

## Project Profile

# Embro Servicing Project

## Storm and Sanitary Servicing, Watermain Replacement and Road Reconstruction

Embro, Ontario



K. Smart Associates Limited was retained to complete the design of sanitary sewer servicing, storm sewer servicing, partial watermain replacement and road reconstruction for the entire village of Embro. The project is being completed in two phases. Phase 1 involved the east half of the village and construction was completed in the fall of 2009. Phase 2 involves the west half of the village and construction will be completed in the fall of 2010.

This project involved approximately 6,000 m of sanitary sewer (200mm to 250mm dia.), 5,000 m of storm sewer (250mm to 900mm dia.), 3,000 m of watermain (150mm to 200mm dia.), and reconstruction of all roads in Embro. The estimated construction value of the project is \$9.3 million.

K. Smart Associates was responsible for all stages of this project, from site surveying to detailed design to contract administration and construction inspection. Due to the topography of the village, it was not possible to provide gravity sanitary sewer service to the entire village and two small pumping stations were designed. Another challenge with this project was ensuring that the new storm and sanitary sewers did not conflict with existing watermains and other utilities.

The design of the storm and sanitary sewers took into account future growth within Embro based on zoning.

Ministry of the Environment approval was obtained for the storm and sanitary sewers and the sanitary pumping stations. As well, the Upper Thames River Conservation Authority was consulted regarding the storm sewer outlets.

Public meetings were conducted for Phase 1 and 2 during the design stage and prior to construction to inform the residents of the project status and the impact of project construction on their properties and lives.



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