

## APPENDIX E

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Project No. 212046

Dr. Mather Carscallen  
Rosebank Homes  
Email: mather.carscallen@gmail.com  
Tel: 902-412-1884

### Re: Rosebank Homes, Herring Cove, NS – Traffic Impact Statement

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Mr. Carscallen,

Harbourside Transportation Consultants has completed a traffic impact statement, as per Halifax Regional Municipality (HRM) requirements, to support the development application for the residential development known as Rosebank Homes in Herring Cove, Nova Scotia.

**Site Context:** The proposed residential development is located on the east side of Herring Cove Road near Norawarren Drive. The site context is illustrated in Figure 1.



Figure 1: Site context, Herring Cove, NS



Herring Cove Road is an arterial roadway that connects the community of Herring Cove and surrounding areas to the regional centre at the Armdale roundabout. In the vicinity of the development, Herring Cove Road has a rural two-lane cross section with on-street bike lanes on both sides of the roadway. Herring Cove Road has a posted speed limit of 50 km/hr. The cross section of Herring Cove Road is shown in Figure 2.



Figure 2: Herring Cove Road

Norawarren Drive is a local cul-de-sac roadway with access on Herring Cove Road. Norawarren Drive has a two-lane cross section with sidewalk on the east side of the roadway. The cross section of Norawarren Drive is shown in Figure 3.

Reginald Court is a local roadway that connects to Norawarren Drive. Reginald Court has a two-lane cross section with sidewalk on the south side of the roadway. The cross section of Reginald Court is shown in Figure 4.



Figure 3: Norawarren Drive

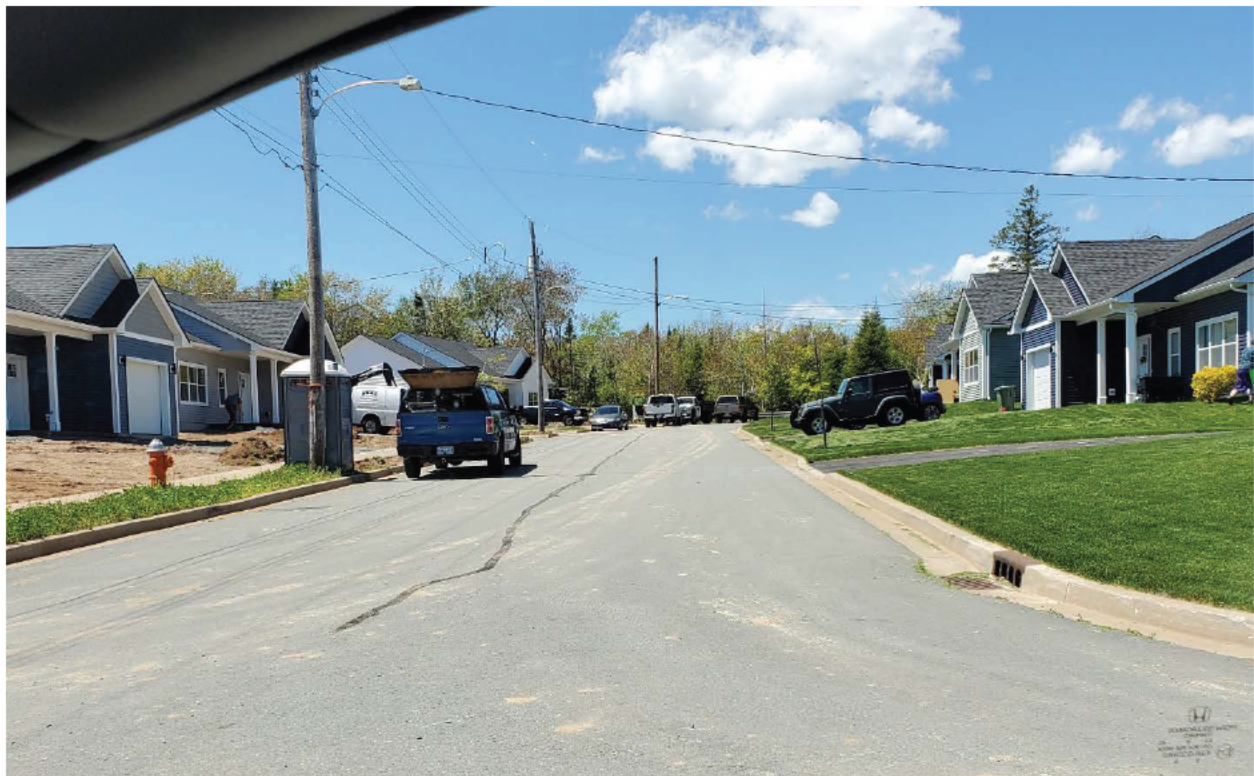


Figure 4: Reginald Court



**Transit:** The area is serviced by Halifax Transit Routes 9B Herring Cove (Figure 5). There are bus stops on Herring Cove Road within 100 metres of the Norawarren Drive intersection.

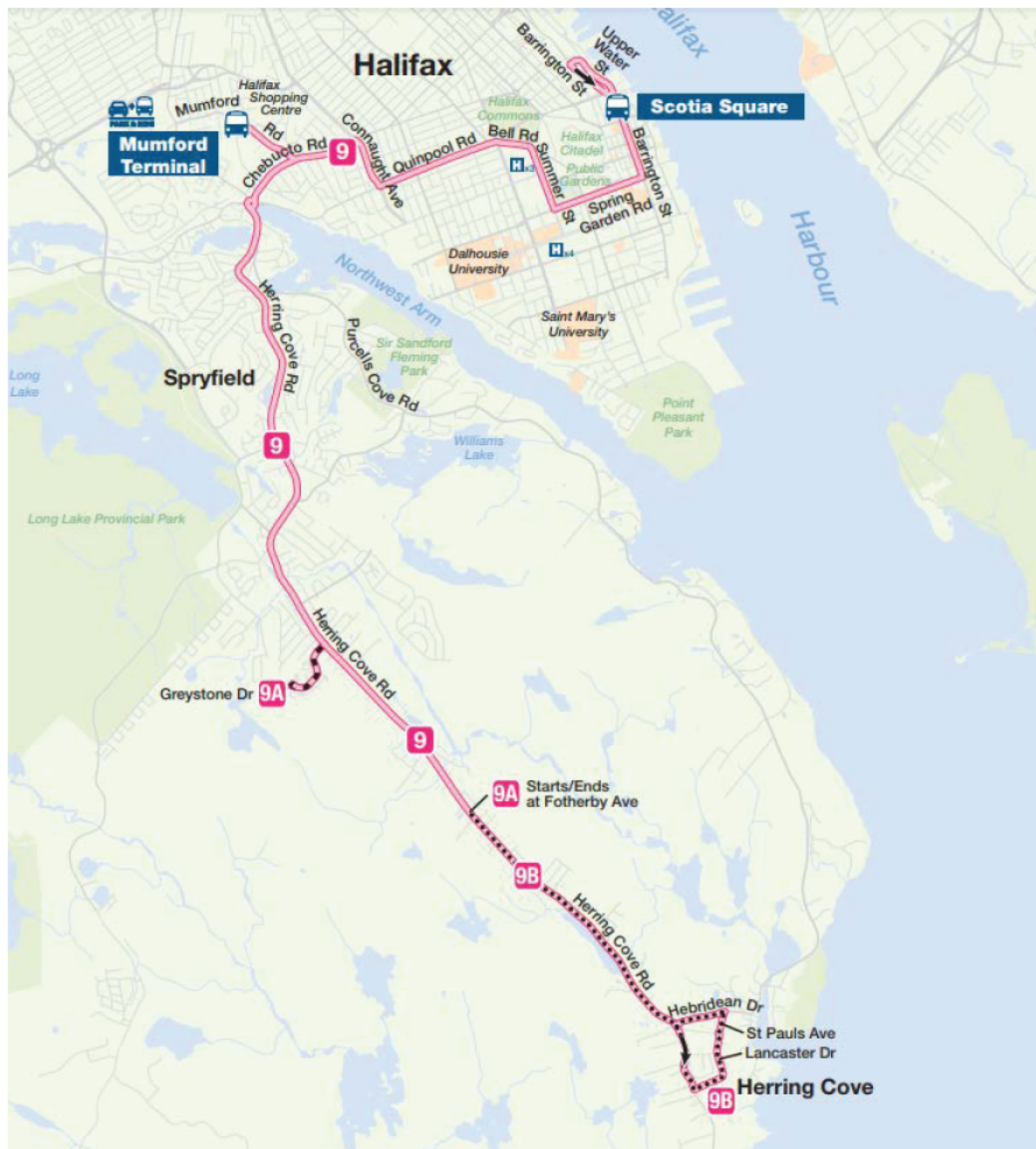


Figure 5: Halifax Transit Route 9 map

**Proposed Development:** The proposed residential development will extend Reginald Court into a cul-de-sac roadway and include 19 single-family homes. The proposed site development plan is shown in Figure 6.



Figure 6: Site development plan by UPLAND Planning + Design Studio dated August 17, 2022

**Access:** The proposed development is an extension of an existing street and will be access from Herring Cove Road through the existing intersection with Norawarren Drive. The intersection is unsignalized with stop-control on the Norawarren Drive approach.

The sight distance available at the intersection was reviewed to ensure the minimum stopping sight distance and turning sight distance requirements of the Transportation Association of Canada's (TAC) *Geometric Design Guide for Canadian Roads* are met. The minimum stopping and turning sight distance requirements for a two-lane roadway with a design speed of 50 km/h are:

- Minimum stopping sight distance = 65 metres
- Minimum turning sight distance – left-turn from stop = 105 metres
- Minimum turning sight distance – right-turn from stop = 95 metres

The minimum stopping sight distance requirement is met in both directions on Herring Cove Road. The turning sight distance to the left of the Norawarren Drive is shown in Figure 7. The turning sight distance to the left of the Norawarren Drive exceeds the requirement of 105 metres.



Figure 7: Sight distance looking to the left of Norawarren Drive

The turning sight distance to the right of the Norawarren Drive is shown in Figure 8. To the right of the access there is approximately 95 metres of sight distance available. The minimum turning sight distance required for a left turn is not met. The sight lines are partially obstructed by bushes and utility poles, the turning sight distance could be improved by clearing shrubbery from the sight lines.



Figure 8: Sight distance looking to the right of Norawarren Drive

**Trip Generation:** The vehicle trip generation estimates for the development were quantified using trip generation rates from the 10<sup>th</sup> edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. The weekday morning (AM) and afternoon (PM) peak hour trip generation estimates for the proposed development are summarized in Table 1. On a typical weekday, the proposed development is expected to generate 14 vehicle trips in the morning peak hour (3 trips entering, 11 trips exiting) and 19 vehicle trips in the afternoon peak hour (12 trips entering, 7 trips exiting).

Table 1: Trip generation estimates

Land Use Code	Units	Trip Generation Rates (vph/unit)						Trips Generated (vph)					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
210 Single-Family Detached Housing	19	0.74	0.18	0.56	0.99	0.62	0.37	14	3	11	19	12	7

**Impact to Surrounding Roadways:** The site-generated vehicle trips will travel along Reginald Court and Norawarren Drive to and from Herring Cove Road. It is expected that the majority of trips would travel to/from the west on Herring Cove Road. The trip generation estimates indicate that the proposed development will generate less than 15 vehicles trips during the morning peak hour and less than 20



vehicles trips during the afternoon peak hour. It is anticipated that the new vehicle trips associated with the proposed development can be accommodated at the intersection of Herring Cove Road and Norawarren Drive with a negligible impact on traffic operations. It should be noted that this consists of a high-level qualitative assessment, therefore no analytical capacity calculations have been completed to support the assessment.

If you have any questions or additional discussion, please feel free to contact the undersigned.

Regards,



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