New camera technology provides increased sight distance within the pipe, up to 200 feet on some size cameras. Due to the substantial lineal footage of pipe to be assessed (over 114,000 linear feet) zoom camera inspection proved to be cost effective for town-wide stormwater system assessments, with a significantly shorter project duration and less traffic impacts.

Cost Effectively Collecting Massive Data for Informed Decision Making

This project approach integrated a mix of new techniques and technical disciplines including zoom camera technology, GIS, asset management, stormwater and roadway engineering, operations, maintenance, capital project planning and stormwater utility management. The effort required processing and organizing massive amounts of data and developing an excel-based capital planning tool that allows for informed decisions to be made on future stormwater system investment.

*Pipes classified as “Needs Further Assessment” were largely due to debris buildup that limited the full inspection of the pipe circumference; however the zoom camera was able to inspect further down the pipe than a crawler camera could. By inspecting before flushing the lines, it allowed for the identification of areas where buildup was occurring, allowing for better informed future maintenance operations.

Since the completion of this project, several other neighboring communities are using a similar approach to collect this municipal-wide stormwater system data. Utilization of zoom camera technology has proven to be the most cost-effective and fastest way to collect this large amount of data, and determine where planning efforts are best spent for the municipally-owned infrastructure.