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Our Project No. 20064A

City of Hamilton
Engineering Department
71 Main Street West
Hamilton, ON, L8P 4Y5

Attention: Mr. Daniel Barnett
Mr. Peter Dimitroulias, C.E.T.

Regarding: 1842 King Street East, ZAC-21-021 & UHOPA-21-009

Dear Mr. Barnett and Mr. Dimitroulias

In response to the comments dated November 22, 2021, from the City of Hamilton please accept the following:

GENERAL COMMENTS (DEVELOPMENT ENGINEERING)

- *Provide a cross section of the stormwater tank with full details. Clarify where it will be proposed within the building.*
  - **See drawing C3-1 for cross section of the SWM Tank. Se revised SWM report for location of SWM tank within proposed building**

- *In accordance with Transportation Planning, the right-of-way widths have been reduced. As such, there shall be no caisson walls or encroachments into the right-of-way on King Street East and Lawrence Road, all must be located within the subject lands.*
  - **Noted**

- *Relocation of above ground utilities are at the expense of the Owner.*
  - **Noted**

- *For the information of the Owner / Applicant and as previously mentioned in the Formal Consultation comments, the following requirements of the Comprehensive Construction Management Plan, however, not limited to must be addressed during the Site Plan Application stage:*
  - **Noted**

STORM WATER MANAGEMENT COMMENTS (INFRASTRUCTURE PLANNING):

- *The FSR and SWM Report proposed 100-year post development controlled release of 0.383 m³/s flow to the sewer system on Lawrence Road which exceeds the 2 year predevelopment flow of 0.220 m³/s to this outlet (based on predevelopment drainage area to this outlet 2.199 ha as per drawing no. : C3-1) and is not consistent with previously provided FC comments which advised that 100-year flow to be controlled to lesser of the 2 year predevelopment flow or free flow capacity of the storm lateral.*
  Based on the above, the stormwater management design for the proposed development should be revised to meet the 100-year allowable flow of 0.220 m³/s to Lawrence Road sewer. Please update the SWM Report and all applicable figures to demonstrate the required storage volume and flow control orifice sizes accordingly.

- **Addressed in revised SWM Report**

- *Page 6 of the report mentions a single OGS unit is proposed; however, OGS sizing calculations show two worksheets are provided – one based on 2.586 ha area using 'Fine' particle size distribution (PSD) and another one based on 0.304 ha area using NJDEP/ETV PSD. Please clarify why two different calculation sheets provided if only one OGS unit proposed.*
    - **Addressed in revised SWM Report**

- *Proposed OGS unit should be designed based on ETV particle size distribution. In addition, OGS sizing calculations show that FD-5HC OGS proposed which achieves more than 80% TSS removal which exceeds the TSS removal efficiency obtained in ETV test. Please note that the actual ETV test performance data posted on the ETV website should be used for the sizing of a hydrodynamic separator unit. The maximum TSS removal efficiency of the hydrodynamic separator unit shown on the sizing calculations cannot exceed the maximum performance stated on the ETV website. Based on this, City will give credit up to the maximum TSS removal efficiency obtained by the ETV test for the chosen OGS model. The design should consider additional measures to achieve the required TSS removal rate (Level 1) for the proposed development and revised OGS sizing calculations signed and stamped by a Professional Engineer should be submitted as per above.*
  Please revise the 'Stormwater Quality Control' section on page 6 of the report accordingly.
    - **Addressed in revised SWM Report**

MINOR STORM SERVICING COMMENTS (PUBLIC WORKS):

- *With respect to minor storm servicing, previous HW comments identified that existing peak flow rates to the King Street and Lawrence Road sewers **must not be exceeded.** Please **expand Table 2.2** to include **pre and post development flows** to each sewer for the **2 through 100-year return period events**. Additionally, the criteria for controlling the 100-year post development peak flow rate to the lesser of the 2-year pre development rate or the free flow capacity of the existing storm sewer lateral **has not been met**. HW does not support the approval of this application until it is demonstrated that the criteria for peak flow control has been met, and that post development flows do not exceed pre development rates for all return period events.*
    - **Addressed in revised SWM Report**

HYDRAULIC ASSESSMENT:

- **All Hydraulic Assessment Comment to be provided under a separate cover by others**

SOURCE WATER PROTECTION COMMENTS (PUBLIC WORKS):

- *Source Water Protection would require a Hydrogeological Brief conducted by a qualified professional (P.Eng, P.Geo) that discusses soil/groundwater conditions to properly characterize potential dewatering needs. This brief should discuss seasonal high groundwater levels, excavation depths, dewatering calculations (on a L/s and L/day basis), and if dewatering is required, groundwater quality sampling to compare against Sewer Use Bylaw criteria. The applicant's Phase II ESA obtained levels during periods of the year that would not characterize the annual high-water table.*
    - **To be provided under a separate cover by others**

- *As information, in order to comply with City of Hamilton Sewer Use Bylaw standards and Temporary Sewer Discharge Permit requirements, discharge location (manhole ID), peak dewatering rate (L/s), and representative water quality will be required. It is recommended to consult with the Superintendent of Environmental Monitoring and Enforcement Group within Hamilton Water as early as possible in the approval process, given that additional review may be required by Hamilton Water to verify the wastewater system could accept the quantity and/or quality of the discharge. Email sewerusebylaw@hamilton.ca to better understand water discharges to City infrastructure. If dewatering is*

expected to exceed 50,000 L/day, registration with the Environmental Activity Sector Registry or a Permit to Take Water from the Ministry of Environment, Conservation, and Parks may be required.

- **Noted**

- *The applicant should be aware that due to the limited capacity in the combined sewer system, no long term dewatering post-construction would be supported by Hamilton Water. Foundation design should be designed accordingly. The applicant shall confirm that no long-term dewatering will be conveyed to municipal sewer infrastructure.*
  - **Noted**

We trust the above is satisfactory to the City of Hamilton, Engineering Development Section.

Yours truly,

Steve Pongracz

Steve Pongracz, C.E.T.
SP/grw

Cc Urban Solutions