

## CONSTRUCTION SPECIFICATION

### ND-4 WATER AND SEDIMENT CONTROL BASIN

#### 1. SCOPE

The work shall consist of excavating, filling and shaping for the construction of a water and sediment control basin.

#### 2. LOCATION

The location of the water and sediment control basin shall be as shown on furnished drawings or as staked in the field.

#### 3. SITE PREPARATION

Vegetation shall be removed from the area occupied by the earth fill. Unsuitable materials shall be disposed at locations shown on the drawings or as staked in the field. Disposal will be at locations approved by the Soil Conservation Service Representative (SCSR) and/or cooperater.

#### 4. EXCAVATION

Excavation shall be to the line and grade shown on the drawings or as staked in the field. To the extent that they are needed, all suitable materials removed from the excavations shall be used in the construction of the basin. The banks of streams in the foundation area shall be sloped no steeper than 1:1 and deepened and widened as necessary to remove all stones, gravel, sand, stumps, roots and other objectionable material and to accommodate compaction equipment. All surplus or unsuitable material shall be disposed at a location that will enhance the disposal area. The location will be approved by the SCSR and/or cooperater.

#### 5. EARTH FILL

Material shall be obtained from the required excavation area. The fill material shall be free from frozen particles, brush, roots, sod or other objectionable material and rocks larger than 6 inches. Existing slopes shall be 1:1 slopes or flatter and scarified to insure bonding with the fill being placed. Fill will be placed in approximately uniform horizontal layers not more than 9 inches thick. The moisture content of the fill material shall be such that, when kneaded in the hand, the soil forms a ball which does not readily separate. If the moisture does not meet the criteria the basin will not be built.

When the quantities of suitable materials obtained from specified excavations are insufficient to construct the specified fills, additional materials shall be obtained from designated borrow areas approved by the SCSR and/or cooperater. The extent and depth of borrow within the limits of the designated borrow area shall be as directed by the SCSR with approval of the cooperater.

Borrow areas shall be excavated and dressed in a manner to eliminate steep or unstable side slopes or unsightly conditions. If subsoil is exposed and will not support a crop, topsoil will be provided to cover this area.

The fill sections shall be compacted by either:

- (a) Routing the hauling and spreading equipment over the fill in such a manner that the entire surface of each layer of fill will be traversed by not less than one track of the equipment, or
- (b) Equivalent methods approved by the SCSR.

6. TOPSOILING

Topsoil shall be stripped, stockpiled, and spread on disturbed areas to restore soil productivity when specified in the construction details or drawings. Depth and extent shall be shown on the construction details or drawings if required.

7. APPURTENANT STRUCTURES

Appurtenant structures such as pipe outlets shall be installed at locations shown on the drawings or as staked in accordance with specifications furnished for those items. Conduits shall be bedded and backfilled throughout the base width of the basin ridge. The sides of the pipe trench shall be sloped no steeper than 2 horizontal to 1 vertical. Soil material shall be placed in 6 inch layers and hand tamped to a depth of approximately 18 inches. The remaining trench backfill shall be placed in 6 inch layers and machine compacted. The materials used for the inlet and conduit shall meet the requirements of Underground Outlet (620).

8. FINISH & CLEANUP

The water and sediment control basin and disturbed areas will be finished so it is left in a relatively smooth condition ready for seeding. All rocks 6" in diameter or larger shall be removed from the area and disposed in a manner approved by the SCSR and/or cooperater.

9. MEASUREMENT

The volume of fill shall be measured and computed to the nearest cubic yard by the average cross sectional end area method. The lower limit for computing fill quantities will be the excavated elevations as shown on the plans or as directed by the SCSR. The lateral limit, fill height, and slopes shall be the lines and grades as staked by the SCSR. Appurtenant structures will be measured as specified on the drawings or as measured in the field.