

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
RECREATION LAND GRADING AND SHAPING
(Acre)
CODE 566

DEFINITION

Recreation land grading and shaping is reshaping the surface of the land to support recreation land use.

PURPOSE

This practice may be applied as part of a resource management system to support one or more of the following purposes:

- Establish or improve effective use of the land area for recreation.
- Minimize on-site and off-site damage to resources from recreation land use.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to land areas where surface irregularities, slopes, obstructions, or surface drainage interfere with planned recreational use or where such use requires designed land surfaces.

CRITERIA**General Criteria Applicable to All Purposes**

All planned work must comply with federal, state, local, and tribal laws and regulations.

The planned grading or shaping must be conducive to the overall recreation area and shall aesthetically blend with the general landscape and surroundings.

The planned grading or shaping must be configured to minimize adverse on-site and off-site impacts such as accelerated erosion, riparian zone degradation, stream channel and streambank damage, hydrology modification, other water resource damage, aesthetics or

unacceptable damage to wildlife habitat, fragmentation, or restriction of wildlife movement.

Grading and shaping. If only shaping is required, the cuts and fills may be estimated by observation or by a minimum amount of surveying. If grading to uniform surfaces is required, the design shall be based on a complete topographic or grid survey. Grading and shaping for specific uses (such as athletic fields) must be according to the requirements of the intended use.

Cuts and fills must be balanced to the greatest extent possible.

Soil compaction and displacement must be kept to a minimum.

Where feasible and appropriate, soil material suited for plant growth should be salvaged, stockpiled, and protected for use as final cover material.

Surface drainage. Plans shall include measures for removing or otherwise providing for control of excess surface water.

Erosion control. Plans shall include provisions for control of erosion. Disturbed areas must be established to vegetation as soon as practicable after construction. If soil or climatic conditions preclude the use of vegetation and protection is needed, non-vegetative means such as mulches or gravel may be used. Preparing the seedbed, seeding, fertilizing, and mulching must be according to [Conservation Practice Standard 342, Critical Area Planting](#). Use vegetation that is adapted to the site and that will accomplish the desired purpose. Preference must be given to native plant species. If native plant materials are not adaptable or proven effective for the planned use, then non-native species may be used.

CONSIDERATIONS

Consider adjoining land uses and the proximity to residences, utilities, cultural resource areas, threatened and endangered species of plants and animals, wetlands or other environmentally sensitive areas, and areas of special scenic value.

Consider the effects of increased recreation and activities on the quality of both surface water and groundwater.

Consider maintaining or improving habitat for fish and wildlife where applicable.

Where feasible and appropriate, soil material suited for plant growth should be salvaged, stockpiled, and protected for use as final cover material.

PLANS AND SPECIFICATIONS

Plans and specifications for recreation land grading and shaping shall 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 installing the practice—including the kind, amount, and quality of materials to be used.

OPERATION AND MAINTENANCE

An operation and maintenance (O&M) plan shall be prepared for and reviewed with the landowner or operator. The plan shall specify that the treated areas and associated practices are inspected annually and after significant storm events to identify repair and maintenance needs.

The O&M plan sheet can be used. Add site-specific recommendations as needed.

REFERENCES

U.S. Department of Agriculture, Natural Resources Conservation Service, 2009. Specifications for Construction Contracts. National Engineering Handbook, Part 642. Washington, DC.

U.S. Department of Agriculture, Natural Resources Conservation Service, 2008. Engineering Field Handbook, Chapter 1, Surveying. National Engineering Handbook, Part 650. Washington, DC.

U.S. Department of Agriculture, Natural Resources Conservation Service, 1990. Engineering Field Handbook, Chapter 4, Elementary Soils Engineering. National Engineering Handbook, Part 650. Washington, DC.

U.S. Department of Agriculture, Natural Resources Conservation Service, 1983. Irrigation, Chapter 12, Land Leveling. National Engineering Handbook, Section 15. Washington, DC.