

MASS GRADING AND GEOTECHNICAL NOTES

1. All cuts and fills shall be confined to the limits indicated within the approved grading plans.
2. The Contractor shall insure that all temporary slopes are stable and that appropriate erosion measures are in place and maintained.
3. Groundwater or unanticipated geologic conditions shall be reported to the Geotechnical Engineer for assessment and recommendations.
4. All compaction efforts shall be monitored and tested by an experienced Soils Technician, under the supervision of a Licensed Geotechnical Engineer representing the Owner.
5. All mass grading shall be monitored, tested, and certified by a Licensed Professional Engineer (Geotechnical Engineer).
6. Contractor is to notify the Geotechnical Engineer, the Engineer of record and City Engineering Inspector 48 hours prior to each and every start or stopping of construction, each time a lift of grading is ready for inspection, and each and every time the Contractor is requesting grading inspection from City. Failure to notify may result in Contractor removing any material that has not been inspected.
7. All areas shall be stripped of organic top soil and non-engineered fill; in addition to all brush, stumps, and roots. Onsite disposal of organic materials is not allowed. The Geotechnical Engineer shall review and approve all stripped and cleared areas prior to placement of fill. Prior to placing fill, the cleared areas shall be scarified and compacted.
8. Fills shall consist of well graded sands and gravels, with a maximum particle size of six inches, and no more than 20% passing the No. 200 sieve. The Geotechnical Engineer shall pre-approve all import soil sources.
9. Boulders and cobbles greater than 6 inches appearing in the excavation to a depth of at least 4 inches below subgrade shall be removed.
10. All fill material shall be dried or moistened to within 2% of the optimum moisture, prior to placement. Lifts shall not exceed eight inches. All fill shall be compacted to at least 90% of Modified Proctor (ASTM D-1557, AASHTO T-180), with the top 12 inches within the roadway prism compacted to 95% of the modified proctor. Material too coarse to test per the specified standards shall be placed in controlled lifts under a performance based method, as outlined within ISPWC.
11. Embankments shall not be constructed on frozen or snow-covered foundations, or with the use of frozen materials.

12. Embankments constructed on slopes greater than 5 horizontal to 1 vertical (5:1) shall be keyed into the undisturbed ground with horizontal benches of sufficient width to allow for the proper operation of compaction equipment.
13. The final limits of cut and fill shall be recorded with the boundary topography and survey by the Engineer or Record. The Geotechnical Engineer shall submit a certification of the fill, along with copies of observations and testing.
14. In the event that any unforeseen conditions not covered by these notes are encountered during grading operations, the Engineer of Record shall be immediately notified in order to provide guidance to Contractor.