The City of Hamilton has initiated a Schedule “C” Municipal Class Environmental Assessment (EA) for a New Well and Water Storage Facility in Carlisle. This Class EA process is a continuation of the 2004 Carlisle Water Supply System Master Plan and the 2006 Carlisle Well Siting Study which identified three (3) potential locations for a new municipal water supply well to service Carlisle. These sites have been identified as 1a-A, 1b-B and 2B on Figure 1 below.

In December 2013, the City completed a hydrogeological investigation to provide additional information on the site 1b-B. This site was identified in the 2006 Carlisle Well Siting Study as the site most likely to provide sufficient production and quality based on the demand projections. The hydrogeological investigation involved drilling a test well and completion of hydraulic testing within the road allowance fronting 1326 Centre Road. The City’s Consultant (WSP Inc. – previously GENIVAR) has completed a 24-hour pump test as well as water quality sampling and analysis.

A step drawdown test was completed with three 60-minute steps. The test well provided a maximum yield of 50 US gallons per minute from the well (just over 3 L/s). This production rate is low relative to the anticipated production requirements identified during previous studies. The step test also indicated the potential for mutual interference effects (connecting shallow and deep fracture zones) which may impact existing shallow wells. It is anticipated a similar effect would be induced if a well were drilled on Concession 8, east of Centre Road.

Due to the potential for mutual interference effects in this area and the low yield from the test well, the project team has decided to focus the investigation on other alternative well sites which may better meet the City’s requirements.