

The SW Elkin Collection System Improvements project is a continuation of a Sanitary Sewer Evaluation Study (SSES) completed for the southwest Elkin collection system to identify sources of I/I (infiltration and inflow). Manhole and smoke test inspections have been completed and sources of inflow identified. CCTV inspections were completed to identify significant sources of infiltration and defective clay pipes. The project will repair the identified I/I sources.

The project includes the rehabilitation and repair of over 300 manholes, including cementitious lining of brick manholes and various manhole repairs (MH inserts, frame/cover reseal to riser or cone, frame/cover replacements). Sixty-seven repairs, resulting from the smoke test inspections, will be completed and include: downspout and storm drain disconnects from the sewers, service lateral repairs, main line repairs, cleanout cap and riser repairs. Pipe rehabilitation/repair consists of various methods (pipe relining, spot repairs, pipe replacement). Additionally, an 8" aerial gravity line is scheduled to be replaced.

The outcome of the project will be: (1) reduction of I/I into the collection system, (2) reduction in the volume of flow discharged to the waste water treat plant due to reduction in I/I, (3) funds spent treating I/I could be more productively utilized elsewhere, and (4) reclaim pipe capacity due the removal of sediment buildup and I/I reduction.