NOVATECH
Engineers, Planners & Landscape Architects

April 8, 2025

City of Ottawa
Planning, Development, and Building Services Department
110 Laurier Ave. W., 4th Floor,
Ottawa, Ontario K1P 1J1

Attention: Mr. Stream Shen
Planner III, Development Review West

Dear Mr. Shen:

Reference: South March Urban Expansion Area
Transportation Capacity Assessment Addendum
Novatech File No. 121038

A Transportation Capacity Assessment was prepared in October 2024 in relation to a Private Official Plan Amendment (OPA) application for the South March Urban Expansion Area (SMUEA) in the City of Ottawa. The lands are located south of March Road and Cameron Harvey Drive, north of Old Carp Road and the previously approved Kanata North Urban Expansion Area (KNUEA) lands, between Old Second Line Road to the west and the Beachburg Rail Corridor to the east. The October 2024 assessment considered the impact of about 4,080 residential units assuming a gross developable area of approximately 233 hectares excluding the existing rural estate subdivisions, and assuming 50% of the land is developable with 35 residential units per developable hectare.

The City provided a letter dated November 22, 2024 deeming the application incomplete, including comments regarding the Transportation Capacity Assessment. A Revised Transportation Capacity Assessment was submitted on April 4, 2025. The April 2025 assessment indicated that transit screenline analysis would be prepared as part of the Community Design Plan process when a Concept Plan is developed and updates to the City's Transportation Master Plan (TMP) and Development Charges By-Law are complete.

While we don't agree that it's required for the Private OPA application, a transit screenline analysis has been completed as part of this addendum to determine if changes are required to accommodate the development-generated travel demands.

1.0 Screenline

As noted in the October 2024 assessment, a custom screenline was developed for the study area in consultation with City staff. The custom screenline generally follows the Renfrew Rail Corridor, crossing March Road (west), Huntmar Drive, Terry Fox Drive, March Road (south), and Herzberg Road, where it extends east of Herzberg Road and crosses Carling Avenue.

2.0 Transit Capacity

Transit service is provided along Terry Fox Drive, March Road, and Carling Avenue across the custom screenline.

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Transit capacity along Terry Fox Drive and Carling Avenue is estimated at 450 passengers/hour. This is based on 10-minute peak period headways and an assumed capacity of 75 passengers for an articulated bus at 85% occupancy.

The City's *TMP Update Transit Network Development* report dated March 31, 2025 includes draft "Needs Based" and "Priority" Transit Networks. The Priority Transit Network includes Bus Rapid Transit on March Road between Corkstown Road and Terry Fox Drive. Per the transit planning guidelines in Table 1 of the City's report, the capacity of median rapid transit along March Road is estimated at 3,000 passengers/hour per direction. This is based on a two-minute peak period headway (ie. a bus would arrive every two minutes for the morning peak period) and an assumed capacity of 90 passengers for an articulated bus at 100% occupancy.

Total capacity across the screenline is estimated at 3,900 passengers/hour per direction, based on the Terry Fox Drive and Carling Avenue bus service and the March Road median rapid transit.

3.0 Projected Transit Demand

The Transit Volume Plot from the City's 2046 TRANS model was obtained in March 2025. The plot is included as **Attachment 1**. The 2046 transit volumes have been used to estimate the background peak hour demand over the length of the screenline.

The 2046 TRANS Transit Volume Plot shows that the peak direction of travel across the screenline is inbound in the a.m. towards the Kanata North Business Park. The inbound background transit volumes across the screenline are as follows in the a.m. peak:

- Terry Fox Drive 176
- Carling Avenue 166
- March Road 1,045

TOTAL 1,387

Site generated transit trips were estimated in the October 2024 assessment and the revised April 2025 assessment at about 560 passengers/hour in the weekday a.m. and p.m. peaks. In the a.m. peak this includes about 170 inbound trips and 390 outbound trips. In the p.m. peak this includes about 330 inbound trips and 230 outbound trips.

Adding site trips to background trips gives a total inbound volume of 1,557 transit trips in the a.m. peak. This is much less than the estimated capacity of 3,900 trips/hour across the screenline. No changes to the planned transit network are required across the screenline to accommodate the site generated transit trips.

North of Old Carp Road and Maxwell Bridge Road the 2046 TRANS model includes only one transit route, along March Road. A background transit volume of 186 outbound trips is projected for this route in the a.m. peak. Adding the outbound site generated transit trips to this gives a total outbound volume of 576 trips, which exceeds the capacity of 450 passengers/hour. At full buildout of the SMUEA a second bus route may be required, potentially along Old Second Line Road. Bus service is provided along Old Second Line Road south of Old Carp Road.

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4.0 Conclusions

The findings of this addendum are summarized as follows:

- Transit analysis has been completed for the custom screenline developed with City staff along the Renfrew Rail Corridor.
- Total capacity across the screenline is estimated at 3,900 passengers/hour per direction, based on bus service along Terry Fox Drive and Carling Avenue and median rapid transit along March Road.
- The 2046 TRANS model shows an a.m. peak background volume of 1,387 transit trips in the peak direction.
- Site generated transit trips were estimated at 170 inbound and 390 outbound in the a.m. peak.
- The total projected transit trips are much less than the estimated capacity across the screenline.
- No changes to the planned transit network are required across the screenline to accommodate the site generated transit trips.
- At full buildout a second bus route may be required north of Old Carp Road and Maxwell Bridge Road, potentially along Old Second Line Road. Bus service is provided along Old Second Line Road south of Old Carp Road.

We trust that this addendum adequately addresses the transit screenline analysis for the SMUEA Private OPA application.

Please call if you have any questions or wish to discuss.

Sincerely,

NOVATECH

Jennifer Luong, P.Eng.
Senior Project Manager | Transportation

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Attachment 1

2046 TRANS Model Transit Volume Plots

TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Period Total Transit Volume

South March UEA OPA

2046 Model - Basecase

N/A

User Initials: TIMW
Plot Prepared: March, 2025
EMME Scenario: 46001

Legend

AM Peak Period Total Transit Volume

1000 2000 3000 4000 5000

N

Distance (m)

500 1000 1500 2000