

POLYETHYLENE PIPE

When used in the Public Right of Way, Corrugated Plastic Pipe for Stormwater Conveyance shall be dual wall HIGH-DENSITY POLYETHYLENE (HDPE) pipe manufactured according to ASTM F2306, Latest Editions. HDPE pipe shall be 60 inches in diameter or less. Pipe Sections shall be joined with gasketed joints that meet the requirements of ASTM D3212 and ASTM F477. Installation guidance outside of these specifications shall be in accordance with ASTM D2321 "Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications" along with product-specific manufacturer recommendations contained in the Installation Guidelines for HDPE pipe.

There shall be a minimum of 1 foot of backfill (2 foot for 60 inch pipe) between the crown of the pipe and sub-grade elevation for all surfaces that are to be paved. There shall be a minimum of 1 foot of backfill between the crown of the pipe and finish grade elevation for all other locations. Maximum cover shall be per manufacturer specifications.

Whenever HDPE pipe crosses any rigid structure or is connected to a rigid structure – waterstop gaskets, flexible booted connections or embedded gaskets such as "A-Lok" in accordance with ASTM F2510 shall be installed. All items shall be approved by the Engineer.

Polyethylene pipe shall be tested, no sooner than thirty (30) days after the backfill is completed on a minimum of 10% of the pipe length as chosen by the Contract Administrator. However, occasionally pavement is placed over the pipe sooner than 30 days. While the 30 day time limit should be maintained, a brief inspection of the pipe prior to paving over it, particularly for the first few joints, may be prudent to ensure that good construction practices are being applied.

Pipe deflections must not exceed 7.5% of the nominal diameter. If any segments fail post installation testing, the Contract Administrator may require post installation testing on any additional or all of the remaining segments. Any location which has a deflection exceeding 7.5% shall be considered unacceptable and must be corrected as approved by the Contract Administrator.

For pipe diameters up to 24 inches, post installation testing shall be performed using a nine-point mandrel approved by the Contract Administrator or by television camera. The mandrel must be pulled through by non-mechanical means. For diameters including and larger than 24 inches, the contractor has the option of performing post installation testing by mandrel, physical measurement, or TV camera. All testing shall be arranged and paid for by the contractor and results approved by the Contract Administrator. No direct payment will be made for testing or re-testing and will be considered subsidiary to the installation price for the pipe.