

## **312000 EARTHWORK**

1. All excavation for university projects shall be Unclassified Excavation, meaning that whatever material is encountered during excavation must be removed. If the soils reports indicate large quantities of rock at the elevations of the building footings, this procedure may be modified, with the permission of the Project Manager. The Contractor shall be instructed to stop excavation if anything of archaeological value is encountered.
2. It is recommended that geotechnical reports be provided for areas where new construction will take place.
3. Require the Contractor to hire a Soils Engineer approved by the Professional to perform inspection and testing of all earthwork. Soils Engineer shall be a Professional Engineer licensed in the Commonwealth of Pennsylvania and possess professional liability insurance in the minimum amount of \$500,000. Soils Engineer shall provide all field and laboratory services required to:
  - a. Test and evaluate all samples of proposed fill materials to determine optimum moisture density relationship in accordance with ASTM D 1557.
  - b. Test all samples to assure compliance with gradation requirements of this Specification. Grain size analysis shall be performed in accordance with ASTM D 422.
  - c. Determine depth of topsoil stripping.
  - d. Inspect all proof rolling and determine the presence of any local soft pockets.
  - e. Inspect excavation in natural soil to determine if bearing stratum meets design criteria.
  - f. Inspect and test compacted fill to determine compliance with Specifications. Field densities shall be determined by ASTM D 1556M, ASTM D 2167 or ASTM D 2922.
  - g. Keep written records of all tests and field instructions, and summaries of these reports shall be mailed weekly to the Professional, University, University Code Official, and Contractor. Final written summaries shall be provided upon completion of work.
4. Foundation elevations shall be shown at elevation of suitable bearing.