

## SERVICING REPORT GROUNDWATER SUMMARY

The form is to be completed by the Professional that prepared the Servicing Report.  
 Use of the form by the City of Toronto is not to be construed as verification of engineering/hydrological content.

<b>For City Staff Use Only:</b>	
<b>Name of ECS Case Manager (please print)</b>	
<b>Date Review Summary provided to to TW</b>	

A. SITE INFORMATION	Included in SR (reference page number)	Report Includes this information City staff (Check)
Date Servicing Report was prepared: <span style="float: right;">December 14, 2018</span>	i	
Title of Servicing Report: <span style="float: right;">11-25 Yorkville Avenue Functional Servicing Report</span>	i	
Name of Consulting Firm that prepared Servicing Report: <span style="float: right;">WSP Canada Group Limited</span>	ii	
Site Address <span style="float: right;">11-21 Yorkville Avenue and 16-18 Cumberland Avenue Toronto, Ontario</span>	Pg. 1	
Postal Code <span style="float: right;">M4W 1L1</span>	Pg. 1	
Property Owner (identified on planning request for comments memo) <span style="float: right;">11 Yorkville Partnership Inc.</span>	Pg. 1	
Proposed description of the project (ex. number of point towers, number of podiums, etc.) <span style="float: right;">Building A: 1 point tower -62 Storey Mixed-Use Tower Building B: 1 point tower - 2 Storey Retail Building</span>	Pg. 1	
Land Use (ex. commercial, residential, mixed, industrial, institutional) as defined by the Planning Act <span style="float: right;">Mixed Use</span>	Pg. 1	
Number of below grade levels <span style="float: right;">Building A: 4 levels Below Grade Building B: 1 level Below Grade</span>	Pg. 1	

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<p>Does the SR include a private water drainage system (PWDS)?</p> <p><b>PWDS: Private Water Drainage System:</b> A subsurface drainage system which may consist of but is not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection or drainage system for disposal in a municipal sewer.</p>	<p>If <b>Yes</b> continue completing Section B (Information Relating to Groundwater) <b><u>ONLY</u></b></p> <p><b>If Yes, Number of PWDS?</b>  <u>Two Systems</u></p> <p><i>(Each of these PWDS may require a separate Toronto Water agreement)</i></p> <p>If <b>No</b> skip to Sections C (On-site Groundwater Containment) and/or D (Water Tight Requirements) as applicable</p>	<p><input checked="" type="radio"/> YES</p> <p><input type="radio"/> NO</p>	
<p><b>B. INFORMATION RELATING TO GROUNDWATER</b></p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>A copy of the pump schedule(s) for <b>ALL</b> groundwater sump pump(s) for the development site has been included in the FSR</p> <p style="text-align: center;"><b>or</b></p> <p>A letter written by a Mechanical Consultant (signed and stamped by a Professional Engineer of Ontario) shall be attached to the SR stating the peak flow rate of the groundwater discharge for the development site for all groundwater sump pump(s). This peak flow rate must be based on the pump schedule(s) that have been designed by the Mechanical Consultant. A template of this letter is attached in Schedule A.</p>	<p>The groundwater pumping rate letter from MCW can be found in Appendix D of the Functional Servicing Report.</p>	<p>Appendix D of the FSR.</p>	

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<p><b>**If there is more than one sump they must ALL be included in the letters along with a combined flow**</b></p>			
<p>Is it proposed that the groundwater from the development site will be discharged to the sanitary, combined or storm sewer?</p>	<p><input type="radio"/> Sanitary Sewer</p> <p><input checked="" type="radio"/> Combined Sewer</p> <p><input type="radio"/> Storm Sewer</p>	<p>Pg. 10</p>	
<p>Will the proposed PWDS discharge from the site go to the Western Beaches Tunnel (WBT)?</p> <p>*Reference attached WBT drainage map*</p>	<p><input type="radio"/> YES      <input checked="" type="radio"/> NO</p> <p><b>If Yes, private water discharge fees will apply and site requires a sanitary discharge agreement.</b></p>		
<p>What is the street name where the receiving sewer is located?</p>	<p>Building A: Yorkville Avenue Building B: Public Laneway</p>	<p>Pg. 7, 8</p>	
<p>What is the diameter of the receiving sewer?</p>	<p>Yorkville Avenue: 600 mm Diameter Combined Sewer Public Laneway: 300 mm Diameter Combined Sewer</p>	<p>Pg. 7, 8</p>	
<p>Is there capacity in the proposed local sewer system?</p> <p><input checked="" type="radio"/> YES      <input type="radio"/> NO</p>	<p>Are there any improvements required to the sewer system? If yes, identify them below and refer to the section and page number of the FSR where this information can be found.</p> <p style="text-align: center;">No.</p> <p>If a sewer upgrade is required, the owner is required to enter into an Agreement with the City to improve the infrastructure?</p> <p style="text-align: right;"><input type="radio"/> YES</p>	<p>Pg. 8, 9</p>	
<p>Total allowable peak flow rate during a 100 year storm event (L/sec) to storm sewer</p> <p>When groundwater is to be discharged to the storm sewer the total groundwater and stormwater discharge shall not exceed the permissible peak flow rate during a 2 year pre development storm event, as per the City's</p>	<p>35.2 L/s for Building A 4.4 L/s for Building B</p>	<p>Pg. 17</p>	

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<p>Wet Weather Flow Management Guidelines, dated 2006</p>			
<p><b>Short-Term Groundwater Discharge</b> Provide proposed total flow rate to the sanitary/combined sewer in post-development scenario</p> <p>Total Flow (L/sec) = sanitary flow + peak short-term groundwater flow rate</p>	<p style="text-align: center;">           0 L/s San flow (bldg is not complete yet)            + 3.15 L/s (Bldg A)            + 0.16 L/s (Bldg B)  <hr style="width: 20%; margin: 0 auto;"/> <b>= 3.31</b> L/sec         </p>	<p>Pg. 10, 11</p>	
<p><b>Long-Term Groundwater Discharge</b> Provide proposed total flow rate to the sanitary/combined sewer in post-development scenario</p> <p>Total Flow (L/sec) = sanitary flow + peak long-term groundwater flow rate</p>	<p style="text-align: center;"> <hr style="width: 20%; margin: 0 auto;"/> <b>19.73</b> L/sec         </p>	<p>Pg. 7, 10</p>	
<p>Does the water quality meet the receiving sewer Bylaw limits?</p> <p><input type="radio"/> YES</p> <p><input checked="" type="radio"/> NO <span style="border: 1px solid blue; padding: 2px;">A settlement tank is required</span></p>	<p>If the water quality does not meet the applicable receiving sewer Bylaw limits and the applicant is proposing a treatment system the applicant will need to include a letter stating that a treatment system will be installed and the details of the treatment system will be included in the private water discharge application that will be submitted to TW EM&amp;P.</p>	<p>Pg. 10, 11</p>	
<p><b>C. ON-SITE GROUNDWATER CONTAINMENT</b></p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>How is the site proposing to manage the groundwater discharge on site?</p>	<p>Discharge to Sanitary Sewer</p>	<p>Pg. 10</p>	

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<p>Has the above proposal been approved by:</p>	<p><input type="radio"/> TW-WIM And <input type="radio"/> TW-EM&amp;P And <input type="radio"/> ECS</p>		
<p>If the site is proposing a groundwater infiltration gallery, has it been stated that the groundwater infiltration gallery will not be connected to the municipal sewer? A connection between the infiltration gallery/dry well and the municipal sewer is not permitted</p> <p>Please be advised if an infiltration gallery/dry well on site is not connected to the municipal sewer, the site <b>must</b> submit two letters using the templates in Schedule B and Schedule C.</p>	<p><input type="radio"/> YES  <input type="radio"/> NO</p>		
<p>Confirm that the infiltration gallery can infiltrate 100% of the expected peak groundwater flow year round, ensure that the top of the infiltration trench is below the frost line (1.8m depth), not less than 5 m from the building foundation, bottom of the trench 1m above the seasonally high water table, and located so that the drainage is away from the building.</p>			
<p><b>D. WATER TIGHT REQUIREMENTS</b></p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff</p>

October 2017


## SERVICING REPORT GROUNDWATER SUMMARY

		(Check)
If the site is proposing a water tight structure:  1. The owner must submit a letter using the template in Schedule D.  2. A Professional Engineer (Structural), licensed to practice in Ontario and qualified in the subject must submit a letter using the template in Schedule E.		

**Provide a copy of the approved SR to Toronto Water Environmental Monitoring & Protection Unit at [pwapplication@toronto.ca](mailto:pwapplication@toronto.ca).**

Consulting Firm that prepared Servicing Report: WSP CANADA GROUP LIMITED

Professional Engineer who completed the report summary: Patrice Desdunes  
Print Name

Professional Engineer who completed the report summary:  2018-12-14  
Signature Date & Stamp

**Schedule A: Template Letter from Mechanical Consultant confirming peak groundwater flow rate**

[Mechanical Consultant Company Letterhead]  
 [Company Name]  
 [Company Address and Contact Information]

As requested, please see attached letter from Mechanical on following page.

[Date]  
**Attention:** Executive Director, Engineering and Construction Services  
 c/o Manager, Development Engineering  
 [ADDRESS]

**cc:** General Manager, Toronto Water  
 c/o Manager, Environmental Monitoring and Protection Unit  
 30 Dee Ave, Toronto ON M9N 1S9

October 2017

## SERVICING REPORT GROUNDWATER SUMMARY

Dear Sir or Madam,

This letter is to confirm that groundwater from the Private Water Drainage System [Description] will be collected and discharged into the [SANITARY OR STORM] control manhole, at a maximum peak flow rate of [XX L/sec] (groundwater peak flow rate).

The groundwater sump pumps will be sized at [XX L/sec] and are expected to run approximately [XX hours per day].

This peak flow rate will be used for assessing capacity for the peak discharge flow into the City's [SANITARY OR STORM] sewer system.

Once the proposed groundwater peak flow rate of [XX L/sec] is approved by Engineering Construction Services (ECS), City of Toronto at the [ZONING/RE-ZONING] stage, the property owner will not be allowed to amend this flow rate in the future. Should there be any amendment to the peak flow rate of [XX L/sec] in future, the property owner shall re-submit either the updated pump schedule or a revised letter to ECS. In addition, the sewer capacity will need to be re-assessed.

\_\_\_\_\_  
Name (printed)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Stamp

### Schedule B: Template Letter from the Property Owner confirming that infiltration gallery/dry well is not connected to the municipal sewer

[Company Letterhead]

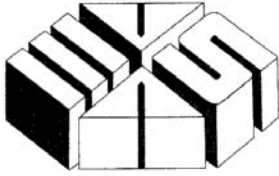
[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

**Attention:** Executive Director, Engineering and Construction Services  
c/o Manager, Development Engineering  
[ADDRESS]

**cc:** General Manager, Toronto Water  
c/o Manager, Environmental Monitoring and Protection Unit  
30 Dee Ave, Toronto ON M9N 1S9



**M.V. SHORE**  
ASSOCIATES (1993) LIMITED

Consulting Professional Engineers

April 30, 2018

Project no: 17-052

Attention: **Executive Director, Engineering & Construction Services**  
**16/F, 55 John Street, Toronto, ON M5V 3C6**

c/o: **Avi Bachar, P.Eng. PMP**  
**Manager, Development Engineering**  
**Engineering and Construction Services**

cc: **General Manager, Toronto Water**

c/o: **Manager, Environmental Monitoring & Protection Unit**  
**30 Dee Ave, Toronto ON M9N 1S8**

Address: **11 Yorkville Avenue, Toronto**

Dear Sir or Madame;

This letter is to confirm that the permanent Private Water Drainage system from ground water will be collected and discharged into sanitary control manholes, at a maximum daily peak flow rate of:-

- High-rise building: 196m<sup>3</sup>/day (average 2.27L/s or 36USgpm) per figure provided in Hydrogeological Assessment Report prepared by EXP Services Ltd dated March 13, 2018)
- Commercial building: 9.0m<sup>3</sup>/day (average 0.1L/s or 1.6USgpm) per figure provided in Hydrogeological Assessment Report prepared by EXP Services Ltd dated March 13, 2018)

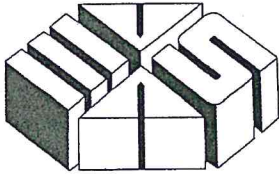
Groundwater pumps will be provided and sized to handle the above flow rate:-

- High-rise building: pump will be sized at 6.3 L/s (100 Us gpm) and is expected to run approximately 8.5 hours per day.
- Commercial building: pump will be sized at 0.63 L/s (10 Us gpm) and is expected to run approximately 3.85 hours per day.

Groundwater pump for each building will discharge water to their respective sanitary control manhole.

This daily peak flow rate will be used for assessing capacity for the peak discharge flow into the City's combined sewer system.





**M.V. SHORE**  
ASSOCIATES (1993) LIMITED

Consulting Professional Engineers

Once the proposed ground water daily peak flow rate of 196m<sup>3</sup>/day for the high-rise building and 9m<sup>3</sup>/day for the commercial building is approved by Engineering Construction Services (ECS), City of Toronto, the Property Owner will not be allowed to amend this flow rate in the future. Should there be any amendment to the daily peak flow rate in the future, the Property Owner shall re-submit either the updated pump schedule or a revised letter to ECS. In addition, the sewer capacity will need to be re-assessed.

For additional information, please contact the undersigned.

.....  
Bill Chan, P.Eng.



Seal

**NOT APPLICABLE**

**SERVICING REPORT GROUNDWATER SUMMARY**

Dear Sir or Madam,

I \_\_\_\_\_, confirm and undertake that I will maintain all building(s) on the subject lands (MUNICIPAL ADDRESS) in a manner which will not discharge, directly or indirectly, any private water collected from subsurface drainage system consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer. All the water collected in the sub-drainage collection system will be **managed onsite all time via infiltration gallery/dry well**. There will be no direct or indirect discharge of private water to City's sewer.

I am aware of MOECC and OBC requirements regarding infiltration gallery/dry well.

\_\_\_\_\_  
Name (printed) and Title

\_\_\_\_\_  
Email

\_\_\_\_\_  
Signature

I, [PRINT NAME], have the authority to bind the corporation.

**Schedule C: Template Letter from a Professional (P.Eng or P.Geo) confirming that infiltration gallery/dry well is not connected to the municipal sewer**

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

**Attention:** Executive Director, Engineering and Construction Services  
c/o Manager, Development Engineering  
[ADDRESS]

**Cc:** General Manager, Toronto Water  
c/o Manager, Environmental Monitoring and Protection Unit  
30 Dee Ave, Toronto ON M9N 1S9

**NOT APPLICABLE**

**SERVICING REPORT GROUNDWATER SUMMARY**

Dear Sir or Madam,

I \_\_\_\_\_, confirm that all building(s) on the subject lands (MUNICIPAL ADDRESS) has been constructed in a manner that will not discharge, directly or indirectly, any private water collected from subsurface drainage system consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer. All the water collected in the sub-drainage collection system will be **managed onsite all time via infiltration gallery/dry well.** There will be no direct or indirect discharge of private water to City's sewer.

I am aware of MOECC and OBC requirements regarding infiltration gallery/dry well.

\_\_\_\_\_  
Name (printed)

\_\_\_\_\_  
Professional Title [P.Geo or P.Eng (specify which discipline)]

\_\_\_\_\_  
Email

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Stamp

**Schedule D: Template Letter from the Property Owner confirming water tight structure**

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

**Attention:** Executive Director, Engineering and Construction Services  
c/o Manager, Development Engineering

[ADDRESS]

cc: General Manager, Toronto Water  
c/o Manager, Environmental Monitoring and Protection Unit  
30 Dee Ave, Toronto ON M9N 1S9

Dear Sir or Madam,

**SERVICING REPORT GROUNDWATER SUMMARY**

I \_\_\_\_\_, confirm and undertake that I will construct and maintain all building(s) on the subject lands (MUNICIPAL ADDRESS) in a manner which shall be completely **water-tight below grade and resistant to hydrostatic pressure** without any necessity for Private Water Drainage System (subsurface drainage system) consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer.

\_\_\_\_\_  
Name (printed) and Title

\_\_\_\_\_  
Email

\_\_\_\_\_  
Signature

I, [PRINT NAME], have the authority to bind the corporation.

**Schedule E: Template Letter from a Professional Engineer (Structural) confirming water tight structure**

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

**Attention:** Executive Director, Engineering and Construction Services  
c/o Manager, Development Engineering  
[ADDRESS]

**cc:** General Manager, Toronto Water  
c/o Manager, Environmental Monitoring and Protection Unit  
30 Dee Ave, Toronto ON M9N 1S9

**SERVICING REPORT GROUNDWATER SUMMARY**

Dear Sir or Madam,

I \_\_\_\_\_, confirm that all buildings on the subject lands (MUNICIPAL ADDRESS) can be constructed completely water-tight below grade in a manner that will resist hydrostatic pressure without any necessity for Private Water Drainage System (subsurface drainage system) consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer.

\_\_\_\_\_  
Name (printed)

\_\_\_\_\_  
Professional Title [P.Eng (Structural)]

\_\_\_\_\_  
Email

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Stamp