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December 18, 2013
File:163600886

Attention: Mr. Kevin Murphy, P.Eng.
Project Manager, Land Development
Mattamy Homes
50 Hines Road, Suite 100
Ottawa, ON
K2K 2M5

Dear Kevin,

Reference: Half Moon Bay South Draft Plan #2 – Transportation Assessment Update

1 INTRODUCTION

Mattamy Homes (Mattamy) seeks to obtain draft plan approval for their proposed development in South Barrhaven referred to as Half Moon Bay South Draft Plan #2.

Draft Plan 2# represents a portion of the undeveloped lands of Half Moon Bay South (HMBS). Previously, and as part of an earlier development application, all of the remaining undeveloped lands of HMBS were considered part of Draft Plan #2. As a result of the ongoing Realigned Greenbank Road Environmental Assessment (EA) study, however, the area of Draft Plan #2 has been modified (i.e. reduced) in order to maintain flexibility and to ensure adaptability with the three preliminary candidate alignments identified in the EA. While some of the other undeveloped areas of HMBS are subject to change based on the outcome of the EA, only the subject lands are being brought forward for draft approval consideration. For the purposes of this letter, the remaining undeveloped lands of HMBS will be referenced as Draft Plan #3 and would be part of subsequent development applications.

In March 2011, Mattamy attained draft approval for the development of the Draft Plan Phase 1 of HMBS. The *Half Moon Bay South Transportation Impact Study (TIS)*, January 20, 2011, was prepared by GENIVAR as part of the supporting studies that accompanied the draft plan submission. The GENIVAR TIS accounted for the transportation impacts from all of the lands within Half Moon Bay South, including Draft Plan #1, Draft Plan #2, and Draft Plan #3. The application was deemed complete and Draft Plan #1 received approval and was subsequently registered.

Following the 2011 TIS by GENIVAR, Stantec was retained to provide an update to and reconfirm the validity of the original TIS. In June of 2013 a letter was submitted in support of the Half Moon Bay South Draft Plan #2.

This letter supersedes the June 19, 2013 letter prepared by Stantec. This letter will compare the trip generation characteristics and road layout of the current Draft Plan #2 development proposal to the original concept that was approved in the 2011 TIS.



Reference: **Half Moon Bay South Draft Plan #2 – Transportation Assessment Update**

1.1 HALF MOON BAY SOUTH TRANSPORTATION IMPACT STUDY FINDINGS AND CONCLUSIONS SUMMARY

Through the *Half Moon Bay South Transportation Impact Study (TIS)*, January 20, 2011 it was determined that the following upgrades would be required to support the full build out of Half Moon Bay South (including Draft Plan #1; Draft Plan #2 and Draft Plan #3):

- Signalization of the intersection of existing Greenbank Road and Dundonald Drive
- Northbound left turn lane at Greenbank Road and Dundonald Drive
- Southbound right turn lane at Greenbank Road and Dundonald Drive
- Eastbound left turn lane at Greenbank Road and Dundonald Drive

Furthermore, it was concluded that with the above upgrades, the HMBS development could proceed in advance of the realigned Greenbank Road extension.

Attached is Table 5 from the 2011 TIS, which summarizes the proposed upgrades at the intersection of Greenbank Road and Dundonald Drive.

Through Transportation Impact Assessments (TIA) submitted to support the registration of Draft Plan #1 these upgrades were reconfirmed and the timing of the upgrades was determined. As part of the construction of the intersection of Dundonald Drive and existing Greenbank Road the ultimate turning lane configurations were built and the underground components of the traffic signals were installed. Through the phase specific TIAs the timing of the implementation of the signals was determined. The Phase 2 traffic impact assessment (representing the registration of the final phase of Draft Plan #1) determined that the signals would be warranted before the full build-out of Draft Plan #1. The intersection has been constructed to its ultimate configuration and the timing of the signals has been determined. As a result, if there are no major modifications to the total number of trips generated by the site then, no further upgrades are required to accommodate the full build-out of Half Moon Bay South.

2 PROPOSED DEVELOPMENT

Figure 1 illustrates the current development proposal for HMBS Draft Plan #2.

2.1 TRAFFIC GENERATION

Table 1 provides a comparison of the unit count and trips generated between the original and current draft plan applications.

The 2011 GENIVAR TIS assessed a plan that included a total of 1200 residential units including 713 single family homes and 487 townhouse units. The original concept, which was subsequently draft approved, was forecasted to generate a total of 766 PM peak hour site trips.



Reference: **Half Moon Bay South Draft Plan #2 – Transportation Assessment Update**

With the proposed Draft Plan #2 unit count, HMBS in totality will include a total of 1240 residential units featuring 613 single family homes and 627 townhouse units. Although the latest concept has 40 more residential units than the earlier plan, due to a shift from single family homes to townhomes, the current concept is expected to generate a total of 731 PM peak hour site trips or 35 fewer site trips than what was previously forecasted.

Table 1 – Unit Count and Trip Generation Comparison

| | Entire HMBS Development | Residential Units | | | | Peak Trip Generation | | |
|----------------------------|---------------------------------------|-------------------|-----------|-----|-------|----------------------|-----|-----|
| | | Single Family | Townhouse | | Total | (PM Peak Hour) | | |
| Original Draft Plan Total* | | 713 | 487 | | 1200 | 766 | | |
| Revised Draft Plan Total* | Draft Plan #1 (previously registered) | 321 | 613 | 340 | 661 | 1240 | 388 | |
| | Draft Plan #2 (subject application) | 139 | | 126 | | | 265 | 159 |
| | Draft Plan #3 (future phase) | 153 | | 161 | | | 314 | 184 |
| Difference | | -100 | 140 | | 40 | -35 | | |

* Unit totals represent all of Half Moon Bay South

2.2 ROAD NETWORK / ACCESS LOCATIONS

The nature of the internal road network for Half Moon Bay South remains relatively unchanged in the updated Draft Plan #2. The intersection of River Mist Road and Rue Des Soldats Riendeau Street is not aligned as a 90 degree intersection and will have a total offset of 0.56 metres. This offset falls within the TAC standard and is considered acceptable. The resulting daylighting triangle is sufficient for the sightlines required, although the sightline does overlap Block 28 by 0.26 metres at the intersection of Street J and River Mist Road.

2.3 REALIGNED NEW GREENBANK ROAD

The City of Ottawa is currently undertaking an Environmental Assessment (EA) for Realigned Greenbank Road south of Cambrian Road. Three candidate alignments for Realigned Greenbank Road have been shortlisted - each with varying degrees of impact to the remaining developable lands within HMBS (i.e. those that would accompany Draft Plan #3). Notwithstanding potential impacts to future phases of HMBS, draft approval of Draft Plan #2 will not preclude any of the three shortlisted EA alignments from being selected as the preferred alignment.

3 CONCLUSIONS

When comparing the overall unit count, trip generation potential and the planned road network, the changes to the draft plan from the original / approved draft plan to the current version are considered to be minor in nature.



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Reference: **Half Moon Bay South Draft Plan #2 – Transportation Assessment Update**

Given the minor nature of the revisions it can be concluded that the results of the previous transportation assessments remain valid and no further transportation impact assessment is required. As such, from a transportation impact perspective draft plan approval of the Half Moon Bay South Draft Plan #2 application can proceed.

All of which is respectfully submitted;

Sincerely,

STANTEC CONSULTING LTD.

A handwritten signature in blue ink, appearing to read "Robert Vastag".

Robert Vastag, MCIP, RPP
Senior Transportation Planner
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Attachment: Figure 1 – Half Moon Bay South Draft Plan #2
Table 5 – Intersection Warrants for Greenbank Road and Dundonald Drive; from the Half Moon Bay South TIS, January 2011


Figure 1



Half Moon Bay South

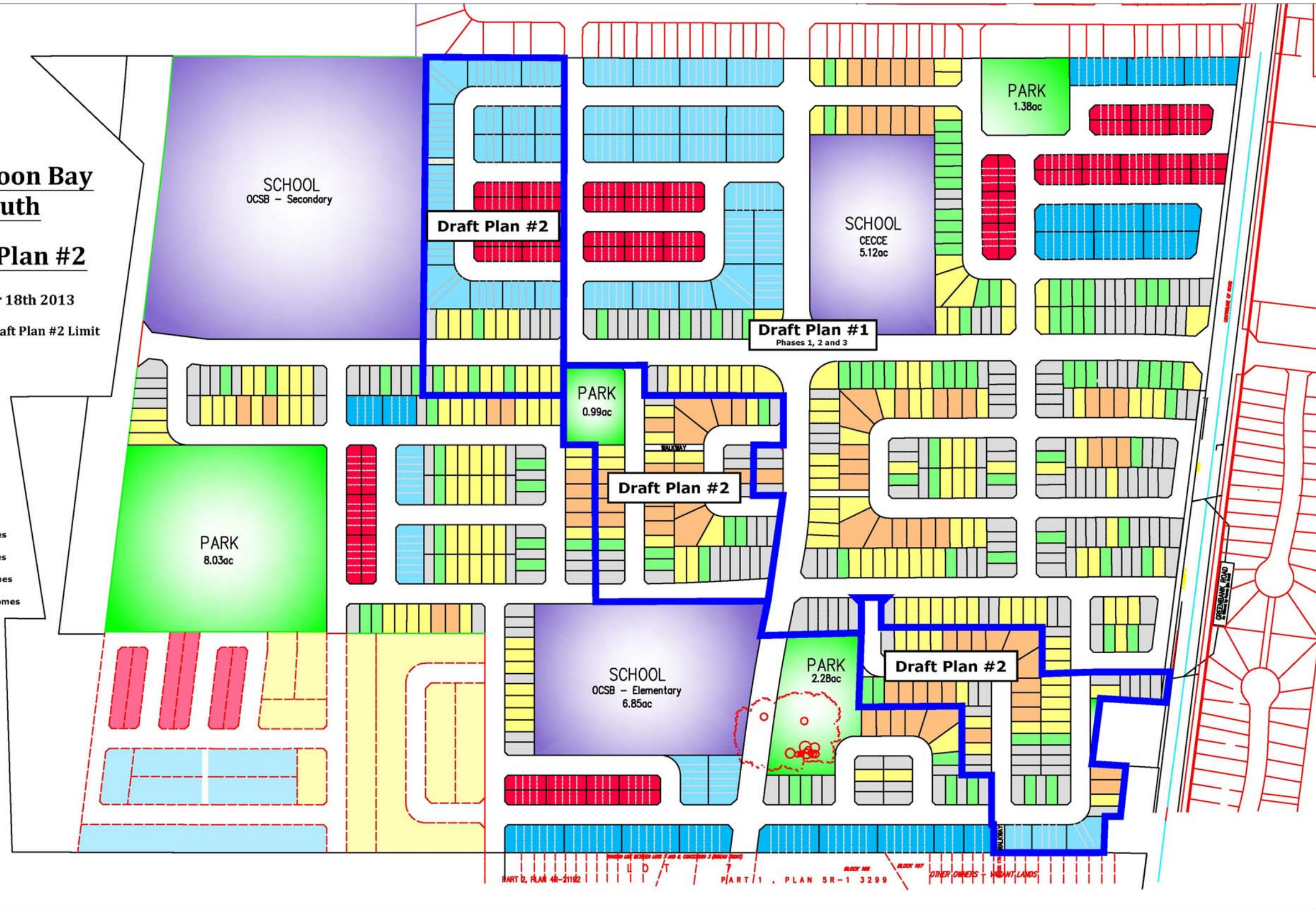
Draft Plan #2

December 18th 2013

 Draft Plan #2 Limit

Unit Type

-  30' Single
-  34' Single
-  36' Single
-  43' Single
-  21' Townhomes
-  23' Townhomes
-  21' Villagehomes
-  20' RL Townhomes





Reference: **Half Moon Bay South Draft Plan #2 – Transportation Assessment Update**

Table 5
Intersection Warrants for Greenbank Road and Dundonald Drive

| Warrant Type | Required | Recommendation | Justification |
|---|--|--|--|
| 2-lane Signalization ¹ | Yes | Yes | - Will also provide pedestrian connectivity across Greenbank Road. |
| 4-lane Signalization ¹ | No | N/A | - With the New Greenbank Road alignment being constructed in Phase 2 of the TMP, the need for a 4 lane existing Greenbank Road will diminish. The need to widen existing Greenbank Road will be determined through the completion of the New Greenbank Road EA and the development schedule. |
| Northbound Left Turn Lane ² | Storage Length = 30 m Parallel Lane = 70 m Taper Length = 70 m | Storage Length = 30 m Parallel Lane = 70 m Taper Length = 70 m | - The storage and taper lengths are appropriate for the volume turning into the development during the PM Peak period. |
| Southbound Right Turn Lane ² | Parallel Lane = 60 m Taper Length = 70 m | Parallel Lane = 60m Taper Length = 70 m | - The storage and taper lengths are appropriate for the volume turning into the development during the PM Peak period. |
| Eastbound Left Turn Lane ² | Not Required | Storage Length = 15 m Taper Length = 50 m | - While the warrants were not triggered for the left turn lane, exiting the development, it is recommended for improved operation and to reduce the delay for vehicles making through or right turn movements. |

¹ MTO Signal Warrant Analysis

² Geometric Design Manual, MTO, Chapter E