

EXPERIMENTAL PROJECTS WORK PLAN

PROFILE WALL PVC PIPE STORM DRAIN TRUNKLINES & LATERALS IN MAINLINE APPLICATION

Location: Miles City: Tatro Street and Milwaukee Street (U-8014)

Project Name: Tatro Street-Miles City

Project Number: STPU 8014(1), CN 7077000

Experimental Project No. MT-12-11

Type of Project: Polyvinyl Chloride (PVC) Storm Drain Lines

Principal Investigator: Craig Abernathy: Experimental Project Manager (ExPM)

Description

Installation of profile wall polyvinyl chloride (PVC) plastic pipe for use in urban project involving new trunkline and lateral connections. Profile wall PVC will also be used for connection into the existing storm drain laterals east of the Tongue River Slough. Emphasis is placed on the trenching and special bedding procedures which is integral to the performance of the PVC placement.

Experimental Design

Profile wall PVC pipe (18"/45.7cm-12"/30.5cm) meeting ASTM F949, has been chosen to be an experimental pipe material for the trunkline and laterals on this project. Profile wall PVC will also be used for connection into the existing storm drain laterals east of the Tongue River Slough.

The 0.6 mile long project is within the city limits except from RP 0.10 to RP 0.35 where it passes through Custer County jurisdiction. Both Tatro Street and Milwaukee Street are classified as urban collectors. The project begins at RP 0.00 (Station 0+00) at the intersection of Montana 59 (P-18) and ends at Montana Avenue (U-8004) RP 0.61 (Station 31+65.43).

Evaluation Procedures

Research will document the installation for best practice with attention per the manufacturer's installation guidelines, (ASTM D2321) and trench/bedded per the plan detail for flexible pipe as detailed in project specifications. Annual inspections will document the pipe condition as applicable to accessible sites, and any other measurable outcomes.

Additional site inspections may supplement the annual visits based on need. Monitor and report on long-term performance. The measure of effectiveness (MOE) prevalent with this project will focus on:

- Proper installation practice
- Long-term durability

A point of contact will be established with the Miles City Public Utilities Office to be a direct liaison to the Research project manager on any issue involving the PVC pipe after construction.

Construction Documentation: Will include information specific to the installation events of the PVC pipe.

Post Documentation: Will entail annual inspections of the pipe installation as accessible. In addition a required mandrel test will be performed after installation and final fill. Research staff will be on hand to document the results for inclusion in the annual report.

Technical Contact for the project is Marc Wotring mwotring@mt.gov or at 444.6738.

Evaluation Schedule

Research will monitor and report on performance for a minimum period of five years annually, with every year up to *ten years (informally). This is in accordance with the Department's "Experimental Project Procedures". Delivery of a construction/installation report, interim, annual or semi-annual reports is required as well as a final project report (responsibility of Research). A web page will be dedicated to display all reporting from the project.

2013:	Installation/Construction Report
2014-2017:	Annual Inspections/Annual Evaluation Reports
2018:	Final Evaluation/Final Report

*If considered the extra data collection and analysis will add value to the overall results of the project.

The project website is located at: <http://www.mdt.mt.gov/research/projects/pvc.shtml>

Update

This project has been delayed until spring of 2014.