



P.O. Box 1749
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Item No. 8.1
Transportation Standing Committee
June 28, 2018

TO: Chair and Members of Transportation Standing Committee

Original Signed

SUBMITTED BY:

Bruce Zvaniga, P.Eng., Director, Transportation and Public Works

Original Signed

Jacques Dubé, Chief Administrative Officer

DATE: May 17, 2018

SUBJECT: **Supplementary Report – Herring Cove Sidewalk Request**

ORIGIN

February 22, 2018 Transportation Standing Committee motion (Item 12.1.1):

“MOVED by Councillor Smith, seconded by Councillor Mason THAT Transportation Standing Committee defer consideration of the November 21, 2017 staff report pending receipt of a supplementary staff report with possible creative, immediate solutions for prioritized pedestrian safety that can be implemented in 2018/19.” **MOTION PUT AND PASSED.**

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, Section 322(1): The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality.

Halifax Regional Municipality Charter, Section 79(1): Council may expend money required by the Municipality for: (aa) streets, culverts, retaining walls, sidewalks, curbs and gutters.

Halifax Regional Municipality Charter, Section 79(1): Council may expend money required by the Municipality for: (ah) playgrounds, trails [...] bicycle paths [...] and other recreational facilities.

RECOMMENDATION

It is recommended that Transportation Standing Committee recommend that Regional Council direct staff to continue detailed design for the implementation of a new permanent street cross-section on Herring Cove Road from Lynnett Road to Civic 554, including sidewalks, bike lanes, bus stops and other elements and consider it for the 2019-20 capital budget, rather than pursue an interim option in 2018.

BACKGROUND

At the February 22nd, 2018 meeting of Transportation Standing Committee (TSC), the staff report “Herring Cove Road Sidewalk Request” dated November 21, 2017 described planning and engineering design work underway to install pedestrian facilities along Herring Cove Road from Lynnett Road to Civic 554 (Attachment A). The report explained the rationale for why construction is targeted for 2019, pending available budget and Council approval of that budget. The staff recommendation was that the report be forwarded to Regional Council as an information item.

TSC deferred consideration of this report (copy in Attachment A) and requested that staff explore an interim measure that could be installed to improve pedestrian safety and comfort until the sidewalks are constructed.

DISCUSSION

Consideration of Interim Solutions

When tasked with finding an interim measure for improved sidewalk safety, staff discussed temporary measures such as:

- Bollards;
- Paint;
- Jersey barriers and/or water-filled plastic barriers;
- Curb stops / parking stops;
- Precast concrete curb; and,
- Planters.

The majority of these solutions would be successful in creating the perceived separation between pedestrians and vehicles (with the exception of paint). Pedestrians may feel more comfortable using this space. Further, the effect is a visually narrowed roadway that has the potential to slow traffic and alert drivers to the pedestrian area (see Figure 1, Figure 2).



Figure 1: Painted Jersey Barrier on Highway



Figure 2: Pedestrian Improvements by Painting Roadway and Adding Bollards

The following factors were considered in developing an interim solution:

1. **Cost**
There is no approved budget for such a project in 2018/19, so a separate request to Council would likely have to be made. The estimated cost of an interim solution would be \$330,000 (see page 5).
2. **Accessibility (including accessible surface width)**
The interim solution should not create a situation that is less accessible than the existing condition. It is necessary that the interim solution be fully accessible for users of all ages and abilities. Users should be able to freely move around the barriers and along the protected surface without obstacle.

3. *Safety*

While many of the interim design treatments (e.g. bollards, paint, curb stops, planters) may enhance feelings of safety in pedestrians, they are not able to physically stop a car should the need arise. This may lead to a false sense of security and reduced vigilance when interacting with traffic, particularly in a higher speed context.

4. *Driveways, curbside loading, and bus stops*

The interim solution must allow continued curbside access for Halifax transit and not interfere with passenger boarding from the three bus stops along this segment. The Redbook recommends a minimum 14.5m gap in temporary barriers to maintain transit access. There are also five wide driveways (7-13m) which would require further gaps in the temporary sidewalk protection. Treatments such as jersey barriers and planters may obscure the view and would require special treatments (e.g. tapered barriers) on either side of each driveway to improve safety and visibility.

5. *Drainage*

Attaching a barrier to the roadway e.g. jersey barrier, water filled plastic barrier, and/or curb stops may impact drainage on the street. It would be important to ensure that water does not collect on either the road-side or the pedestrian-side of the barrier and lead to standing water and/or ice in the winter.

6. *Winter maintenance and visibility*

Some barriers (e.g. bollards) may create difficulties with snow clearing in the winter. Plows have been known to sweep bollards away -- their bases are prone to catching on the blades of snow clearing equipment. Low-height barriers such as curb stops may need to have bollards to ensure they are visible.

Regardless of which design treatment or barrier style is chosen, professional standards recommend a 0.6m (2ft) offset buffer from the white line on the edge of the travel lane for safety purposes. This would be taken from the existing 2m (6.5ft) paved shoulder that is already sub-standard and crumbling in most sections (Figure 3, Figure 4). If the barrier itself takes approximately 0.3m (1ft), the result of what's left would be a crumbling shoulder that is 1.1m (3.5ft) or less in width.



Figure 3: Inconsistent Shoulder Width Sept 2017

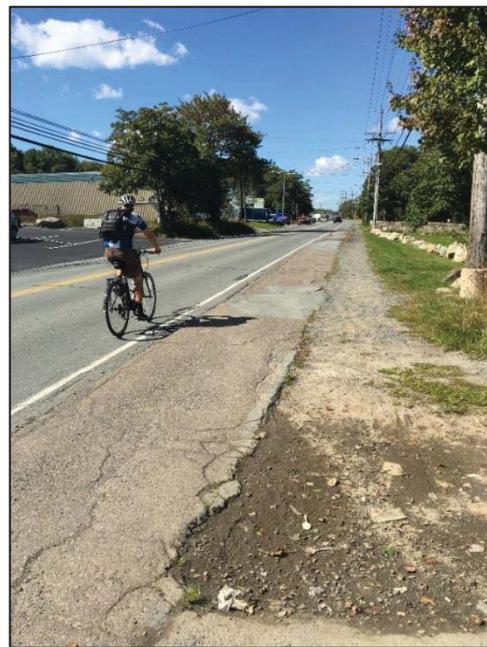


Figure 4: Crumbling Shoulder Sept 2017

Policies from the Integrated Mobility Plan (3.1.5a) state that new pedestrian infrastructure should be accessible for people of all ages and abilities. Staff are concerned that this new 1.1m (3.5ft) paved shoulder width may be impassable for people in wheelchairs or pushing strollers. **To achieve this accessible width of 1.8m (6ft), the existing shoulder would have to be removed and replaced with a widened and repaved new shoulder.**

Interim Solution Option

Considering the above factors, the option developed in response to TSC’s request for “possible creative, immediate solutions for prioritized pedestrian safety” that can be implemented in 2018/19 is as follows:

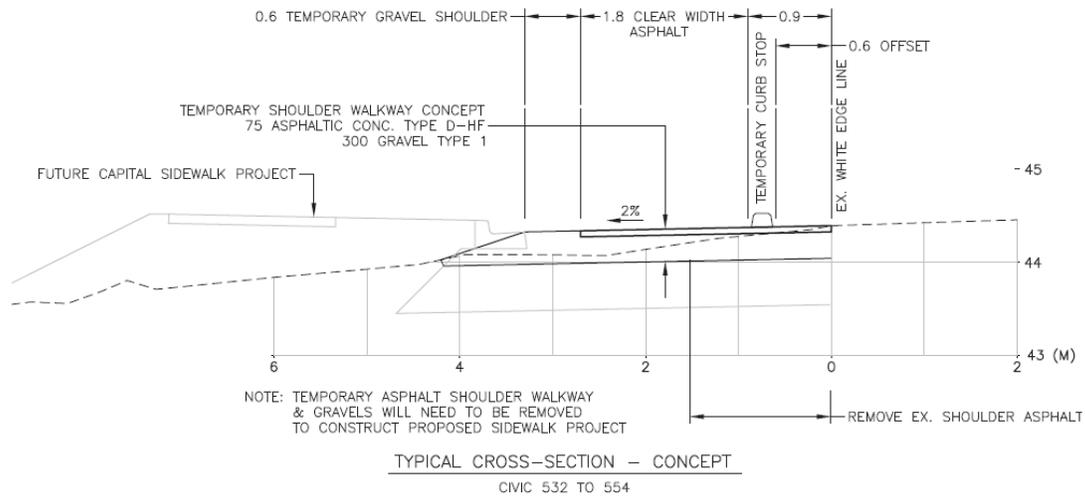


Figure 5: Cross Section of Interim Solution with Curb Stops and Repaved Shoulders

The preferred interim option as identified by Staff is to widen and repave the shoulder on the east side, then place concrete curb stops as a delineator/barrier along the edge of the interim “sidewalk” (see Figure 5 for a concept technical drawing with widths). Inspiration comes from an installation in Seattle, WA involving paved shoulders with stamped asphalt and curb stops (Figure 6). This is the preferred solution because:

1. It achieves a small barrier between the paved shoulder and the roadway that will visually narrow the roadway and alert vehicles of the possibility of pedestrians;
2. It is easier and more cost-effective to install vs larger jersey barriers;
3. Placement can be modified more easily than jersey barriers;
4. There are less issues around visibility and driveway entrances; and,
5. Curb stops can be stepped over by pedestrians if absolutely necessary.



Figure 6: Temporary Sidewalk Installation in Seattle, Washington

The interim option involves adding temporary sidewalk on the **east side of Herring Cove Road only**. Extending the repaved shoulders and curb stops to the west side of the street would be challenging as the ditches would need to be infilled and a stormwater system installed. This stormwater infrastructure is costly and should not be considered as part of a temporary solution. It is not advisable to install a stormwater system until the permanent cross-section (including lane widths and placement) is determined.

Anticipated Cost

The total cost of this project is around \$330,000 +HST including a 30% contingency.

Section 1: Lynnett St to Civic 532

\$130,000 including 2.0m repaved shoulder
East side only

Section 2: Civic 532 to Civic 554

\$200,000 including curb stop delineators and
1.8m repaved shoulder
East side only

This money is not currently available in the capital budget for installation this summer. If Council chooses to pursue this option, staff would need to return to Audit and Finance Committee to seek approval of a funding source.

If the interim option to be implemented, it would have to be completely removed when the permanent infrastructure is constructed.

Staff Assessment

This interim solution is **not recommended** by staff for the following reasons:

1. Curb stop barriers could only be incorporated on the east side of Herring Cove Road between Civic 532 and Civic 554. Property issues between Lynnett St and Civic 532 make it impossible to widen the shoulder meaning that this section will just be repaved to 2.0m (6.5ft) without the addition of the barriers; and,
2. The widened and repaved asphalt sidewalks will need to be removed when the permanent sidewalks are constructed, which are being designed for construction in 2019 (pending available budget). This may not be a prudent use of limited capital budget.

FINANCIAL IMPLICATIONS

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

RISK CONSIDERATION

The original Recommendation Report (Attachment A) identified no significant risks. No new or significant risks have emerged based on the recommendations contained in this Supplementary Report.

COMMUNITY ENGAGEMENT

On April 25th, AT Staff were invited to meet with eight members of the Spryfield Community Association to discuss work completed on the project to date, and to get their community perspective on the temporary design options.

Staff shared images of what the temporary option with curb stops could look like and described the criteria that were used in determining this option. Staff explained that while implementing a sidewalk on this section of Herring Cove Road is a priority, there are no guarantees that it could be built in 2019 without budget approval. However, staff are continuing with the detailed design and property acquisition process and noted that this is identified as a priority project in the Integrated Mobility Plan.

The primary concerns of the group were: vehicular speed, crosswalk safety, project timelines, and the community perception of a second-rate sidewalk. The consensus of the group was that they would prefer to wait one year for a high-quality sidewalk than to implement the temporary option discussed.

ENVIRONMENTAL IMPLICATIONS

This project is supportive of the sustainability objectives of the Municipality as it aims to make it safer and more comfortable for residents to choose sustainable transportation options for everyday transportation purposes.

ALTERNATIVES

Transportation Standing Committee may recommend to Regional Council that the temporary sidewalk design described in this report, including \$330,000 plus net HST of repaved shoulders and curb stop barriers, be approved and implemented in summer 2018, subject to the identification and approval of a funding source by Audit and Finance Standing Committee. This alternative is not recommended based on the discussion above.

ATTACHMENTS

Attachment A February 22, 2018 Report to TSC “Herring Cove Sidewalk Request”

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.

Report Prepared by: Siobhan Witherbee, Active Transportation Planner, 902.490.6822



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Item No. 12.1.1
Transportation Standing Committee
February 22, 2018

TO: Chair and Members of Transportation Standing Committee

Original Signed

SUBMITTED BY:

Bruce Zvaniga, P.Eng., Director, Transportation and Public Works

DATE: November 21, 2017

SUBJECT: Herring Cove Road Sidewalk Request

ORIGIN

February 8, 2017 Committee of the Whole motion (Item 7).

“MOVED by Councillor Adams, seconded by Councillor Whitman THAT Committee of the Whole request a staff report outlining the cost of installing sidewalk on the Herring Cove Road from Lynnett Road to 564 Herring Cove Road including potential sources of funding from other municipal funds and with a view to having this installation take place in 2017/18.” **MOTION PUT AND PASSED.**

LEGISLATIVE AUTHORITY

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RECOMMENDATION

It is recommended that Transportation Standing Committee forward this report to Regional Council for information.

BACKGROUND

New Sidewalk Assessment Tool and Prioritization

Requests for new sidewalks are typically submitted through the area councillor or through HRM's 311 service. The requested road segments are then evaluated based on a number of criteria including proximity to schools, daycares, seniors' homes, commercial and high-density residential areas, parks, and public transit stops. Requests are also considered if the sidewalk fills a gap by connecting two existing areas with a new sidewalk or if there are safety concerns due to poor sightlines, high motor vehicle volumes or speeds. Each request is scored and placed onto a list that currently has over 400 new sidewalk locations for prioritization. Approximately 5-10 new sidewalk projects are constructed annually based on funding availability and project integration opportunities (e.g. road repaving projects).

Based on the new sidewalk criteria this segment of Herring Cove Road ranks "HIGH" on the prioritization list for construction.

Neighbourhood Context and Existing Sidewalk Condition

Herring Cove Road is the main thoroughfare for the community of Spryfield (population approx. 13,500). Much of the commercial activity, higher-density residential buildings and transit are clustered along this corridor. Similar to other pre-amalgamation suburban arterials, Herring Cove Road was not built with adequate pedestrian infrastructure. Some sidewalks and paved shoulders have been installed over the years to meet localized demand, however, large gaps still exist.

A continuous sidewalk currently exists on the west side of Herring Cove Road connecting Spryfield to the Armdale roundabout as far as Greystone Drive (4.7 km), however, not all sections are up to standard. There is intermittent sidewalk on the east side of Herring Cove Road with the longest segment existing between McMullen Road and Lynnett Road (2.6 km). There are paved shoulders on the east side of Herring Cove Road south of Lynnett Road, and on the west side south of Greystone to facilitate walking (Attachment A). A small segment of asphalt sidewalk facilitates access to a bus stop/shelter (approx. 60m) on the east side of Herring Cove Road near the intersection of McIntosh Street.

Social Considerations

Many residents of Herring Cove Road between Lynnett Road and Civic 564 rely on transit and walking as their primary means of transportation. These paved shoulders are well used as they pass in front of a row of apartment buildings where residents walk to and from the bus stops, nearby schools, community centres and shops. Residents with disabilities as well as parents pushing strollers are frequently observed traveling on the paved shoulder in this area. Improving the active transportation infrastructure along this section of Herring Cove Road is necessary to improve comfort and safety for a high density of residents getting to and from their destinations.

Safety Considerations

The relatively straight, wide lanes along this segment of Herring Cove Road may contribute to the high vehicular speed in this area. A nearby speed study¹ found that approximately 1 in 7 vehicles exceeded the 50 km/h speed limit by more than 10 km/h along this segment. Of greatest concern, there have been recent vehicular-pedestrian collisions along this segment.

Proposed Herring Cove Road Future Widening Project

The need for sidewalks along this segment of Herring Cove Road has been discussed in previous years. The project has been on hold in part due to the uncertainty around road widening from two lanes to four

¹ Speed study was conducted in August 2016 for inbound vehicles only in front of 647 Herring Cove Road.

lanes. The 2014 Regional Plan identifies the widening of Herring Cove Road from the Armdale Rotary to Old Sambro Road as a potential project, however, there was no clear timeframe established for its completion. It is unlikely that the project would impact the study area further up Herring Cove Road between Lynnett Road and Civic 564 in the near future.

Related Active Transportation Policy

In April 2010, Regional Council endorsed the International Charter for Walking, a symbolic commitment to promote active transportation, physical activity, community planning and environmental sustainability in the Municipality. The Active Transportation Priorities Plan (AT Plan) was adopted by Regional Council in 2014. The primary goal of the document is to “establish a complete, integrated, and readily available region-wide AT network serving urban, suburban, and rural areas”. The AT Plan identifies that there are incomplete sidewalk networks in Fairview, Spryfield, Dartmouth and the business parks. The AT Plan identifies the segment of Herring Cove Road between Lynnett Road and Civic 564 as a highly rated segment for a new sidewalk connection.

The Integrated Mobility Plan recommended that the Municipality continue to focus efforts on establishing AT connections within communities outside the Regional Centre.

Action 69 of the Integrated Mobility Plan identified three major sidewalk connections to be completed by 2020; this segment of Herring Cove Road along between Lynnett Road and Civic 564 is one of them.

Bicycle Lanes

Herring Cove Road is identified in the AT Plan as a “Proposed Bicycle Route on Major Road”. Community desire for bicycle lanes along this segment was also identified in the community engagement sessions of the Integrated Mobility Plan. Functional study of Herring Cove Road should also include the consideration of bicycle facilities and connectivity along this corridor as part of a “complete streets” approach. Bicycle lanes currently exist on Herring Cove Road between Sarah Drive and Hebridean Drive (2.3km).

Additionally, the provincial government has been proactively adding bicycle lanes and paved shoulders on nearby rural roads (e.g. Ketch Harbour Road, Old Sambro Road) to create an on-road recreational cycling loop. Bicycle lanes on Herring Cove Road from Lynnett Road to Civic 564 would eventually connect to this cycling loop and assist in continuing the network into the city.

DISCUSSION

As the above section illustrates, the addition of sidewalks and bicycle lanes along this segment of Herring Cove Road is supported by HRM policy and plans, the sidewalk assessment tool, safety considerations and policy direction from the Integrated Mobility Plan. As a result, staff is planning how to implement the project and reviewing costs, possible property requirements, and overall project scope.

Estimated Cost

This is a large scale project with full implementation costs estimated at \$2.8 million (Class D estimate). This includes 1.8m sidewalk on both sides, 1.5m painted bike lane on both sides, new curb, gutter, drainage systems, road resurfacing, and street trees. While the focus of this project is providing pedestrian infrastructure due to the nature of the current road, some of the highest costs associated with this project would be installation of a drainage system. Given that the proposed budget for active transportation capital projects (sidewalks, multi-use pathways and bike lanes) in 2018-19 is \$4.1 million, a project of this magnitude is challenging to implement.

Staff has explored the feasibility of a smaller project to establish the most critical sidewalk connections in the 2018 construction year. The concept that was explored was to build *sidewalks only* to connect Lynnett Road to Civic 564 on the east side of Herring Cove Road, and Greystone Drive to Civic 531 (Chebucto

Connections) on the west side. However, the cost estimated for this intermediary project is \$2.3 million (Class D estimate), with very little savings associated with the significant downscaling of infrastructure. If the municipality moves forward with constructing portions of sidewalk, the installation of the expensive drainage system is still required.

The option of a smaller-scale project that may have been implemented on a faster timeframe is not recommended as there is minimal cost savings and for additional reasons as outlined below.

Property Issues

Investigation for this report led to the discovery that there is no legal survey available for this section of Herring Cove Road. Due to sporadic property acquisition for the future widening of Herring Cove Road, the property line adjacent to the HRM right-of-way is uneven and occasionally unclear. It is difficult to plan and construct a consistent cross section until the Municipality knows which land it legally owns and how much width is available.

Upon realization of this gap, staff engaged a consultant to review the necessary documentation and conduct the legal survey of upwards of 50 properties along Herring Cove Road. This is a lengthy process that will take several months to complete. Results are expected in early-mid 2018.

Herring Cove Road Functional Study

Concurrently, while Project Planning and Design staff are reviewing options for sidewalks and bicycle lanes along this segment, the Transportation Planning group from Planning and Development are about to initiate a planning study of the full Herring Cove Road corridor. This planning study will aim to develop a complete vision of Herring Cove Road from the roundabout to the Hebridean Drive. The study will address pedestrian needs, vehicle and transit needs, recommended bicycle facilities and overall street design. This planning process for Herring Cove Road will assist in establishing the cross-section that would be built for the segment in question from Lynnett Road to Civic 564.

Next Steps

Although staff recognize the importance of this project and have explored avenues for the project to be constructed in 2018, the limiting factors are:

- Lack of legal survey for this section of Herring Cove Road;
- \$2.8 million project cost including new drainage system;
- Partial implementation or intermediary step is still costly at \$2.3 million; and,
- Requirement of a “complete streets” review of Herring Cove Road which includes the segment from Lynnett Road to Civic 564.

Current and future actions to implement this project include:

- Continued planning and design (conducting legal survey, understanding and planning for new drainage system, producing revised cost estimates, etc.);
- Conducting a full planning study of Herring Cove Road corridor; and,
- Budgeting and project planning to position installation of sidewalk and bicycle lanes on Herring Cove Road from Lynnett Road to Civic 564.

At this time, it is anticipated the planning and detailed design phases can be completed in time to consider a 2019 construction of a new sidewalk and bicycle facilities from Lynnett Road to Civic 564. Additional review is required through the budget process to determine available funding and project planning to support the Herring Cove Road project.

As with any project, detailed engineering design challenges may be identified that could impact the timing and cost of the project.

FINANCIAL IMPLICATIONS

There are no immediate financial implications associated with the recommendations in this report. In 2018/19, staff will continue project planning and design in preparation for implementing this project in the 2019/20 budget year and construction season, if feasible.

RISK CONSIDERATION

There are no significant risks associated with the recommendations in this Report. The risks considered rate Low.

COMMUNITY ENGAGEMENT

Two community groups in this area brought forward the request for consideration of new sidewalks in the budget – Chebucto Connections and the Spryfield Community Association. According to the community groups, new sidewalks along the “500 block” of Herring Cove Road would improve safety of neighbourhood children walking to school, and facilitate at-risk students attending after school tutoring programs at Chebucto Connections, where there is currently no sidewalk (or safe access).

Recent public engagement from the Integrated Mobility Plan in November 2016 and February 2017 identified the desire for improved infrastructure for walking and cycling along Herring Cove Road. Many of the people walking and cycling along this road feel unsafe due to the combination of vehicular speed and narrow/ crumbling sidewalks and shoulders. The specific segment between Greystone Drive and Civic 554 is identified as a priority sidewalk connection to be implemented by 2020.

ENVIRONMENTAL IMPLICATIONS

This project is supportive of the sustainability objectives of the Municipality as it aims to make it safer and more comfortable for residents to choose sustainable transportation options for everyday transportation purposes.

ALTERNATIVES

Transportation Standing Committee may not wish to forward this report to Regional Council for information.

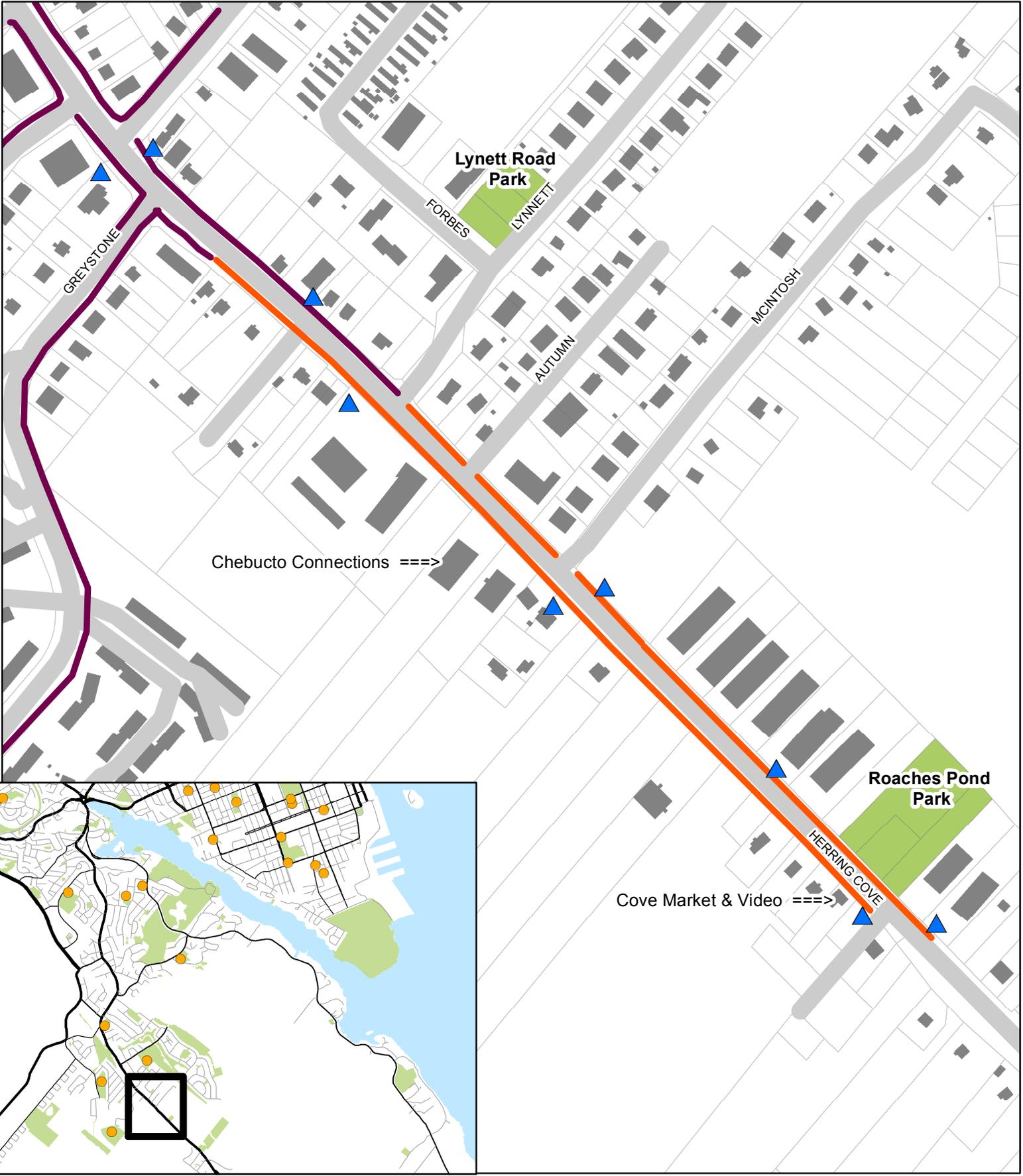
ATTACHMENTS

Attachment A: Context Map and Proposed Sidewalk Connections

Attachment B: Photos from Site Visit September 2017

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.

Report Prepared by: Siobhan Witherbee, Active Transportation Planner, 902.490.6822



Attachment A

Context: Herring Cove Road

New Sidewalk Request

- Existing Sidewalks
- Proposed Sidewalks with Bike Lane
- Parcel Boundaries
- Building Footprints
- Municipal Parks
- Ocean
- Schools
- Key Bus Stops

Attachment B: Photos from Site Visit September 2017



