

#### 4.4.3

#### Urbanization of Rural Cross Sections Within Urban Boundaries

**Presenter**

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The City of Hamilton contracted Stantec Consulting Ltd. in November 2007 to perform an analysis of the road sections within the City in order to assist in determining the optimum locations for the urbanization of their rural cross sections within the urban boundaries.

Within the urban boundaries of the City of Hamilton, there are two general classifications of roads: urban and rural. Urban roads have cross sections that typically include curbs, gutters, catch basins, underground storm water services, and sidewalks. Meanwhile, rural roads may be lacking some or all of these components and are more likely to include culverts and ditches for storm water management. The reconstruction of a rural road section to urban specifications is referred to as urbanization.

This study used GIS to analyze the existing infrastructure within the urban boundaries of the City of Hamilton to assist in determining where the urbanization of rural cross sections would be most beneficial and economical to the City, its residents. The results of the spatial analysis were loaded into a decision model which was used to determine critical possible locations. The model provided recommendations based on a multitude of factors, each weighted to reflect its importance and significance in selecting locations for new sidewalk construction as well as what-if scenario analysis capabilities.