

**Z00566XX STORM SEWER (WATER MAIN REQUIREMENTS) (LCDOT)** For use on LCDOT projects with water main quality storm sewer required. This pay item and special provision is for use on projects where the storm sewer and water main are running parallel. Fill in the Dimension Ratio Maximum for plastic pipe below. Fill in the expected surcharge pressure on page 2. Delete this note from the Contract Specifications.

Effective: November 1, 2011  
 Revised: May 7, 2015

**Description:** This work shall consist of furnishing and constructing storm sewer in areas where the minimum horizontal separation from water main and/or water service lines cannot be maintained. The separation requirements are defined in the “Standard Specifications for Water and Sewer Construction in Illinois”, 7<sup>th</sup> edition, 2014.

**Materials:** The storm sewer materials shall be limited to the following:

- *Concrete Pressure Pipe: The concrete pressure pipe shall meet the requirements of the latest AWWA Standards C300, C301, and C303. The structural design of pre-stressed concrete cylinder pipe shall be according to the latest addition of AWWA Standard C304.*
- *Ductile Iron Pipe: The ductile iron pipe shall meet the requirements of ANSI A 21.51 (AWWA C151). The class or thickness design shall be according to ANSI A 21.50 (AWWA C150). The ductile iron pipe shall be seal coated and/or cement lined according to ANSI A 21.4 (AWWA C104). The ductile iron pipe shall have mechanical or rubber (slip seal or push on) joints.*
- *Plastic Pipe: The plastic pipe may be composed of Polyvinyl Chloride (PVC) or Polyethylene (PE) pipe. The PVC or PE material shall meet the requirements of NSF (National Sanitation Foundation) standard 14 and the AWWA or ASTM designated standard shown in the following table. The dimension ratio shall be less than the maximum value shown in the table below:*

AWWA Standard	Material (Material Code)	Dimension Ratio Maximum
C900	PVC	XX
C905	PVC	XX
C906	PE (PE 3048)	XX
	PE (PE 2406)	XX
	PE (PE 3406)	
ASTM D 1785	PVC (PVC 1120) PVC (PVC 1220)	XX

ASTM D 2241	PVC (PVC 1120) PVC (PVC 1220)	XX
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- *ASTM D 1785 and ASTM D 2241 PVC pipe shall be rated at 160 psi or greater at 73.4°F.*
- *Additional guidance is available in the Standard Specifications for Water & Sewer Construction in Illinois.*
- *Steel Pipe: The steel water pipe shall meet the requirements of the latest AWWA Standard C200. The structural design shall be according to the latest edition of C200 and AWWA Manual M-11 shall serve as the standard of practice for design and installation.*

**General:** The work shall be performed according to Section 550 of the “Standard Specifications”, “The Standard Specifications for Water and Sewer Construction in Illinois”, 7<sup>th</sup> edition, 2014 and 35 Illinois Administrative Code 653.119, which requires the storm sewer to be pressure tested (for storm sewers where 10’ horizontal separation from water main is not met) to the maximum expected surcharge pressure before backfilling.

For this project the maximum expected surcharge pressure is XX psi.

**Method of Measurement:** Storm Sewer (Water Main Requirements) will be measured for payment in place in feet. The measurement shall be according to Article 550.09 of the “Standard Specifications”.

**Basis of Payment:** This work will be paid for at the contract unit price per foot for STORM SEWERS (WATER MAIN REQUIREMENTS) of the diameter specified. *The unit price shall include all equipment, materials and labor necessary to complete the work as specified. The cost of pressure testing the storm sewer included in the unit price for STORM SEWERS (WATER MAIN REQUIREMENTS).*