

HJA Water Management Consulting

509 Foul Bay Road, Victoria, BC., V8S 4G9 | 250-885-3711 | Jack.Hull@telus.net

To: Council, District of Oak Bay

From: J. A. (Jack) Hull, HJA Water Management Consulting, Project Manager

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Subject: Uplands Combined Sewer Separation Project – Geotechnical Investigation Progress Update

Introduction

At its regular meeting on May 24, 2016 Council awarded contract for a geotechnical investigation to WSP Canada Inc., as part of the Uplands Combined Sewer Separation project. The objectives of the geotechnical investigation are:

1. to undertake a geotechnical survey, to a maximum depth of five (5) metres, to determine the location of bedrock;
2. to assess the suitability of sub-surface soils as trench backfill; and
3. to record any other geotechnical information that would be of relevance to the installation of a sewer pipe, for example, the presence of groundwater, potential for trench sloughing etc.

Progress Update

Following the award of the contract a project initiation meeting was held with WSP on June 1 attended by the WSP project manager and Geotechnical Engineer, the project manager for Oak Bay and Oak Bay staff. To date the following work has been completed:

- June 2 - 6 – Desktop review of available data;
- June 7 – all day ground penetrating radar (GPR) scanning along the roads of the alignment;
- June 16 – all day utility locating and borehole layout (locations mainly determined from the GPR scan);
- June 20 – all day soil drilling;
- June 22 – all day rock probing;
- June 22 – commenced laboratory testing;
- Week of June 27 – data correlation;
- June 30 – completed soil drilling

An additional half day drilling (June 30) was required as a result of encountering concrete in the road right of way.

Laboratory soil testing is well advanced and the report and drawings are being prepared. Some borehole logs and drawings are expected by July 15. WSP expects to have the report ready for staff review by July 22.

Following a review of the Geotechnical Report by Oak Bay staff, the report will be provided to McElhanney Consulting Services Ltd., the pre-design consultant. In preparing the pre-design report and cost estimates to date, assumptions were made as to the location of rock. The geotechnical report will provide the information that will allow McElhanney to compare the assumed location with the actual and adjust cost estimates as necessary.

Next Steps

The pre-design report from McElhanney, that will include a recommended option for separation of the Uplands sewers, is anticipated to be introduced at a Special Committee of the Whole in early October, for subsequent consideration at the October 24, 2016 Council meeting..