

May 28, 2025 File No. 24010

GSP Group Inc.

72 Victoria Street S, Suite 201 Kitchener, Ontario N2G 4Y9

Attn: Hugh Handy, Vice President

Re: Opinion of Servicing of Proposed Development

Zoning By-Law Amendment

280 Clair Road West Guelph, Ontario

Counterpoint Land Development by Dillon Consulting Inc. ('Dillon') has been retained by Home Opportunities to support a Zoning By-Law Amendment for the property located at 280 Clair Road West, in Guelph, Ontario. In general terms, our role as the civil engineer on record from a rezoning perspective is to verify that the existing municipal infrastructure (sanitary and water) can accommodate the proposed development concept put forth by Home Opportunities, while confirming and adequate storm outlet and addressing environmental regulations associated with stormwater management and low impact development ('LID') measures.

We have been working City of Guelph staff for the past year to ensure the proposed development meets all regulations enforced by the authorities having jurisdiction. Dillon has made one (1) pre-application to the City at the end of 2024 that consisted of a combined Functional Servicing and Stormwater Management Report and a civil drawing package. Comments from Development Engineering were provided to Dillon in May 2025. Due to this, it is our opinion that the current concept presented by Home Opportunities can be accommodated by the existing municipal infrastructure with a minor extension of the sanitary sewer in Clair Road and the utilization of the proposed ecological linkage as a storm outlet for 100-year capture and infiltration. Note that the sanitary extension will require Environmental Compliance Approval ('ECA'). Additionally, should the proposed ecological linkage become municipal property, an ECA may be required for the natural infiltration basin. Please see below for a summary of key servicing aspects that have been identified to date.

Sanitary Sewers:

The adjacent municipal roadways contain sanitary sewers however they are not directly within the site frontage. Additionally, there is an existing abandoned 200mm forcemain, this will not be used for connection purposes. As coordinated with City of Guelph staff, a sanitary sewer extension from the existing 300mm sanitary sewer in Clair Road West is proposed to provide a new sanitary connection to



the subject site. The development proposed will result in an increase in the equivalent population and peak flow, calculated as per City of Guelph Sanitary Design Criteria, to the municipal sewer system.

An analysis was completed by the municipality's consultant using a peak flow of approximately 28 L/s and the results are as follows as provided by Engineering staff:

• The model shows there is no surcharging between the subject site and the WWTP. Along the flow path from the local receiving sewer to the WWTP, there are 4 MHs with a HGL freeboard less then 1.8m. For all 4 MHs, the HGL freeboard is less than 1.8 m under existing conditions. 3 junctions with a HGL freeboard less than 1.8 m are located between the siphon and the WWTP, and all 4 are associated with shallow sewers. The fact that there is no surcharging from the subject site to the WWTP and the maximum decrease in HGL freeboard in MHs with an HGL freeboard less than 1.8 m is 2 cm suggests the existing network has sufficient capacity to manage the existing flows, as well as the additional flows from the proposed development.

Therefore, the existing municipal infrastructure can accommodate the development with a minor sanitary sewer extension in Clair Road.

Watermain:

The adjacent municipal roadways contain watermains that are of a typical size to service the proposed development. There exists 2 – 400mm watermains on Clair Road West, one is in Pressure District ("PD") 3 while the other is in PD1. The subject site will be serviced off the existing 400 mm diameter watermain in PD3 on Clair Road West as coordinated with municipal staff. The domestic and fire flow water demands were calculated in accordance with City of Guelph design criteria and FUS guidelines (2020).

An analysis was completed by the municipality's consultant and the results are as follows as provided by Engineering Staff:

- Please note that the fire flow proposed by Dillon for the site was defined to be 266.7 L/s which is
 the commercial rate whereas high density residential is 200 L/s. The higher fire flow was used
 within the model as per the request.
- Based on the model results, the water system at the proposed development provided a pressure of 82 psi under both ADD and MDD conditions which slightly exceeds the City's preferred operating range of 50 80 psi but is still below the maximum allowable pressure of 100 psi. The available fire flow at hydrants H80-013, and H80-034 surpassed the calculated FUS fire flow requirement of 266.7 L/s and the City's guideline of 200 L/s

Therefore, the existing municipal infrastructure can accommodate the development.



Storm Conveyance, Stormwater Management and Low Impact Development:

In accordance with the requirements outlined in consultation with City of Guelph staff, the subject site is isolated from a direct stormwater outlet and will therefore rely on infiltration and evaporation for stormwater management. The Hydrogeological Investigation Report delineated an infiltration design rate of 81 mm/hr to 101 mm/hr, which is deemed sufficient to manage all design storm events, including the 100-year storm event. As a result, on-site stormwater management (SWM) infrastructure has been designed to meet the City's criteria for the Hanlon Creek Sub-watershed for quantity control, water quality treatment, and water balance, in alignment with the discussions held with City staff. Detailed calculations supporting the proposed design have been included as part of the development application.

Based on the 1st pre-application submission, additional details pertaining to the TSS removal and thermal mitigation are to be provided. Given the soils high sand content and quick infiltration rates, at source Low Impact Development ('LID') measures will be provided to satisfy these criteria.

It should be noted that the proposed development concept can only be accommodated is the ecological linkage can be utilized for storm water infiltration/mitigation.

Therefore, the existing natural topography can accommodate the proposed development from a stormwater management perspective.

We trust that the information presented herein has demonstrated that the sanitary, watermain and stormwater management plan for the proposed development meets the intent of the zoning requirements and that the existing municipal infrastructure and natural topography can accommodate the proposed development. Should you require additional information or require a copy of our latest, detailed Functional Servicing Report please do not hesitate to contact the undersigned.

Sincerely,

Counterpoint Land Development



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