EXISTING CONDITIONS

An inventory of the existing conditions within the study area was completed to facilitate an evaluation of relative impacts of sanitary servicing alternatives on the existing natural and social environment. Existing conditions within the study area were identified in the following general categories:

- Natural Environment
- Social Environment
- Sanitary Servicing

NATURAL ENVIRONMENT

Stantec ecological staff completed a background review and detailed field investigations within the study area to identify and characterize the natural features and associated ecological functions.

A number of area sensitive bird species, including the Pileated woodpecker, Pine warbler, White-breasted nuthatch, Hairy woodpecker and Wood thrush, were identified within the study area. Amphibian breeding habitat was identified within the swamp community along Strasburg Creek, within the central woodland/wetland feature and within the cultural plantation along Huron Road for a variety of frog species. No endangered, threatened or special concern species were identified during the field investigations.

The prominent surface water feature in the study area is the South Branch of Strasburg Creek that flows west to east through the study area, outletting through a portion of the Strasburg Creek Provincially Significant Wetland Complex (PSW) to Ward’s Pond on the Main Branch of Strasburg Creek. This watercourse is known to support brook trout populations and spawning areas within the downstream reaches, as confirmed through an aquatic habitat assessment and electrofishing survey for this study.

The upper reaches of this watercourse originate in a deciduous woodland, swamp and meadow marsh community near the centre of the study area. Intermittent flows drain eastward through an agricultural field and cultural thicket prior to entering the large deciduous forest. Seepage areas within the forest provide permanent coldwater flows to the downstream wetland and watercourse features, which support brook trout populations. Other small watercourses were identified within the woodland/wetland feature along Strasburg Creek, but none exists outside of the natural features. A portion of the study area is also subject to flooding during a Regional Storm Event and is located within the Regulatory Floodplain.

SOCIAL ENVIRONMENT

The Brigadoon Community Area currently includes a mix of existing single/semi/townhome residential lots (including schools/parks/places of worship) and agricultural land. Much of the agricultural land is subject to development applications, which will create further residential, commercial, and/or employment land uses within and adjacent to the general study area.

SANITARY SEWAGE SERVICING

At present, a 900mm diameter trunk sanitary sewer outlet has been constructed within the Strasburg Road right-of-way, to a point approximately 100m beyond the crossing of the Main Branch of Strasburg Creek. This trunk sewer then extends northerly (as a 675mm diameter trunk), servicing the Middle Strasburg sewershed area. The existing 900mm diameter trunk sanitary sewer is sized to accommodate flows from both the Middle and South Branch sewershed areas.