

4.11 HUMAN OCCUPANCY AND RESOURCE USE

4.11.1 Municipal Structure

The Study Area is located in the Township of St. Clair, County of Lambton. The Township was formed when Moore and Sombra Townships amalgamated in 2000. The Study Area is located outside of urban areas in the Township. The nearest community of Sombra is located approximately 4 km west of the Bickford Compressor Station. The St. Clair Valve Site is located approximately 3 km south of the community of Courtright.

4.11.2 Land Use

Land use information is derived from aerial photographs and the County of Lambton Official Plan. According to the Official Plan, land use designations along the Union St. Clair Line include Petrochemical Industrial Land, Rural/Agricultural, Primary Natural Heritage Corridor, and Moore and Sombra St. Clair Parkway Area (**Appendix A, Figure No. A-6**). The policies for each of the respective designations allow uses consistent with the designation.

The majority of lands along the Union St. Clair Line are designated as Petrochemical Industrial Land. The main function of these lands is to accommodate existing and future large scale industrial uses that are inappropriate elsewhere (County of Lambton, 1997). It is also recognized that agricultural uses are permitted and will continue to exist until the lands are required for industrial purposes. Interpretation of aerial photographs indicate that the majority of land in the vicinity of the Union St. Clair Line is agricultural, with some industrial use, most notably the Terra Nitrogen / ICI Nitrogen Products fertilizer plant and settling ponds south of Bickford Line, and Ontario Power Generation's Lambton Generating Station just north of the St. Clair Valve Site.

A small area at the southernmost part of the Study Area is designated Rural/Agricultural (**Appendix A, Figure No. A-6**). The goal of this designation is to ensure the continued viability of the agricultural industry, including farms, secondary farm uses, farm related businesses, and the rural communities, and to ensure that uses that would conflict with agricultural activities are not established in farming areas (Lambton County, 1997).

Although there are no designated residential lands near the Study Area in the Official Plan, residential land-use exists throughout the area, with higher density areas along the St. Clair River.

The lands along Clay Creek including the watercourse itself, and the lands along the St. Clair River shoreline and the wooded area south of Oil Springs Line are designated as a Primary Natural Heritage Corridor, as described in **Section 4.11.3**.

The St. Clair River Parkway Area runs along the St. Clair Parkway (County Road 33), which follows the shoreline of the St. Clair River and intersects the St. Clair River Crossing. The goal is to ensure that the riverfront is developed in a manner that complements the aesthetic and

natural setting of the riverfront and recognizes the inherent environmental constraints associated with flooding and slope instability (Lambton County, 1997). Specific policies apply to residential, industrial, and recreational developments, and natural heritage preservation and enhancement.

4.11.3 Designated Natural Areas

As described in **Section 4.6**, a search of the NHIC database revealed no provincially designated natural areas in the Study Area (NHIC, 2008).

The Union St. Clair Line traverses areas designated by Lambton County Official Plan (1997) as Primary and Secondary Natural Heritage Corridors (**Appendix A, Figure No. A-6**). Primary Corridors in the Official Plan generally follow watercourses and the lakeshore. The Union St. Clair Line does not pass through any areas mapped as Significant Natural Areas in the Official Plan (**Appendix A, Figure No. A-6**).

4.11.4 Natural Resource Use

There is no Aggregate Resource Inventory Paper for the Study Area location due to the low aggregate potential as a result of the physiography of the area. Mapping of local mineral and aggregate resources in the County shows no sand or gravel deposits in the vicinity of the Study Area (Lambton County, 1997).

Data from Natural Resources Canada (2008) indicates that there are no major producers of base metals, coal, ferrous or precious metals in the Study Area. There are also no exploration projects for these resources in the general vicinity of the Study Area.

Petroleum production, storage and distribution infrastructure occur in Lambton County. In the vicinity of the Study Area, they consist of oil pools and wells, and natural gas transmission pipelines, pools, wells, storage pools and compressor stations. The location of hydrocarbon features can be seen in **Appendix A, Figure No. A-7**.

4.12 HERITAGE RESOURCES

4.12.1 Archaeological Overview

Prior to construction of the Union St. Clair Line, all archaeological works would have been completed along the pipeline route as per regulatory requirements of the time.

4.12.2 Heritage Overview

To identify potential heritage properties within the Study Area the Ontario Heritage Properties Database was consulted (Ministry of Culture, 2005). To be included in the database, a property must be recognized or protected under the following criteria: