National Standard Construction Specifications Part 642 National Engineering Handbook

# Instructions for use Construction Specification 52—Steel Pipe

## 1. Applicability

Construction Specification 52 is applicable to the installation of steel pipe conduits.

### 2. Material specifications

The following material specifications complement Construction Specification 52: 554—Steel Pipe 581—Metal

### 3. Included items

Items to be included in contract specifications and drawings follow:

- a. Details of the bedding, including description and grading limits of the bedding material.
- b. Excavation requirements. If measurement and payment method 1 or 2 is used, a bid item and items of work and construction details for excavation and backfill would normally be covered under Construction Specification 21 and 23. If measurement and payment method 3 or 4 is used, construction details for excavation can be covered either in section 12, or as a subsidiary item under Construction Specification 21.
- c. Method of backfill selected from section 10.
- d. Pay limits or actual limits for excavation and backfill, if required.
- e. Kind of pipe. Include name, type, grade, finish, weight class, and wall thickness as required. (See appropriate reference specifications.)
- f. Size of pipe.
- g. Length of pipe.
- h. Type of protective lining and coating if required (Refer to AWWA Standard C203, AWWA Standard C209, or AWWA Standard

C214 for detailed information). **Note:** In accordance with AWWA C203, field welded pipe 27-inch diameter and larger is large enough to allow entry of personnel to clean the welded surface and apply primer and enamel. Therefore, lined pipe smaller than 27-inch diameter should not be field welded.

- i. Type of joint and details of special joints.
- j. Details of wall fittings and other special fittings and appurtenances.
- k. Watertightness or pressure test requirements, if applicable.
- 1. Shop coating of fittings if the vinyl option is specified as described in section 6.
- m. Bonding details for cathodic protection, if applicable.
- n. Method of field lining, coating, wrapping, and repair selected from section 7.
- o. Method of measurement and payment in section 11.

### 4. Methods

# Section 7, Field Lining, Coating, Wrapping, and Repair

*Method 1*—Intended for use when hot-applied linings and/or coatings are required or for repairing hot applied linings and/or coatings.

*Method 2*—Intended for use when cold-applied tapes are required for wrapping assembled joints and for repair of hot applied coatings.

*Method 3*—Intended for use when the pipe is coated in accordance with AWWA Standard C214.

*Method 4*—Intended for use when cold-applied linings and/or coatings are required or for repairing linings and/or coatings.

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More than one method may be used, in which case the paragraphs should be linked with the word **or** and the following paragraph inserted before the last paragraph in the section:

*All Methods*—The following provisions apply to all methods of field coating, wrapping, and coating repair.

#### Section 10, Backfill

The methods are self-explanatory.

**Section 11, 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 52–6, 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.