S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS

March 6, 2019

File: 18058

City of Ottawa
110 Laurier Avenue West
Ottawa, ON, K1P 1J1

Attention: William Curry
Development Review

RE: 3598 Innes Road (D07-12-18-0132)
Ottawa, ON

Thank you for your comments in connection with the above noted project in regards to the review of the submitted engineering plans. We have had the opportunity to review your comments and offer the following response:

Comments:

A. List of Drawing(s):

General Comments:

A1. *Prior to issuance of a water permit, a water card is to be completed. Please complete the attached water card and return the digital copy via email to my attention.*

Please see attached.

A2. *Please provide a site lighting certificate, sealed by a P.Eng., that satisfies the following condition:*

Prior to the Site Plan Approval, the applicant shall provide a certificate, from an acceptable professional engineer, that the site lighting has been designed to meet the following criteria:

a) *It must be designed using only fixtures that meet the criteria for Full Cut-Off (Sharp cut-off) Classification, as recognized by the Illuminating Engineering Society of North America (IESNA or IES), and;*

b) *It must result in minimal light spillage onto adjacent properties. As a guideline, 0.5 fc is normally the maximum allowable spillage.*

Please refer to the lighting plan.

A3. *Please note this application will require a Ministry of Environment Conservation and Parks Environmental Compliance Approval (ECA) application as the site is located on industrial zoned land.*

An ECA application is in the process of being complete and will be provided upon completion.

Grading & Erosion Control Plan

A4. *According to City of Ottawa standards, stormwater cannot travel through neighbouring properties. Please re-grade the site to have the stormwater drainage directed to the City's Right-Of-Way.*

The major overland flow route has been redirected to discharge along Innes Road. Please refer to the revised Grading & Erosion Control Plan.

A5. *Please confirm that the pavement recommendation for this site was supplied by the geotechnical engineer.*

The pavement recommendation has been revised based on the Geotechnical Memorandum prepared by McIntosh Perry.

Site Servicing Plan

A6. *Please note, according to City of Ottawa standards, quantity control is to be controlled by inlet control devices (ICD) rather than the existing orifice pipe sizes. Please re-design your SWM to include ICDs. (Refer to comment B1).*

The proposed quantity control devices have been revised to an orifice plate. Please refer to the revised Functional Servicing & Stormwater Management Report along with the Site Servicing Plan for details.

Notes & Details Plan

A7. *Please add an ICD table with information including location, release rate, size, type, etc.*

A Stage-Storage-Table has been added to the Note & Details Plan.

B. List of Report(s):
Functional Servicing & Stormwater Management Report

B1. Please confirm that the existing pipe design can accommodate the proposed 5-year rainfall period under free flow conditions and that the site can control stormwater during the 100 year post development rates using ICDs. Please review the City of Ottawa Sewer Design Guidelines and Sewer Material Specifications for conformity.

Please refer to the storm sewer design sheet within Appendix A of the revised Functional Servicing & Stormwater Management Report.

Additional Comments based on March 5, 2019 email from William Curry

1. *We only accept individual DWGS and not sets in PDF format. Individual DWG file names should match the DWG name.*

   Individual drawings in PDF format have been prepared.

2. *Change your connecting pipe to a 300mmØ.*

   The private storm service has been revised to 300mmØ as requested.

3. *Place a circle beside M & BP for Remote Readout (RR in the circle)*

   The remote readout symbol has been included on the servicing drawing.

4. *You have 2 different "Call out Note" for Storm MH and CBs SUMP. CBs all have 600 mm sump. MH=300mm*

   Noted and revised.

5. *Call me and explain recycled water tanks going to the Storm sewer?*

   The tanks are a part of the water reuse function for the car wash.

6. *Does the Building have a weeping tile pipe?*

   There is no basement to this facility and no weeping tiles.

7. *Need more info on the Drawing for MH1 Unit HG4. It is likely in the report but it has to be on the DWG as the Contractor and City inspector don't have a report on site and need all information on the DWG.*

   Details of the oil/grit interceptor have been added to the drawings.

8. *Storm Pipe should be identified as PVC SDR 35 and Sanitary as SDR 18.*

   All storm and sanitary sewer pipe materials are included on the Notes and Details Plan.

9. *You need a clay seal for the storm pipe between MH 6 and MH1.*

   The clay seal has been added to the drawings.

10. *The Geotechnical speaks to Site Services. Your Sewer notes (on the DWG) should mimic what they say….ie bedding materials and thickness. Your pipes are shallow and this should be increased to even more than what they propose.*

    Bedding materials and thicknesses are provided on the engineering Notes and Details plan and are in keeping with the geotechnical report. An insulation detail has also been provided.

11. *We need to discuss TD1 (trench drain) connected to the sanitary*

    The trench drain is collecting any runoff from within the car wash facility.

12. *CO (cleanouts) in the sanitary pipe?*

    As per the discussions with City of Ottawa engineering staff, additional details have been provided for the cleanouts and select cleanouts have been removed and replaced with long radius bends.

13. *Your sanitary BFP should be as per the OBC and in the building and not as you show.*

    The sanitary backflow preventer is located based on the specific facility requirements not to allow potential surcharging into the external recycling and oil/grit interceptor systems.

14. *Provide Frame and Cover info on the DWG……*
    -CBMH to be S25 Frame and S28.1 Cover
    -CBs to be S19
    -San MH to be S25 Frame and S24 cover
    -Storm MH to be S25 Frame and S24.1 cover

    Frame and cover information has been detailed on the Notes and Details Plan as requested.

Yours truly,

S. LLEWELLYN & ASSOCIATES LIMITED

S. Frankovich, P.Eng.