

NATURAL RESOURCES CONSERVATION SERVICE

DOCUMENTATION REQUIREMENTS

DIVERSION (362)

FIELD DATA

The following is a list of the minimum field data to be collected:

1. Plan view sketch of system layout;
2. Field slope;
3. Grade of each design reach;
4. Reach lengths and total length;
5. Verification of soil survey description of texture and wetness;
6. Cross sections (minimum of one per reach);
7. Type and location of outlet;
8. Profile and cross section of outlet downstream to a stable point.

DESIGN DATA

The following is a list of the minimum required design data:

1. Peak discharge calculations;
2. Based on verified soil texture and proposed vegetation, determine allowable velocity;
3. Design slope, dimensions, and velocities for each reach;
4. Design of outlet protection according to applicable practice standards (for example, Underground Outlet (620), Grade Stabilization Structure (410), Lined Waterway or Outlet (468));
5. Construction drawings shall include the following as a minimum:
 - Plan view including location map and all system components;
 - Profile view of diversion;
 - Cross section of each design reach;
 - Details of the outlet protection or other structural components (see documentation requirements for associated practices);

- Lime, fertilizer, and seeding requirements according to practice standard 342, Critical Area Planting (may be included as a specification instead);
- Quantities of materials;
- Critical Inspection Items;
- Utilities statement and Excavation Safety statement.

6. Construction and material specifications;
7. Written Operation and Maintenance (O&M) plan.

PRE-CONSTRUCTION & INSPECTION

1. Preconstruction Meeting With Landowner And Contractor. This is a meeting to explain the drawings and specifications, discuss requirements for construction and material certifications, level of staking needed, safety issues, utilities notification, and other topics. Document the following as a minimum:
 - Time and date of meeting;
 - Names of attendees;
 - Items discussed and decisions made.
2. Layout And Staking Of Practices. Document:
 - Survey notes showing layout of the practices, including date and who performed the staking;
 - If the contractor provides staking, then document any reviews made to ensure proper placement of the practice.
3. Utilities Notification. Can use form ENG-5 and ENG-6 to assist in tracking utility notifications (See NEM §MA503). Document:
 - Initial discussion with landowner about his or her responsibility to notify utilities;
 - Information from landowner about existence and location of known utilities;
 - Assurances that utility company has been notified, including staking by utilities.

4. Inspection During Construction. Document:

- All inspections made during construction, including all those identified on the drawings as critical inspection items;
- Include visual inspections and conclusions, surveys, tests and test results;
- Discussions with landowner and contractor;
- Photographs taken before and during construction;
- Approval by designer of any changes from the drawings or specifications before implementation of the change.

CONSTRUCTION CHECK

The following is a list of the minimum required data to support the as-built drawing:

1. Profile of ridge and channel at 100 feet maximum intervals;
2. Minimum of one cross section for each reach;
3. Final grade of each reach;
4. Total length of diversion;
5. Seeding performed;
6. Adequacy of outlet. Refer to documentation requirements for associated practices (such as Lined Waterway Or Outlet (468) and Grade Stabilization Structure (410)) for construction check data required;
7. Materials documentation to certify quality as stated on drawings and specifications.

CERTIFICATION

The following is a list of what must be certified by a person with the required approval authority for the installed practice:

1. Final quantities and documentation for quantity changes;
2. Statement on the as-built drawings that the installed practices meet or exceed the requirements of the NRCS practice standards;
3. Record in the case file the length of the installed diversion;
4. Report in PRMS, as applicable;
5. See documentation requirements of associated practices to determine certification requirements.