Special Provision to Item 464 Reinforced Concrete Pipe



Item 464, "Reinforced Concrete Pipe," of the Standard Specifications is amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 464.1., "Description," is amended by adding the following:

Provide the televising and color digital video disc (DVD) recordings of installed reinforced concrete pipe using a color closed-circuit television inspection unit to determine the condition of the lines.

Section 464.2.1., "Fabrication," is voided and replaced by the following:

Fabrication plants must be approved by the Materials and Tests Division in accordance with <u>DMS-7305</u>, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures," before furnishing precast reinforced concrete pipe for Department projects. The Department's MPL has a list of approved reinforced concrete pipe plants.

Furnish material and fabricate reinforced concrete pipe in accordance with DMS-7305.

Section 464.2.3., "Marking," first paragraph, is voided and replaced by the following:

Furnish each section of reinforced concrete pipe marked with the following information in accordance with DMS-7305:

- class or D-load of pipe,
- ASTM designation,
- date of manufacture,
- pipe size,
- name or trademark of fabricator and plant location,
- designation "TX" for precast units fabricated in accordance with DMS-7305,
- designated fabricator's approval stamp for each approved unit.
- pipe to be used for jacking and boring (when applicable), and
- designation "SR" for pipe meeting sulfate-resistant concrete plan requirements (when applicable).

Section 464.2.4., "**Inspection**," is voided and replaced by the following:

Provide access for inspection (visual and television) of the finished pipe at the project site before, during, and after installation. The Contractor must furnish all equipment and labor necessary to complete all televising on the jobsite before isolating the reinforced concrete pipe segment and beginning videotaping operations. A camera designed for televising sewer lines is required.

Section 464.2.5., "Causes for Rejection," is voided and replaced by the following:

Individual sections of pipe may be rejected for any of the conditions stated in the Annex of DMS-7305.

Section 464.2.6., "Repairs," is voided and replaced by the following:

Make repairs, if necessary, as stated in the Annex of <u>DMS-7305</u>.

Section 464.3.5., "Television Inspection," is added as follows:

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3.5. Television Inspection. The reinforced concrete pipelines must be televised and recorded to determine the condition of the line. The inspector will observe the television inspection in progress. Upon completion, the Contractor must contact the Engineer to review the digital versatile disc (DVD), if necessary.

> Perform television inspection one length of reinforced concrete pipeline at a time. Control flow so that it will not exceed 25% of the pipe diameter at the time of televising.

When the depth of flow at the upstream headwall of the reinforced concrete pipeline being televised is above the maximum allowable for television inspection, reduce the flow to allowable levels by temporarily plugging or blocking the flow, or perform the inspections during minimum flow hours.

Section 464.3.6., "Digital Versatile Disc (DVD) Logs," is added as follows:

3.6. **Digital Versatile Disc (DVD) Logs.** Provide an inspection report with each completed DVD that is a written log of all pipe defects, sags, offset points, connection locations, and conditions recorded on a footage basis. This log must also denote the section being televised, flow direction, camera direction, position of taps or failures, pipe condition, and weather conditions. This report must be submitted to the Engineer for approval.

Section 464.3.7., "Video Log Format," is added as follows:

- 3.7. Video Log Formats. Submit one DVD copy of the recordings to the Engineer. Each DVD must be permanently labeled with the following:
 - date televised,
 - station-to-station location and size of storm sewer,
 - station and easement location,
 - name of Contractor,
 - date tape submitted, and
 - DVD number.

Section 464.3.8., "Video Quality," is added as follows:

3.8. Video Quality. If the Contractor produces a video of such poor quality that the Engineer is unable to evaluate the condition of the existing storm sewer main or locate the existing storm sewer lateral connections, the Contractor must re-televise the existing storm sewer main and provide a new DVD of good quality at no additional cost.

Section 464.3.9., "Video Equipment Operations," is added as follows:

3.9. Video Equipment Operations. The Contractor is responsible for the inspection equipment with an accurate footage counter that displays on the monitor the distance of the camera from the centerline of the starting headwall. Adjust the camera height such that the camera lens is always centered (1/2 inside diameter or higher) in the pipe being televised. In any case television camera must not be pulled or propelled through the line at a speed greater than 25 ft. per minute.

Section 464.3.10., "Negotiability of Reinforcement Concrete Pipe," is added as follows:

3.10. Negotiability of Reinforced Concrete Pipe. The Engineer makes no guarantee that all the reinforced concrete pipe proposed to be televised and inspected is clear for the passage of a camera.

> No separate or additional payment will be made for any excavation, person entry, or any other method that may be required to retrieve video equipment that has been hung up, destroyed, or lost during the televising operation.

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Article 464.4., "Measurement," is amended by adding the following:

The television inspection of the reinforced concrete pipe will be measured by the foot of line televised. The foot measurement will be determined from the distance recorded on the DVD log.

Article 464.5., "Payment," is amended by adding the following:

Television inspection of the reinforced concrete pipe will not be paid for separately, but will be subsidiary to this Item.

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