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Item No. Info 2 North West Community Council September 9, 2024

TO: Chair and Members of North West Community Council

FROM: Brad Anguish, Commissioner of Operations

DATE: June 9, 2024

SUBJECT: Hammonds Plains Road – Functional Plan

INFORMATION REPORT

ORIGIN

October 16, 2023 North West Community Council motion (Item No. 14.1.1):

MOVED by Councillor Lovelace, seconded by Councillor Outhit:

THAT North West Community Council request a staff report outlining and prioritizing the steps needed to initiate the planning and consultation process to develop a Functional Plan for Hammonds Plains Road. The report should consider the following:

- 1. Impact of "Schedule J" growth restrictions on developing a connected public road network;
- 2. The increase of population and traffic due to large mixed use as-of-right developments;
- 3. Previously promised connections to Margeson Drive, Eider Drive, Lucasville Road;
- 4. Lack of power poles and lines for streetlight infrastructure on Hammonds Plains Road;
- 5. Need to improve wooden cross-culverts and stormwater infrastructure, including stormwater easements on private property;
- 6. Modernizing intersections and installing turn lanes for public transit and traffic flow:
- 7. Implementing pedestrian safety infrastructure including crosswalks, safer off-street transit stops, and connecting to Lucasville Greenway Project; and,
- 8. Alignment with work already underway to resolve flooding at Bluewater Road and St. Margarets Bay Road, as well as planned upgrades to Halifax Water infrastructure including decommissioning Uplands Park Wastewater Treatment Facility.

MOTION PUT AND PASSED

EXECUTIVE SUMMARY

This report provides a summary of the approach that could be taken to developing a functional plan for the Hammonds Plains Road corridor, with reference to several area specific issues and how they would be considered as part of such a project.

BACKGROUND

Hammonds Plains Road (Route 213) is an arterial roadway that runs east-west approximately 19km between St. Margaret's Bay Road (Trunk 3) in Upper Tantallon and Bedford Highway (Trunk 2) in Bedford. It serves as a regional east-west connection between Highway 102 and Highway 103, and also provides access to several primarily residential communities including Upper Tantallon, Hammonds Plains, Upper Hammonds Plains, Lucasville, West Bedford, and Bedford.

The Hammonds Plains Road corridor varies considerably along its length in terms of geometry, land use, and access control. The western half of the corridor between Upper Tantallon and Pockwock Road is mostly access controlled, with well spaced intersections and relatively few driveways. Between Pockwock Road and Gary Martin Drive, it traverses rolling hills and is fronted by a wide variety of low density residential and commercial properties. East of Gary Martin Drive, Hammonds Plains Road includes some 4-lane sections and is a key link connecting the growing community of Bedford West to Highway 102 and Bedford.

Related Planned Roadway Network Improvements

Roadway network improvements that would impact the functionality of Hammonds Plains Road have been under consideration for several years. These include:

- Upgrades to the Hammonds Plains Road Larry Uteck Boulevard intersection, which were recommended in the Bedford West Master Plan alongside several other road network upgrades, some of which have already been completed on Hammonds Plains Road (widening between Gary Martin Drive and Highway 102, signalization at Innovation Drive)
- Middle Sackville Connector / Beaver Bank Bypass: A proposed collector road that would connect between Hammonds Plains Road and Middle Sackville via Margeson Drive, with access to Highway 101 (Exit 2a). Efforts to advance this connection have been paused since adoption of the Integrated Mobility Plan (IMP) in 2017
- Highway 113: A proposed provincial 100 series highway that would connect Highway 102 and Highway 103, providing an alternate route for regional trips that currently use Hammonds Plains Road. While construction is not anticipated to happen for many years, the Nova Scotia Department of Public Works began corridor preservation work in 1998. The proposed Highway 113 alignment runs through the growing community of West Bedford and adjacent to the Blue Mountain - Birch Cove Lakes Wilderness Area, which is designated for protection under Nova Scotia's Wilderness Areas Protection Act
- Sussex Drive: A proposed connection between Stillwater Lake (Sussex Drive) and Hubley (Eider Drive), with potential for a future interchange connection to the proposed Highway 113. The intent is for a developer to build the connection; however, there have been challenges with acquiring the necessary lands to facilitate the connection

Land Use Considerations

Recognizing the infrastructure capacity constraints on Hammonds Plains Road, restrictions on development have been in place in the Beaver Bank / Hammonds Plains / Upper Sackville Plan area since 1998. The 2006 Regional Plan further restricted development within these areas by limiting residential subdivision activity that includes new public streets in areas under "Schedule J" until transportation infrastructure capacity is increased. At the time, it was assumed that proposed roadway connections including the Middle Sackville Connector / Beaver Bank Bypass would be required to lift these growth controls.

Despite Schedule J growth restrictions that limit development in the area, there are several as-of-right residential developments which have been permitted to proceed in the area on existing lots, and on new lots proposed on existing public streets.

Streetlighting

On some sections of Hammonds Plains Road, a lack of utility poles limits the ability to provide continuous streetlighting. A project requiring significant investment would need to be undertaken to provide the

necessary design and infrastructure (poles, wiring, streetlight fixtures, etc.) to add streetlights to these areas.

Climate Related Vulnerabilities

Climate related events that occurred in spring / summer 2023 exposed vulnerabilities on the Hammonds Plains corridor. Major wildfires in Tantallon and Upper Hammonds Plains in late May / early June resulted in evacuation orders for thousands of residents, all of whom relied on Hammonds Plains Road to exit the area. Heavy rains in July resulted in flooding that closed Hammonds Plains Road in the vicinity of Bluewater Road and St. Margarets Bay Road for extended periods.

The intersection of Hammonds Plains Road and Bluewater Road has been identified as one of the "top ten" sites under the National Disaster Mitigation Program – Flood Risk Assessment Study¹. A preliminary design for mitigation measures was completed in 2019. This work is expected to be combined with infrastructure upgrades required to support the development of Sandy Lake Special Planning Area.

DISCUSSION

A functional planning process is often employed as an early step in understanding the operational constraints and opportunities for transportation corridors, and is typically used to establish a vision for how corridors can be redeveloped over time to better serve current and future mobility needs.

Key components of the functional planning process include:

- Development of a detailed understanding of existing conditions
- Estimation of future transportation demand
- Establishment of objectives and measures of effectiveness
- Development of infrastructure upgrade options
- Evaluation of infrastructure upgrade options based on a range of factors including how they meet project objectives and the necessary trade-offs
- Development of functional design (30%) drawings and construction cost estimates

The functional planning process has been employed for several strategic corridors in HRM in recent years. Relevant examples include the Bedford Highway, Herring Cove Road, Bayers Road, and Robie Street. For each of these projects, Regional Council approved staff's recommendation for a reconfiguration concept, and subsequent stages of preliminary design, detailed design, and construction were initiated.

Key Considerations Proposed for Assessment

The following provides a summary of how each of the considerations identified in the North West Community Council motion could be addressed as part of a functional planning process:

- Impact of "Schedule J" Growth Restrictions on Road Network Development: A summary of the area growth restrictions and how they influence road network development in the area would be developed.
- Traffic Generated by As-of-Right Developments: An estimate of the traffic demand expected to result from any outstanding as-of-right developments along Hammonds Plains Road would be developed and summarized, and subsequently used to model and assess traffic operations along the corridor.
- Planned Roadway Connections (Margeson Drive, Sussex Drive, Eider Drive, Highway 113): The impact of planned regional roadway connections on traffic volumes on Hammonds Plains Road would be assessed using HRM's Regional Transportation Demand Model.

¹ <u>National Disaster Mitigation Plan - Flood Risk Implementation Plan - May 3/22 Regional Council |</u> Halifax.ca

- Streetlighting: A review of streetlighting would be completed to determine any areas along the corridor where streetlighting improvements may be needed. For areas where streetlighting improvements are necessary, design of necessary infrastructure would be completed.
- Stormwater Infrastructure and Flooding Mitigation: A review of existing data on flood modelling and assessment of existing stormwater infrastructure in the area would be completed to identify any deficiencies and associated mitigative measures.
- Roadway / Intersection Improvements: Potential improvement options for transportation infrastructure along the corridor would be developed in response to any deficiencies identified as part of the analysis.

Potential Functional Planning Approach:

The following provides a summary of the general approach that would be carried out if staff were to develop a functional plan for Hammonds Plains Road:

- Procurement: Develop and issue a Request for Proposals (RFP) for a functional planning project that would solicit proposals from qualified consultants. Review submissions and award project to highest scoring proponent.
- Existing Conditions Review: Collect background information and data including:
 - Topographic survey
 - o Traffic volume data
 - o Collision data
 - o Transit ridership data
 - Inventory of existing infrastructure
 - o Transportation operational analysis of existing conditions
 - Flood hazard mapping
- Land Use Analysis: Complete a review of relevant land use policies that influence development along the corridor including the Regional Plan, the Regional Subdivision By-law, and applicable land use by-laws, and develop a range of scenarios for land use along the corridor. This would include determining potential densities, interactions with existing or planned services (including water/wastewater, transit, parks and other community facilities), and evaluating the potential built form, scale and types of land uses that could be accommodated along the corridor.
- Establish Design Objectives: Based on regional planning policy, priorities plans, and strategic goals, establish the design objectives for the project. For example, consideration should be given to mode share targets, operational performance, and road safety goals to inform how design priorities are established.
- Transportation Demand Projections: Develop projected transportation demands for future scenarios based on background growth, anticipated developments, and potential road network upgrades (i.e. regional roadways).
- Stormwater Infrastructure Analysis: Complete stormwater modeling and analysis to identify deficiencies / vulnerabilities in existing infrastructure and determine required upgrades, with consideration of nature-based solutions.
- Streetlighting Review: Complete a review of existing streetlighting along the corridor to identify any areas where improvements may be warranted, and consider opportunities to add streetlighting where needed.

- Conceptual Design: Develop concept level (10%) design options for proposed transportation upgrades to the corridor, along with associated multimodal transportation analysis.
- Functional Design: Develop functional level (30%) design options and cost estimates for proposed transportation upgrades to the corridor, along with associated multimodal transportation analysis.
- Options Evaluation: Evaluate how each option meets established project objectives using tools including traffic operational analysis, multi-modal level of service (MMLOS), and other evaluation frameworks.
- Stakeholder / Community Engagement: Engage with external stakeholders and the community to
 understand the perspectives of residents and users of the corridor, and to share and solicit
 feedback on upgrade options being considered. It is expected that engagement would occur in two
 phases immediately following the Existing Conditions Review and following Functional Design
 development. A key part of stakeholder engagement will be with African Nova Scotian (ANS)
 communities given upcoming work planned through the ANS Community Action Planning Program
 as well as other community representatives, rights holders and equity seeking groups.
- Phasing / Implementation Planning: Develop a high-level plan for how upgrades to the corridor should be planned and phased over time. This may also include any required amendments to planning documents (the Regional Plan, Regional Subdivision By-law and land use by-laws) to ensure that the preferred land use approach aligns with the preferred transportation approach for the corridor.
- Final Deliverables: Prepare final project deliverables including 30% design drawings, cost estimates, and a report detailing all findings and recommendations.

Timing and Resources

It is anticipated that the development of a functional plan for Hammonds Plains Road would take approximately 12 months from project initiation to completion. An HRM Project Manager assigned to the project would be responsible for the procurement and management of a planning/engineering consultant, including the coordination of all work activities. A technical steering committee comprising members of several internal departments would be established to review all deliverables prepared by the consultant. It is estimated that a consulting contract for this project would have a budget of approximately \$500,000 depending on the final scope requirements.

It is noted that at 19km, the length of the corridor exceeds that of any other functional design project completed by HRM to date by a wide margin. If the project were to proceed, there may be merit in dividing it into smaller sections and taking a phased approach.

Other Considerations

Ongoing projects including the Joint Regional Transportation Agency (JRTA) Regional Transportation Plan and Future Serviced Communities Study will both consider Hammonds Plains Road and its role in the regional roadway network. Both studies are anticipated to be completed by the end of 2024 – their results would be expected to influence any planning and design work related to Hammonds Plains Road; therefore, they should be completed before a potential functional plan for Hammonds Plains Road is initiated.

The Strategic Growth and Infrastructure Priority Plan (SGIPP), which is a requirement of the draft Regional Plan, will also influence the understanding of infrastructure needs on the Hammonds Plains Road corridor. It is expected that the SGIPP will be initiated in 2025.

FINANCIAL IMPLICATIONS

There are no financial implications at this time. If Regional Council were to approve a request from NWCC

to undertake a functional plan for Hammonds Plains Road, the costs and resources required would be presented to Regional Council as part of the capital budget process.

COMMUNITY ENGAGEMENT

N/A

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, Part VIII, Planning & Development

Halifax Regional Municipality Charter, subsections 318(1), 322(1) and clauses 319(4)(d)(e), as follows:

- 318 (1) All streets in the Municipality are vested absolutely in the Municipality. (2) In so far as is consistent with their use by the public, the Council has full control over the streets in the Municipality.
- 319 (4) The Council may, by by-law,
 - (d) designate any street as a controlled access street;
 - (e) regulate or prohibit access to a controlled access street.
- 322 (1) The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality

Controlled Access Streets By-Law

ATTACHMENTS

N/A

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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