

LSRCA Hydrogeological Submission Acknowledgement

I, Name: Craig Kelly, Credentials: P. Geo. (i.e. P.Geo, or exempted P.Eng. as determined within the *Professional Geoscientists Act of Ontario*), confirm that I am a professional familiar with applicable documents, guidelines and criteria pertaining to groundwater management and that the submission entitled:

Report Name: Hydrogeological Assessment – Proposed Commercial Development, Southwest Corner of Yonge Street and Mapleview Drive East, Barrie, Ontario, with associated Drawings: Figures 1, 2A, 2B, 3, 4A, 4B has been reviewed by me and addresses the key components in the check list included below.

I acknowledge that hydrogeological sign-off or sign-off from another discipline pertaining to this submission or a portion of this submission does not constitute a permit from LSRCA. A permit will be required for all works within an LSRCA Regulated Area in accordance with Ontario Regulation 179/06 and additional information may be required as part of the permit process.

I acknowledge that an incomplete submission will result in processing delays and may be returned and/or additional information may be requested.

Signature:  Printed Name: CRAIG KELLY

Name of Consulting Firm: PINCHIN LTD.

Date: 04/20/22 (mm/dd/yy)



LSRCA Hydrogeological Submission Checklist

The following checklist refers to the requirements when submitting a detailed design submission. These same requirements apply to functional design submissions as well, with the exception of the detailed design drawings. The functional design needs to provide sufficient detail to demonstrate the proposed development concept will be capable of meeting the hydrogeological requirements at the detailed design stage.

For items that have been included, please fill in the report section and report page along with appendix location or drawings pertaining to each item. For items not included, check “No” or “N/A” (Not Applicable) for each item. If “No” or “N/A” are checked, please provide an explanation in the note section of why the criteria do not apply in a particular instance. Please note that the submission may be deemed incomplete and that additional consultation with LSRCA may be required prior to submission acceptance.

The checklist below refers to requirements for every development type, therefore the **LSRCA Hydrogeological Submission Guidelines (2013)** should be referred to for specific study requirements for your type of Planning Act application. For example, the study scope may be reduced for single lot residential applications. Please contact LSRCA to scope study requirements prior to undertaking work.

Yes			No	N/A	Item	Comment
Report Section	Report Page	Drawing/ Appendix				
Discussions were undertaken with the LSRCA hydrogeological team prior to the onset of the field work				N/A	Pre-submission consultation with LSRCA has been completed as recommended in the Hydrogeological Assessment Submission Guidelines (2013).	
Section 1 to 10	Page 1 to 14	Figure 1, 2A, 2B, 3, 4A, 4B; Appendix I, II, III, IV, V, VI			The hydrogeological report has been prepared as a standalone document . (i.e., all references, calculations and drawings, Thornthwaite-Mather water balance assessment, are included within the document).	
To be provided					A Hard Copy of all reports and all drawings (folded individually to 8.5” x 11” size) has been submitted for LSRCA review.	
Section 3, 4	Page 2 to 6	Figure 4A, 4B; Appendix III, Table 1			Geological Characterization as per Section 3.1	

Yes			No	N/A	Item	Comment
Report Section	Report Page	Drawing/Appendix				
Section 2	Page 2	Figure 3, 4A, 4B; Appendix III, Table 1			Test pits/Boreholes as per Section 3.1.6 (Required for detailed design)	
Section 2	Page 2	Figure 3, 4A, 4B; Appendix III, Table 1			Monitoring Wells as per Section 3.1.7 (Preliminary data required for functional design)	
Section 3.5	Page 3 to 4	Figure 3			Private Well Survey as per Section 3.1.8	
Section 4.1 to 4.2	Page 5 to 6	Figure 4A, 4B; Appendix III, Table 1			Characterization of the local hydrostratigraphy/hydrogeology as per Section 3.1.9	
Section 3.1	Page 2 to 3				Description of Surface Water Features and Functions as per Section 3.1.10	
Section 4.4	Page 6				Water Quality as per Section 3.1.12	
				N/A	D-5-5 Water Supply (private servicing only) as per Section 3.1.13	
Section 4.2	Page 6	Table 1			Groundwater Levels as per Section 3.2.1 (Preliminary data required for functional design)	
				N/A	Pumping Tests as per Section 3.2.2	
				N/A	Groundwater Discharge (Baseflow) as per Section 3.2.3	
Section 6	Page 7 to 11	Appendix V, VI			Pre- and Post-Development Water Balance Assessment as per Section 3.2.4	
				N/A	D-5-4 (Onsite Sewage Systems only) as per Section 3.2.6	
Section 6.7	Page 11				Infiltration/recharge mitigation plan as per Section 3.3	
				N/A	In-situ infiltration testing as per Section 3.3	To be undertaken at the time of Civil Engineers Design (location selection)
				N/A	Low impact development design calculations	To be undertaken at the time of Civil Engineers Design (location selection)

Submission/Resubmission Requirements:

1. A completed response matrix which includes a detailed response outlining how each of the comments above have been addressed with reference to applicable reports/drawings (i.e. specific sections/pages/details or tab identifiers).
2. The response matrix is to also include a summary of any additional changes to the design (i.e. in addition to those not identified in the detailed response to comments, and includes changes to reports, drawings, details, facility design, etc.).
3. All drawings are to be folded (8.5 x 11).
4. Reports and engineering drawings/details are to be signed and sealed by a Professional Geoscientist or Professional Engineer as appropriate.
5. Reports are to include a digital copy of applicable models on a Data CD or USB Thumb Drive.
6. All submissions/reports are to include applicable technical components which achieve the minimum requirements outlined in the LSRCA Technical Guidelines for Stormwater Management Submissions, September 2016.

Important Notes and References:

1. Please contact the LSRCA to scope any required Environmental Impact Study or Natural Heritage Evaluation. Information regarding ecological offsetting policy can be found here <https://www.lsrca.on.ca/Shared%20Documents/Ecological-Offsetting-Plan-2019.pdf>
2. The stormwater management submission is required to be prepared in accordance with "LSRCA Technical Guidelines for SWM Submissions" https://www.lsrca.on.ca/Shared%20Documents/permits/swm_guidelines.pdf
3. Submissions are to be in accordance with the LSRCA Watershed Development Guidelines <https://www.lsrca.on.ca/Shared%20Documents/permits/watershed-development-guidelines.pdf?pdf=Watershed-Development-Guidelines>
4. The hydrogeological analysis is required to be prepared in accordance with "Hydrogeological Assessment Submissions: Conservation Authority Guidelines for Development Applications" https://www.lsrca.on.ca/Shared%20Documents/permits/hydrogeological%20_guidelines.pdf?pdf=Hydrogeological-Guidelines
5. Where the LSPOP applies, submissions are to be in accordance with the LSPOP found here: <https://www.lsrca.on.ca/watershed-health/phosphorus>
6. Low Impact Development Treatment Train Tool can be found here: <https://www.lsrca.on.ca/Pages/LIDTTTool.aspx>
7. [LSPP Water Balance Offsetting Policy: applies to all new applications under the planning act received after 1 January 2019, details can be found here:](#) <https://www.lsrca.on.ca/Shared%20Documents/lssp-water-budget-policy.pdf>
8. LSRCA Review Fees can be found here: <https://www.lsrca.on.ca/permits/permit-fees>