

**NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATIONS**

DIVERSION

1. Scope

The work shall consist of constructing the diversion channels, ridges, and filling and leveling as required by the construction plans.

2. Location

The location of the diversion shall be as shown on the construction plans or as staked in the field.

3. Site Preparation

All dead furrows, ditches, and gullies shall be filled prior to or as a part of construction. Old terraces, fence rows, brush, and tall standing vegetation shall be removed from the area occupied by the diversion ridge and the area from which the earthen construction material will be taken.

4. Material

Materials for earthfills shall be obtained from excavation in the channel or other designated areas and shall be free of objectionable materials such as brush, roots, and rock particles that endanger the performance of the diversion.

5. Placement of Earthfill

All diversions. Diversions shall be constructed to the dimensions specified on the drawings or as staked in the field. All fills shall be full-bodied with cross section conforming to that specified at all stations. Diversion ridges constructed across gullies or depressions shall be placed in lifts and compacted by machinery travel to ensure proper density. The diversion channels, side slopes, ridges, cut areas, and fill areas shall be finished to a smoothness so the surface can be readily traveled upon by farm-type equipment. Topsoil is to be stripped, stockpiled, and spread on disturbed areas to restore soil productivity, when specified in the Construction Details.

Level diversions. Partial or complete end closures and channel blocks, when specified, must be in place before the diversion is considered complete.

Unless otherwise specified in the Construction Details, the maximum tolerance between high and low points in the channel of all level diversions is 1 foot for channel widths of 30 feet or less and 0.4 foot for channel widths greater than 30 feet.

The diversion ridge will be constructed to produce a virtually level settled ridge crown throughout the diversion length so that runoff in excess of the design frequency can overtop in sheet flow and not as concentrated flow at a few low points.

Any ditch or channel made at the bottom edge of the back slope while moving earth from the back slope into the diversion ridge will be shaped, as necessary, so that drainage from the back slope of the diversion will not flow parallel to it.

6. Outlets

Underground tile outlets are to be installed at locations shown on the construction plans or as staked in the field. Refer to Construction Specifications 620, Underground Outlet, for detailed installation requirements.

7. Vegetation

A protective cover of vegetation shall be established when specified in the Construction Details. Seeding shall comply with Construction Specifications 342, Critical Area Planting.

8. Measurement

Measurement for the volume in cubic yards of diversions completed will be determined by measuring the length of the diversion ridge multiplied by the designed ridge cross section above natural groundline.

9. Construction Details

For level diversions, the volume of fill required for blocks shall be computed and included in the total volume.