



**COMMITTEE OF ADJUSTMENT NOTICE OF PUBLIC HEARING  
APPLICATION NO. A-004-2024**

**TAKE NOTICE** that an application has been received by the Town of Innisfil from **Shayne Connors, Agent**, on behalf of **Parkbridge Lifestyle Communities Inc., Owner**, for a minor variance from Zoning By-law 080-13, pursuant to Section 45 of the *Planning Act*, R.S.O. 1990, c. P.13, as amended.

The subject property is described legally as **PLAN 51M1189 BLK 318** is known municipally as **2979 Middlemass Stret**, and is zoned as “**Residential Townhouse EXCEPTION 5 HOLDING SYMBOL (RT-5 (H))**”.

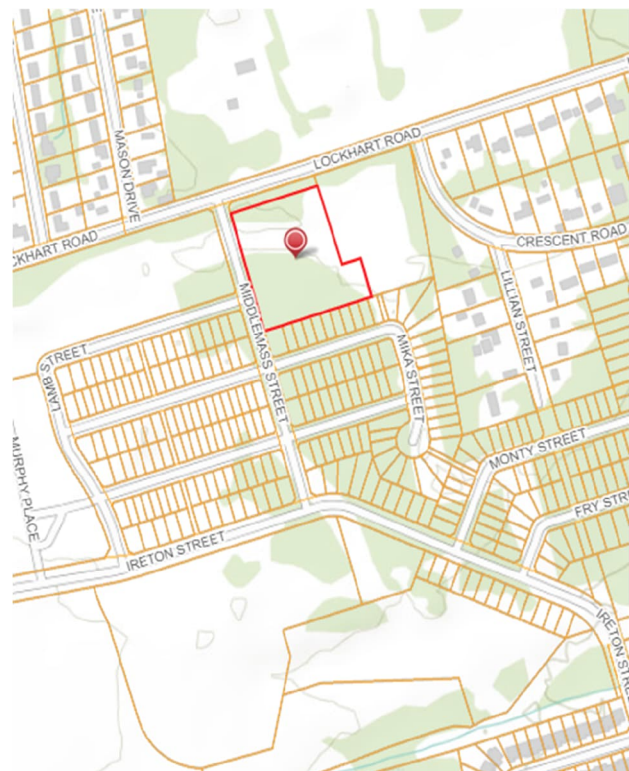
**The applicant is proposing to construct multiple townhouses with a deficient Landscape Open Space ratio of 31.6%. The applicant is seeking relief from Section 4.2 (b) of the Zoning By-law which requires a minimum Landscape Open Space ratio of 35% in RT zones.**

The Committee of Adjustment for the Town of Innisfil will consider this application in person at Town Hall and virtually through Zoom on **Thursday, April 18, 2024 at 6:30 PM.**

To participate in the hearing and/or provide comments, you must register by following the link below or scanning the above QR code: <https://innisfil.ca/en/building-and-development/committee-of-adjustment-hearings.aspx>

Requests can also be submitted in writing to: Town of Innisfil Committee of Adjustment, 2101 Innisfil Beach Road, Innisfil, Ontario, L9S 1A1 or by email to [planning@innisfil.ca](mailto:planning@innisfil.ca).

If you wish to receive a copy of the decision of the Committee of Adjustment in respect of the proposed minor variance, you must make a written request to the Secretary-Treasurer of the Committee of Adjustment by way of email or regular mail. The Notice of Decision will also explain the process for appealing a decision to the Ontario Lands Tribunal.



Additional information relating to the proposed application is available on the Town of Innisfil website. Accessible formats are available on request, to support participation in all aspects of the feedback process. To request an alternate format please contact Planning Services at [planning@innisfil.ca](mailto:planning@innisfil.ca).

Dated: **April 2, 2024**

Toomaj Haghshenas,  
Secretary-Treasurer  
[thagshenas@innisfil.ca](mailto:thagshenas@innisfil.ca)  
705-436-3710 ext. 3316



March 14<sup>th</sup>, 2024

Darren Ding | Development Planner  
Town of Innisfil  
2101 Innisfil Beach Road  
Innisfil, ON L9S 484

Dear Mr. Ding;

**RE: Innis Village Phase 2C Minor Variance – Planning Justification Brief  
Innis Village Subdivision 51M-1189 (Lots 26 and 27, Concession 10), Block 318,  
Innisfil, ON  
OUR FILE 18129V**

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MacNaughton Hermsen Britton Clarkson Planning Limited (“MHBC”) was retained by Parkbridge Lifestyle Communities Inc. (the “Owner”) to review the planning merits of a proposed Minor Variance application to facilitate the construction of a 38-unit townhouse land lease development known as Innis Village Phase 2C (the “Proposed Development”). The property is municipally known as 2979 Middlemass Street, Innisfil (the “Site”). The scope of this Planning Justification Brief is to provide a brief overview of the Proposed Development, as well as request relief from the minimum requirement of 35% for Landscaped Open Space under Zoning By-law 080-13.

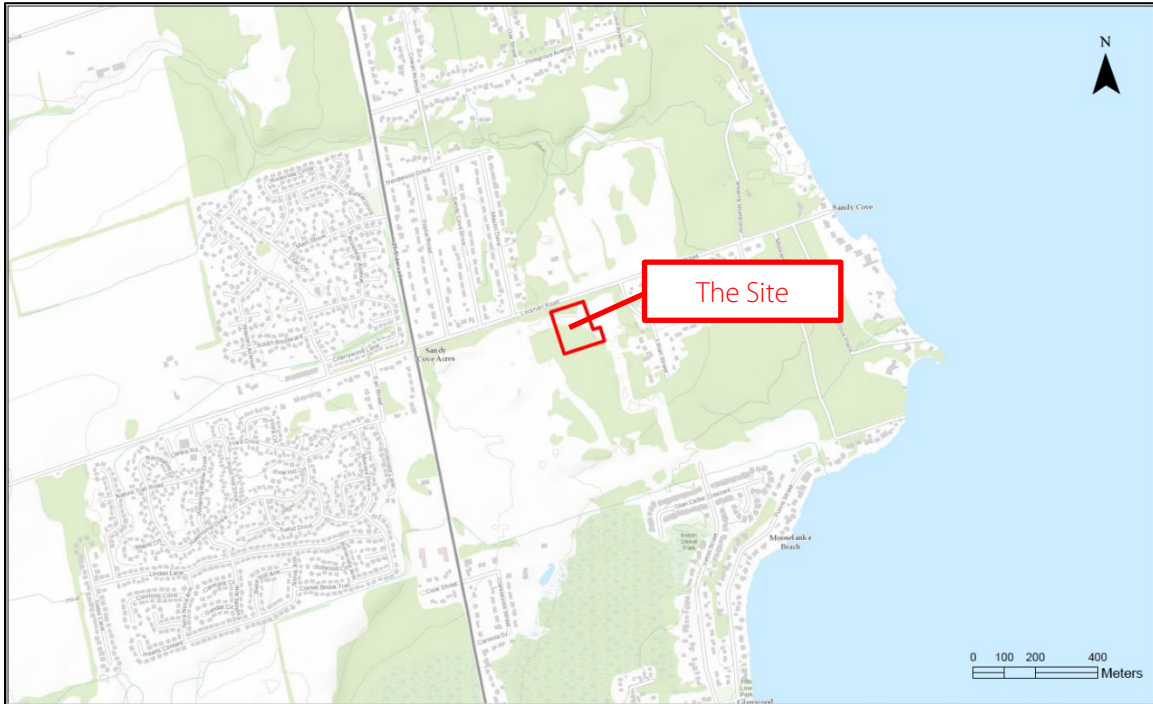
## **1.0 PROJECT OVERVIEW**

The Site is a registered Block within the Innis Village Draft Plan of Subdivision and is municipally addressed as 2979 Middlemass Street in the Town of Innisfil. The Site is currently vacant and has approximately 141.5 metres of frontage along Middlemass Street, as well as a lot area of 1.68 hectares (4.15 acres). The location of the Site is shown in **Figure 1** below.

The Site is designated “Residential Medium Development” on Schedule B5 to the Town of Innisfil Official Plan (see **Figure 2**) and is located along a “local road” on Schedule C to the Town of Innisfil Official Plan.

The Site is currently zoned the “Residential Townhouse Exception Five (RT-5) Zone” in the Town’s Comprehensive Zoning By-law (see **Figure 3**).

**Figure 1 – Site Location**



## **2.0 SITE DESCRIPTION AND SURROUNDING LAND USES**

This section of the Report provides a brief overview of the Site and the Proposed Development, as well as surrounding land uses.

The Site is located at 2979 Middlemass Street in the Town of Innisfil. Access to the Site will be provided via a new entrance that is aligned with Lamb Street.

Surrounding land uses are categorized as follows:

- North:** Open space and Lockhart Road;
- South:** Residential uses;
- East:** Stormwater management pond area; and,
- West:** Middlemass Street, Open space (park) and residential uses.

The Site is proposed to be developed for a 38-unit townhouse land lease development. Landscaping is proposed on the west side of the Proposed Development to help provide screening from Middlemass Street. The Proposed Development is currently going through the Site Plan Approval process. A second submission has been made and is currently under review by Town staff and external agencies. Block 333, which abuts the Site to the north, is an open space/landscaping block and will also provide screening from Lockhart Road. Access to the Site will be provided via a new entrance that is aligned with Lamb Street and a total of 12 visitor parking stalls are proposed within the Proposed Development. The Proposed Development also consists of 1 m by 1 m sheds that are proposed for

the units within Buildings G, H and I. The proposed sheds meet the applicable zoning requirements under the RT-5 Zone.

A copy of the site plan for the Proposed Development is included as **Appendix A**.

### **3.0 PROPOSED MINOR VARIANCE**

The purpose of the proposed Minor Variance is to request a reduced minimum landscaped open space requirement for the Proposed Development. Specifically, the following Minor Variance is being requested:

1. Table 4.2 b: Requesting to permit a minimum landscaped open space requirement of 30%; whereas, a minimum landscaped open space requirement of 35% is required.

### **4.0 PLANNING ANALYSIS**

The following is a review of the land use policy framework related to the Site.

#### **4.1 Planning Act**

The *Planning Act* establishes the rules for land use planning in Ontario and effectively describes how land uses can be controlled, and who may control them.

Sections 2 and 3 of the *Planning Act* require that planning decisions have regard to matters of Provincial interest, be consistent with the Provincial Policy Statement and conform to the Provincial plans that are in effect. **Sections 4.2 and 4.3** of this Report examine the applicable Provincial policy and plans as they relate to the Proposed Development.

**Based on a comprehensive review of the Proposed Development, it is the opinion of the undersigned that the Proposed Development complies with the applicable policies of the *Planning Act*.**

#### **4.2 Provincial Policy Statement (2020)**

The Provincial Policy Statement (the "PPS") is the statement of the Provincial government's policies on land use planning and is intended to provide policy direction on land use matters which are in the Provincial interest. All land use planning decisions are required to be consistent with the PPS.

Policies of the PPS, among other matters, direct the focus of growth towards settlement areas to ensure their continued viability and encourage densities and a mix of land uses that efficiently use land and resources and are appropriate for existing infrastructure. The PPS further contains policies that direct for a range and mix of housing types and densities, and opportunities that promote economic development to support long-term economic prosperity.

The Site is located within a settlement area. Section 1.1.3.1 of the PPS states that "*settlement areas shall be the focus of growth and development.*" Further, Section 1.1.3.2 requires that "*settlement*

*areas shall be based on densities and a mix of land uses, which effectively use land and resources, and are appropriate for, and effectively use, the infrastructure and public service facilities which are planned or available.”* Section 1.1.3.4 of the PPS also states that *“appropriate development standards should be promoted, which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety.”*

The Proposed Development would facilitate the continued development and build-out of the draft plan approved and registered Innis Village Subdivision, which is an approved development that is consistent with the settlement area policies of the PPS, promotes and provides intensification, and effectively uses land and resources, including existing infrastructure.

**Based on a comprehensive review of the PPS, it is the opinion of the undersigned that the Proposed Development is consistent with the policies of the PPS.**

### **4.3 Growth Plan for the Greater Golden Horseshoe (2020)**

The Growth Plan for the Greater Golden Horseshoe (the “Growth Plan”) was created by the Province to guide the building of stronger more prosperous communities through the management of growth. The Growth Plan contains various principles which are intended to guide decisions on how land is developed. The Town of Innisfil is within the boundaries of the Growth Plan and thus, its policies apply to the Site.

Section 2 of the Growth Plan hosts policies about “where and how to grow,” with an emphasis on directing growth to established settlement areas. More specifically, the policies direct the majority of new growth to settlement areas that have a delineated built boundary, have existing or planning municipal infrastructure that can support growth, and where a complete community can be achieved. The Growth Plan further focuses growth to areas within settlement areas that have been designated as built-up areas, strategic growth areas, areas with existing or planned transit access, and in proximity to public service facilities. The Proposed Development conforms to these policies, as the Site is located within a fully serviced settlement area and is designated, zoned and draft plan approved for residential development.

Furthermore, the Growth Plan identifies the Site as being located in a settlement area. Section 2.2.2 a) of the Growth Plan indicates that the *“vast majority of growth will be directed to settlement areas that have a delineated built boundary, have existing or planned municipal water and wastewater systems, and can support the achievement of complete communities.”*

The Proposed Development would promote the policies of the Growth Plan by allowing for the continuation of the Innis Village Subdivision, which has been approved in conformity with the Growth Plan.

**Based on a comprehensive review, it is the opinion of the undersigned that the Proposed Development conforms with the policies of the Growth Plan.**

#### **4.4 County of Simcoe Official Plan**

The Site is designated "Settlement" on Schedule 5.1- Land Use Designations to the County of Simcoe Official Plan. The County of Simcoe Official Plan requires that settlements are to be planned to accommodate a diversity of land uses, including residential, commercial, industrial and institutional uses.

The Proposed Development would facilitate the continued development and build-out within the Innis Village Subdivision, which has been approved and is located within a fully serviced settlement area.

**It is the opinion of the undersigned that the Proposed Development conforms to the policies of the Simcoe County Official Plan.**

#### **4.5 Town of Innisfil Official Plan (2018 Consolidated)**

The Town of Innisfil Official Plan (the "Town OP") is the applicable policy document guiding development in the Town of Innisfil. The document establishes a long-range strategy for land use and resource management across the Town. The Plan hosts a variety of development goals, objectives, and policies aimed at guiding development. The Town OP designates the Site as "Residential Medium Density" as per Schedule B5 – Land Use Plan (see **Figure 2** below).

The Proposed Development is located on a registered Block of land that has previously been subject to subdivision approval and the Proposed Development is currently going through the Site Plan Approval process. The Proposed Development aligns with the permitted uses for the "Residential Medium Density" designation under the Town OP.

Section 2 of the Town's OP pertains to policies relating to place-making and the importance of ensuring community growth. The Proposed Development follows these policies by incorporating streetscape design, providing townhouse units located around an efficient looping street network and providing convenient visitor parking and snow storage facilities at the northeast and southeast portions of the Site.

Furthermore, the function and intent of the Residential Medium Density designation achieves the goals of Section 2 of the Town OP as the designation provides for higher-density residential development in small pockets. The Proposed Development is located on lands that are draft plan approved and registered and zoned for the proposed residential use.

Additionally, Section 10.3 of the Town's OP pertains to permitted uses and policies of an area designated Residential Medium Density. The Proposed Development conforms to the permitted uses and policies stated in Section 10.3.

**It is the opinion of the undersigned that the Proposed Development conforms to the policies of the Town of Innisfil Official Plan.**

**Figure 2 – Official Plan Land Use Designation**



#### **4.6 Innis Village Architectural Control/Urban Design Guidelines**

Architectural Control/Urban Design Guidelines (ACUDG) were prepared for the Innis Village Subdivision by John G. Williams Ltd. on behalf of Parkbridge Lifestyle Communities Inc. during the original approvals of the subdivision. The purpose of this document was to establish a development vision, design principles, urban design guidelines, architectural control guidelines and an implementation strategy to direct the creation of a sustainable, vibrant and healthy new community that:

- Is appropriate to its local context;
- Is environmentally sustainable;
- Respects the natural heritage features of the area;
- Creates an attractive and safe public realm;
- Supports aging-in-place initiatives;
- Respects affordable housing goals; and,
- Supports active transportation and recreational activities.

Section 3.2 provides guidelines that are applicable to open space elements. Within the Site, there are no concerns for Environmental Protection Lands, and there are no mature woodlot areas that would be affected by the Proposed Development.

Section 3.3.3 pertains to policies relating to gateways. The Proposed Development is near the Lockhart Road and Middlemass Street gateway, which should be designed to enhance the arrival to the Subdivision, as per the policies of the ACUDG. The applicable provisions are being met concerning landscaping and gateway features as implementation measures along Middlemass Street will be made to further improve and complement the entry of the Innis Village Subdivision and the Site. Further, visitor parking is proposed to be implemented on the eastern portion of the Site to not dominate the street edge at gateway areas, as per the guidelines.

Section 4.3, Architectural Guidelines for Lifestyle Townhouses on Private Roads, discusses specific housing characteristics for Phase 2C concerning the proposed demographic, adult lifestyle retirement living, and will be designed uniformly with affordability as a primary influence.

Sections 4.3.1 and 4.3.2 provide insight into the street and building relationship of the Proposed Development. Provisions are directed towards the configuration of the site area, such as minimizing the garage projection, having the outdoor amenities in the rear yard of each unit and proposing townhouses with a mix of lot sizes for the anticipated demographic. The applicable provisions are being met concerning both Section 4.3.1 and 4.3.2 as the provisions are expected to enhance the area and provide the proposed demographic with the ability to easily move within the Proposed Development.

Sections 4.3.3 and 4.3.4 discuss entryways. All townhouses are anticipated to have a single-car garage which will be integrated into the dwelling units. As per Section 4.3.3, the maximum width of the private garage should be 3.6 metres to allow a single vehicle to enter. Further and concerning the main entrance of the dwelling units, a covered front porch is to be directly visible from the street to act as the focal point of the dwelling. These provisions are being implemented as they will aid in weather protection and further minimize the projection of the garages within the streetscape of the Site.

Section 4.3.12 pertains to the lot area and models within the Proposed Development. It is suggested that the Proposed Development will provide for a consistent and unified design. This will be achieved by integrating colour schemes, similar main entrances and wall cladding which will then enhance the architecture and provide street and building connectivity.

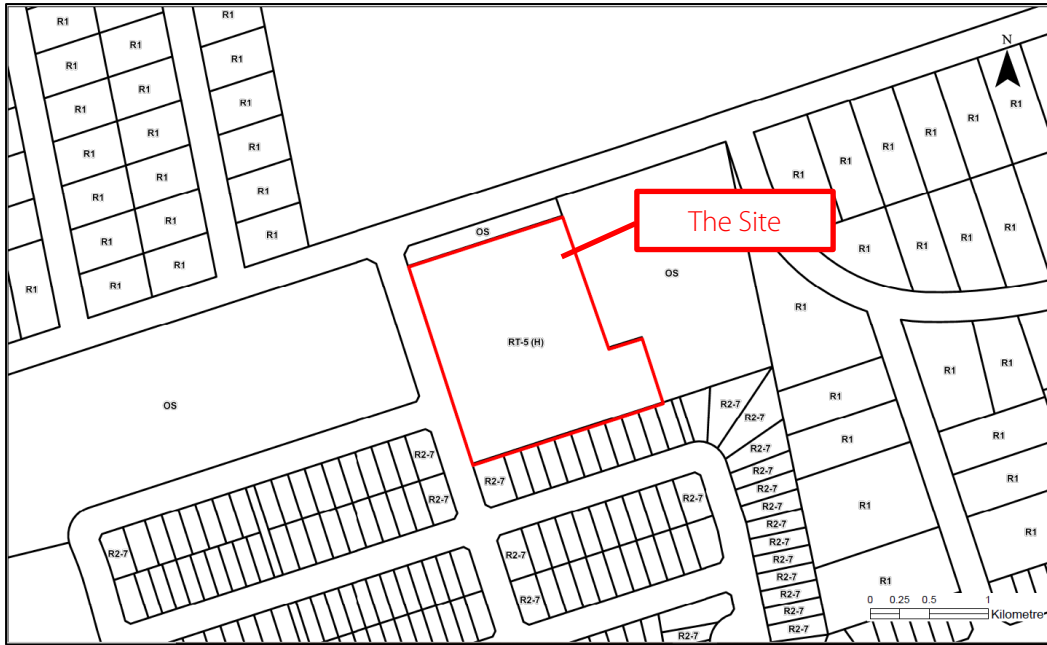
**Based on a comprehensive review of the proposal and the applicable provisions of the Innis Village Architectural Control/Urban Design Guidelines, it is the opinion of the undersigned that the Proposed Development is consistent with the Innis Village Architectural Control/Urban Design Guidelines.**

#### **4.7 Town of Innisfil Zoning By-law 080-13**

Currently, the Site is zoned the "Residential Townhouse Exception Five" (RT-5) Zone in the Town's Zoning By-law (see **Figure 3** below). The Proposed Development is permitted as of right under the listed permitted uses for the RT-5 Zone.



**Figure 3 – Site Zoning**



**Table 1** below displays the primary zoning compliance for the Site, additional zoning compliance details can be found on the Site Plan (see Appendix A):

**Table 1- Zoning Provisions**

Provision	RT-5 Zone	Provided
Lot Frontage (min.)	N/A	141.5 m
Lot Area (min.)	N/A	16,868 m <sup>2</sup>
Front Yard Setback (min.)	6 m	6 m
Southern Side Yard Setback (min.)	7.5 m	8.11 m
Northern Side Yard Setback (min.)	6 m	6.62 m
Rear Yard Setback (min.)	6 m	16.36 m
Lot Coverage (max.)	60%	42%
Landscaped Open Space (min.)	35%	<b>31.6%</b>

In order for more optimal and desired townhouse dwellings to be provided within the Site, some of the requirements of the Zoning By-law cannot be satisfied. Accordingly, a Minor Variance must be sought to facilitate the Proposed Development and ensure zoning compliance.

It is noted that although the Proposed Development will be providing 3,300 m<sup>2</sup> (31.6%) of landscaped open space, a reduced requirement of 30% is requested to allow for minor flexibility in the event there are minor design changes.

## 5.0 PROPOSED MINOR VARIANCE – FOUR TESTS EVALUATION

When considering the Proposed Development as outlined above, the Committee of Adjustment needs to be satisfied that the proposal satisfies the “four tests” of a Minor Variance, as established in Section 45(1) of the *Planning Act*. The purpose of this section is to provide a review of how the requested Minor Variances satisfy each of the following four (4) tests:

1. The minor variance maintains the intent of the Official Plan;
2. The minor variance maintains the intent of the Zoning By-law;
3. The minor variance is desirable for the appropriate development or use of the land; and
4. It is minor?

As previously stated, Minor Variances are being requested related to the Proposed Development. They are as follows:

1. Table 4.2 b: Requesting to permit a minimum landscaped open space requirement of 30%; whereas, a minimum landscaped open space requirement of 35% is required.

### *Maintains the General Intent and Purpose of the Official Plan*

The Site is designated Residential Medium Density on Schedule B5 – Land Use: Sandy Cove to the Town OP. As previously indicated, the function of the Residential Medium Density Designation is to provide higher-density residential development.

The proposed Minor Variance would facilitate the continued development and build-out of Phase 2C within the Innis Village Subdivision, which is an approved subdivision and is located in a Settlement Area.

It is the opinion of the undersigned that the proposed Minor Variance conforms to the general intent and purpose of the Town OP.

### *Maintains the General Intent and Purpose of the Zoning By-law*

The Site is zoned the Residential Townhouse Exception 5 (RT-5) Zone under the Town’s Zoning By-law. Specifically, the proposed Minor Variance requests to permit a reduced minimum landscape open space requirement of 30%; whereas 35% is required under the RT-5 Zone.

The general intent and purpose of the minimum landscaped open space requirements is to ensure that adequate permeable greenspace is implemented in coordination with the stormwater management solution and to provide outdoor amenity space. A memo prepared by Stantec and dated December 18, 2023, was prepared in support of the Proposed Development and indicates that the Site can support a reduced landscaped open space area of 29%. A copy of the memo is included as **Appendix B**.

Regarding outdoor amenity space, the Site will contain 5,330 m<sup>2</sup> of landscaped open space and it is noted that Block 333, which abuts the Site to the immediate north, will provide additional landscaped open space (multi-use trail and landscaping) for the Proposed Development. It is also noted that the Proposed Development will contain three-season Muskoka rooms for each of the units that will provide additional indoor amenity space. The proposed Muskoka rooms were approved via Minor Variance application A-015-2023, which was approved by the Town's Committee of Adjustment at the April 20, 2023 meeting.

It is the opinion of the undersigned that the proposed Minor Variance conforms to the general intent and purpose of the Zoning By-law.

### ***Desirable for the Appropriate Development or Use of the Land***

The proposed Minor Variance would allow for a more desirable and efficient medium-density residential development and would not change the ultimate long-term use or character of the Site or surrounding area. The proposed sheds would provide additional storage space for the units of Buildings G, H and I. The Site will still provide adequate landscaped open space to provide outdoor amenity space for residents and will not have any negative stormwater management impacts.

It is the opinion of the undersigned that the proposed Minor Variance is desirable for the appropriate development and use of the lands.

### ***Minor in Nature***

The proposed Minor Variance seeks to reduce the minimum landscaped open space requirement from 35% (5,903.8 m<sup>2</sup>) to 30% (5,060.4 m<sup>2</sup>), which represents a 5% (843.4.8 m<sup>2</sup>) reduction. As per the letter prepared by Stantec, the reduction in landscaped open space will not have any negative stormwater management impacts and the Site will still provide an adequate amount of outdoor amenity space. Additional landscaped open space will also be provided on Block 333, which abuts the Site immediately to the north. It is noted that although the Proposed Development will be providing 3,300 m<sup>2</sup> (31.6%) of landscaped open space, a reduced requirement of 30% is requested to allow for minor flexibility in the event there are minor design changes.

On this basis, it is the opinion of the undersigned that the requested Minor Variance is minor in nature.

## **6.0 SUMMARY & FINDINGS**

Overall, one Minor Variance is being requested to facilitate the development of the Innis Village Phase 2C land lease block.

The Official Plan policies and Zoning By-law provisions permit townhouse dwellings and associated accessory structures (sheds) on the Subject Lands.

The requested Minor Variance will facilitate the continued build-out of the Innis Village Subdivision Phase 2C land lease block, which maintains the intent of the policy and zoning framework, is desirable for the Subject Lands and is appropriate for the surrounding neighbourhood.

It is the opinion of the undersigned that the proposed Minor Variance is consistent with the PPS, conforms to the Growth Plan, County of Simcoe Official Plan and Town of Innisfil Official Plan, and meets the intent of the Town of Innisfil Zoning By-law. Furthermore, it is the opinion of the undersigned that the proposed Minor Variance meets the four (4) tests established in the *Planning Act*, and represents good planning.

Should you require any additional information, please do not hesitate to contact the undersigned.

Yours truly,  
**MHBC**



Kory Chisholm, BES, MSc, MCIP, RPP  
Partner

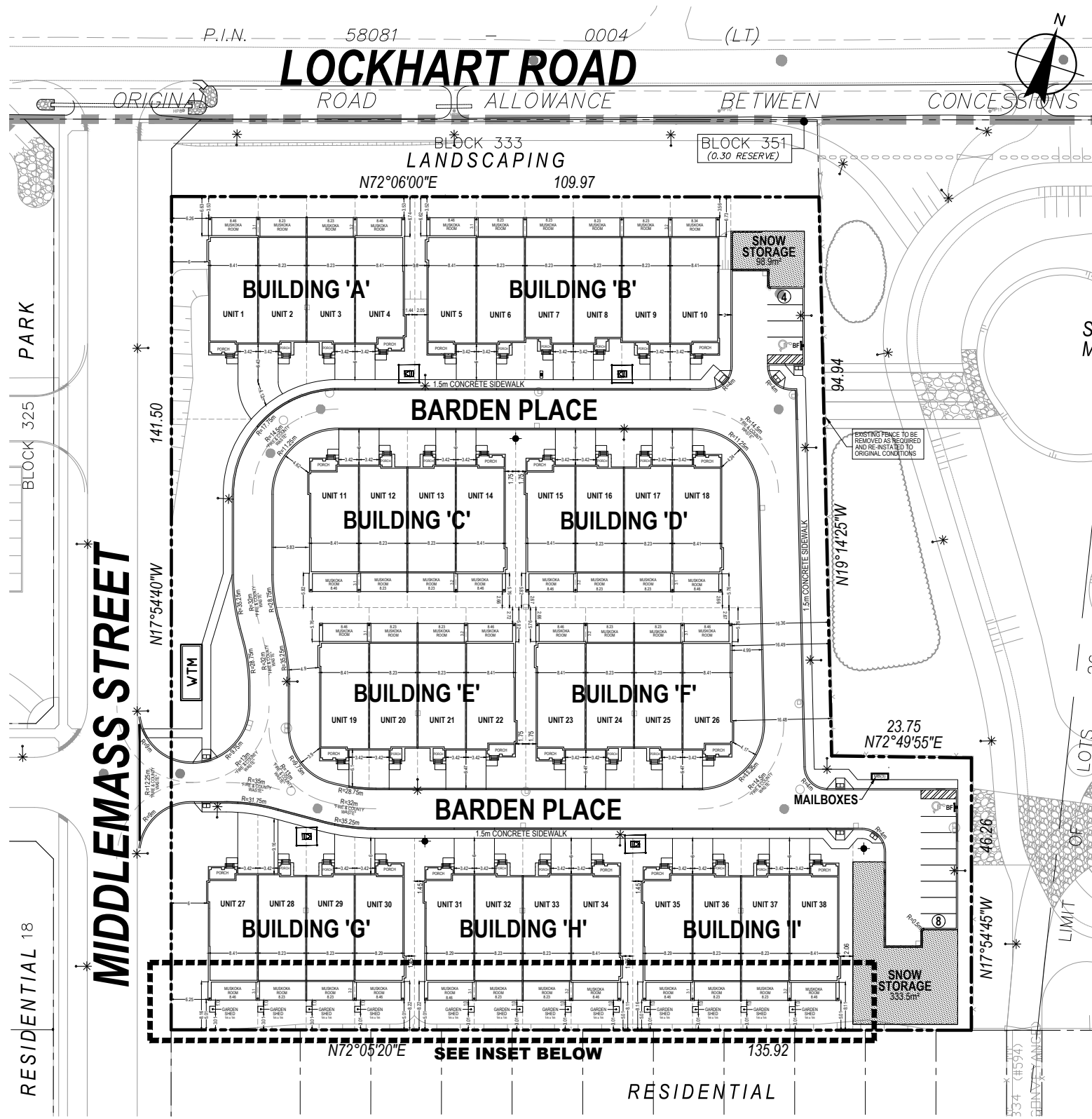


Shayne Connors, BAH, MSc  
Intermediate Planner

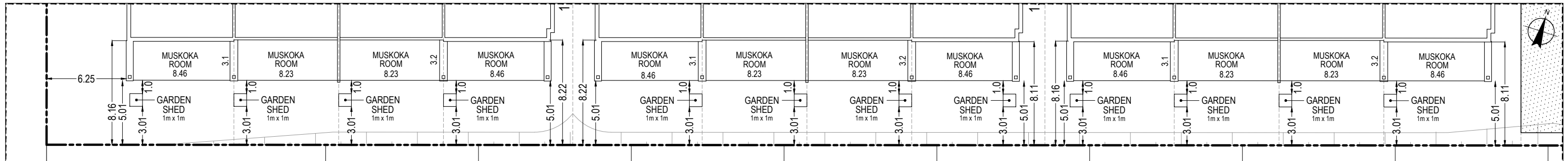
# Appendix A

# PARKBRIDGE, INNIS VILLAGE 2C MINOR VARIANCE

MAR. 12, 2024



SITE STATISTICS		
STATISTIC	AREA	PERCENTAGE
Building Area	7,077m <sup>2</sup>	42.0%
Landscaped Area	5,330m <sup>2</sup>	31.6%
Asphalt and Concrete Area Cleared of Snow (Snow Storage: 10% of cleared area)	4,304m <sup>2</sup> (432m <sup>2</sup> )	25.5% (10%)
Asphalt and Concrete Area Not Cleared of Snow	157m <sup>2</sup>	0.9%
Total Lot Area	16,868m <sup>2</sup>	100%



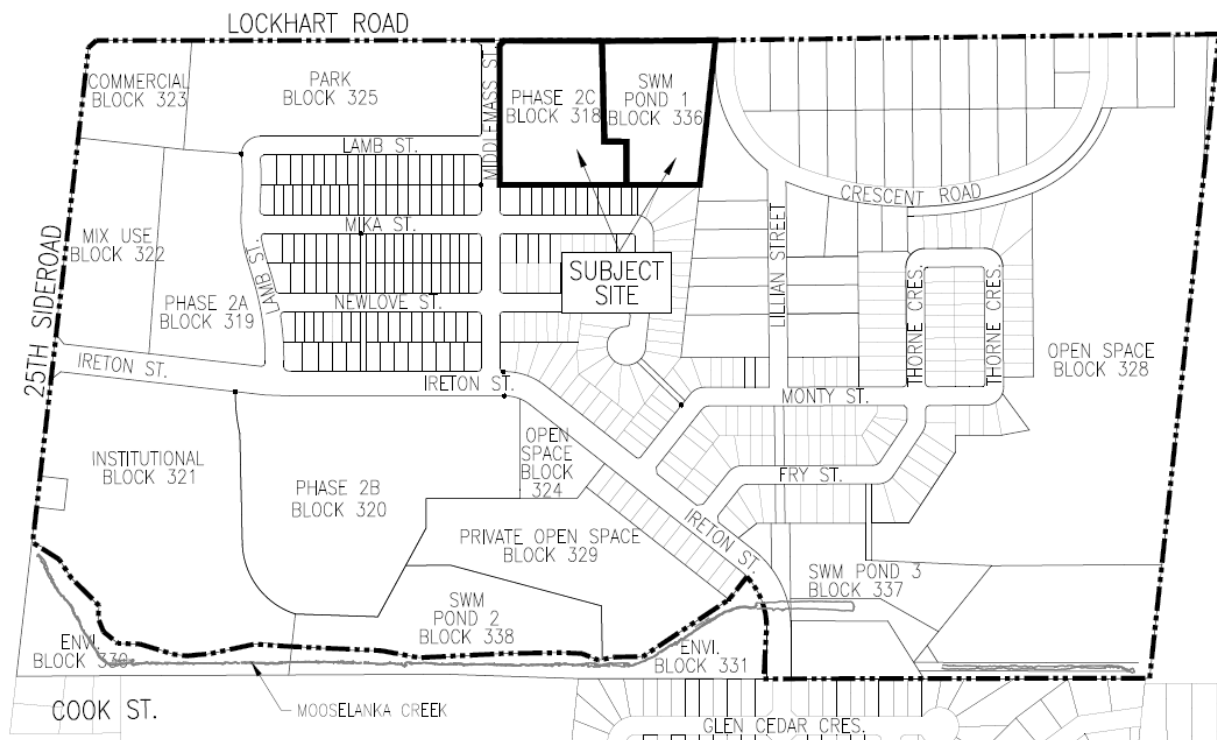
# Appendix B

To:	Glen Switzer, Town of Innisfil	From:	Amber Palmer, P.Eng. Asif Quader, P.Eng.
	Phil Thase, LSRCA		300W-675 Cochrane Drive Markham, ON L3R 0B8
File:	160622940	Date:	December 18, 2023

**Reference: Stormwater Management (SWM) Plan for Block 318 (Phase 2C) of Innis Village Development**

## INTRODUCTION

This technical memorandum has been prepared to outline the SWM plan of Block 318 (Phase 2C) within the Innis Village development. **Figure 1** shows the location of Block 318 (referred to as ‘the Site’).



**Figure 1: Project Site Location – Block 318**

## BACKGROUND INFORMATION

The following reports and documents were reviewed in the preparation of this technical memorandum:

- Stormwater Management Pond #1 Design Report, prepared by Stantec Consulting Ltd., May 2023 (Pond 1 Design Report).



**Reference: Stormwater Management (SWM) Plan for Block 318 (Phase 2C) of Innis Village Development**

- Water Balance Mitigation for Block 318 (Phase 2C) of Innis Village Development Technical Memorandum, prepared by Stantec Consulting Ltd., January 2023.
- Updated Hydrology and Stormwater Management Ponds Design, Technical Memorandum prepared by C.C. Tatham & Associates Ltd, updated September 11, 2019. (Tatham SWM Memo 2019).
- Innis Village, Town of Innisfil, Stormwater Management Report, prepared by C.C. Tatham & Associates Ltd., revised December 22, 2017. (Tatham SWM Report 2017).
- Innis Village Final Drawings (Town Files: D12-2005-001), prepared by C.C. Tatham & Associates Ltd, October 2019.
- Hydrologic Modelling Hewitts, Sandy Cove, Mooselanka, Gilford, Lover's Creeks and the City of Barrie Annexation Areas, Final Report, prepared by URS, July 2011. (URS Hydrologic Modelling 2011).
- Certification of Pond 1 (Interim Conditions), prepared by Stantec Consulting, dated April 7, 2022.

## **SWM CRITERIA**

Block 318 is subject to relevant SWM criteria of the Town of Innisfil, Lake Simcoe Region Conservation Authority (LSRCA), and Ministry of Environment, Conservation and Parks (MECP). The SWM criteria are outlined below:

- **Quantity Control:** Post-development or proposed flows should be controlled to pre-development flows.
- **Quality Control:** Provide 'Enhanced' water quality control.
- **Erosion Control:** For Sites less than 2 ha, erosion control is normally not required. For larger areas, where an erosion control study is not specified, the runoff from 25 mm design storm (4-hour Chicago distribution) should be detained and released over a period of at least 24 hours.
- **Water Balance:** The Innis Village draft plan was approved in 2012 and was considered as a Major Development under Lake Simcoe Protection Plan (LSPP).

The Innis Village Stormwater Management (SWM) Report (C. C. Tatham and Associates Ltd. (Tatham), December 2017) included a water balance assessment for the Innis Village Site with a best efforts approach to mitigate changes due to the proposed development. This assessment set a water balance target of 10 mm of infiltration of runoff from the impervious areas for Block 318. A feasibility review of the water balance target for Block 318 was undertaken as part of detailed design and a revised target recommended for the following reasons:

- Centralized Low Impact Development (LID) features would be required to treat 10mm of runoff from all paved surfaces within the block.
- Groundwater is generally shallow across the majority of the site (2-3 m below grade)

**Reference: Stormwater Management (SWM) Plan for Block 318 (Phase 2C) of Innis Village Development**

- High groundwater levels make centralized LID facility unfeasible as it is not possible to divert storm flows from the storm sewers to LID without raising hydraulic grade line (HGL) of the sewer system.

Recognizing the existing site constraints, a best-efforts approach for water balance mitigation for this Site (Block 318) will be implemented with 20 mm of runoff from the roof surface directed to proposed lot level LIDs, where there is 1 m separation provided between the bottom of the proposed LID and the seasonal high groundwater level.

LSRCA has advised that Policy 6.40-DP is applicable to Block 318 as noted in LSRCA's technical review (hydrogeology item #H6), hence post-development infiltration volume is required to match pre-development infiltration volume on an annual basis. Should this not be feasible, cash compensation will be payable as per the Water Balance Recharge Policy (2019).

- **Phosphorus Control:** The Site was draft plan approved in 2012 and is considered as a Major Development under Lake Simcoe Protection Plan (LSPP), best efforts should be adopted to mitigate changes in phosphorus loading due to the proposed development. The approved draft plan predates the LSRCA Phosphorus Offsetting Policy (LSPOP) of January 2018.
- **Erosion and Sediment Control (ESC):** ESC is required for site alteration works in accordance with the ESC Guidelines for Urban Construction (2006) and the LSRCA requirements.

## **STORMWATER MANAGEMENT PLAN**

The SWM plan for Block 318 involves the following measures.

### **QUANTITY CONTROL**

Under the proposed condition, Block 318 is serviced by SWM Pond 1 (located in the adjacent Block 336), which is designed to provide quantity control. Refer to Pond 1 Design Report (Stantec 2023) for additional details pertaining to the hydrologic modelling of the contributing catchments (including Block 318) and Pond 1 details.

Pond 1 design assumed that Block 318 (Area 208 in SWM Pond 1 Report) had an imperviousness of 75%. The weighted imperviousness was calculated for the latest site plan and is 74% and is consistent with the Pond 1 assumptions. Impervious calculations are included in **Appendix 1**.

### **QUALITY CONTROL**

Under the proposed condition, Block 318 is serviced by SWM Pond 1 (located in the adjacent Block 336), which is designed as an 'Enhanced Wetland' facility, providing Enhanced quality control. As a wetland facility providing Enhanced quality control per the 2003 MECP criteria, the required permanent pool (PP) storage volume is 1379 m<sup>3</sup> and 810 m<sup>3</sup> for active storage (40 m<sup>3</sup>/ha for extended detention). The provided permanent pool volume within

**Reference:** Stormwater Management (SWM) Plan for Block 318 (Phase 2C) of Innis Village Development

the forebay and main cell of Pond 1 is 1392 m<sup>3</sup>, exceeding the 1379 m<sup>3</sup> requirement. Refer to Pond 1 Design Report (Stantec 2023) for additional details.

## **EROSION CONTROL**

Under the proposed condition, Block 318 is serviced by SWM Pond 1 (located in the adjacent Block 336), which is designed to satisfy the erosion control (extended detention) criteria.

In accordance with the 2003 MECP criteria, the required extended detention storage volume should be the greater of the active storage requirement (40 m<sup>3</sup>/ha) or the runoff from the 25mm storm event with a minimum drawdown time of 24 hours. The governing required extended detention volume is runoff from the 25 mm storm event. This equates to a required storage volume of 2185 m<sup>3</sup> and a release rate of 0.038 m<sup>3</sup>/s. The modelled extended detention volume provided within Pond 1 is 2077 m<sup>3</sup> at a release rate of 0.012 m<sup>3</sup>/s and a draw down time of 80 hours. Refer to Pond 1 Design Report (Stantec 2023) for additional details.

## **PHOSPHORUS BUDGET**

A phosphorus budget was included in the 2017 Innis Village Stormwater Management Report for the Innis Village Site including Block 318 with a best efforts approach to mitigate changes due to the proposed development. Pond 1 is part of the proposed mitigation strategy for the catchment areas to the pond including Block 318. Within the 2017 Report, Pond 1 was assumed to be a constructed wetland with a 77% phosphorus removal rate. Since Pond 1 is an enhanced wetland pond it would provide the same level of treatment for drainage catchment areas, in keeping with the 2017 assessment.

## **WATER BALANCE AND LID DESIGN**

With the development of Block 318, the existing infiltration is reduced.

The proposed lot-level LIDs will collect the 20 mm of roof runoff from the adjacent townhouse units. The infiltration galleries are located along the rear lot property line with a total equivalent area of approximately 195 m<sup>2</sup> and a width of 0.75 m. The galleries include:

- 75 m length and 1.5 m wide galleries servicing back to back rear yards (Buildings C to F);
- 109 m length and 0.75 m wide galleries servicing single rear yards (Buildings G to I);

At these locations, the seasonal high groundwater table is approximately 2.5 m below proposed ground, providing sufficient clearance from the bottom of the galleries. The strategically placed infiltration galleries are able to provide a total retention volume of 54.6 cu.m/event (design calculations attached). Based on the Site constraints, the proposed retention volume is the 'Best Effort' that can be attained, which exceeds 20 mm retention volume from the proposed roof areas.

The infiltration galleries consist of 50 mm clear stone wrapped in filter fabric located under a swale, with direct roof connection and an over drain connected to area drains located within the rear-lot swales. The proposed

**Reference:** Stormwater Management (SWM) Plan for Block 318 (Phase 2C) of Innis Village Development

galleries are 900 mm in depth with 700 mm of stone provided below the invert of the overflow pipe, and an estimated drawdown time of 47 hours. The LID design calculations are included in **Appendix 2**.

An assumed infiltration rate of 15 mm/hr (assumed for 'loam' type soil as presented in the borehole data – Peto McCallum November 2016) was used for the LID design. The infiltration rate was reduced to 6 mm/hr, by applying a safety factor of 2.5, per Toronto and Region Conservation Authority (TRCA) SWM Criteria (TRCA 2012). The abovementioned infiltration rate will be confirmed by in-situ testing at the Site.

### **CASH COMPENSATION**

A water balance assessment for Block 318 was completed by WSP Golder (2023). This assessment indicates that the pre-development infiltration volumes are 6,000 cu.m./year and the post-development infiltration (with mitigation) is 3,000 cu.m./year. This represents an infiltration deficit of 3,000 cu.m./year in the post-development condition. In accordance with the Water Balance Offsetting Policy, the required cash compensation for the Block 318 is \$155,146.50 (which includes the 15% administration fee). Calculations are included in **Appendix 3**.

### **EROSION AND SEDIMENT CONTROL (ESC)**

Refer to Drawings C-601, C-602, and C-603 for ESC details.

### **CONCLUSIONS**

This technical memorandum demonstrates that the SWM requirements of Block 318 is satisfied by the following measures:

- Pond 1 provides quantity control for Block 318.
- Pond 1 provides quality control for Block 318.
- Pond 1 provides erosion control for Block 318.
- Pond 1 meets the phosphorus budget requirements for Block 318.
- Proposed lot-level LIDs provide on-site infiltration mitigation with cash compensation offsetting providing the remainder of the water balance requirement for Block 318.

**Reference:** Stormwater Management (SWM) Plan for Block 318 (Phase 2C) of Innis Village Development

**Stantec Consulting Ltd.**



**Amber Palmer** P.Eng  
Senior Associate, Water Resources  
Phone: 905 944 4806  
amber.palmer@stantec.com



**Asif Quader** Ph.D., P.Eng.  
Water Resources Engineer  
Phone: 905 944-7777  
Asif.Quader@stantec.com

Attachment: Appendix 1: Impervious Calculations  
Appendix 2: LID Design Calculations  
Appendix 3: Cash Compensation Calculation

c.



**Project Name:** Innis Village Block 318  
**Project Number:** 160622940

Total Site Area 16868 m2

Landuse	Area (ha)	Area (m2)	C (Runoff Coef.)	C (weighted value)	Imperviousness (%)	Imperviousness (Weighted Value)	% Area
Roof/Front Porch/Driveway	0.70	7040	0.9	6336.00	94	664889	42%
Road/Sidewalk	0.35	3512	0.9	3160.56	94	331663	21%
Snow Pile Area	0.04	427	0.9	384.07	94	40303	3%
Muskoka Room & Rear Yard Porch	0.10	997	0.9	898	94	94191	6%
WTM	0.00	34	0.9	31	94	3226	0%
Landscape	0.49	4858	0.25	1215	22	107957	29%
<b>Total</b>		16868		<b>0.71</b>		<b>74%</b>	

**Infiltration Gallery (IG) Sizing Calculations**

**Project Name:** Innis Village Block 318  
**Project Number:** 160622940

**Input**  
**output**

**Site Characteristics - Infiltration Gallery**

Contributing Roof Areas	0.26	ha
Retain Depth of	20.0	mm
Water Balance Storage Volume	51.7	m <sup>3</sup>

**Retention Target from 2017 Tatham Eng. SWM Report**

Block 318 Impervious Area	0.98	ha
Retain Depth of	10.0	mm
Water Balance Storage Volume	98.0	m <sup>3</sup>

**Infiltration Gallery Calculations**

Existing Soil Type = Sand Loam					
Infiltration Rate (with FS 2.5) = i =	6.0	mm/hr	(adjusted by TRCA FS of 2.5)	Percolation Rate I =	15.0 mm/hr
Drawdown Time = t =	48	hrs			
Porosity of Storage Media = n =	0.4				

**Infiltration Gallery (IG) Details** in rear yard for Bldg C-F

IG Length = l =	75	m
IG Width = w =	1.50	m
Total Trench/IG Surface Area = A	113	m <sup>2</sup>
Max Depth of IG for infiltration =	0.72	m
<b>D=i * t / (1000*n)</b>		

**Infiltration Gallery (IG) Details** in rear yard for Bldg G-I

IG Length = l =	109	m
IG Width = w =	0.75	m
Total Trench/IG Surface Area = A	82	m <sup>2</sup>
Max Depth of IG for infiltration =	0.24	m
<b>D=i * t / (1000*n)</b>		

**Gravel Storage Volume**

Porosity of Storage Media = n =	0.4	
Surface Area of IG = A =	195	m <sup>2</sup>
Depth of Stone = d =	0.7	m
Total Stone Volume = A x d =	136.4	m <sup>3</sup>
<b>Void Space Available in IG = n x A x d =</b>	<b>54.6</b>	<b>m<sup>3</sup></b>
Drawdown Time =	47	hr

<b>Total Volume from Infiltration Galleries =</b>	<b>54.6</b>	<b>m<sup>3</sup> (provided in Block 318)</b>
<b>Percentage of Target from Contributing Roof Areas =</b>	<b>105%</b>	
<b>Percentage of Target from 2017 Tatham Report =</b>	<b>56%</b>	

**Cash Compensation Calculations**

<b>Infiltration</b>	<b>m<sup>3</sup>/year</b>
Pre-development	6000
Post-development	3000
Deficit	3000
Offsetting Cash Compensation	\$134,910.00
Administration Fee (15%)	\$20,236.50
<b>Grand Total</b>	<b>\$155,146.50</b>