

SECTION 31 2216 – FINE GRADING

Revise this Section by deleting and inserting text to meet Project-specific requirements.

This Section uses the term "Landscape Architect." Change this term to match that used to identify the design professional as defined in the General and Supplementary Conditions.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

Delete hidden text after this Section has been edited for the Project.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. The Contractor's attention is specifically directed, but not limited, to the following documents for additional requirements:
 - 1. The current version of the *Uniform General Conditions for Construction Contracts, State of Texas*, available on the web site of the Texas Facilities Commission.
 - 2. The University of Houston's *Supplemental General Conditions and Special Conditions for Construction*.

1.2 SUMMARY

- A. Section Includes:
 - 1. Machinery restrictions.
 - 2. Site preparation for grass areas.
 - 3. Finish grading.
 - 4. Prevention of excessive weed growth in lawns.

1.3 DEFINITIONS

- A. Finished Grading: Placing and grading of additional soil that may be required to bring the grade to the required grades for lawns, shrubbery, and groundcover beds.

1.4 SUBMITTALS

- A. Topsoil: Provide a quart bag along with macro- and micro-nutrient analysis for approval prior to material delivery to site.

1.5 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site preparation operations. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without written permission from the Owner.
- B. Protection of Existing Utilities: Existence and location of underground items are not guaranteed. Investigate and field locate/verify before commencing work. Excavation and backfill in the vicinity of existing items shall be carried out with extreme caution. The Contractor shall be held responsible for utility protection, and for any damage to existing utilities.
- C. Indicate on record drawings any conflict between field conditions and proposed grading.

PART 2 - PRODUCTS

2.1 TOPSOIL

- A. Topsoil: Provide topsoil free from herbicides and insecticides which might adversely affect subsequent growth of turf or plantings, or which might otherwise contain materials toxic to humans and pets. Provide topsoil mix containing the following ingredients at the listed percentages:
 - 1. 15 percent sandy loam.
 - 2. 15 percent red loam.
 - 3. 35 percent landscaper's compost.
 - 4. 35 percent aged humus (fungal compost).

PART 3 - EXECUTION

3.1 GENERAL

- A. Protect and maintain benchmarks and survey points from disturbance during construction.

3.2 PLACEMENT OF FINE GRADE MATERIALS

- A. Clear subgrade of stones larger than 3 inches in any dimension, and of concrete, wood, construction debris, and other deleterious matter. Excavate to a depth of 12 inches all areas that have received lime, or become saturated with oil, gasoline, or bituminous products and backfill with clean earth.
- B. Import topsoil directly to site of deposition or stockpile new topsoil on site in quantity needed to produce the required depth after spreading. Protect topsoil piles from erosion with tarpaulins and limit boards.
- C. Spread topsoil to a minimum settled depth of 2 to 3 inches and feather smoothly into finished grade at edges so as to blend with adjacent ground shapes.
- D. Take precautions to keep the topsoil friable and porous. Do not handle or work topsoil when it is excessively wet, or during a rainfall. Do not place topsoil on any subgrade that has not been loosened, tilled, or graded for drainage. Loosen and till the full depth of the topsoil and re-till any areas that become unduly compacted by vehicular movement.

3.3 FINE GRADING

- A. The Contractor shall be responsible for minor adjustments to the finished subgrade if such treatment is required in the opinion of the Owner and Landscape Architect.
- B. Hand rake the surface, removing all clods and undesirable material greater than one half inch (1/2") from ground surface. Fill all low spots with specified materials and cut irregularities to the acceptance of the Landscape Architect.
- C. An acceptable fine grade area shall be free from depressions greater than 6 inches over any given space of 25 feet except at grade transitions, which shall be gradual and even.
- D. During the finished grading operations, all swales and additional swales that may be required to drain areas shall be finished. In general, all grade adjustments shall be made so there are no areas that will have standing water.
- E. To prevent excessive weed growth in the lawn areas, the Contractor should be prepared to immediately install the lawn upon the completed and acceptable finished grade.
- F. Landscape areas shall have a minimum 2 percent slope for drainage.

3.4 CLEAN UP AND PROTECTION

- A. After completion of fine grading and topsoil operations, do not drive trucks or other heavy equipment over finished areas.

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- B. Upon completion of the work, remove all debris and excess material from the site so that the area is left neat and clean.
- C. Separate recyclable materials produced during site clearing from other non-recyclable materials. Store or stockpile without intermixing, and transport to appropriate recycling facilities.
- D. Protect the finished area throughout the remainder of the construction activities.

END OF SECTION 31 2216