

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

**ELECTRIC:**  
 CEI FIRST ENERGY  
 6896 MILLER ROAD, SUITE 101  
 BRECKSVILLE, OH 44141  
 ATTN: JOHN M. ZASSICK  
 PHONE: 440-546-8706

**TELECOM:**  
 WIDE OPEN WEST  
 105 BLAZE INDUSTRIAL PARKWAY  
 BEREA, OH 44017  
 ATTN: BOB HAMMOND  
 PHONE: 440-625-0349

**TELECOM:**  
 CENTURYLINK  
 4000 CHESTER AVE.  
 CLEVELAND, OH 44103  
 ATTN: DOUG HOLLOWAY  
 PHONE: 216-906-6284

**TELECOM:**  
 WINDSTREAM  
 560 TERNES AVE.  
 ELYRIA, OHIO 44035  
 ATTN: GEOFFREY HAMM  
 PHONE: 440-329-4245

**TELECOM:**  
 AT&T  
 13630 LORAIN AVE. - 2ND FLOOR  
 CLEVELAND, OHIO 44111  
 ATTN: JAMES JANIS  
 PHONE: 216-476-6142

**TELECOM:**  
 VERIZON  
 12300 RIDGE ROAD  
 NORTH ROYALTON, OHIO 44133  
 ATTN: DAN ARZ  
 PHONE: 440-457-4832

**WATER:**  
 CITY OF CLEVELAND  
 DIVISION OF WATER  
 1201 LAKESIDE AVE.  
 CLEVELAND, OH 44114  
 ATTN: FRED ROBERTS  
 PHONE: 216-664-2444 x75590

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**CLEARING AND GRUBBING**

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

**CONSTRUCTION ACCESS**

THE CONTRACTOR CAN ACCESS THE PROJECT LOCATION FROM THE ODOT RIGHT-OF-WAY AND EASEMENTS. IF THE CONTRACTOR ELECTS TO USE THE ADJACENT NORFOLK SOUTHERN PROPERTY THEN THE CONTRACTOR SHALL APPLY FOR A RIGHT OF ENTRY VIA THE NORFOLK SOUTHERN RAILPROS SYSTEM. A COPY OF THE APPROVED PERMIT SHALL BE PROVIDED TO THE ODOT ENGINEER PRIOR TO THE BEGINNING OF CONSTRUCTION.

**SURVEYING PARAMETERS**

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THIS SHEET OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

**PROJECT CONTROL**

POSITIONING METHOD: ODOT VRS  
 MONUMENT TYPE: TYPE B

**VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD 88  
 GEOD: GEIOD 12B

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAVD83(2011)  
 ELLIPSOID: GRS80  
 MAP PROJECTION: LAMBER CONFORMAL CONIC  
 COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE  
 COMBINED SCALE FACTOR: 0.99992243  
 ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH C&MS 623.

UNITS ARE IN U.S. SURVEY FEET.

**ENDANGERED BAT HABITAT REMOVAL**

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

**COOPERATION BETWEEN CONTRACTORS**

THE CONTRACTOR SHALL COOPERATE AND COORDINATE OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THE CONTRACT. NO WAIVER OF ANY PROVISIONS OF THE CONSTRUCTION OF MATERIAL SPECIFICATIONS IS INTENDED.

THE CONTRACTOR IS ADVISED THAT PID 107657 (CONSTRUCTION PROJECT NUMBER 21-0285). WILL BE UNDER CONSTRUCTION CONCURRENTLY WITH THIS PROJECT.

**ITEM 690 - MISC.: SITE RESTORATION**

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROVIDE ACCESS AND SITE RESTORATION TO THE PROJECT LOCATION.

THIS ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, EARTHWORK, CLEARING AND GRUBBING, FENCE WORK, GUARDRAIL, ETC. TEMPORARY EROSION CONTROL ITEMS SHALL BE PAID FOR PER ITEM 832. THIS ITEM SHALL INCLUDE ALL RESTORATION WORK NECESSARY TO RESTORE ANY DISTURBED AREAS ALONG ANY CONSTRUCTION ACCESS PATHS TO AS GOOD AS OR BETTER THAN THEIR ORIGINAL CONDITION. WHEN ACCESSING THE PROJECT LOCATION AND SLOPES 3:1 OR STEEPER ARE ENCOUNTERED, THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO KEEP DAMAGE TO THE SLOPE TO A MINIMUM, TO PREVENT FUTURE EROSION PROBLEMS.

ALL SLOPES 3:1 OR STEEPER SHALL HAVE ITEM 670 - SLOPE EROSION PROTECTION INSTALLED. ALL DISTURBED VEGETATED DITCHES SHALL HAVE ITEM 670-DITCH EROSION PROTECTION INSTALLED.

THIS ITEM SHALL ALSO INCLUDE SEEDING, REPAIR SEEDING AND MULCHING, FERTILIZING, APPLICATION OF LIME AND WATERING PER ITEM 659 FOR ALL DISTURBED AREAS. IT SHALL ALSO INCLUDE THE ADDITION OF 3 INCHES OF TOPSOIL FOR ALL SEEDED AREAS. THE CONTRACTOR SHALL ENSURE A GOOD STAND OF GRASS AS DETAILED PER 659.23. THE COST OF ALL THE ABOVE, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 690 - MISC. SITE RESTORATION.

ITEM 690 - MISC.: SITE RESTORATION LUMP SUM

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	56 CY
(504 SY) x (111 / 1000SY) = 55.9 CY	
659, REPAIR SEEDING AND MULCHING	25 SY
(504)x(0.05) = 25.2 SY	
659, COMMERCIAL FERTILIZER	0.07 TON
(504)x(1 TON / 7410 SY) = 0.068 TON	
659, LIME	0.10 ACRE
(504)x(1 ACRE / 4840 SY) = 0.104 ACRE	
659, WATER	3 M GAL.
(504) x (0.0054 M GAL / SY) = 2.7 M GAL	
670, SLOPE EROSION PROTECTION MAT, TYPE A	504 SY

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

**ITEM SPECIAL - SUE LEVEL A - TEST HOLES**

THE EXISTING ELECTRICAL LINE SHOWN IN THE PLANS IS PLACED AT ITS APPROXIMATE LOCATION AND DEPTH. PRIOR TO BEGINNING GRADING OPERATIONS AND PLATE PILE PLACEMENT, CONTRACTOR SHALL PERFORM TWO (2) SUE LEVEL A TEST HOLES TO CONFIRM THE LOCATION OF THE ELECTRICAL LINE ADJACENT TO THE WORK LOCATION. THE EXCAVATION AND IDENTIFICATION OF THE ELECTRICAL LINE SHALL CONFORM WITH THE EFFORT IDENTIFIED IN THE ODOT SUBSURFACE UTILITY LOCATION SERVICES (SULS) SPECIFICATIONS, SECTION 401: UTILITY QUALITY LEVEL A.

THE WORK WILL INCLUDE BACKFILLING, COMPACTING, AND RESTORATION OF THE EXCAVATION TO THE SITE'S ORIGINAL CONDITION. EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT.

THE UNIT BID PRICE FOR THIS ITEM SHALL INCLUDE ALL OF THE LABOR, MATERIAL AND EQUIPMENT NECESSARY TO MEET THE ABOVE REQUIREMENTS.

THE FOLLOWING QUANTITY HAVE BEEN CARRIED FORWARD TO THE GENERAL SUMMARY.

ITEM SPECIAL - SUE LEVEL A - TEST HOLES 2 EACH

**ITEM SPECIAL - NORFOLK SOUTHERN, RAILPROS - PERMIT**

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO OBTAIN A RIGHT OF ENTRY PERMIT USING THE NORFOLK SOUTHERN RAILPROS SYSTEM. THE CONTRACTOR IS ADVISED THAT THE PERMIT FEES FOR THE RAILPROS SYSTEM ARE AS FOLLOWS:

NON-ENVIRONMENTAL RIGHT OF ENTRY FEE - \$1500  
 EXPEDITED APPLICATION FEE -\$3000

THE CONTRACTOR CAN ACCESS THE RAILPROS SYSTEM AT THE FOLLOWING ADDRESS: [HTTPS://NS.RAILPROSPERSMITTING.COM](https://ns.railprospersmitting.com)

THE FOLLOWING QUANTITY HAS BEEN CARRIED FORWARD TO THE GENERAL SUMMARY.

ITEM SPECIAL - NORFOLK SOUTHERN, RAILPROS - PERMIT LS

**ITEM 202 - REMOVAL MISC.: REMOVE AND REPLACE BOULDERS**

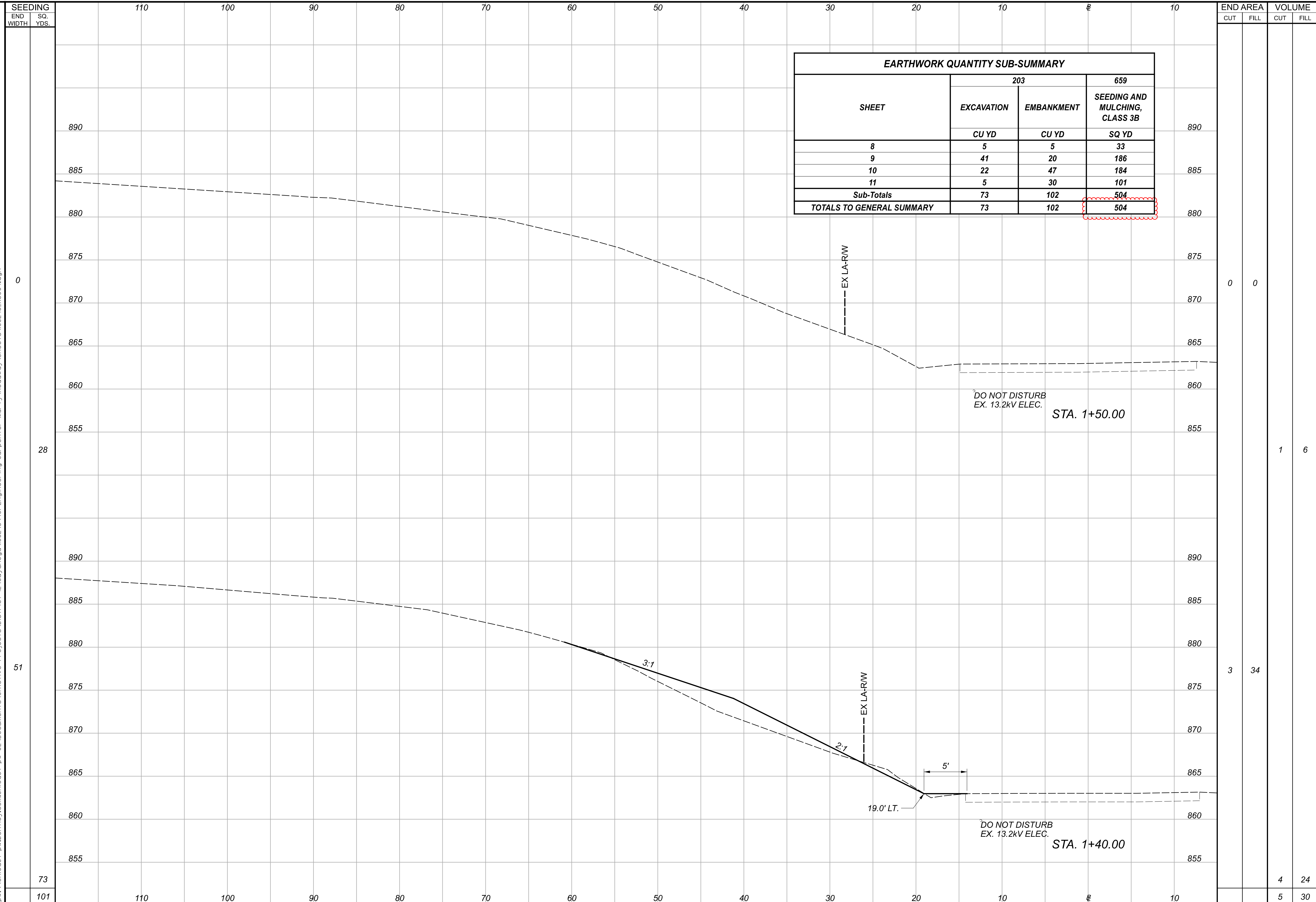
THERE ARE LARGE BOULDERS LOCATED ON THE WEST SIDE OF THE ACCESS DRIVE. THE CONTRACTOR MAY MOVE THE BOULDERS FOR ACCESS TO THE CONSTRUCTION SITE. THE CONTRACTOR SHALL MOVE AND REPLACE THE BOULDERS BACK TO THEIR ORIGINAL LOCATION ONCE THE PROJECT IS COMPLETE.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE, UNLESS NOTED OTHERWISE, SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 202 - REMOVAL MISC.: REMOVE AND REPLACE BOULDERS.

BASELINE CONSTRUCTION REFERENCES AND BENCHMARKS						
GROUND						
STATION	OFFSET (FT)	SIDE	NORTHING	EASTING	ELEVATION	DESCRIPTION
0+00.00	0.00		641132.675	2219870.360		P.O.T.
0+92.52	94.08	LT			902.70	SQUARE CUT ON TOP OF WALL, BM #1
0+96.30	96.23	LT	641143.629	2219734.658	900.57	3/4" IRON PIN SET, CP02
1+40.70	18.72	RT	641251.947	2219793.412	962.97	3/4" IRON PIN SET, CP03
1+83.47	561.83	LT	640908.206	2219323.613	904.53	3/4" IRON PIN SET, CP01
2+44.14	12.89	RT			864.43	BENCH TIE SET IN PP, BM # 2
2+50.00	0.00		641323.044	2219708.311		P.O.T.
PROJECT SCALE FACTOR: 1.000077576						








EARTHWORK QUANTITY SUB-SUMMARY			
SHEET	203		659
	EXCAVATION	EMBANKMENT	SEEDING AND MULCHING, CLASS 3B
	CU YD	CU YD	SQ YD
8	5	5	33
9	41	20	186
10	22	47	184
11	5	30	101
<b>Sub-Totals</b>	<b>73</b>	<b>102</b>	<b>504</b>
<b>TOTALS TO GENERAL SUMMARY</b>	<b>73</b>	<b>102</b>	<b>504</b>

END AREA	VOLUME	
	CUT	FILL
0	0	0
28	1	6
51	3	34
73	4	24
101	5	30

CROSS SECTIONS  
 STA. 1+40.00 TO STA. 1+50.00

DESIGN AGENCY  
  
 DESIGNER  
 TWG  
 REVIEWER  
 MDW 08-25-20  
 PROJECT ID  
 108243  
 SHEET TOTAL  
 P.11 P.15