

RECOMMENDATIONS FROM WALL FOUNDATION INVESTIGATION

1. THE SOIL TEST BORINGS DID NOT ENCOUNTER ANY UNSUITABLE MATERIALS ALONG THE WALL ALIGNMENTS. HOWEVER, IF SOFT/LOOSE SOILS OR OTHER UNSUITABLE MATERIALS ARE ENCOUNTERED BENEATH THE PROPOSED MSE WALL LOCATIONS DURING CONSTRUCTION, THEY SHOULD BE OVER-EXCAVATED AND REPLACED WITH COMPACTED WALL BACKFILL MATERIAL. THE DEPTH AND EXTENT OF ANY OVER-EXCAVATIO SHOULD BE DETERMINED DURING CONSTRUCTION BY DESIGN BUILD TEAM ENGINEER.

2. BASED ON THE BORING DATA, THE SOIL TYPE AND STRENGTH ALONG THE MSE WALLS ARE EXPECTED TO VARY. THE DESIGN BUILD TEAM RECOMMENDS A MAXIMUM ALLOWABLE BEARING PRESSURE OF 2000 PSF FOR USE IN DESIGN OF THE MSE WALLS. IF THE MSE WALL DESIGN PRESSURE EXCEEDS THE MAXIMUM ALLOWABLE BEARING PRESSURE, THE WALL SHOULD BE CONSTRUCTED TO A HEIGHT EQUIVALENT TO THE ALLOWABLE BEARING PRESSURE, AND AFTER A 30-DAY WAITING PERIOD, THE WALL MAY BE CONSTRUCTED TO ITS FINAL HEIGHT. SETTLEMENT PLATES SHOULD BE INSTALLED TO MONITOR THE PROGRESS OF SETTLEMENT TIME, AND THE LENGTH OF THE WAITING PERIOD MAY BE INCREASED OR DECREASED BASED ON THE SETTLEMENT MONITORING DATA, AT THE DISCRETION OF DESIGN BUILD TEAM GEOTECHNICAL ENGINEER. THE TOTAL PRIMARY CONSOLIDATION SETTLEMENT IS ESTIMATED TO BE 18 TO 24 INCHES. THE LONG TERM SETTLEMENT OF THE MSE WALL IS ESTIMATED TO BE 2 INCHES IN A 20-YEAR DESIGN PERIOD.

SETTLEMENT PLATE LOCATIONS

- SP-1 STA. 290+50 15' LT.
- SP-2 STA. 291+50 15' RT
- SP-3 STA. 292+40 15' LT.
- SP-4 STA. 314+50 15' LT.
- SP-5 STA. 315+50 15' RT.
- SP-6 STA. 316+50 15' LT.

SEE DRAWING NO. 13-02 AND 13-04 FOR DELINEATION OF THESE LOCATIONS.

3. THE EMBANKMENT SLOPES ALONG THE MSE WALLS SHALL BE REINFORCED USING TYPE A AND TYPE B GEOGRIDS IN ACCORDANCE WITH SPECIAL PROVISION SECTION 457-GEOGRID REINFORCED SLOPES. THE EXTENT AND THE REQUIRED MINIMUM NUMBER OF FULL LENGTH GEOGRID LAYERS (TYPE A) SHOULD BE AS LISTED BELOW AND SHOWN IN THE SLOPE REINFORCEMENT DETAIL PRESENTED ON DRAWING NO. 4-03.

WEST APPROACH ROADWAY WALLS:

STATION TO STATION	NO. OF FULL LENGTH GEOGRID LAYERS
288+50 TO 289+00	1
289+00 TO 290+00	2
290+00 TO 291+00	3
291+00 TO 291+50	5
291+50 TO 292+83.84	7

EAST APPROACH ROADWAY WALLS:

STATION TO STATION	NO. OF FULL LENGTH GEOGRID LAYERS
314+19 TO 315+00	7
315+00 TO 316+00	5
316+00 TO 317+00	3
317+00 TO 318+00	2
318+00 TO 319+00	1

4. THE EMBANKMENTS FOR THE BRIDGE ABUTMENTS SHALL BE REINFORCED USING A LAYER OF GEOTEXTILE FABRIC IN ACCORDANCE WITH SPECIAL PROVISION SECTION 881- FABRICS. THE EXTENT OF THIS REINFORCEMENT SHALL BE AS SHOWN IN THE EMBANKMENT STABILIZATION DETAIL PRESENTED ON DRAWING NO. 4-03

5. DUE TO HIGH GROUND WATER ELEVATION NEAR THE PROPOSED BOTTOM OF WALL NO. 4, WE RECOMMEND THAT 12 INCHES OF MSE WALL BACKFILL MATERIAL BE SET UP FOR USE UNDER THE REINFORCED FILL AREA ALONG THIS WALL. THE USE OF THIS MATERIAL SHOULD BE AT THE DIRECTION OF THE DESIGN BUILD TEAM ENGINEER.

6. THE BACKFILL MATERIALS AND DRAINAGE MEASURES FOR THE WALLS SHOULD CONFORM TO GDOT STANDARD SPECIFICATIONS.



REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: INNOVATIVE PROGRAM DELIVERY  
**GENERAL NOTES**