

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

LAND SMOOTHING

(Ac.)

Code 466



DEFINITION

Land smoothing is removing irregularities on the land surface.

PURPOSE

- Improve surface drainage.
- Provides for more uniform cultivation.
- Improves equipment operation and efficiency.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on areas where depressions, mounds, old terraces, turn rows, and other surface irregularities interfere with the application of needed soil and water conservation and management practices.

Land smoothing is limited to areas having adequate soil depth or where topsoil can be salvaged and replaced.

Land smoothing does not apply to regular maintenance practice on irrigated land or land that has been modified using Florida NRCS conservation practice standard Precision Land Forming, Code 462 or in Irrigation Land Leveling, Code 464.

CRITERIA

Impact to cultural resources, wetlands and Federal and state protected species shall be evaluated and avoided or minimized to the extent practicable during planning, design and implementation of this conservation practice in accordance with established National and Florida policy, General Manual (GM) Title 420-Part 401; Title 450-Part 401, Title 190-Parts 410.22 and 410.26, National Planning Procedures Handbook (NPPH) Florida Supplements to Parts 600.1 and 600.6, National Cultural Resources Procedures Handbook (NCRPH), National Food Security Act Manual (NFSAM), and the National Environmental Compliance Handbook (NECH).

The extent of rough grading required and tolerances of the finished smoothing job shall be in keeping with the requirements of the planned cropping system.

Construction operations are to be performed in such a manner that erosion and air and water pollution are minimized.

Smooth irregularities to the degree required for the planned purpose.

The land to be smoothed will be cleared of vegetative matter and trash.

CONSIDERATIONS

Where possible, the ground surface should be plowed or disked prior to smoothing.

Consider the effects on the water budget, especially on volumes and rates of runoff, infiltration, and evaporation.

Effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff should be minimized.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Consider potential for changes in plant growth and transpiration because of changes in the volume of soil water.

Potential for earth moving to uncover or redistribute toxic materials, such as saline soils should be addressed.

Consider the effects on wetland hydrology and/or wetland wildlife habitat.

Address potential impacts to existing utilities by locating and avoiding all utilities.

Consider the effects on soil loss due to increased wind erosion potential and subsequent deposition.

Ensure that cultural resources, inventory and assessment have been completed prior to movement of soil.

PLANS AND SPECIFICATIONS

Plans and specifications for land smoothing and shaping must be in keeping with this standard and must describe the requirements for applying the practice to achieve its intended purpose. Plans and specifications must include construction plans, drawings, job sheets or other similar documents. These documents must specify the requirements for applying the practice.

Plans and specifications shall include, but not limited to, the following.

- location and extent of area to be smoothed,
- site preparation requirements prior to land smoothing,
- description of irregularities to be smoothed and acceptable tolerances,

- vegetative requirements, and
- location of utilities and notification requirements.

OPERATION AND MAINTAINENCE

An Operation and Maintenance (O&M) plan must be prepared for the practice and reviewed with the landowner or operator. Maintenance must be performed to insure that this practice functions as intended.

The O&M Plan will include, but not limited to, the following:

- performing maintenance when needed to insure that surface irregularities are maintained at the degree of smoothness required.
- specify that the treated areas and associated practices are inspected annually and after significant storm events to identify repair and maintenance needs.

REFERENCES

- Florida NRCS Conservation Practice Standards:
Irrigation Land Leveling, Code 464
Precision Land Forming, Code 462
- General Manual
Title 420-Part 401
Title 450-Part 401
Title 190-Parts 410.22 and 410.26
- National Cultural Resources Handbook
National Environmental Compliance Handbook
National Food Security Act Manual
National Planning Procedures Handbook
Florida Supplements to Parts 600.1 and 600.6