0.00        0          0    1.00
                Subsoil Exc       0.00        0          0    1.00
                    Fill          9.10       17         17    1.00       -196
```

```
        B25.0C
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           4.46          6          6    1.00      -202
        WALL
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           3.56          7          7    1.00      -209

14+50.00 SUITABLE
          Common Exc         1.38          3          3    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           6.73          9          9    1.00      -215
        SHOULDERBORROW
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           0.35          1          1    1.00      -216
        S9.5B
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           6.53         14         14    1.00      -230
        B25.0C
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill          10.88         14         14    1.00      -244
        WALL
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           3.57          7          7    1.00      -251

15+00.00 SUITABLE
          Common Exc         0.98          2          2    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill          38.24         42         42    1.00      -291
        SHOULDERBORROW
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
          Subsoil Exc        0.00          0          0    1.00
              Fill           0.35          1          1    1.00      -292
        S9.5B
          Common Exc         0.00          0          0    1.00
         Subgrade Exc        0.00          0          0    1.00
```

```
        Subsoil Exc      0.00        0        0  1.00
           Fill          6.53       12       12  1.00      -304
    B25.0C
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill         15.10       24       24  1.00      -328
    WALL
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill          3.59        7        7  1.00      -335

15+50.00 SUITABLE
        Common Exc       0.37        1        1  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill         15.60       50       50  1.00      -384
    SHOULDERBORROW
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill          0.35        1        1  1.00      -385
    S9.5B
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill          6.53       12       12  1.00      -397
    B25.0C
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill         18.10       31       31  1.00      -428
    WALL
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill          3.59        7        7  1.00      -435

16+00.00 SUITABLE
        Common Exc       0.17        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill         26.00       39       39  1.00      -474
    SHOULDERBORROW
        Common Exc       0.00        0        0  1.00
        Subgrade Exc     0.00        0        0  1.00
        Subsoil Exc      0.00        0        0  1.00
           Fill          1.67        2        2  1.00      -476
    S9.5B
```

```
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill          5.95       12       12    1.00       -488
       B25.0C
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill         17.94       33       33    1.00       -521
       WALL
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill          1.71        5        5    1.00       -526

16+50.00 SUITABLE
          Common Exc        0.44        1        1    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill         24.95       47       47    1.00       -572
       SHOULDERBORROW
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill          1.67        3        3    1.00       -575
       S9.5B
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill          5.95       11       11    1.00       -586
       B25.0C
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill         16.62       32       32    1.00       -618
       WALL
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill          1.71        3        3    1.00       -621

17+00.00 SUITABLE
          Common Exc        1.32        2        2    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
              Fill         16.43       38       38    1.00       -657
       SHOULDERBORROW
          Common Exc        0.00        0        0    1.00
          Subgrade Exc      0.00        0        0    1.00
          Subsoil Exc       0.00        0        0    1.00
```

Fill	1.67	3	3	1.00	-660
S9.5B					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	5.95	11	11	1.00	-671
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	11.04	26	26	1.00	-697
WALL					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	1.71	3	3	1.00	-700
17+50.00 SUITABLE					
Common Exc	3.87	5	5	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	4.18	19	19	1.00	-714
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.71	2	2	1.00	-716
S9.5B					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	8.95	14	14	1.00	-730
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	2.05	12	12	1.00	-742
WALL					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	2	2	1.00	-744
18+00.00 SUITABLE					
Common Exc	5.79	9	9	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.37	4	4	1.00	-739
SHOULDERBORROW					
Common Exc	0.00	0	0	1.00	

Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.11	1	1	1.00	-740
S9.5B					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	5.57	13	13	1.00	-753
B25.0C					
Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.00	2	2	1.00	-755

⬧   G R A N D   S U M M A R Y   T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
SUITABLE			
Common Exc	127	127	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	322	322	1.00
SHOULDERBORROW			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	21	21	1.00
S9.5B			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	222	222	1.00
B25.0C			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	230	230	1.00
WALL			
Common Exc	0	0	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	87	87	1.00

⬧   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume	XS Quant Adjusted Volume	Add/Sub Quant Unadjusted Volume	Add/Sub Quant Adjusted Volume	Mult

```
     Factor
                                    (cu. yd.)  (cu. yd.) (cu. yd.)    (cu. yd.)

          --------------------------- ---------- ---------- -------------
------------- ------
          SUITABLE
                              Common Exc      127        127           0
0   1.00
                              Subgrade Exc      0          0           0
0   1.00
                              Subsoil Exc       0          0           0
0   1.00
                              Fill            322        322           0
0   1.00
          SHOULDERBORROW
                              Common Exc        0          0           0
0   1.00
                              Subgrade Exc      0          0           0
0   1.00
                              Subsoil Exc       0          0           0
0   1.00
                              Fill             21         21           0
0   1.00
          S9.5B
                              Common Exc        0          0           0
0   1.00
                              Subgrade Exc      0          0           0
0   1.00
                              Subsoil Exc       0          0           0
0   1.00
                              Fill            222        222           0
0   1.00
          B25.0C
                              Common Exc        0          0           0
0   1.00
                              Subgrade Exc      0          0           0
0   1.00
                              Subsoil Exc       0          0           0
0   1.00
                              Fill            230        230           0
0   1.00
          WALL
                              Common Exc        0          0           0
0   1.00
                              Subgrade Exc      0          0           0
0   1.00
                              Subsoil Exc       0          0           0
0   1.00
                              Fill             87         87           0
0   1.00
```

```
Input  File: R:\Roadway\CorridorModeling\Earthwork\Input Files\EW_Y3.inp
Output File: EW_Y3.log
 1     1      1
 1     2      2
 1     3      3 Earthwork
 1     4      4
 1     5      5 tolerance = 0.004
 1     6      6
 1     7      7 xs dgn = HB0002_rdy_xsc_Y3.dgn
 1     8      8
 1     9      9 Proposed Finish Grade
 1    10     10 soil type = Suitable
 1    11     11 fill mult factor = 1.000000
 1    12     12 type = line, line_string
 1    13     13 lvname = Prop CMT Conc Surface
 1    14     14 lvname = Prop CMT Pvmt Surface*
 1    15     15 lvname = Prop CMT Slope Grass
 1    16     16 lvname = Prop CMT Shear Line
 1    17     17 lvname = Scratch_Level_8
 1    18     18 lvname = Prop CMT Concrete Wall Surface
 1    19     19
 1    20     20 Existing Ground Line
 1    21     21 soil type = Suitable
 1    22     22 type = line, line_string
 1    23     23 lvname = Exist XS Ground Line
 1    24     24
 1    25     25 existing suitable material
 1    26     26 soil type = Suitable
 1    27     27 fill mult factor = 1.00
 1    28     28 type = line, line_string
 1    29     29 lvname = WEI XS Soil-Suitable
 1    30     30
 1    31     31 existing suitable material
 1    32     32 soil type = Unsuitable
 1    33     33 fill mult factor = 1.00
 1    34     34 type = line, line_string
 1    35     35 lvname = WEI XS Soil-Unsuitable
 1    36     36
 1    37     37 existing suitable material
 1    38     38 soil type = UnsuitableMarginal
 1    39     39 fill mult factor = 1.00
 1    40     40 type = line, line_string
 1    41     41 lvname = WEI XS Soil-UnsuitableMarginal
 1    42     42
 1    43     43 existing suitable material
 1    44     44 soil type = DDE
 1    45     45 fill mult factor = 1.00
 1    46     46 type = line, line_string
 1    47     47 lvname = WEI XS Soil-DDE
 1    48     48
```

```
1    49      49 existing suitable material
1    50      50 soil type = UnsuitableDDE
1    51      51 fill mult factor = 1.00
1    52      52 type = line, line_string
1    53      53 lvname = WEI XS Soil-UnsuitableDDE
1    54      54
1    55      55 existing unsuitable material
1    56      56 soil type = Undercut
1    57      57 fill mult factor = 1.00
1    58      58 type = line,line_string
1    59      59 lvname = WEI XS Soil-UnsuitableUndercut
1    60      60
1    61      61 Proposed Undercut
1    62      62 common exc only
1    63      63 soil type = ShoulderBorrow
1    64      64 fill mult factor = 1.00
1    65      65 type = line,line_string
1    66      66 lvname = Prop CMT Shoulder Borrow
1    67      67
1    68      68 Proposed Undercut
1    69      69 soil type = Suitable
1    70      70 fill mult factor = 1.00
1    71      71 type = line,line_string
1    72      72 lvname = WEI XS Fill-Suitable
1    73      73
1    74      74 Proposed Undercut
1    75      75 soil type = SelectMaterial
1    76      76 fill mult factor = 1.00
1    77      77 type = line,line_string
1    78      78 lvname = WEI XS Fill-SelectMaterial
1    79      79
1    80      80 Proposed Undercut
1    81      81 common exc only
1    82      82 soil type = S9.5B
1    83      83 fill mult factor = 1.00
1    84      84 type = line,line_string
1    85      85 lvname = Prop CMT Pvmt Course 1
1    86      86
1    87      87 Proposed Undercut
1    88      88 common exc only
1    89      89 soil type = B25.0C
1    90      90 fill mult factor = 1.00
1    91      91 type = line,line_string
1    92      92 lvname = Prop CMT Pvmt Course 2
1    93      93
1    94      94 Proposed Undercut
1    95      95 common exc only
1    96      96 soil type = Wall
1    97      97 fill mult factor = 1.00
1    98      98 type = line,line_string
```

```
1     99     99 lvname = Prop CMT Concrete Wall
1    100    100 lvname = Prop CMT Concrete Structures
1    101    101
1    102    102 excavation limits
1    103    103 lvname = Prop XS Exc Vertical Line 1
1    104    104 type = line
1    105    105
1    106    106 Write Earthwork Shapes
1    107    107 plot param
1    108    108 lvname = WEI XS Earthwork
1    109    109 Stratify Shape Color
1    110    110
1    111    111 vertical search distance = 200
1    112    112
1    113    113 /*calculate only between excavation limits*/
1    114    114
1    115    115 End Area Decimal Places = 2
1    116    116
1    117    117 write column base ascii file =
R:\Roadway\CorridorModeling\Earthwork\EW-TXT\08-Y3.txt
1    118    118
1    119    119 column 1 formula = ["SUITABLE", Common Exc, unadj vol] +
["UNSUITABLE", Common Exc, unadj vol] + ["UNSUITABLEMARGINAL", Common Exc, unadj
vol]
1    120    120 column 1 number of decimal place = 0
1    121    121 column 1 total length = 10
1    122    122
1    123    123 column 2 formula = ["SUITABLE", Fill, unadj vol]
1    124    124 column 2 number of decimal place = 0
1    125    125 column 2 total length = 10
1    126    126
1    127    127 column 3 formula = ["UNDERCUT", Common Exc, unadj vol] + ["UNDERCUT",
Subgrade Exc, unadj vol] + ["UNDERCUT", Subsoil Exc, unadj vol]
1    128    128 column 3 number of decimal place = 0
1    129    129 column 3 total length = 10
1    130    130
1    131    131 column 4 formula = ["SELECTMATERIAL", Fill, unadj vol]
1    132    132 column 4 number of decimal place = 0
1    133    133 column 4 total length = 10
1    134    134
1    135    135 column 5 formula = ["SHOULDERBORROW", Fill, end area]
1    136    136 column 5 number of decimal place = 2
1    137    137 column 5 total length = 10
1    138    138
1    139    139 column 6 formula = ["S9.5B", Fill, End Area]
1    140    140 column 6 number of decimal place = 2
1    141    141 column 6 total length = 10
1    142    142
1    143    143 column 7 formula = ["B25.0C", Fill, End Area]
1    144    144 column 7 number of decimal place = 2
```

```
1   145   145 column 7 total length = 10
1   146   146
1   147   147 Process Earthwork for Baseline = Y3
1   148   148 job number = rdy
1   149   149
1   150   150 beg sta =   23+00.00
1   151   151 end sta =   26+85.00
1   152   152
1   153   153
1   154   154
1   155   155
1   156   156
1   157   157
1   158   158
1   159   159
1   160   160
0     0   161 END_OF_FILE
COMPUTING EARTHWORKS FOR BASELINE = Y3
COMPUTING EARTHWORKS FOR JOB = RDY
FORMING LIST OF XSCELLS
BEGINNING EARTHWORKS COMPUTATION
```

	Material Name	End Areas	Unadjusted Volumes	Adjusted Volumes	Mult Factor	Mass Ordinate
Station		(sq. ft.)	(cu. yd.)	(cu. yd.)		
23+00.00	SUITABLE					
	Common Exc	9.71	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.52	0	0	1.00	0
	SHOULDERBORROW					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.61	0	0	1.00	0
	S9.5B					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	5.29	0	0	1.00	0
	B25.0C					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.48	0	0	1.00	0
23+50.00	SUITABLE					
	Common Exc	2.84	12	12	1.00	
	Subgrade Exc	0.00	0	0	1.00	

```
          Subsoil Exc       0.00         0         0    1.00
          Fill             32.96        31        31    1.00       -19
SHOULDERBORROW
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              0.60         1         1    1.00       -20
S9.5B
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              7.72        12        12    1.00       -32
B25.0C
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              2.89         3         3    1.00       -35

24+00.00 SUITABLE
          Common Exc        7.14         9         9    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill             68.66        94        94    1.00      -120
SHOULDERBORROW
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              0.61         1         1    1.00      -121
S9.5B
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              7.79        14        14    1.00      -135
B25.0C
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              6.88         9         9    1.00      -144

24+50.00 SUITABLE
          Common Exc        5.81        12        12    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill             66.96       126       126    1.00      -258
SHOULDERBORROW
          Common Exc        0.00         0         0    1.00
          Subgrade Exc      0.00         0         0    1.00
          Subsoil Exc       0.00         0         0    1.00
          Fill              0.63         1         1    1.00      -259
S9.5B
```

```
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill       8.07       15          15    1.00       -274
       B25.0C
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill      11.96       17          17    1.00       -291

25+00.00 SUITABLE
              Common Exc       2.08        7           7    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill      83.39      139         139    1.00       -423
       SHOULDERBORROW
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill       0.63        1           1    1.00       -424
       S9.5B
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill       7.07       14          14    1.00       -438
       B25.0C
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill      15.72       26          26    1.00       -464

25+25.00 SUITABLE
              Common Exc       0.00        1           1    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill     126.39       97          97    1.00       -560
       SHOULDERBORROW
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill       0.63        1           1    1.00       -561
       S9.5B
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
                    Fill       7.06        7           7    1.00       -568
       B25.0C
              Common Exc       0.00        0           0    1.00
            Subgrade Exc       0.00        0           0    1.00
             Subsoil Exc       0.00        0           0    1.00
```

Fill	9.61	12	12	1.00	-580

25+50.00 SUITABLE

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	155.35	130	130	1.00	-710

SHOULDERBORROW

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.63	1	1	1.00	-711

S9.5B

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	7.07	7	7	1.00	-718

B25.0C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	9.62	9	9	1.00	-727

26+00.00 SUITABLE

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	320.97	441	441	1.00	-1168

SHOULDERBORROW

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	0.61	1	1	1.00	-1169

S9.5B

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	7.73	14	14	1.00	-1183

B25.0C

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	10.50	19	19	1.00	-1202

26+50.00 SUITABLE

Common Exc	0.00	0	0	1.00	
Subgrade Exc	0.00	0	0	1.00	
Subsoil Exc	0.00	0	0	1.00	
Fill	203.73	486	486	1.00	-1688

SHOULDERBORROW

```
              Common Exc      0.00        0         0   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill        0.60        1         1   1.00      -1689
         S9.5B
              Common Exc      0.00        0         0   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill        8.39       15        15   1.00      -1704
         B25.0C
              Common Exc      0.00        0         0   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill       11.39       20        20   1.00      -1724

  26+85.00 SUITABLE
              Common Exc      5.11        3         3   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill        1.57      133       133   1.00      -1854
         SHOULDERBORROW
              Common Exc      0.00        0         0   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill        0.60        1         1   1.00      -1855
         S9.5B
              Common Exc      0.00        0         0   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill       12.91       14        14   1.00      -1869
         B25.0C
              Common Exc      0.00        0         0   1.00
              Subgrade Exc    0.00        0         0   1.00
              Subsoil Exc     0.00        0         0   1.00
                  Fill       17.40       19        19   1.00      -1888
            G R A N D    S U M M A R Y    T O T A L S
            Material Name        Unadjusted Adjusted   Mult
                                 Volumes    Volumes    Factor
                                 (cu. yd.)  (cu. yd.)
       -------------------------- ---------- ---------- ------
       SUITABLE
                  Common Exc         44        44   1.00
                  Subgrade Exc        0         0   1.00
                  Subsoil Exc         0         0   1.00
                      Fill         1677      1677   1.00
       SHOULDERBORROW
                  Common Exc          0         0   1.00
                  Subgrade Exc        0         0   1.00
                  Subsoil Exc         0         0   1.00
                      Fill            9         9   1.00
```

```
        S9.5B
                        Common Exc          0          0   1.00
                        Subgrade Exc        0          0   1.00
                        Subsoil Exc         0          0   1.00
                        Fill              112        112   1.00
        B25.0C
                        Common Exc          0          0   1.00
                        Subgrade Exc        0          0   1.00
                        Subsoil Exc         0          0   1.00
                        Fill              134        134   1.00
```

↑   S P L I T   S U M M A R Y   T O T A L S

Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Quant Adjusted Volume (cu. yd.)	Quant Mult Factor
SUITABLE					
Common Exc	44	44	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	1677	1677	0	0	1.00
SHOULDERBORROW					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	9	9	0	0	1.00
S9.5B					
Common Exc	0	0	0	0	1.00
Subgrade Exc	0	0	0	0	1.00
Subsoil Exc	0	0	0	0	1.00
Fill	112	112	0	0	1.00
B25.0C					

		Common Exc	0	0	0
0	1.00	Subgrade Exc	0	0	0
0	1.00	Subsoil Exc	0	0	0
0	1.00	Fill	134	134	0
0	1.00				