



Houle Chevrier Engineering Ltd.

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May 13, 2013

Our Ref. No. 13-079

Arch-Nova Design Inc.
45 Banner Road
Nepean, ON
K2H 8X5

Att.: Mr. Zoran Mrdja, P.Eng.

RE: CONSULTATION REGARDING DAILY DESIGN SEWAGE FLOW
PROPOSED COMMERCIAL DEVELOPMENT
2403 HUNTLEY ROAD
OTTAWA, ONTARIO

Dear Sir:

It is understood that plans are underway to develop the vacant parcel of land known as 2403 Huntley Road in Ottawa, Ontario. The area of the parcel of land is approximately 3,700 square metres. It is proposed that a multi-tenant commercial use building be constructed at the subject site. The building will be serviced by an onsite wastewater system and drinking water well. A determination of the resulting daily design sewage flow (DDSF) resulting from the proposed building is required in order to assess the feasibility of constructing an onsite sewage system at the site that is capable of handling the resulting design flow. If the DDSF exceeds 10,000 litres per day, an application for an Environmental Compliance Approval through the Ministry of the Environment will be required which, given the details of the subject property, is likely not attainable. Our firm has been retained to determine the resulting DDSF based on preliminary details that have been provided to our firm, including building size and likely occupant type(s).

The preliminary details that we have received pertain to the construction of a 2 storey building with a 1,500 square metre footprint (total area of 3,000 square metres). The suggested, potential occupancy types include a retail store(s), office space, and/or a daycare facility. Based on information provided in the Ontario Building Code pertaining to DDSFs for various occupant types, we have estimated the DDSF as follows:

Table 1 - Estimation of DDSF assuming one occupant type for entire building

Occupant Type	Resulting DDSF (litres per day)
Retail Store	± 15,000
Office Space*	± 24,200
Daycare**	± 68,200

* assuming 75 litres per 9.3 square metres of office space.

** assuming occupant load factor of 3.3 square metres per person (child or staff) and 75 litres per person.

Table 2 - Estimation of DDSF assuming provided occupant types each occupy 1000 sq. m. of building space.

Occupant Type	Resulting DDSF (litres per day)
Retail Store	± 5,000
Office Space*	± 8,000
Daycare**	± 22,800
TOTAL	± 35,800

* assuming 75 litres per 9.3 square metres of office space.

** assuming occupant load factor of 3.3 square metres per person (child or staff) and 75 litres per person.

The results of our calculations suggest that, given the building size and the proposed occupancy types, the DDSF will exceed 10,000 litres per day. Additional details provided to our firm by the client in the form of a table labeled 'Wastewater Design Criteria' indicated a suggested allowance of 5 litres per square metre per day for a 'commercial space'. This allowance itself results in a DDSF of approximately 15,000 litres.

We trust that this letter is sufficient for your purposes. If you have any questions concerning this information, please call.

Yours truly,

HOULE CHEVRIER ENGINEERING LTD.



Matthew Rainville, C.E.T.