

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2015 EDITION**

Add a new SECTION to DIVISION 1900:

SECTION 1910

POLYPROPYLENE PIPE

1910.1 DESCRIPTION

This specification covers polypropylene (PP) pipe for storm sewers and culverts.

1910.2 REQUIREMENTS

a. Polypropylene Pipe. Provide PP pipe for storm sewers and culverts that comply with AASHTO M 330, Type S.

b. Joints. To obtain soil tight joints, manufacture the pipe joints to comply with the following:

- Maximum opening is 1 inch.
- For non-cohesive backfills, provide an opening no greater than 3-1/3 times D_{85} for medium to fine sand and 5 times D_{85} and for uniform sand. D_{85} is the sieve size that 85% of the backfill material is smaller than.
- For openings over 1/8-inch, provide a channel length at least 4 times the size of the opening. Channel length is the length of the path that the soil must infiltrate.

c. End Sections. Provide only corrugated metal or precast concrete end sections that comply with the sizes and dimensions in the Contract Documents, and applicable **SECTION 1902** or **1904**. Connect the dissimilar materials using a soil-tight connection approved by the Engineer.

d. Deflection. Maximum deflection (reduction of the barrel base inside diameter) is 5%. Measurement will be made using a mandrel or other method as approved by the Engineer not less than 30 days following the installation. Deflections in excess of 5% may require the pipe to be removed and reinstalled, or replaced if permanently deformed or damaged in any way.

1910.3 TEST METHODS

Test materials in accordance with the AASHTO standard cited in **subsection 1910.2a**.

1910.4 PREQUALIFICATION

Follow the instructions on the AASHTO National Transportation Product Evaluation Program's (NTPEP) website to participate in the audit program for polypropylene pipe (PPP) plants.

Forward an official copy of the latest NTPEP certificate of compliance, final audit report, quality control plan, and split sample results report to the Bureau Chief of Construction and Materials for evaluation.

Producing plants that have successfully met the requirements of the NTPEP audit program and are listed on the NTPEP website as "compliant" will be prequalified.

In order to maintain prequalified status, send a copy of the annual NTPEP certificate of compliance, as well as the related audit report and split sample test results as soon as they are received or published. Plants that fail to achieve a yearly NTPEP Certificate of Compliance will be removed from prequalified status.

Plants that fail to provide the annual documents described above or repeatedly fail the deflection requirements of **subsection 1910.2d**, may be removed from prequalified status.

1910.5 BASIS OF ACCEPTANCE

Prequalification as specified in **subsection 1910.4**.

Receipt and approval of a Type C certification as specified in **DIVISION 2600**.

Visual inspection for condition and dimensional requirements.

Successful deflection testing with a mandrel as outlined above and in **subsection 817.3e**.

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