

July 13, 2020

Mr. Kevin Neatt
Director, Planning & Development
Clayton Developments Limited

[Via Email: kneatt@claytondev.com]

RE: Traffic Impact Statement Addendum - Charleswood Development, Windsor Junction, NS

Dear Mr. Neatt:

Plans are being prepared for Charleswood Development, a 177-unit residential development between Charleswood Drive and Cumberland Way, in Windsor Junction (PID # 00510560 and 40699837). Another nearby development is in progress, Windgate Development, that is expected to increase the traffic volume on Windgate Drive. This is an addendum to the previously completed Traffic Impact Statement (WSP, November 2018) that summarizes the expected impact of Windgate Development on the conclusions reached in the Charleswood Development Traffic Impact Statement.

SITE DESCRIPTION AND PLANNED NEARBY DEVELOPMENT

The Charleswood Development site is currently undeveloped and is located north of Windgate Drive and west of Windsor Junction Road with existing residential development bordering the proposed development (See Figure 1). The proposed Charleswood Development consists of up to 177 residential units and will be a mixture of single family and adult housing. The adult housing is expected to be accessed via Cumberland Way while single family units will have access to both Cumberland Way and Charleswood Drive. There is no planned onsite connection between the Cumberland Way and Charleswood Drive portions of the development. Traffic generated by the 177 units is expected to access Windgate Drive via the existing Cumberland Way and Charleswood Drive intersections.

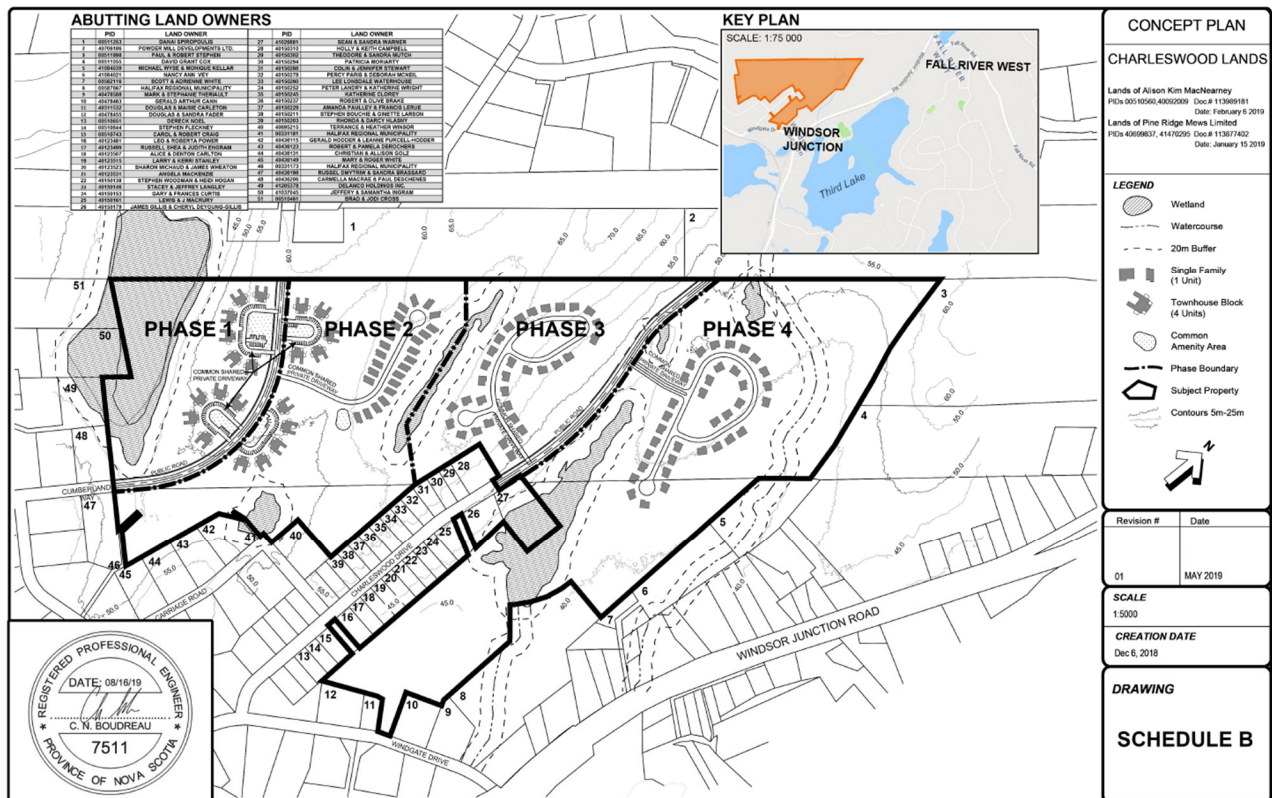


Figure 1 - Charleswood Development Site Plan

A Traffic Impact Study was completed for the nearby Windgate Development (WSP, March 2015) as well as an addendum (WSP, July 2019) to adjust the proposed land use. Based on the July 2019 addendum, the proposed development will include 368 residential units and will be a mixture of single family, semi-detached and apartment units.

DESCRIPTION OF WINDGATE DRIVE

Windgate Drive is a 2-lane major collector street that runs east-west and connects Windsor Junction Road with Beaver Bank Road. Traffic volume data collected by HRM Traffic Management in June 2017 indicates the two-way annual average weekday traffic (AAWT) volume on Windgate Drive between Cumberland Way and Windsor Junction Road is approximately 3,650 daily vehicles and under 250 vehicles in each direction during the morning and evening peak hours. The posted speed limit is 70km/h.

TRIP GENERATION – CHARLESWOOD DEVELOPMENT

The Traffic Impact Statement for the Charleswood Development completed trip generation estimates and they are as follows:

The Charleswood Drive portion of the site is planned to consist of 68 single family residential units. Trip generation estimates were prepared using published trip generation rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, Washington, 2017). It is estimated that the new development along Charleswood Drive will generate:

- 51 two-way trips (13 entering and 38 exiting) during the AM peak hour; and,
- 67 two-way trips (42 entering and 25 exiting) during the PM peak hour.

The Cumberland Way portion of the site is planned to consist of 25 single family residential units and 84 senior adult housing (attached townhouses). Trip generation estimates were prepared using published trip generation rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, Washington, 2017). It is estimated that the new development along Cumberland Way will generate:

- 36 two-way trips (11 entering and 25 exiting) during the AM peak hour; and,
- 47 two-way trips (28 entering and 19 exiting) during the PM peak hour.

TRIPS FROM WINDGATE DEVELOPMENT

WSP has reviewed the trip generation completed in the Traffic Impact Study and addendum for the Windgate Development. Windgate Development is broken into two portions, northern and southern. The trip generation was prepared using published trip generation rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, Washington, 2017). The following are the trip estimates based on the July 2019 addendum:

Southern Portion

- 169 two-way trips (41 entering and 128 exiting) during the AM peak hour; and,
- 218 two-way trips (137 entering and 81 exiting) during the PM peak hour.

Northern Portion

- 69 two-way trips (17 entering and 52 exiting) during the AM peak hour; and,
- 92 two-way trips (58 entering and 34 exiting) during the PM peak hour.

Trip distribution for the Windgate Development was prepared in the Traffic Impact Study (March 2015, WSP). WSP reviewed the expected background traffic growth from the Windgate Development that would pass the access points of Charleswood Development on Windgate Drive and is summarized in Table 1.

Table 1 – Windgate Development Background Trips on Windgate Drive across Charleswood Development

	AM Peak	PM Peak
Eastbound	76	48
Westbound	24	82
Two-way	100	130

Based on the Windgate Development trip generation estimates (outlined in Table 1) and trip distribution, it is anticipated that the westbound volume on Windgate Drive, along the frontage of the Charleswood Development, will increase by approximately 80 vehicles during the PM peak hour. Since HRM Traffic Management indicated that there are under 250 westbound vehicles during the PM peak currently on Windgate Drive, the total advancing volume is expected to be low, therefore, left turn lanes are not expected to be warranted for traffic turning at Charleswood Drive or Cumberland Way.

SUMMARY

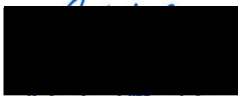
1. Plans are being prepared for Charleswood Development, a 177-unit residential development between Charleswood Drive and Cumberland Way, in Windsor Junction (PID # 00510560 and 40699837).
2. Review of a nearby development, Windgate Development, is proposed to include 368 residential units. This development will add approximately 100 two-way during the AM peak hour and approximately 130 two-way trips in the PM peak hour across the access points of Charleswood Development on Windgate Drive.

CONCLUSION

3. After review of the anticipated background volumes on Windgate Drive by the Windgate Development across the site access locations for Charleswood Development and the existing low volumes expected on Windgate Drive, the conclusions reached in the Traffic Impact Study (November 2018) continue to be valid.
 - *HRM data from 2017 indicates that the directional volumes on Windgate Drive are under 250 vehicles per hour in each direction at both Charleswood Drive and Cumberland Way. Considering these low volumes, left turn lanes are not expected to be warranted for traffic turning at either intersection.*
 - *Considering the HRM data indicates relatively low background traffic volumes on Windgate Drive, additional volumes that will be generated by the added development on Charleswood Drive and Cumberland Way are not expected to have any noticeable impact on the level of performance of existing roads and intersections.*

If you have any questions or comments, please contact me by email at courtney.mccarthy@wsp.com or by telephone at 902-536-0982.

Sincerely,



Courtney McCarthy, P.Eng.
Traffic & Transportation Engineer
WSP Canada Inc.

