

LINED WATERWAY OR OUTLET

Design Survey

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

- a. Profile and cross-sections along centerline of waterway or channel.
- b. Detailed topography at inlet, outlet and at the location of other related structures.
- c. Soils classification throughout waterway.

Design Data

The following shall be considered minimum in the design of all lined waterways or outlets. The information shall be recorded in the design notes. Appropriate data shall be transferred to the construction drawings.

- a. Hydrology of contributing area.
- b. Hydraulics of waterway or outlet.
- c. Method of lining based on availability of materials.
- d. Structural and hydraulic design of structures.
- e. Soils investigations as needed.
- f. Quantity computations.

Construction Drawings

The construction drawings shall include but will not be limited to the following:

- a. Plan of Waterway or outlet.
- b. Profile and cross-section of waterway or outlet.
- c. Plan and detailed sections of all related structures.
- d. Log of soil investigation (if required).
- e. Table of Quantities.
- f. Location map.

Practice specifications along with applicable "Items of Work and construction Details" shall be provided for each item or phase of construction.

Layout Survey Notes

The following information shall be recorded in the field notes:

- a. Centerline, slope stakes, and reference stakes for the waterway or outlet.
- b. Alignment and reference stakes for all structures.

Compliance Checks

The complexity of waterway or outlets will dictate the need for compliance checks during construction. All compliance checks shall be recorded in the field's 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 of completed waterway (100' maximum interval).
- b. Cross-sections of waterway.
- c. Dimensions alignment and elevation of structures.
- d. Concrete tests.
- e. Contraction and expansion joint spacing (if required).
- f. Method of curing.
- g. Statement of compliance.

As-Built Plans

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