

NON-REINFORCED CONCRETE DITCH AND CANAL LINING

Design Survey

The following information shall be obtained and recorded in the field notes:

- a. Profile along centerline of ditch or canal.
- b. Cross-sections as required for volume computations.
- c. Location and extent of critical soil conditions. (Or on soils map.)
- d. Location and extent of areas requiring special provisions for drainage.

Design Data

The following shall be considered minimum in the design of all non-reinforced concrete ditch and canal lining. The information shall be recorded in the design notes. Appropriate data shall be transferred to the construction drawings. Data may also be shown directly on the standard plan.

- a. Hydraulic design.
- b. Structural design (if required).
- c. Volume computations.
- d. Drainage requirements (if required).
- e. Evidence of consideration for NEPA regulations. (Form WY ENVIR. #1)

Drawings and Specifications

The construction drawings, or standard plan, shall include, but will not be limited to, the following:

- a. Profile cross-section and length of ditch to be lined.
- b. Plan showing alignment.
- c. Structure details (if required).
- d. Table of Quantities.
- e. Location map. (May be combined with b.)

Practice specifications along with applicable "Items of Work and Construction Details" shall be provided for each item or phase of construction as needed to clarify the work.

Layout Survey Notes

The following information shall be recorded in the field notes:

- a. Centerline alignment stakes.
- b. Slope stakes as required.
- c. Grade stakes with offset as required.
- d. Location, alignment, and reference stakes for structures.

Compliance Checks

The complexity of the installation will dictate the need for compliance checks during construction. All compliance checks shall be recorded in the field notes. Narratives of construction checks shall be recorded in the job diary or on a sheet in the field notes. Compliance checks shall include, but will not be limited to, the following:

- a. Profile and cross-section of ditch (maximum 300' interval).
- b. Pad cross-section.
- c. Thickness of lining.
- d. Spacing of contraction joints.
- e. Method of curing.
- f. Materials testing results (if made).
- g. Structure dimensions and elevations (if part of plan).
- h. Statement of compliance.

As-Built Plans

As-Built plans shall be prepared for all installations. These drawings shall reflect all significant changes in linear measurements, quantities, alignment, or design changes. If there were no significant changes, the original drawings shall be marked "As-Built".

Where standard plans are used and there was no significant change, as entry shall be made in the field notes indicating the installation was in accordance with the applicable standard plan. In this instance, As-Built plans are not required.