



April 27 2023

Engineering & Construction Services
Metro Hall
55 John Street, 16th Floor
Toronto, Ontario M5V 3C6

Attention: Jacqueline Rodrigues, P.Eng.

Dear Mrs. Rodrigues:

Re: Response to City Comments
Zoning By-Law Amendment Application No. 21 166606 STE 13 OZ
Site Plan Control Application No.: 21 166615 STE 13 SA
Applicant: Urban Strategies Inc.
Developer: Tenblock
Location: 25 St. Mary Street Ward: 13

We are in receipt of the City's engineering submission comment letter dated March 20, 2023 and January 9, 2023 prepared for the above noted project.

Following review of the comments received, kindly find below our responses itemized as per the comments provided in your March 23, 2023 letter and under Section 4.0 of the January 9, 2023 letter:

A. REVISIONS AND ADDITIONAL INFORMATION REQUIRED FOR PLANS, STUDIES AND DRAWINGS

3. Engineering & Construction Services

- 3.1. Update the Functional Servicing Report Groundwater Summary (Long Term Discharge), to reflect changes made to the Functional Servicing and Stormwater Management Report.

Functional Servicing Report Groundwater Summary has been revised accordingly.

- 3.2. Revise the Functional Servicing and Stormwater Management Report to comply with the Sewer Capacity Assessment Guidelines found at <https://www.toronto.ca/wp-content/uploads/2021/07/96e4-ecs-specs-dcm-sewer-capacity-assessment-guidelines-July2021.pdf>

Refer to all sections as it relates to discharge to a combined sewer. Separate the report into catchments, combining the analysis for flows discharging to St. Mary Street and Inkerman Street is not accurate as the CSO at Yonge Street and St. Mary Street separate these streets into separate combined sewer catchments.

Functional Servicing and Stormwater Management Report (FSR/SWM Report) has been revised to provide separate analyses for the combined sewer networks on St. Mary Street and Inkerman Street.

- 3.3. Revise the Functional Servicing and Stormwater Management Report to address the comments provided on the attached marked up document, appended to this memorandum as Attachment 1 – Servicing & SWM Comments.

FSR/SWM Report has been revised accordingly to address all comments provided in Attachment 1.

C. REVISIONS TO PLANS AND ADDITIONAL INFORMATION REQUIRED PRIOR TO SITE PLAN APPROVAL AND THE ISSUANCE OF ANY BUILDING PERMITS (INCLUDING BELOW GRADE PERMITS)

4. Engineering & Construction Services

- 4.1. Update the general notes according to the City's General Notes Sample plan, found at: <https://www.toronto.ca/wp-content/uploads/2022/07/96be-ecs-specs-notes-general-notes-jul2022.pdf>

Civil Engineering Drawings have been revised to include the updated general notes as per City's General Notes Sample plan.

- 4.2 Revise the Site Servicing Plan to include the following notes:

- a) "The building storm and sanitary systems shall be designed to be able to operate under municipal sewer surcharge conditions".
- b) "The method of installation for the proposed service connections will be at the discretion of Toronto Water".
- c) "Existing connections no longer in use shall be disconnected by Toronto Water at the Owner's cost".
- d) "The location of the water meter shall be to Toronto Water's satisfaction".
- e) "All waste material, including any hazardous contaminated excess soils, shall be removed and disposed of off – site by the Owner in accordance with Ministry of the Environment, Conservation and Parks regulations and all other applicable statutory requirements".
- f) "The owner is required to install and maintain a premise isolation device for all applicable water services in accordance with Toronto Municipal Code, Chapter 851 Water Supply, the building code, and CSA B64 series standards".
- g) "The limits of construction within the City's right-of-way are at the discretion of the City inspector".

- h) "Prior to commencing any work within the municipal right-of-way the contractor, developer, or consultant will obtain all necessary road occupancy permits from the City's Right – of – Way Management Unit".
- i) "Be advised that should any party, including the applicant or any subsequent owner, apply for more than one condominium corporation encompassing any or all of this development or make an application that results in a land division, Staff may require legal assurances, including but limited to easements, with respect to the approved services. Such assurances will be determined at the time of application for condominium approval".
- j) "Servicing for this site includes discharge of private water into the City's combined sewer system. The owner shall apply for and obtain an exemption under City of Toronto Municipal Code Chapter 681, Sewers (the "Sewers By – Law"), where approved by the General Manager, Toronto Water, for the discharge of private water into the City's combined sewer system. Any acceptance of this drawing does not constitute an approval to connect a private water drainage system or to discharge private water to a City sewer, which approval must take the form of a discharge agreement executed by the General Manager, Toronto Water, in accordance with the Sewers By – Law. If the owner is unable to obtain an exemption in the form of a discharge agreement, or does not remain in good standing, amendments to the approved site plan or a new site plan application may be required".

Site Servicing Plan has been revised to include the aforementioned notes.

- 4.3 Regarding water balance, please provide details showing how the 12.15m³ and 0.80m³ will be fully utilized within a 72 – hour period. Please provide the calculation breakdown as to how this was determined (i.e. calculations that include the soil hydraulic conductivity, if applicable).

Irrigation calculations and detailed greywater reuse calculations will be provided at a later stage.

- 4.4 Provide a hydrant spacing plan that confirms the proposed hydrant relocation still meets the minimum hydrant spacing requirements in accordance with the City of Toronto Design Criteria for Sewers and Watermains.

Site Grading Plan has been updated to include hydrant spacing for the fire hydrant which is to be relocated.

- 4.5 Changes must be made to all applicable reports and drawings to ensure consistency.

Noted.

- 4.6 Confirm that the park servicing details are at the latest version and that they were confirmed by the Parks Department to be used.

Confirmation on the park servicing design by the Parks Department is pending.

4.7 Revise the Grading Plan to clearly identify the overland flow route (this is required in the case that all mechanical systems fail and/or run – off from storm events exceed the capacity of the City storm sewers).

Overland flow routes have been included in the Site Grading Plan.

4.10 Please confirm that all notes on the plans are not in conflict with any City of Toronto specifications and standards are of the latest revision.

All notes on Civil Engineering drawings are in accordance with the latest versions of City of Toronto specifications and standards.

4.11 Revise the Functional Servicing and Stormwater Management Report to address comments provided in the attached marked up document, appended to this memorandum as *Attachment 1 – Servicing & SWM Comments*.

FSR/SWM Report has been revised, to address the comments included in Attachment 1.

4.12 Revise the Grading and Servicing Plans to address comments provided in the attached marked up document, appended to this memorandum as *Attachment 2 – Engineering Drawing Comments*.

Grading and Servicing Plans have been revised, to address the comments included in Attachment 2.

4.13 Provide an itemized cost estimate for all items to be installed / constructed / planted within the right(s) – of – way.

An itemized cost estimate will be provided at a later submission stage.

Attachment 1 - Functional Servicing and Stormwater Management Report, by Lithos dated February, 2023.

- a) Review the summary provided within your report. As you have stated accurately here, the development cannot cause an increase in overflows at the CSO during any DWF event or WWF event.

Therefore, ALL analysis for existing and proposed flow to St. Mary Street and Inkerman Street need to be analyzed *separately*, with the presence of the CSO these streets are to be separated into the two separate catchments. (8.0 Total Flows (MECP F-5-5, pg. 12)

Section 8.0 'Total Flows' of the FSR/SWM Report has been revised to include separate analyses for the combined networks on St. Mary Street and Inkerman Street.

- b) PLEASE SEPARATE THE ANALYSIS CONSISTENTLY BETWEEN THE CATCHMENTS. THIS WILL PROVIDE MUCH NEEDED CLARITY!!!! (8.0 Total Flows (MECP F-5-5, pg. 12)

Section 8.0 'Total Flows' of the FSR/SWM Report has been revised to include separate analyses for the combined networks on St. Mary Street and Inkerman Street.

- c) How was this derived? (8.1 Total Existing Flows – Table 8.1, pg. 13)

As per City's Design Criteria for Sewers and Watermains, dated January 2021, foundation allowance has been calculated as the site area (0.5ha), multiplied by 5 L/s/ha (for sites < 10ha). Table 8.1 of the FSR/SWM Report has been revised accordingly.

- d) See table at the bottom of this page and confirm if it accurately reflects the flows and receiving sewer. Please include a table similar to the one created that clearly illustrates existing and proposed flows based on *catchment area*. Catchments are created by the presence of CSOs.

The lack of clarity between catchments continues to make this report difficult to follow. (8.2 Total Proposed Flows, pg. 14)

FSR/SWM Report has been revised, to include a table (Table 8.5), incorporating all existing and proposed flows received by the combined sewer networks on Inkerman Street and St. Mary Street.

- e) If the flows summarized below are accurately interpreted from the information provided, if you split the flows between the St. Mary St and Inkerman St the reduction of storm flows to accommodate an increase in san flows may likely achieve compliance with F-5-5. Please review and examine your options. (8.2 Total Proposed Flows, pg. 14)

According to Table 8.5 of the FSR/SWM Report, the total proposed discharge flows are smaller than the total existing discharge flows to the combined sewer networks on St. Mary Street and Inkerman Street. Therefore, the proposed development will comply with the MOECP F-5-5 procedure.

- f) What is this flow? How does it differ from Long-term GW flow? (8.2 Total Proposed Flows – Table 8.2, pg. 14)

Foundation allowance flow has been incorporated into the long-term groundwater flows, proposed for the subject developments. Tables 8.3, 8.4 and 8.5 of the FSR/SWM Report have been prepared accordingly.

- g) Summarize how this section such that it clearly follows the Sewer Capacity Assessment Guidelines: <https://www.toronto.ca/wp-content/uploads/2021/07/96e4-ecs-specs-dcm-sewer-capacity-assessment-guidelines-july2021.pdf>

i.e. Refer to the applicable flow chart, i.e. Proposed Discharge > Existing Discharge, therefore:

Criterion 1 – has/has not been met

Criterion 2 – has/has not been met

Criterion 3 – has/has not been met (8.2.1.1. External Downstream Capacity, pg. 15)

According to Table 8.5 of the FSR/SWM Report, the total proposed discharge flows are smaller than the existing discharge flows to the combined sewer networks. Therefore, as per Figure 2 of the July 2021 Sewer Capacity Assessment Guidelines, there is adequate capacity in both sewer networks, above noted. Please refer to Section 8.2 of the FSR/SWM Report.

- h) Cannot exceed 1.8m, refer to the Sewer Capacity Assessment Guidelines. (8.2.1.2 Hydraulic Grade Line Analysis, pg. 15)

Following coordination with the City, there will be no concerns regarding the Hydraulic Grade Analysis, considering the fact that the minimum available freeboard is approximately 2.92m (>1.8m). Please refer to Section 8.2.1.2 of the FSR/SWM Report for details.

- i) St. Mary St and Inkerman need to be reviewed as separate catchments due to the presence of the CSO. These totals combined the two catchment areas which is not accurate when the analysis needs to be carried up to the CSO point, as also discussed in Section 8.0 of this report (8.2.2 Wet – Weather Flows into the Combined Sewer Network, pg. 16)

FSR/SWM Report has been revised to include separate analyses for the combined networks on St. Mary Street and Inkerman Street.

- j) This is intended for design of sanitary/combined sewers. This site will have a pump that dictates the groundwater/foundation flow. You do not double count for it in this instance. (Sanitary Sewer Design Sheet 3 of 6, Appendix D)

Sanitary Sewer Design Sheet 3 of 7, found in Appendix D of the FSR/SWM Report has been updated accordingly.

- k) See table provided in the body of report. Separate based on catchment areas. (Sanitary Sewer Design Sheet 3 of 6, Appendix D)

Sanitary Sewer Design Sheet 3 of 7 has been updated, based on the fact that the combined sewer networks on Inkerman Street and St. Mary Street have been analyzed as two separate catchments.

- l) How was this number established? Why does it differ from the 9.11 L/s (sanitary flow is sanitary flow) (Pre & Post – Development Site Contribution to Combined Network Wet – Weather Flows (DAP5), Appendix D)

Pre & Post – Development Site Contribution to Combined Network Along St. Mary Street Wet – Weather Flows (DAP5), found in Appendix D of the FSR/SWM Report, has been revised to include all flows received by the combined sewer network on St. Mary Street.

Attachment 2 - Engineering Drawings, by Lithos dated February, 2023.

Site Servicing – Cross Sections (Drawing SS-02)

- a) Refer to City Std. T-708.091-4. Based on the clearances above and below, a frost box is required. (Storm Connection Section A-A)

Storm Connection Section A-A has been revised to include reference to City's standard drawing T-708.091-4.

- b) Check. This is inconsistent with the rest of the drawings and the report. (Storm Connection Section A-A)

The subject note in Storm Connection Section A-A has been revised accordingly.

- c) Label this piece of infrastructure. (Sanitary Connection Section B-B)

Sanitary Connection Section B-B has been revised to note the type of the subject infrastructure.

- d) Check if this service can come in at a springline to avoid insulation. Confirm that the invert at the property line/control MH is higher than the obvert of the mainline. (Sanitary Connection Section B-B)

Sanitary Connection Section B-B has been lowered, in order to avoid insulation. The invert of the proposed lateral connection at the control MH is higher than the obvert of the mainline.

- e) It should be noted that if the gas main is lower than anticipated a vertical bend will need to be installed. (Water Connection Section C-C)

Water Connection Section C-C has been revised to include a note, stating that, should the depth of the existing 600mm diameter gas main is greater than anticipated, a vertical bend may be required.

Erosion Control Plan (Drawing EC-01)

- f) Add note: "The limits of construction within the City's right-of-way are the discretion of the City inspector".

Drawing EC-01 has been revised to include the subject note.

Comments from January 9, 2023 memorandum

C. REVISIONS TO PLANS AND ADDITIONAL INFORMATION REQUIRED PRIOR TO SITE PLAN APPROVAL AND THE ISSUANCE OF ANY BUILDING PERMITS (INCLUDING BELOW GRADE PERMITS)

4. Engineering & Construction Services

- 4.1 Update the general notes according to the City's General Notes Sample plan, found at: <https://www.toronto.ca/wp-content/uploads/2022/07/96be-ecs-specs-notes-general-notes-jul2022.pdf>

Civil Engineering Drawings have been revised to include the updated general notes as per City's General Notes Sample plan.

- 4.2 Revise the Site Servicing Plan to include the following notes:

- a) "The building storm and sanitary systems shall be designed to be able to operate under municipal sewer surcharge conditions".
- b) "The method of installation for the proposed service connections will be at the discretion of Toronto Water".

- c) "Existing connections no longer in use shall be disconnected by Toronto Water at the Owner's cost".
- d) "The location of the water meter shall be to Toronto Water's satisfaction".
- e) "All waste material, including any hazardous contaminated excess soils, shall be removed and disposed of off – site by the Owner in accordance with Ministry of the Environment, Conservation and Parks regulations and all other applicable statutory requirements".
- f) "The owner is required to install and maintain a premise isolation device for all applicable water services in accordance with Toronto Municipal Code, Chapter 851 Water Supply, the building code, and CSA B64 series standards".
- g) "The limits of construction within the City's right-of-way are at the discretion of the City inspector".
- h) "Prior to commencing any work within the municipal right-of-way the contractor, developer, or consultant will obtain all necessary road occupancy permits from the City's Right – of – Way Management Unit".
- i) "Be advised that should any party, including the applicant or any subsequent owner, apply for more than one condominium corporation encompassing any or all of this development or make an application that results in a land division, Staff may require legal assurances, including but limited to easements, with respect to the approved services. Such assurances will be determined at the time of application for condominium approval".
- j) "Servicing for this site includes discharge of private water into the City's combined sewer system. The owner shall apply for and obtain an exemption under City of Toronto Municipal Code Chapter 681, Sewers (the "Sewers By – Law"), where approved by the General Manager, Toronto Water, for the discharge of private water into the City's combined sewer system. Any acceptance of this drawing does not constitute an approval to connect a private water drainage system or to discharge private water to a City sewer, which approval must take the form of a discharge agreement executed by the General Manager, Toronto Water, in accordance with the Sewers By – Law. If the owner is unable to obtain an exemption in the form of a discharge agreement, or does not remain in good standing, amendments to the approved site plan or a new site plan application may be required".

Site Servicing Plan has been revised to include the aforementioned notes.

4.3 Regarding water balance, please provide details showing how the 12.15m³ and 0.80m³ will be fully utilized within a 72 – hour period. Please provide the calculation breakdown as to how this was determined (i.e. calculations that include the soil hydraulic conductivity, if applicable).

Irrigation calculations and detailed greywater reuse calculations will be provided at a later stage.

4.4 Relocate one of the 'h' connections to a different watermain on St. Nicholas Street to provide the added redundancy / fire protection for the building, upon confirmation of the watermain's capacity, as noted in Section A. If there are capacity constraints that prevent this, a valve on the main is required.

Site Servicing Plan has been updated accordingly.

4.5 Provide a hydrant spacing plan that confirms the proposed hydrant relocation still meets the minimum hydrant spacing requirements in accordance with the City of Toronto Design Criteria for Sewers and Watermains.

Site Grading Plan has been updated to include hydrant spacing for the fire hydrant which is to be relocated.

4.6 Changes must be made to all applicable reports and drawings to ensure consistency.

Noted.

4.7 Show location of and label water meter and backflow preventer on the plans. The room where the water meter is located shall be positioned in the building such that it is adjacent to the outside wall of the building at the point where the private water service pipe enters the building. Refer to Note 20 on p.82 (drawing T-1107.03-1) of the City's Water Servicing and Metering Manual.

Water meters and backflow preventers have been included in Site Servicing Plan and the legend of the subject drawing has been updated accordingly. Water meters will be installed as per City's standard drawing T-1107.03-1. A related note has also been included in Site Servicing Plan.

4.8 Show the above grade building exterior wall on the sanitary and storm details to demonstrate that the storm and sanitary control maintenance holes and groundwater sampling port are all located outside of the building and accessible to City staff.

Site Servicing Plan has been revised to include the above grade building outline. All storm and sanitary control maintenance holes, as well as the groundwater sampling port, have been located outside of the building footprint.

4.9 Confirm that the park servicing details are at the latest version and that they were confirmed by the Parks Department to be used.

Confirmation on the park servicing design by the Parks Department is pending.

4.10 Revise the Grading Plan to clearly identify the overland flow route (this is required in the case that all mechanical systems fail and/or run – off from storm events exceed the capacity of the City storm sewers).

Arrows for overland flow route have been included in the Site Grading Plan.

4.11 Provide written confirmation from the structural/building engineer designing the building that the floor slabs and sidewalls of the stormwater management tank will be designed to take most critical loading including the full height of the maximum volume of stormwater management tanks. This letter must be stamped and signed by a licensed Professional Engineer.

The subject letter has been included in Appendix B of the Functional Servicing and Stormwater Management Report.

4.14 Please confirm that all notes on the plans are not in conflict with any City of Toronto specifications or standards and that references made to City specifications and standards are of the latest version.

All notes on Civil Engineering drawings are in accordance with the latest versions of City of Toronto specifications and standards.

4.16 Revise the Grading and Servicing Plans to address comments provided in the attached marked up document, appended to this memorandum as *Attachment 2 – Engineering Drawing Comments*.

Grading and Servicing Plans have been revised to address the comments included in Attachment 2.

4.17 Provide an itemized cost estimate for all items to be installed / constructed / planted within the right(s) – of – way.

An itemized cost estimate will be provided at a later submission stage.

Attachment 2 - Engineering Drawings, by Lithos dated November, 2022.

Site Servicing Plan (Drawing SS-01)

a) Confirm that the inlets/sampling ports are separated between the two buildings rooftops. Identify this (i.e. East Tower sampling port, West Tower sampling port).

Site Servicing Plan has been revised to include separate inlets/sampling ports for the East and West sampling ports.

b) disconnected and capped at the main by City forces at the Owner's expense

Site Servicing Plan has been revised to include the subject note.

c) disconnected and capped at the main by City forces at the Owner's expense

Site Servicing Plan has been revised to include the subject note.

d) disconnected and capped at the main by City forces at the Owner's expense

Site Servicing Plan has been revised to include the subject note.

e) A valve is needed between the two connections.

Site Servicing Plan has been revised to include a valve between the two proposed water connections.

Site Servicing – Cross Sections (Drawing SS-02)

f) Provide a cross-section of the details for the insulated connection. Refer to City Std. T-708.01-4.

A cross section for the insulated connection as per City's standard drawing T-708.01-4 has been provided accordingly.

g) Identify max release rate.

Storm connection section D-D has been revised to include the maximum release rate of the proposed Stormtech chambers.

Composite Landscape and Utilities Plan (Drawing CP-01)

h) The sampling ports should be shown on this plan.

Composite Landscape and Utilities Plan has been revised to incorporate the proposed sampling ports.

Should you have any further questions, please feel free to contact the undersigned.

Yours truly,



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Project Design Manager

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