



Statewide Pipe Inventory

Don't Let Pipe Failure Cost You. Stop Issues Before They Start

PROBLEM

VDOT battled statewide pipe failures and drainage issues on interstate and primary roads that caused costly emergency repairs. To proactively maintain pipes and prevent failure, VDOT needed a prioritized work plan. Before they could create a work plan, all pipes needed to be inventoried and their condition assessed.

SOLUTION

VDOT selected PILLAR as one of 5 contractors tasked with efficiently gathering detailed information on each pipe structure. Using 22, two-man inspection crews, PILLAR inventoried 16,500+ pipes in 40 counties in 5 months.

APPROACH

To maximize collection efforts, Pillar utilized its approved subcontractors (WRA, JMT, Bowman, and RK&K) and its own employees, comprising twenty-two, two-man crews. Inspections were performed on cross pipes that could be investigated in daylight on either side of the road. Storm sewers connected by drop inlets were not included in this inspection. However, if a cross pipe terminated or was connected at a drop inlet in the median, the drop inlet grate was removed to examine the outlet/inlet end(s) from the surface.

Driveway pipes were excluded, and pipes or box culverts classified and inspected under the bridge inspection program were not inspected.

VDOT provided inspection criteria via a spreadsheet labeled Pipe Data Dictionary. Rather than complete direct entry into HMMS, our inspectors completed the spreadsheet and submitted as the deliverable along with pictures. Prior to submittal, the QA/QC Manager performed weekly data checks to ensure all appropriate fields were completed correctly.

Any immediate safety issues encountered were brought to the attention of VDOT.

The project took a total of 13,052 inspection hours along with 706 QA/QC hours.