

PART 1 - GENERAL

1.1 SUMMARY

A. WORK INCLUDED

1. Rough and finish grading of site.
2. Dust alleviation and control.
3. Cleanup and disposal of excess material.
4. Provision of all material, equipment, and apparatus which are necessary to complete the work specified.
5. The Design/Builder shall be familiar with the soil conditions on the site, and shall thoroughly understand all recommendations associated with the grading.
6. The Design/Builder shall comply with erosion control measures to prevent run-off of sediment and other unsuitable materials to the storm drain system.

1.2 PROJECT CONDITIONS

- A. Protect excavations by shoring, bracing, sheeting, underpinning, or other methods to prevent cave-ins or loose dirt from entering excavations. Barricade open excavations and post warning lights at work adjacent to public streets and walks.
- B. Underpin adjacent structure(s), including utility service lines, which may be damaged by excavation operations.
- C. Promptly repair damage to adjacent facilities caused by earthwork operations. Cost of repair shall be at the Design/Builder's expense.
- D. Promptly notify the University of unexpected subsurface conditions.

1.3 EXISTING CONDITIONS

- A. Upon beginning the earthwork, the Design/Builder represents that he has inspected the site and has satisfied himself as to actual grades and levels and the true conditions under which the work is to be performed.

1.4 QUALITY ASSURANCE

- A. All work under this section will be subject to the inspection and approval of both the Design/Builder and an approved Geotechnical Consultant registered in California. Compaction testing shall be performed by a University approved independent testing laboratory under the supervision of a California registered Geotechnical Consultant.
- B. Any fill where the site preparation, type of material, or compaction is not approved by the Geotechnical Consultant shall be removed and/or re-compacted until the requirements are satisfied and approved by the Geotechnical Consultant. Fill material shall be tested for pollutants and certified for suitability by the Geotechnical Consultant.
- C. Finish surface of the site shall not vary more than one tenth of a foot (0.10') from that called for on the approved Contract Documents.
- D. Percentage of compaction specified shall be the minimum acceptable. Unless otherwise specified, 90% shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material, as determined by ASTM D 1557.

- E. Building pad shall be certified by the Civil Engineer.

PART 2 - PRODUCTS

2.1 REQUIREMENTS FOR GENERAL ENGINEERED FILL

- A. All fill material shall be approved by the Design/Builder. All work shall conform with applicable requirements of the geotechnical report.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Verify existing sub-grades as shown on the drawings. Designate and identify datum elevation and project engineering reference points. Set required lines, levels, and elevations.
- B. Do not cover or enclose work before obtaining required inspections, tests, approvals, and location recording.

3.2 EXISTING UTILITIES

- A. Before starting grading and excavation, establish the location and extent of underground utilities in the work area. Exercise care to protect existing utilities during earthwork operations. Perform excavation work near utilities by hand and provide necessary shoring, sheeting, and supports as the work progresses.
- B. The existing utility lines to remain passing through the work area shall be maintained, protected, relocated or extended, as required.
- C. Protect active utility services uncovered by excavation.
- D. Remove abandoned utility service lines from areas of excavation. Cap, plug, or seal abandoned lines and identify termination points at grade level with markers.
- E. Accurately locate and record abandoned and active utility lines rerouted or extended on project record documents.

3.3 SITE GRADING

- A. Perform grading within contract limits, including adjacent transition areas, to new elevations, levels, profiles, and contours indicated. Provide uniform levels and slopes between new elevations and existing grades.
- B. Grade surfaces to assure areas drain away from structures and to prevent ponding and pockets of surface drainage. Provide sub-grade surfaces free from irregular surface changes.

3.4 DISPOSAL OF WASTE MATERIAL

- A. Stockpile, haul from site, and legally dispose of waste materials, including excess excavated materials, rock, trash, and debris.

3.5 MAINTENANCE

- A. Protect graded areas from traffic and erosion. Keep free of trash and debris. Repair and re-establish grades in settled, eroded, and damaged areas.
- B. Where completed areas are disturbed by construction operations or adverse weather, scarify, reshape, and compact to required density.

END OF SECTION