



IBI GROUP
400–333 Preston Street
Ottawa ON K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
ibigroup.com

Memorandum

To/Attention	Eric Harrold	Date	March 18, 2022
From	Ryan Magladry Amy Zhuang	Project No	122507-6.2.3
cc	Melissa Pettem Reuben Noel		
Subject	Golf Course Cart Storage Building - Servicing Memorandum		

IBI Group Professional Services Inc. (IBI, IBI Group) has been retained by Mattamy Homes to provide engineering consultation for the Stonebridge Golf Course new cart storage building, which is proposed as an accessory structure to the Golf Course Clubhouse. The existing golf cart storage building will be removed as a result of the golf course hole #9 reconfiguration. The existing practice putting green will also be relocated to the western portion of the existing parking lot to make way for the hole #9 reconfiguration. This memorandum will summarize the servicing requirements and design considerations for the proposed cart storage building.

Domestic Water Supply

No new municipal water services and water fixtures are required for the site. A seasonal distribution line will be extended from the existing irrigation system located at the “snack shack” to the north-west of the proposed storage building, and will be used for cart cleaning operations only, and is considered to be non-potable (untreated) and is fed from a branch off the golf course irrigation distribution system. This is not a municipal water service, and it will be operated seasonally, and flushed in the offseason. No municipal approval is required, and it is not required to be constructed to City Standards.

Wastewater System

No new municipal sanitary services and wastewater fixtures are proposed for the new cart storage building.

Stormwater Management

The study area is currently open space, golf course lands surrounded by the existing Stonebridge development. The parcel for which the new cart storage building consists of an existing clubhouse facility and a snack shack building. The cart storage building is located in the southern area of the existing parking lot. Stormwater runoff is captured on-site through sheet drainage and landscaping and parking lot drains, which outlet to the Stonebridge Golf Course pond network.

The on-site minor system was designed to meet the existing conditions of the original clubhouse development. Minor system flow will be conveyed to the existing Catch Basin Manhole (CBMH 3) and utilizing the same ICD as existing. Runoff C calculation of the overall site have been provided in C-550 Storm Drainage Area Plan. The C value comparison between the pre-development and post-development of the adjusted areas within the site are demonstrated in **Table 1.1**. According to the results, the total pervious area (landscaped) has increased, and the overall runoff coefficient C has reduced from 0.68 to 0.64. Therefore, the subject development

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will have no negative impacts on downstream infrastructure, and thus no additional quantity controls measures are required for this site.

Table 1.1 C Value Comparison

CBMH3	Pre-development		Post-development	
	Area (ha)	C	Area (ha)	C
Grass	0.333	0.20	0.395	0.20
Building	0.000	0.90	0.051	0.90
Driveway & Parking	0.744	0.90	0.631	0.90
Total	1.077	0.68	1.077	0.64

Water quality control has been provided by the existing SWMF located at hole #15. As a result of a decreased parking lot area, and an increase in roof and softscape areas, the redevelopment will have an improved benefit on water quality, and no additional on-site water quality measures are required.

Grading

The site will be graded to function with the new practice putting green, as well as to limit disruption to the existing landscape and parking lot areas. As a result of the general east to west slope of the parking lot, and the long flat slab of the new building, the drive aisle is elevated on the north side of the building in order to function with the garage doors at each end of the building.

A 150mm freeboard to the garage doors has been provided for the cart washing station at the east side of the building.

Sediment and Erosion Control Plan

An erosion and sediment control plan will be implemented for the construction of the new cart storage building. The plan will include, as a bare minimum the following measures;

- Silt Sacks placed under the grates of all CB's and CBMH's located within the zone of construction
- Light Duty Silt Fence located along the low-lying perimeter of the construction zone. The South property line is located at the top of an undisturbed heavily treed berm, where siltation concerns are non-existent.

Conclusion

The Stonebridge gold course cart storage building can be serviced to meet the requirements of the City of Ottawa and the MOE.

Regards,



Ryan Magladry, C.E.T
Project Manager



Demetrius Yannouloupoulos
Director – Office Lead



Amy Zhuang, P.Eng.
Intermediate Engineer



CLIENT

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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR CITY REVIEW	2021-06-16
2	REVISED AS PER CITY COMMENTS	2021-07-16
3	ISSUED FOR SPA	2021-11-16

NOT FOR CONSTRUCTION

FOR NOTES, LEGEND, CB TABLE, AND DETAILS

KEY PLAN

CONSULTANTS

1:500
 0 5 10 15 20m

SEAL

IBI GROUP
 400 - 333 Preston Street
 Ottawa ON K1S 5M4 Canada
 tel 613 225 5111 fax 613 225 5868
 ibigroup.com

PROJECT
 STONEBRIDGE CLUBHOUSE

PROJECT NO:
 122507

DRAWN BY: D.P.S. **CHECKED BY:** R.M.

PROJECT MGR: R.M. **APPROVED BY:** D.G.Y.

SHEET TITLE
 STORM DRAINAGE AREA PLAN

SHEET NUMBER C-550 **ISSUE** 3

Pre-development		
	Area (ha)	C
Grass	0.333	0.20
Building	0.000	0.90
Driveway & Parking	0.744	0.90
Total	1.077	0.68

Post-development		
	Area (ha)	C
Grass	0.395	0.20
Building	0.051	0.90
Driveway & Parking	0.631	0.90
Total	1.077	0.64

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