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**Item No. 12.1.1**  
**Transportation Standing Committee**  
**September 26, 2019**

**TO:** Chair and Members of the Transportation Standing Committee

*-Original Signed-*

**SUBMITTED BY:**

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Brad Anguish, Director, Transportation and Public Works

*-Original Signed-*

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Jacques Dubé, Chief Administrative Officer

**DATE:** August 13, 2019

**SUBJECT:** **Proposed Route 91 – Hemlock Ravine**

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**ORIGIN**

Item 12.2.2 of the June 20, 2019 session of the Transportation Standing Committee.

MOVED by Councillor Outhit, seconded by Councillor Mason THAT the Transportation Standing Committee request a staff report with recommendations on how to address the documented concerns from the residents and the District Councillor to be completed within 60 days. These concerns relate to existing and anticipated safety, speeding, traffic volume, short cutting, and congestion issues on Oceanview Drive.

MOTION PUT AND PASSED

**LEGISLATIVE AUTHORITY**

HRM Charter, Part III, subsection 69(1)(a), "The Municipality may provide public transportation service by the purchase of vehicles or vessels and operation of the service."

Nova Scotia Motor Vehicle Act, Part V, subsection 89(1), "...traffic authorities in regard to highways under their respective authority may cause appropriate signs to be erected and maintained designating business and residence districts and railway grade crossings and such other signs, markings and traffic control signals as may be deemed necessary to direct and regulate traffic and to carry out the provisions of this Act."

**RECOMMENDATION**

It is recommended that the Transportation Standing Committee recommend that Halifax Regional Council direct the CAO to monitor operations along Oceanview Drive following the implementation of Route 91 – Hemlock Ravine to identify any adjustments to bus stop locations, on-street parking and/or the installation of additional pavement markings, signage or other infrastructure, as required, resulting from the implementation of the transit route.

## **BACKGROUND**

Oceanview Drive is a local residential street that runs approximately 1.3 km between Amin Street and Armenia Drive. Located in the Papermill Lake / Bedford South area, the street is approximately 9 m wide and provides access to residential properties with multiple side street connections and frequent residential driveways over its entire length. At the northeastern end, approximately 100 m beyond Amin Street, Oceanview Drive also provides primary access to the Bedford South School.

The street is of typical design for an urban local street (i.e. 9 m wide, concrete curb/gutter, sidewalk on at least one side, etc.) and was planned as part of the overall street network included in the Papermill Lake and Bedford South subdivisions. At present, there are connections to the north via Royal Masts Way and Amin Street, providing access to Moirs Mill Road and Nelson's Landing Boulevard with connections to the south through Armenia Drive and Nine Mile Drive, providing access to Larry Uteck Boulevard and Highway 102. Additional connections to the north are planned via extensions of Armenia Drive and Nine Mile Drive that would occur with future development of the Papermill Lake area and provide additional direct access to Moirs Mill Road.

Information was submitted through the area Councillor outlining resident concerns related to safety conditions along Oceanview Drive. The concerns are primarily related to traffic volume, congestion and speed on the street and the feeling that implementation of a transit route would worsen the situation without first implementing traffic calming measures or providing additional road connections to provide alternate routes for traffic to use instead of Oceanview Drive.

## **DISCUSSION**

The primary concerns identified by the community can be discussed via three overarching areas; transit, traffic and road connections.

### Transit

As per the Council approved *Moving Forward Together Plan* (MFTP) and 2019/20 Halifax Transit Annual Service Plan, the new Halifax Transit Route 91 Hemlock Ravine is scheduled to enter service November 25, 2019 as part of the bundled service changes. In approving these plans and associated required resources, Regional Council has approved the general purpose and connectivity provided by the route. Specific routing, including streets travelled on, turning movements, and bus stop locations are determined operationally during implementation of the route. This new local route will be introduced as part of the overall network changes in Bedford, Sackville and parts of Dartmouth.

The intention of the new Route 91 Hemlock Ravine is to introduce a direct connection between the growing community of West Bedford and Halifax Shopping Centre/Mumford Terminal, while also improving transit service and access to Bedford South. The demand for improved connections between Mumford Terminal and Bedford Highway were raised by members of the public during consultation, and this route aims to address that gap in service. As shown in Figure 1, this new local route will expand service to new areas including Starboard Drive, Nine Mile Drive, Oceanview Drive and Moirs Mill Road. It also creates a new connection between Bedford Highway and Mumford Terminal which was previously unavailable. This route will also serve the planned West Bedford Park & Ride on Innovation Drive once completed.

Oceanview Drive would see the introduction of transit service between Nine Mile Drive and Amin Street. Staff anticipate that this section would be best served by a total of six stops (three stops in each direction) to ensure good and walkable access to transit service.

As per the span of service approved in the MFTP, the new Route 91 Hemlock Ravine will operate every 30 minutes during weekday rush hours, and every 60 minutes during all other in-service times. This will result in the addition of only four vehicles per hour (two per direction) during weekday rush hours and two vehicles per hour (one per direction) at all other times.

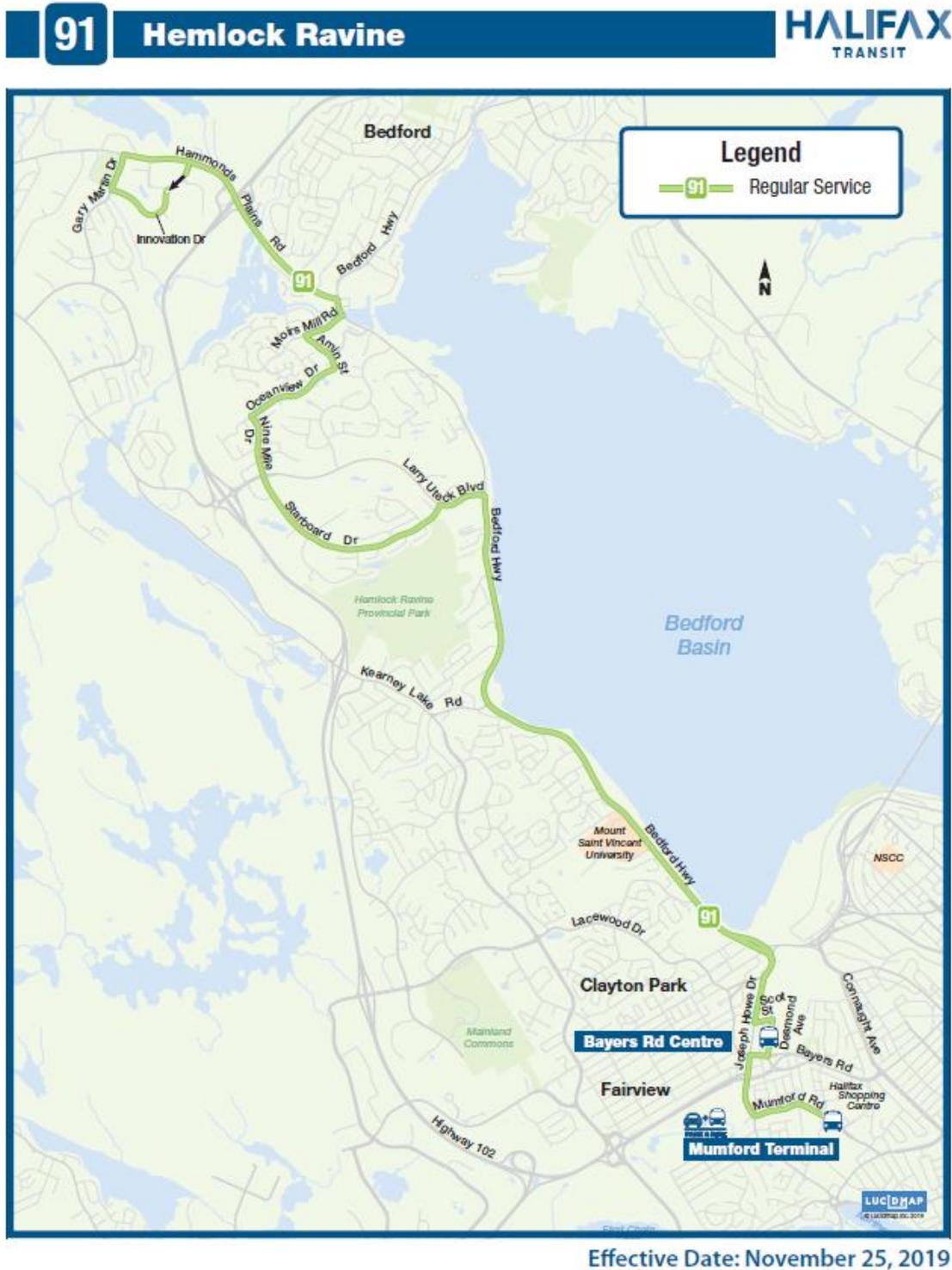


Figure 1: Route 91 Hemlock Ravine Map

Some concerns were raised about how buses would be able to operate during winter conditions given the grades on Oceanview Drive. Like other routes in Bedford and across the network, the steep grade of some roads can cause issues for Halifax Transit vehicles in inclement weather. It is anticipated that the new Route 91 Hemlock Ravine will likely require a snow plan route, like that followed by the Route 90 today (Bedford Highway to Hammonds Plains Road) and continue to serve Innovation Drive and Broad Street, depending on operational requirements.

Staff has investigated other concerns raised about the general operation of buses on Oceanview Drive, related to its design and the fact that it is classified as a local road, traffic volumes, proximity to the local elementary school, and on-street parking. As indicated in the background section of this report, Oceanview Drive's design is typical for a local street and it is not unusual for buses to operate on local roads of this type. As well, the addition of improved transit service in this area has the potential to help reduce the traffic travelling through Oceanview Drive by providing a more convenient and efficient mode choice. After reviewing the concerns brought forward, it was found that conditions are not unique, and there is no inherent safety issue with introducing transit service on this street.

The November 2019 service changes impact numerous transit routes, and significantly changes travel by transit in the Bedford and Sackville areas. The Route 91 Hemlock Ravine must be considered as part of the network, and any changes to the routing could have network wide implications and create gaps in service, or additional redundancies.

As of September 2019, the entire new November network exists in the transit scheduling software, in the form of public timetables, vehicle assignments, and Operator duties. The creation of this network in the software has taken over six months of detailed scheduling. Any change to the network or schedule, would require weeks, and potentially months, to re-create valid outputs within resource and budget allocations.

For a typical service change, all scheduling outputs are required to be complete and finalized a minimum of ten weeks prior to the service change, as they feed into both technological and employee shift selection processes. To meet that ten week deadline, any route adjustments, even those minor in nature, must be finalized well before then, to allow for both the scheduling work, and other procedural requirements, such as review meetings, to occur, before the outputs are finalized.

Of the four quarterly service adjustment periods, November requires more preparation and lead time as it includes a separate extended schedule for New Years Eve. Due to the magnitude of the November 2019 service changes, additional time was required for quality control and to ensure that technology, including stop announcements, trip planning apps, etc. will be accurate and correct. As such, all scheduling outputs were required to be finalized by early August 2019, and there is no opportunity for any modifications.

Identifying an alternative routing is not possible ahead of the November 25, 2019 launch date. Any modifications to the Route 91 Hemlock Ravine for November 2019 would need to function as operational detours, and would result in incorrect information being provided through all digital mediums, including the Departures line, digital screens, trip planning website, and apps, leading to very challenging communication of the modifications.

### Traffic

Traffic volume, vehicle speed and congestion were the prominent concerns identified by residents through correspondence provided to staff. Oceanview Drive has been assessed under the Council approved Traffic Calming Administrative Order (TCAO) and, based on the assessment, does qualify for implementation of traffic calming measures.

Assessments conducted under the TCAO look at factors such as traffic speed, traffic volume, visibility obstructions, pedestrian facilities, etc. Two sections of Oceanview Drive were assessed separately; Royal Masts Way to Nine Mile Drive and Amin Street to Royal Masts Way. Results of the assessment showed that neither section have any geometric elements that result in visibility obstructions and the 9 m wide travel

way with concrete curb/gutter (both sides) and concrete sidewalk (one side) is typical of local streets throughout HRM. Traffic speed and volume data for the two sections of Oceanview Drive is shown in the following table.

	85 <sup>th</sup> Percentile Speed (Km/h)	Vehicle Volume (vehicles/day)
Royal Masts Way to Nine Mile Drive	55	3226
Amin Street to Royal Masts Way	47	1740

As per the process outlined in the TCAO, the timeline for implementation of measures is dependent on the relative ranking score of the street and/or integration opportunities with other HRM construction projects. At the time of this report, Oceanview Drive ranked 35<sup>th</sup> and 45<sup>th</sup> (Royal Masts Way to Nine Mile Drive and Amin Street to Royal Masts Way, respectively) out of approximately 206 locations. These rankings are based on traffic data from the Fall of 2018. It is important to note that ranking positions are constantly changing due to new assessments being conducted, identification of coordination opportunities with other capital work and existing ranked streets moving into the completed stage.

Under current capital budgets, traffic calming measures can be implemented on about 10-15 streets each year. The total number of projects that get completed depends on several variables, including the type of measures to be installed, coordination opportunities with other capital projects, funding commitments, etc.

At this time, it is anticipated that Oceanview Drive could potentially reach the top of the current ranked list for implementation within the next three or so years however, this is not guaranteed as the ranked list constantly changes due to other assessments, coordination opportunities and funding levels.

Vertical traffic calming measures such as speed humps are not considered on transit routes because the jostling movement created for the vehicle poses risk of injury to transit users who are not buckled in and may be standing. Appropriate traffic calming measures for Oceanview Drive would include horizontal deflections which require additional detailed design and funding that was not included in the 2019/20 Capital Budget. As a result, Implementation of formal traffic calming measures by November 2019 is not achievable.

The closure of the parent drop-off / pick-up loop at the Bedford South School was highlighted by residents as having the potential to worsen congestion and impact safety along Oceanview Drive. Staff had consulted with the school administration and did oppose the closure, citing similar concerns as the residents. Ultimately, the decision was outside HRM's control and the access was closed for the last few weeks of the 2019 school year.

After the closure, staff were on site on several occasions during both drop-off and pick-up times to observe and assess operations. Although operations issues were expected, none materialized. There were more vehicles dropping students off on the sidewalk along Oceanview, but no significant issues were identified. Traffic was reported to operate smoothly with no significant impact beyond what was present prior to the closure. It is recognized that this initial period was during a time when school was winding down and good weather is normal, so staff will continue to monitor the situation through the start of the new school year and continue to communicate with the school administration to deal with any issues that might arise.

Some residents suggested restricting parking along Oceanview Drive to help ease the congestion by providing for easier passage of vehicles, including buses. The existing on-street parking does however, act as a form of traffic calming. Feedback from residents outlined that congestion is caused because vehicles often have to pull over and slow down or stop in openings between parked cars in order to allow an opposing vehicle to pass. Although this may be seen as an inconvenience causing congestion, it shows how the on-street parking is able to effectively slow down traffic.

Principles outlined in the Integrated Mobility Plan speak to the acceptance of increases in congestion to promote slower speeds and discouraging single occupant vehicle use. Retaining the on-street parking helps

to slow down traffic using Oceanview Drive and additional congestion could make the route less attractive to drivers, resulting in them choosing alternate routes, avoiding Oceanview altogether.

### Road Connections

Much of the feedback received by residents indicated the need for additional road connections to help divert traffic away from Oceanview Drive and onto Moirs Mill Road. As noted in the background section of this report, road extensions are planned as part of the development of the remainder of the Papermill Lake area.

There is an active planning application (case 20507) currently being processed that includes a request by the owner for a substantive amendment to an existing development agreement for the undeveloped portions of the Papermill Lake development. It is a phased development and the current request is to reconfigure the building lots and the phasing of the road network. To date, the applicant has proposed the following phasing:

- Phase 1 – extend Moirs Mill Road toward Highway 102 and connect into a proposed extension of Nine Mill Drive;
- Phase 2 – extension of Richardson Drive between Moirs Mill Road and Oceanview Drive;
- Phase 3 – construction of additional cul-de-sac roads on lands between the proposed Richardson Drive extension and proposed Nine Mile Drive extension.

The planning application has already completed one public information meeting. Given public interest in the file, as well as recent changes to its content, additional public engagement is planned for September 2019. Although it is anticipated that the application will be moved forward to Council for their consideration in the near future, timing for construction of the extension for Nine Mile Drive is difficult to predict. Development of the new road is entirely dependent on the applicant's willingness to subdivide lands and construct the road, which is in turn dependent on market demand. Though Council can stipulate the order of phasing as well as commencement of construction dates within development agreements, typical timelines within agreements such as this require commencement within 2-5 years of their approval. A failure to commence development within the timelines outlined within a future agreement would result in the development rights to this land expiring, and the agreement negotiation process re-starting.

### Summary

The potential impact to traffic operations along Oceanview Drive resulting from the implementation of the proposed Route 91 – Hemlock Ravine is anticipated to be negligible. The planned schedule will result in only four vehicles added to the roadway per hour during peak times and two vehicles per hour at all other times. The improved transit service also has the potential to help reduce traffic volume by providing a more convenient and efficient travel mode. Any additional congestion that may result from the slower moving buses would only serve to help slow overall traffic speeds and has the potential to help reduce traffic volume by making Oceanview Drive a less attractive route for short-cutting. Oceanview Drive is designed similar to most other local roads throughout HRM and it is not unusual for transit to operate on these roads without issue.

Staff has followed the Council approved process for assessing, ranking and implementing traffic calming projects as it relates to Oceanview Drive. This street currently ranks below many other streets that have also been assessed and any measures considered for Oceanview Drive would require funding and lead time to undertake the necessary design. As such, implementation of formal traffic calming measures would not be achievable prior to implementation of the new transit route. Although it is not possible to implement formal traffic calming at this time, the presence of existing on-street parking as well as the introduction of the slower moving transit vehicles have the potential to create an interim traffic calming effect.

Staff propose to collect additional traffic volume and speed data post implementation of the transit route to help quantify the overall impact, positive or negative. Also, recognizing the fact that increased congestion beyond a point, depending on conditions, could cause access issues and so staff will continue to monitor operations on Oceanview Drive to determine if implementation of some parking restrictions might be beneficial.

Although timing is not certain, when constructed, the extension of Nine Mile Drive to Moirs Mill Road has the potential to reduce overall traffic volume on Oceanview Drive, particularly on the west end between Royal Masts Way and Nine Mile Drive and has a high potential to help alleviate pressures currently being felt by residents along Oceanview Drive.

### **FINANCIAL IMPLICATIONS**

There are no immediate financial implications associated with the recommendation of this report.

If a decision is made to pursue either changes to the current routing proposed for the Route 91 – Hemlock Ravine or implementation of ad hoc traffic calming measures, additional funding will be required as any cost associated with the implementation of route adjustments or ad hoc traffic calming measures is not currently identified in existing or proposed capital and operating budgets. Operating costs associated with the changes are estimated to range between \$30,000 and \$80,000, depending on the decision.

### **RISK CONSIDERATION**

There are no significant risks associated with the recommendations put forward in this report.

### **COMMUNITY ENGAGEMENT**

Information was submitted by residents, through the Municipal Clerk's Office, outlining concerns surrounding traffic on Oceanview Drive. Staff has also been in direct contact with residents and the local Councillor regarding this area.

In addition to the above, staff have also engaged the Principal of Bedford South School, staff from HRCE and police regarding the decision to close the school's drop-off loop and anticipated impact this could have on Oceanview Drive and the surrounding streets.

### **ENVIRONMENTAL IMPLICATIONS**

There are no environmental implications identified.

### **ALTERNATIVES**

TSC could recommend that Regional Council identify a funding source and direct the CAO to immediately pursue changes to the current routing proposed for the Route 91 – Hemlock Ravine and/or immediately pursue the implementation of ad hoc traffic calming measures. This is not recommended for the reasons identified in this report.

### **ATTACHMENTS**

None

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A copy of this report can be obtained online at [halifax.ca](http://halifax.ca) or by contacting the Office of the Municipal Clerk at 902.490.4210.

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