National Standard Construction Specifications Part 642 National Engineering Handbook

Instructions for use Construction Specification 51—Corrugated Metal Pipe

1. Applicability

Construction Specification 51 is applicable to the installation of all types of corrugated metal pipe conduits.

2. Material specifications

The following material specifications complement Construction Specification 51: 551—Coated Corrugated Steel Pipe 552—Aluminum Corrugated Pipe

3. Included items

Items to be included in contract specifications and drawings follow:

- a. Line and grade of the conduit.
- b. Details of the pipe bedding including description and grading limits of the bedding material.
- c. Details of wall fittings, joint and other special pipe fittings.
- d. Details of struts or ties, as necessary.
- e. Pay limits or actual limits for excavation and backfill, if required. Due consideration of OSHA safety requirements for trench excavation should be considered for pay quantities.
- f. Applicable material specifications.
- g. Type, class, size, gauge, and length of pipe.
- h. Type of coupling and gasket, if required. Coupling bands may be detailed on the drawings and described in section 11, or may be specified in section 11 by describing the performance requirements by reference to ASTM A 798, paragraph 8, Pipe Installation. Using ASTM A 798, joint watertightness may be specified per paragraph 8.2.4.6 Watertightness; however, the method of testing and the basis for determining acceptance is needed.

- i. Close riveting or double riveting, if required.
- j. Type of pipe coating, if required.
- k. Methods of measurement and payment if the contract specification includes more than one method.
- Backfill requirements. Compaction requirements should be equal to requirements for the adjacent embankment for principal spillways or similar installations.

4. Methods

Section 10, Measurement and payment The methods are self-explanatory.

When specifications are prepared using electronic procedures and all methods but one are deleted for use in a contract specification, delete from the last paragraph, *All Methods The following provisions apply to all methods of measurement and payment.* Left justify the remaining text.

5. Items of work and construction details Starting at the top of page 51–4, prepare and outline job specific "Items of Work and Construction Details" (IWCD) in accordance with these instructions. For ease of utilization, the use of recyclable color paper for the IWCD should be considered.