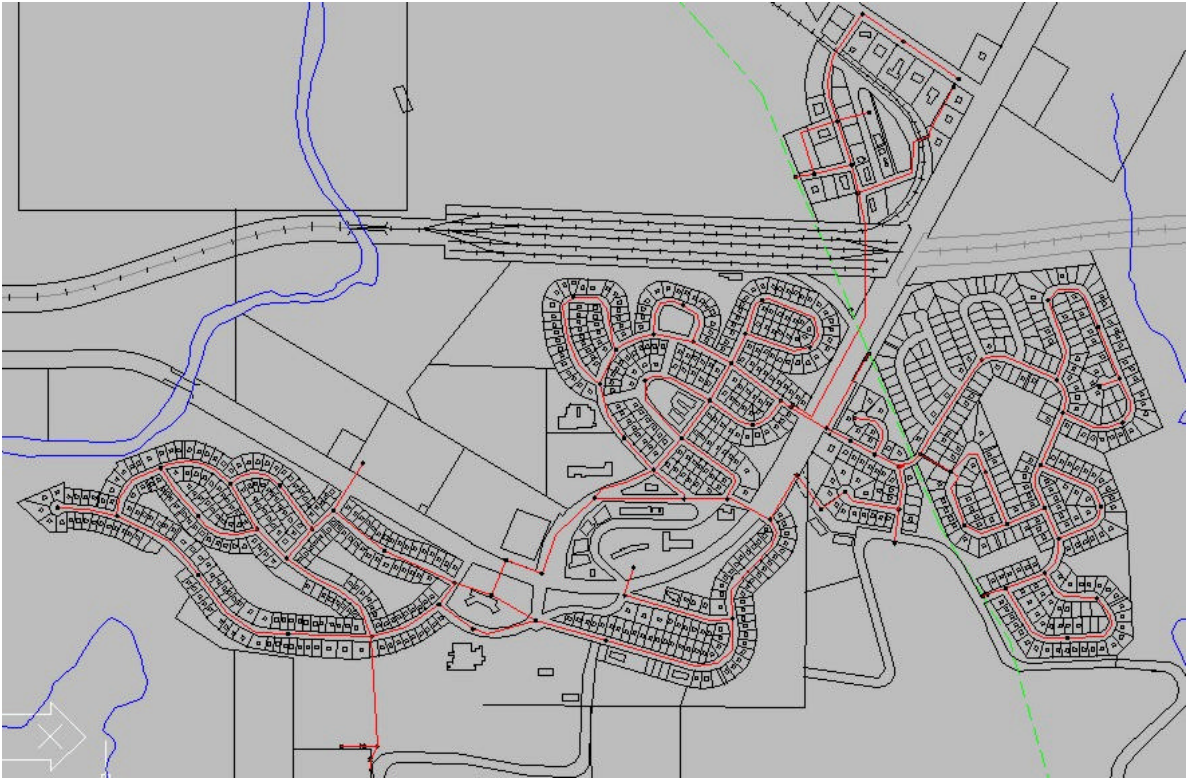


WATER DISTRIBUTION NETWORK MODELING

Township of Terrace Bay

Terrace Bay, Ontario



Project Description

In 1998, KGS Group was retained by the Township of Terrace Bay to perform a review and evaluation of the Township's water supply system. The project involved the creation of a water distribution computer model from the Township's pipe network layout drawings. The Cybernet computer program available through Haestad Methods Inc. was used for the analysis. Hydrant tests were performed at key locations throughout the Township and the results were used to calibrate the model. Since the Township's water system is not metered, water demands for the entire Township were estimated using accepted standard practices. Steady state network pressures and fire flow analyses were simulated for the existing conditions and for recommended improvements to the pipe network. Based on the model results the Township carried out recommended improvements which resulted in better system performance throughout the Township.

In 2000, KGS Group was retained again to re-evaluate the water distribution network with the inclusion of the system upgrades performed since the first study in 1998.

The water distribution model was also used to assess the pressures and fire flow capacities of the system for the new water treatment plant that is to be constructed in the near future.