

PO Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 11.1.2

Halifax Regional Council June 30, 2009

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

Dan English, Chief Administrative Officer

Mosepe Genty

Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: June 9, 2009

SUBJECT: Quinpool Road Streetscape - Schematic Design

ORIGIN

- 1. The approved 2008 / 2009 Capital Budget.
- 2. A report dated February 19, 2009 was before Council at its meeting on February 24, 2009 regarding 11.1.4 Spring Garden Streetscape Design.
- 3. A report was before Council at its meeting of June 2, 2009 regarding "Streetscape and Undergrounding Projects Implementation Strategy".

RECOMMENDATION

It is recommended that Council confirm Quinpool Road Streetscape - Schematic Design Option #4 as the preferred option for implementation.

BACKGROUND

- 1. At its meeting on September 23, 2008, Council awarded RFP # 08-121, Consulting Services Quinpool "Your Neighbourhood Mainstreet" Streetscape Phase 1 and 2 to the highest scoring proponent, Terrain Group for a total cost of \$503,268.96 with funding from Capital Account No.CDG00271, Downtown Streetscapes.
- 2. Item #3 of the motion adopted as amended by Council at its meeting on February 24, 2009 regarding 11.1.4 Spring Garden Streetscape Design (report dated February 19, 2009) read that:
 - "3. The preferred option identified through completion of the schematic design report for Quinpool Road in the next few weeks proceed into Phase II, Detailed Design and Construction Documents."
- 3. A report dated May 6, 2009 entitled *Streetscape and Undergrounding Projects Implementation Strategy* before Council's June 2, 2009 meetings in response to Council's February 24, 2009 motion regarding 11.1.4 Spring Garden Streetscape Design was referred to the pending Capital Commission Committee.

DISCUSSION

The Executive Summary of the Schematic Design report appears in Appendix A of this report. The report describes four options and recommends "Option #4 - Sidewalk Widening Both Sides", as preferred based on the evaluation matrix contained in that Executive Summary. Considerable public and stakeholder consultation was conducted. This design option has been endorsed by the Quinpool Business Association Board and was favorably received at a Public Open House on April 1. Option #4 is estimated to cost \$8,918,890 (including a 20% schematic design level contingency of \$1,437,200 and HST).

As directed by Council on February 24, 2009 in anticipation of possible federal infrastructure/stimulus funding, the Quinpool Road Streetscape project has proceeded into Phase II, Detailed Design and Construction Documentation and final comments are scheduled for receipt by mid-June 2009. Construction is dependant upon funding availability. At its meeting on June 2, 2009 Regional Council referred the matter of a *Streetscape and Undergrounding Projects Implementation Strategy* and funding to the pending Capital District Steering Committee. Council is now being asked to confirm design option #4 as the preferred option as a housekeeping matter prior to implementation at some future date.

BUDGET IMPLICATIONS:

There are no budget implications at this time. All approvals for funding will be brought back to Regional Council.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES: None.

ATTACHMENTS:

- Executive Summary; Quinpool Road Streetscape
- Quinpool Road Streetscape Final Report and Appendicies

A copy of this report can be obtained online at http://www.halifax.ca/council/agendasc/cagenda.html then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Barry Yanchyshyn, Senior Landscape Architect, Real Property Planning 490-3967

Report Approved by:

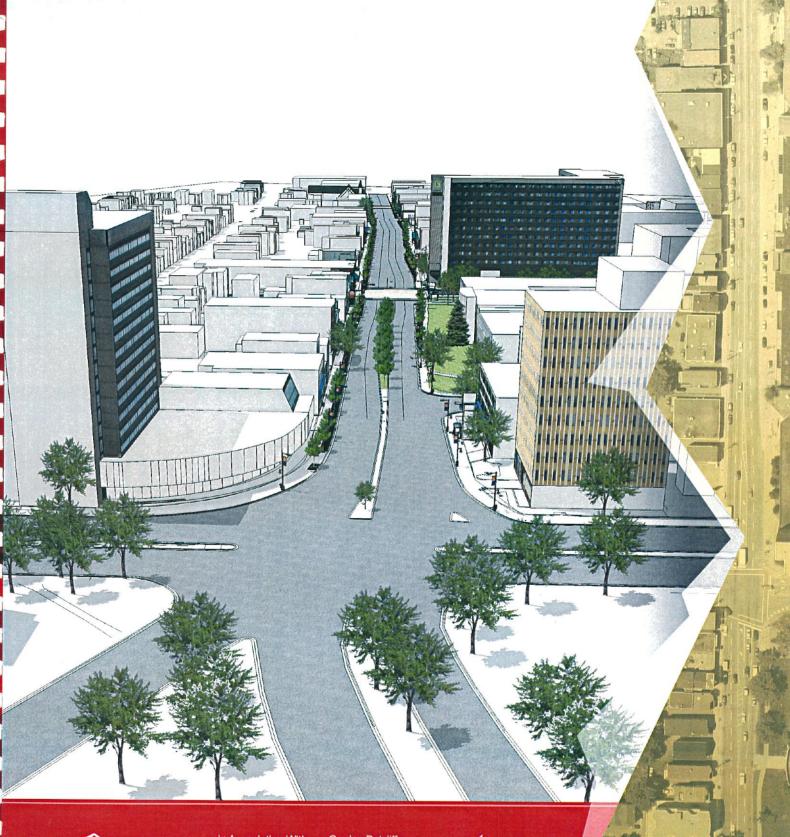
Peter Bigelow, Manager, Real Property Planning 490-6047

Report Approved by: Phillip Townsend, Acting Director, Infrastructure and Asset Management 490-7166



Quinpool Road Streetscape Phase 1: Public Consultation, Schematic Design and Cost Estimate

Project # D08544 April 29, 2009





In Association With:

ALAN BAXTER & ASSOCIATES

Gordon Ratcliffe Landscape Architects





QUINPOOL ROAD STREETSCAPE DESIGN PROJECT

EXECUTIVE SUMMARY

Introduction

The Quinpool Road commercial area forms a key component of the Halifax Regional Municipality (HRM) Capital District and acts as a neighbourhood main street, providing a key destination and congregation point for the surrounding residential neighbourhoods. The eclectic mix of services and retail uses, along with residents living in the immediate surrounding neighbourhood and commuters support the vitality of the street. A thorough analysis of the study area, which stretches from Robie Street to Preston Street, was completed to identify current strengths of the street and opportunities leading to recommendations for improvement as part of the streetscape design.

Project Goal

Based on the Request for Proposal, "The 'Goal', is to create a beautiful, treed and easily-maintained streetscape; provide for pedestrian comfort, amenity and fluidity of movement; mitigate the effects of traffic and transit on pedestrian activity; strengthen the vitality of retail areas by ensuring and enhancing pedestrian traffic; support transit ridership and operations; and address requirements related to vehicular capacity and flow within the downtown streets network."

Project Guiding Objectives

The following objectives guided the direction of the design options:

- To understand the existing street pattern, texture, uses and challenges.
- To achieve safety of pedestrians and vehicles through the Quinpool corridor.
- To maintain acceptable levels of traffic flows along the arterial road, identify opportunities for bike lanes and adequate parking for servicing vehicles, taxis and transit.
- To achieve functionality of public spaces and their interface with adjoining private landholdings while maintaining flow.
- To create an aesthetically pleasing environment that provides Universal Accessibility.
- To achieve a streetscape that can be operated year round.
- To implement sustainable initiatives within the design and implementation.
- To work with stakeholders and the public to create a plan that people embrace.

- To assess the options for placing services underground in the most cost effective and efficient manner, including identifying opportunities for undertaking other underground infrastructure works during the construction period.
- To minimize disruption due to construction works.

Design Process

Four streetscape design options were developed to satisfied the project goals and objectives. The primary considerations of the design process included:

- The street in context of surrounding land uses
- Transportation corridors
- The history of the street
- The demographic profile of the area
- Traffic, bicycle and pedestrian movements
- Existing parking and loading areas
- The existing lighting levels
- Day and night use of the street
- Consultation from stakeholder, business owners and the public

Streetscaping opportunities were identified through the analysis of the above items. Streetscape elements were identified and incorporated into design options. The options were assessed against the goals and objectives of the project. Several design elements were recommended for the Quinpool streetscape design. These included the use of pavers on sidewalks, multifunctional street light standards, legible intersections for pedestrians, entrance features, street trees, and street furniture. These concepts were discussed through the consultation with stakeholders, business owners/operators, and the general public. Key challenges identified through this process were:

Challenge 1: Vehicle Traffic

Quinpool Road is a main arterial route for through traffic moving on to and off of the peninsula, as well as being an important commercial destination. The high traffic volumes and width of the road creates a disconnect between the north and south sides of the street, distracting from the pedestrian experience of Quinpool as a destination or place.

Every effort will be made to accommodate the different users of the space by clearly delineating spaces for pedestrians, outdoor cafes and sales areas, transit users, cyclists and vehicles, including areas for parking and loading.

Challenge 2: Mega-block

"Mega-blocks" refer to large city blocks such as Quinpool Centre that create a barrier to connecting through to adjacent streets and between the two neighborhoods on either side of the street. This 300 m long block has directly impacted the character of Quinpool Road, as it is much larger in length and has a different building form than what exists along the south side and further west along the street. The south side consists generally of older two storey structures with access between buildings and shop frontages along the sidewalk.

A number of pedestrians were observed crossing mid-block in this area. Although it seems an optimum location for an additional crosswalk, HRM Traffic and Right-of-Way has taken the position that a formal mid-block crosswalk at this location would be unacceptable due to traffic and road design considerations.

The proposed design changes seek to address the connectivity between the street and adjacent neighbourhoods, as well as provide design solutions to create a human scale to the streetscape.

Challenge 3: Parking and Loading

It is essential to maintain on-street parking and loading along Quinpool Road, especially since public parking opportunities are limited and a number of the businesses load through the front door that faces onto Quinpool Road. The intention will be to maintain the status quo of limiting parking to outside the peak traffic periods.

Proposed design changes investigate the opportunities for parking while also considering the current congestion problems, such as occur between Monastery Lane and Preston Street.

Challenge 4: Pedestrian Environment

The wide width of the street and low building height create a feeling of openness and lack of intimacy on the sidewalks. This heightens the feeling that this is an automobile dominated area. In addition, the uneven levels of illumination, numerous alleyways, and poor maintenance of sidewalks and other public spaces along the street create safety concerns and accessibility challenges.

The design will enhance the appearance of the street through undergrounding, addition of street trees and the definition of public spaces.

Challenge 5: Existing Right-of-Way Width

The existing right-of-way width from property boundary to property boundary across the street varies from 21.9 m at its narrowest point to 29.5 m at its widest point. Sidewalk widths and vehicle lane widths also vary from the south to north sides of the street.

Desirable widths being sought:

- Roadway widths 4.2m shared lane for vehicles and cyclists.
 - 3.3m inside lane for vehicles
- Sidewalk widths 3.0m existing (typical)
 - 4.8m with provision of outdoor café/ sales area opportunities, street trees and other sidewalk amenities.

Design Options

The following plans detail the different components of the four options that have been developed from the site analysis and consultation. The overall preferred concept provides for:

- Total undergrounding of utility lines
- Increased street trees and other vegetation
- Universal accessibility
- Crime Prevention Through Environmental Design (CPTED) considerations - improved lighting, addition of payphones, & natural surveillance
- Maintaining vehicle flow
- Maintaining access to parking
- Maintaining sidewalk widths
- Improving bicycle access
- Providing outdoor space for retail activities
- Public artwork

The table that follows provides an assessment of the four options.

Quinpool Road Streetscape Options Analysis	Option 1: Treed median	Option 2: North Side Linear Park	Option 3: Status Quo - Beautification	Option 4: Sidewalks Widened Both sides
Utilities undergrounded	x	x	x	х
Aesthetic elements provided to improve appearance and interest of street (e.g. trees, public art)	х	X	x	х
Site furnishing to increase pedestrian comfort (e.g. benches, garbage bins, trees, etc.)	х	x	х	х
Pedestrian space increased	N/C	x	N/C	х
Existing street trees maintained	-	-	NC	<u>.</u>
Number of street trees increased	xx	x	х	x
Safety concerns addressed (reduce mid-block crossing distance/provide refuge)	xx	x	N/C	x
Existing sidewalk width maintained or increased		x	N/C	x
Provide widened sidewalks on south side of the street for street cases of up to 4.8 m	N/C	N/C	N/C	x
Human scale of street improved	xx	x	-	x
Universal access measures incorporated (ie. corner bulbing, tactile features,)	х	х	х	×
CPTED measures incorporated	x	х	х	x
Parking maintained	x	х	х	x
Traffic flow improved	N/C	N/C	N/C	N/C
Bicycle flow improved	х	x	-	x
Life-cycle accounting measures incorporated (ie. sustainability measures)	х	X		x
Streetscape can be operated year round.	х	x	x	x
Avoids creating two distinct shopping districts		-	N/C	N/C
Opportunities to expand business outdoors	-	x	N/C	XX
Cost (lowest overall)	•	x	N/C	N/C
SCORE	10	14	7	16

exceeds criteria: XX; meets criteria: X; decrease from existing: -; no change: N/C

COST (in millions) NOTE 1:Excludes HST	*\$8.8 M	*\$8.2 M	*\$8.7M	*\$8.7M
	#\$8.5 M	#\$7.9M	#\$8.4M	#\$8.4M

Notes:*with both primary and secondary overhead power lines underground;

with only secondary overhead power lines underground

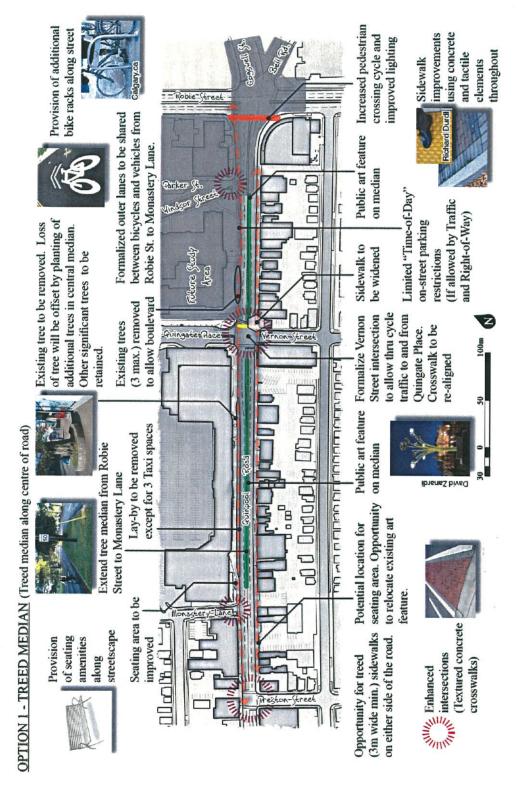
Undergrounding and Electrical costs

Option 1 Treed Median		Option 2 North Side	Linear Park	Option 3 Status Quo- Beautification Option 4 Sidew Widened both s			
All U/G	Sec. U/G	All U/G	Sec. U/G	All U/G	Sec. U/G	All U/G	Sec. U/G
2.3 M	2.1M	2.3M	2.0M	2.2M	2.0M	2.2M	2.0M

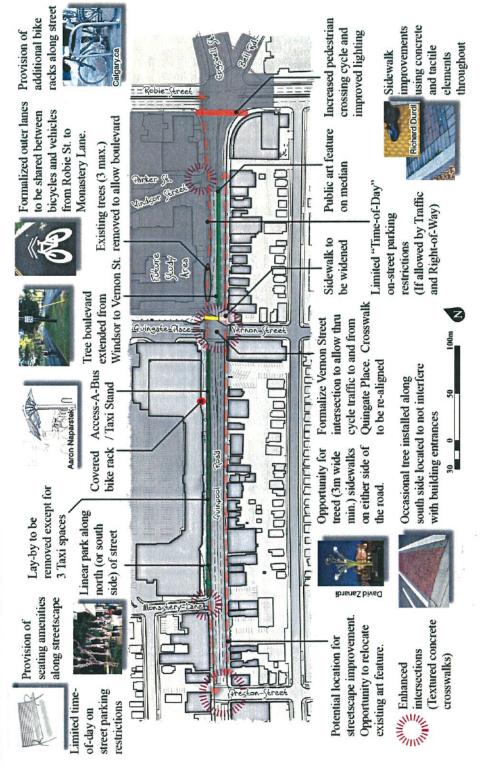
These costs include supply and installation of the following:

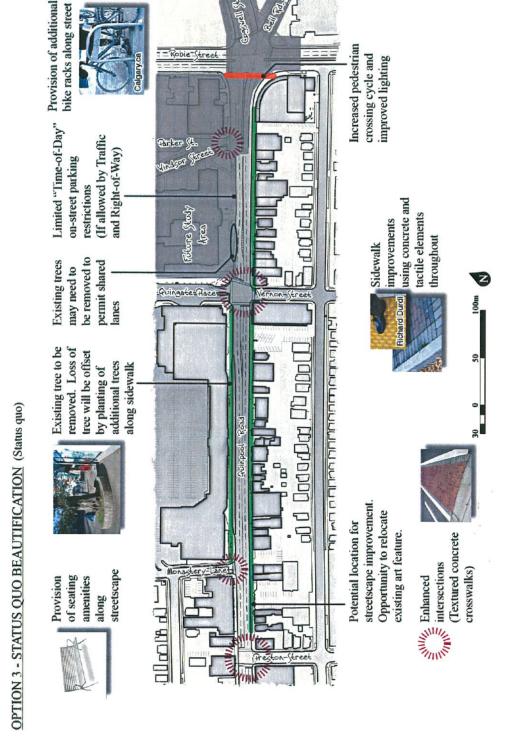
- 1) Electrical and communication conduit,
- 2) Streetlights and streetlight power supply,
- 3) Removal and installation of power poles where required,
- 4) Installation of electrical manholes and communications pedestals,
- 5) Replacement of signalized intersection including undergrounding, signal poles, detector loops, controller pad

Effectively the additional cost to place all the telecommunication and electrical underground is approximately \$200,000. Based on this cost difference and the benefits, both aesthetically and from a maintenance perspective, it is recommended that total undergrounding be carried out.

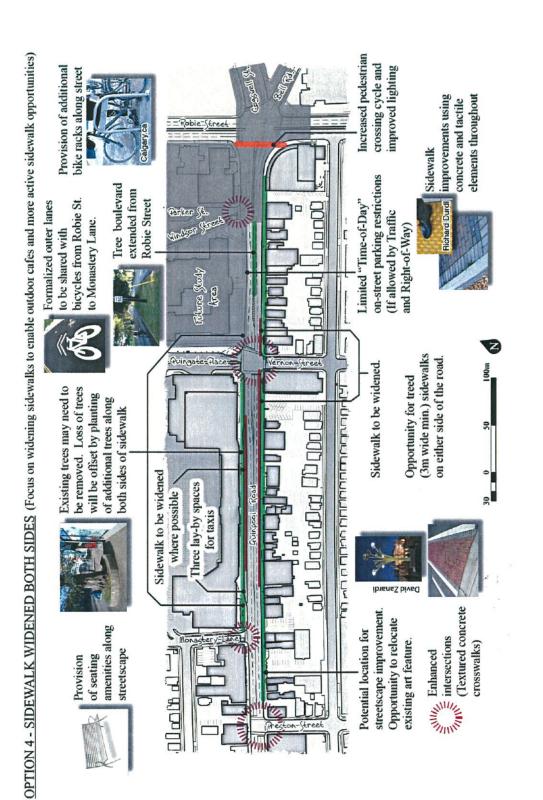


OPTION 2 - NORTH SIDE LINEAR PARK





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Conclusion:

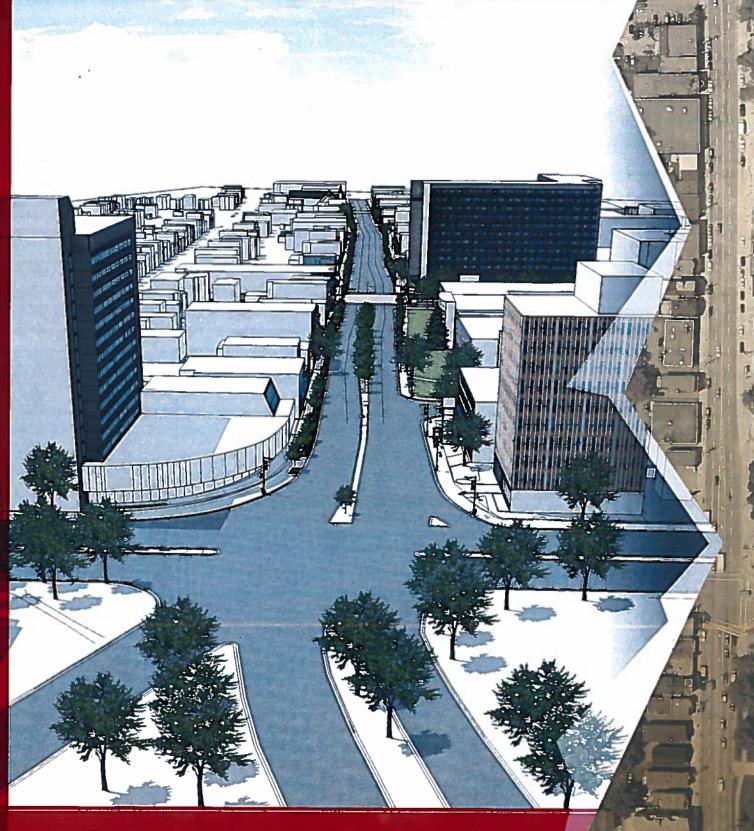
The four options balance the importance of Quinpool Road being a principal connector to the downtown core while improving the pedestrian environment and supporting the extension of business activity from indoors to outdoors. The Treed Median (Option 1) creates a visual connection between Quinpool Road and the surrounding community; the North Side Linear Park (Option 2) creates a central focus point, recognizing the distinct character differences between the north and south sides of the street; the Status Quo (Option 3) focuses on street improvements while maintaining the existing lane configuration and vehicle movement patterns; and the Sidewalk Widened (both sides) (Option 4) focuses on providing space for cafes and retail uses and combining some of the advantageous features from the previous options

Option 4 with total undergrounding is the preferred option based upon the analysis.



Quinpool Road Streetscape Phase 1: Public Consultation, Schematic Design and Cost Estimate

Project # D08544 FINAL REPORT May 14, 2009





In Association With:

Gordon Ratcliffe Landscape Architects ALAN BAXTER & ASSOCIATES







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A number of pedestrians were observed crossing mid-block in this area. Although it seems an optimum location for an additional crosswalk, HRM Traffic and Right-of-Way has taken the position that a formal mid-block crosswalk at this location is unacceptable because it does not meet current accepted engineering standards for the establishment of a marked crossing.

The proposed design changes seek to address the connectivity between the street and adjacent neighbourhoods, as well as provide design solutions to create a human scale to the streetscape.

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The design will enhance the appearance of the street through undergrounding, addition of street trees and the definition of public spaces.



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Aesthetic elements provided to improve appearance and interest of street (e.g. trees, public art)	х	х	x	х
Site furnishing to increase pedestrian comfort (e.g. benches, garbage bins, trees, etc.)	х	x	x	x
Pedestrian space increased	N/C	x	N/C	x
Existing street trees maintained	-	•	NC	-
Number of street trees increased	xx	x	x	х
Safety concerns addressed (reduce mid-block crossing distance/provide refuge)	xx	х	N/C	x
Existing sidewalk width increased	-	x	N/C	x
Provide widened sidewalks on south side of the street for street cases of up to 4.8 m	N/C	N/C	N/C	x
Human scale of street improved	xx	х	N/C	x
Universal access measures incorporated (ie. corner bulbing, tactile features,)	х	х	x	х
CPTED measures incorporated	х	х	х	x
Parking maintained	x	х	х	x
Traffic flow improved	N/C	N/C	N/C	N/C
Bicycle flow improved	х	x	N/C	х
Life-cycle accounting measures incorporated (ie. sustainability measures)	x	х	х	х
Streetscape can be operated year round.	х	x	х	x
Avoids creating two distinct shopping districts	•	•	N/C	N/C
Opportunities to expand business outdoors	•	x	N/C	xx
Cost (lowest overall)	-	x	N/C	N/C
SCORE	10	14	9	16

exceeds criteria: XX; meets criteria: X; decrease from existing: -; no change: N/C

- 1					
	COST (in millions) NOTE 1:Excludes HST	*\$8.8 M #\$8.5 M	*\$8.2 M #\$7.9M	*\$8.7M #\$8.4M	*\$8.7M #\$8.4M

Notes:*with both primary and secondary overhead power lines underground;

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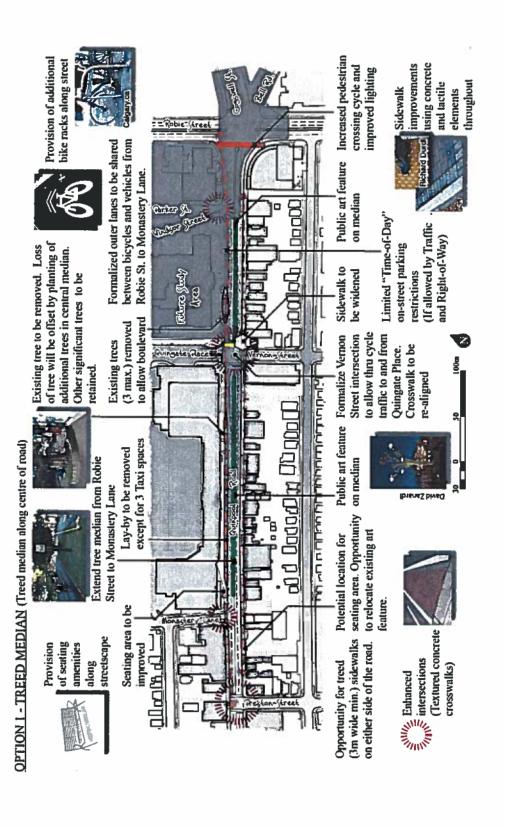
Undergrounding and Electrical costs

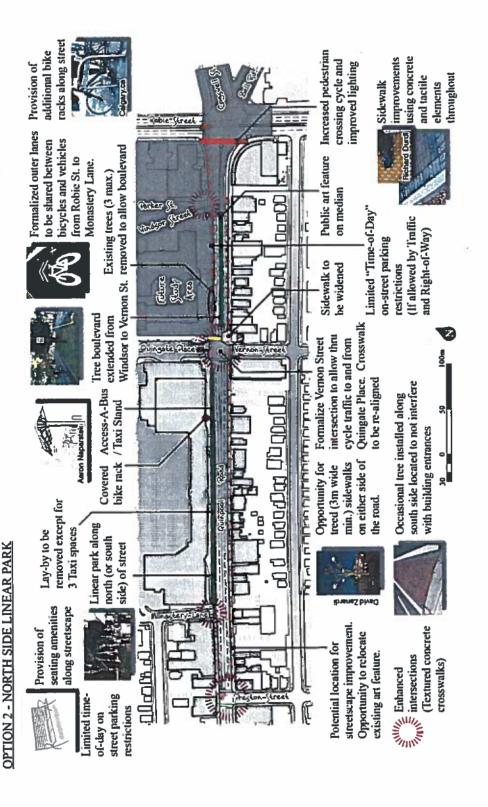
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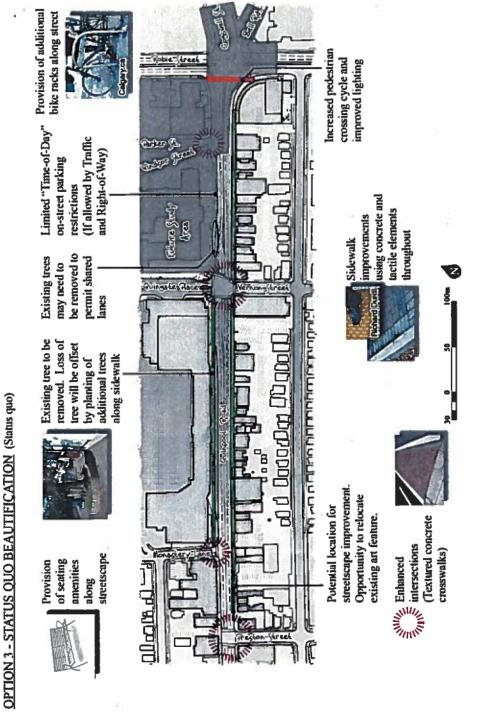
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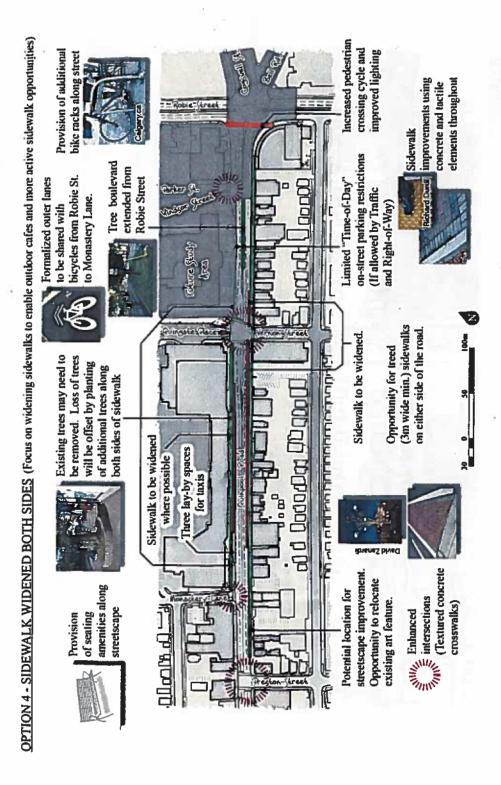
- 1) Electrical and communication conduit,
- 2) Streetlights and streetlight power supply,
- 3) Removal and installation of power poles where required,
- 4) Installation of electrical manholes and communications pedestals.

Effectively the additional cost to place all the telecommunication and electrical underground is approximately \$300,000. Based on this cost difference and the benefits, both aesthetically and from a maintenance perspective, it is recommended that total undergrounding be carried out.









1 Introduction to Quinpool Road

1.1 Planning Framework

There are several planning documents that outline the policy and regulations for development along Quinpool Road. In addition, HRM is currently in the process of creating new documents that will influence future development in this area. The diagram below lists applicable documents and summarizes the relationship between these documents.



1.1.1 Operative Planning Documents

Regional Municipal Planning Strategy (RMPS)

The Regional Municipal Planning Strategy supports street elements such as sidewalk retail uses; human-scale building elements that avoid long, uninterrupted blank walls; weather protection for pedestrians through the use of awnings; context sensitive architecture; access to sunlight at the street level; and the maintenance of adjacent building setbacks to maintain a continuous street wall.

Halifax Municipal Planning Strategy

The development along Quinpool Road is regulated by the Quinpool Road Commercial Area Secondary Plan, which is found under the Halifax

Municipal Planning Strategy. The main objective of this plan is to encourage commercial and mixed-use development that strengthens the community function of Quinpool Road, while in keeping with the character and scale of the adjacent residential developments.

Active Transportation Plan

Quinpool Road is identified as a "preliminary on road candidate route" under the HRM Active Transportation Functional Plan. Pepperell Street, which runs parallel to Quinpool Road from Robie Street to Beech Street, is also identified as a "preliminary on road candidate route". These candidate routes are streets that are being considered for potential HRM bike route status. (Refer to Appendix C for reference to HRM Active Transportation Functional Plan).

HRM By Design

The Quinpool Road area is not directly impacted by the first stage of HRM by Design which deals only with downtown Halifax. However, the intent of the HRM by Design documents contain streetscape design principles that can be used to inform the design of Quinpool Road to ensure consistency of streetscape design. Policies are currently being developed to address future development on Quinpool Road. This will lead to amendments of the existing Municipal Planning Strategy and Land Use Bylaw.

1.2 Site Context Review

1.2.1 Geographical Context

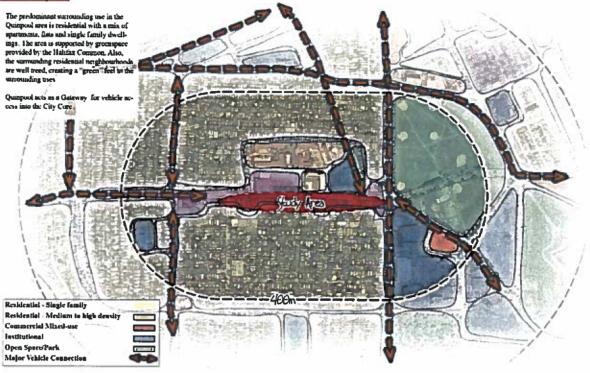
Quinpool Road is centrally located on the peninsula, separating the north and south ends of Halifax, dividing these two distinct neighbourhoods. It is an important arterial street providing both a transition from the Armdale roundabout and a gateway to the downtown core.

Quinpool Road is recognized as a street that services the local neighbourhoods. This is reflected in the Quinpool Road Mainstreet District Association's branding "Your Neighbourhood Mainstreet". Surrounded by predominantly residential uses, nearby residents make up a large portion of the people using the services and enjoying the amenities of the street. Quinpool should function as a meeting place, connecting both the north and south end neighbourhoods, drawing local residents to the area.

The vibrancy of the Quinpool Road business area can be attributed to the eclectic mix of owner-operated restaurants, coffee shops, grocery stores, and a variety of services and retail uses, which along with the Art Deco Oxford Theatre, add to the character of the street. The composition of business uses currently in existence on Quinpool Road include approximately: Services: 47%; Retail: 31%; Restaurants: 15%; and Grocery/ Food retailers: 7% (Statistics Canada, 2008).

Surrounding Uses

8.



The 400 m radius defineates a 5 minute walk for the average person (APA, 2006) and a desirable neighbourhood walking distance to central services.

1.2.2 Historical Context

The name, "Quinpool", is believed to have originated from the name of a widow named Quinn who lived by a stretch of water in the Northwest Arm known as 'Quinn's Pool' (MacKenzie & Robson, 2004). Quinpool Road has been a connection onto the peninsula since the 1900s when it was first recorded as a dirt path winding by hayfields, sports fields, churches, a seminary, and the old St. Mary's College Campus (MacKenzie & Robson, 2004). Quinpool Road continues to be a major artery for vehicular traffic, beginning at the "Willow Tree" and terminating at the Armdale roundabout.

1.2.3 Demographics

The Quinpool Road area has a population of approximately 8,400 people. The population density of 6,287.2 persons per square kilometer (Statistics Canada, 2008) in this area is far greater than the population density of Halifax peninsula (3,239.9 per km.sq. [community counts, 2009]).

Approximately 31% of the population is between the ages of 20 to 29, which is reflective of the large student population living in the area. In addition, the large percentage of people between the ages of 20-29 brings the median age of the population to 31. This is a young population in comparison with HRM as a whole where the median age of the population is 39.0 (Statistics Canada, 2008).

Single family homes, apartment buildings with less than 5 stories, and flats are the predominant housing forms in the study area. There are a total of 3,660 private dwelling units in the Quinpool Road area, of which 59% are rental units For a more detailed breakdown of the statistics, please refer to Appendix A. (Statistics Canada, 2008).

Future Development

There are several potential development sites within the Quinpool Road study area. Two predominant sites are the former Saint Patrick's High School site and the adjacent Armco Capital property, both on the corner of Windsor Street and Quinpool Road. The future development of the Saint Patrick's and Armco sites will significantly impact the character and streetscape of Quinpool Road through scale of the buildings, their location on the site, design of the buildings, and their accompanying uses. Another future development site is located across from Monastery Lane at 6232 Quinpool Road (parking lot). The owners of this property have indicated that they are considering the development of a boutique condominium for the site.



One of the future development sites on Ouinpool Road.

1.2.4 Traffic & Pedestrian Movements

Cycling and Pedestrians

Over 45% of the population in the Quinpool Road area walks or bicycles to work, supporting the continued creation of pedestrian and cycling-friendly environments (Statistics Canada, 2008). The HRM Active Transportation Plan classifies bike routes as primary and secondary routes. Primary Routes provide the "spine" of the system, which are direct links between key destinations, secondary routes provide connections into surrounding neighbourhoods. Quinpool Road, including the streetscape project area, has been identified both within the HRM Active Transportation Plan (Nov 2006) and the Blueprint for a Bicycle Friendly HRM (Dec 2002) as being a primary on road corridor. In both documents the entire length of Quinpool has been designated as a Phase 1 route, indicating that infrastructure should be built to accommodate cyclists in the near future.



Pedestrians are able to access Quinpool Road through parking lots that connect to Pepperell Street. This occurs at Ben's Bakery, the commercial center at 6112 Quinpool, and Blockbuster Video. Based on observations and the pedestrian counts completed in 2008, the desirable clear sidewalk width for pedestrian use (known as effective width) for Quinpool Road is 1.5 m. This was calculated using Jan Gehl and Fruin pedestrian calculations (please refer to Appendix B for a breakdown of the pedestrian counts). Based on these calculations, the minimum width required for the pedestrian area, street furniture and outdoor cafes, varies between 3 - 4.8 m depending on the amenities provided. The current sidewalk width varies from 2.5 m to 4.7 m.



Quinpool Road is used by the surrounding residents as a destination and main route to the city core

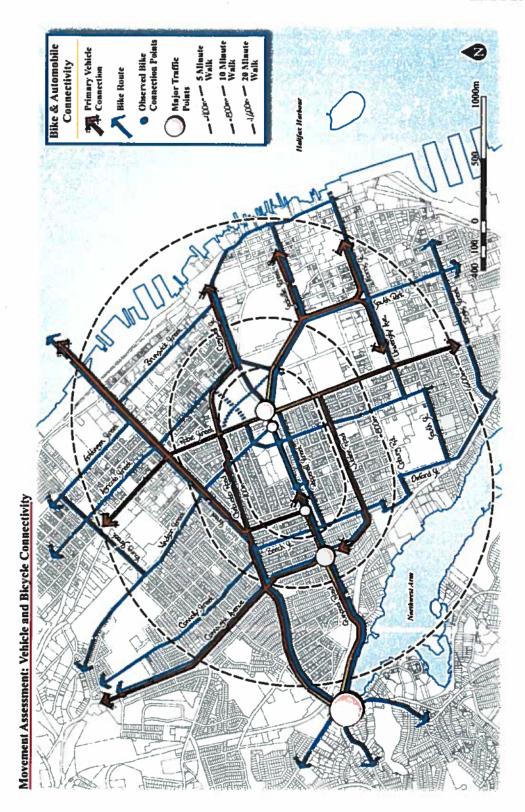
Transit

Six bus stops exist within the study area on either side of the road: Quinpool Road at Windsor Street; Quinpool Road at Vernon Street and Quinpool Road at Preston Street. Approximately 625 people embark and disembark at these stops on a daily basis during the week (Metro Transit, 2008). The busiest stops are located at Quinpool Road/Vernon Street (heading east and west) and Quinpool Road/Windsor Street (heading west). Metro Transit currently services Quinpool Road with three transit routes. Of the three bus routes, the #6 is the only wheelchair accessible bus and the only bus to travel down Quinpool Road on Saturdays, Sundays, and holidays. Peak transit hours are between 6:45am – 10:00am and 3:00pm – 7:00pm. Buses run approximately every 30 minutes throughout the day (see Appendix C for a more detailed breakdown).

Prepared for: HALFAX by: terrain

Traffic Movements

The study area is bounded by Preston Street to the west and Robie Street to the east, and contains two signalized intersections: Vernon Street; and, Preston Street. Quinpool Road is heavily utilized by motorists with average traffic counts of 1,700 vehicles in the intersections at peak times during the day (HRM, 2008). As previously stated, Quinpool Road is a major arterial route into the downtown. (See Appendix C for a more detailed breakdown).



8



Existing Parking and Loading

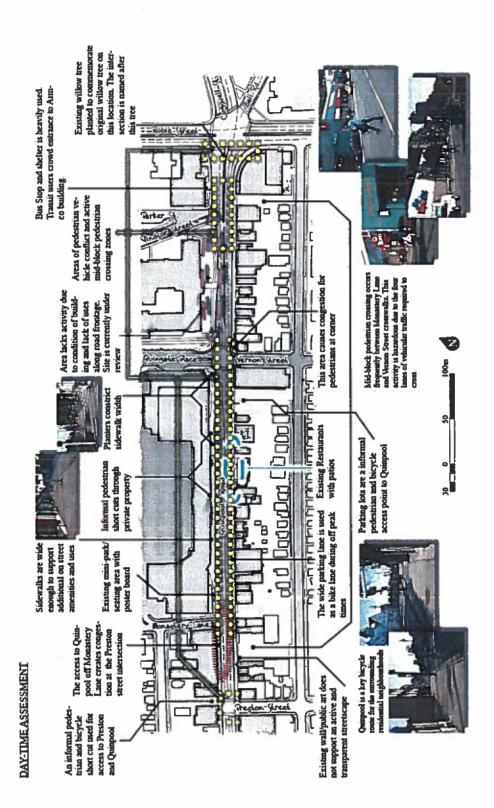
Under provincial legislation, vehicles actively engaged in the loading or unloading of passengers or materials are permitted to stop in the areas identified by the "no parking" signs or in the loading zone areas.

On the south side of Quinpool Road there is time restricted parking between the hours of 9am-6pm (the non-rush hour period) but during the morning traffic peak between 7-9am stopping or loading is not permitted. On the north side of Quinpool Road 1 hour parking is permitted at all hours of the day in front of Quinpool Centre (lay-by area). For the remainder of the north side of the street stopping or loading is not permitted between 4 and 6 pm, the evening traffic peak.

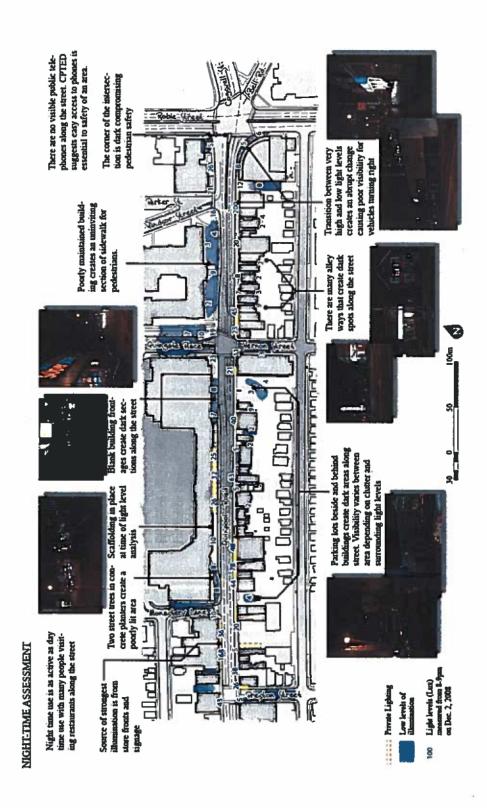
The plan on the following page summarizes the current parking and loading areas on the street. Most of the businesses on the south side of the street load from the front. The existing restricted parking and loading (restricted to non-rush hour times) along Quinpool Road is an effective strategy for servicing local businesses while maintaining traffic flows during peak periods.

EXISTING PARKING AND LOADING PLAN

1.2.5 Day Time Assessment



1.2.6 Night Time Assessment



1.2.7 Consultation

Consultation was carried out with individual property owners, business owners, and key stakeholder groups. A public open house, attended by over 100 people, was held on January 22, 2009 to present the preliminary design concepts (3) and another public open house was held on April 1st, 2009, to present the preferred schematic design. Participants were given the opportunity to provide comments on the various aspects of the design.

Included in the stakeholder group consultations were:

- Quinpool Road Mainstreet District Association Limited
- HRM Transportation and Public Works
 - Traffic and Right-of-Way Services
 - Municipal Operations
 - Metro Transit
 - Urban Forestry
- Infrastructure and Asset Management
 - Design and Construction Services
- HRM Regional Police
- Utility Services
 - Nova Scotia Power/ Aliant / Eastlink / Heritage Gas
 - Halifax Water Commission

Property and Business Owner Consultations

Outlined below is a summary of the key issues that arose from the consultations undertaken with property and business owners on Quinpool Road (refer to Appendix E for a more detailed description).

- Emphasis was placed on the importance of maintaining and even increasing the hours of on-street parking along Quinpool Road to maintain the vitality of the businesses.
- The existing parking and loading street signage clutter is unclear to customers and should be addressed.
- Lack of bicycle lanes and bike racks is a concern to customers who bike to Quinpool Road. Many retail business owners want better support for the biking community.
- Burying the overhead utility wires was supported and believed it would greatly enhance the aesthetic appeal of the street.
- Pedestrian safety and the lack of crosswalks between Vernon Street and Preston Street was a primary concern.
- Additional street furnishings such as benches, trees, planters, quality lighting standards and waste receptacles were requested.
- Interest in expanding and / or creating patios was identified by several restaurant owners.
- Graffiti is a concern to the majority of businesses.

- Businesses suggested that a buffer area between the road and the sidewalk is needed.
- Businesses expressed a concern that the street is unfriendly at night because of the height of the existing light standards and unsafe due to the inconsistency of lighting along the street.

Key Stakeholder Consultations

- Stakeholders are generally supportive of the streetscape improvements.
- Traffic and Right-of-Way advised that any recommendation to alter existing traffic direction signs or flow of traffic would need to go through a neighbourhood consultation process separate from this project that could take up to a year or more.
- Traffic and Right-of-Way opposed placement of an additional crosswalk between Vernon Street and Preston Street because of existing guidelines pertaining to the establishment of marked crossings.
- Traffic and Right-of-Way advised that the Robie Street and Quinpool Road intersection would undergo a thorough investigation into potential options at a later date. The intersection is not within the scope of the streetscape design project.
- Traffic and Right-of-Way have recommended a cross section that includes a 4.2 meter shared use curb lane, which will require some sidewalk narrowing, but will still maintain at least a 3.0 m wide sidewalk.
- Municipal Operations advised that the three stream waste receptacles are a problem due to contamination. It was advised that single stream receptacles would be more effective and 50 pole-mounted units have been installed between Robie and Connaught.
- Municipal Operations suggested that any new street light standards should be able to incorporate pole-mounted waste receptacles.
- Metro Transit suggested using different pavers around bus shelters to delineate bus areas to the visually impaired.
- The owners of the Armco Building at Robie would like the bus shelter removed from in front of their entrance of their building, however Metro transit disagrees, saying the shelter provides a convenient transfer for passengers from Robie Street to Quinpool Rd.
- Metro Transit advised that a 2.5 metre obstacle-free buffer is required around both sides of the bus shelters to further enable accessibility. A 30 m no stopping area is required from all transit stops.
- All stakeholders view burying the overhead wires as greatly improving the streetscape.
- Urban Forestry indicated that HRM is committed to maintaining existing trees, and do not support tree removal unless they pose a threat to public safety.
- Urban Forestry has noted the existing large elm tree outside the Quinpool Centre, is in decline and would support the removal of this trees as a component of the streetscape project.



- The Quinpool Road Mainstreet District Association was supportive of the project and raised the following points:
 - A crosswalk is needed in front of the Quinpool Centre;
 - Bike lanes would enhance the street;
 - Instances of crime and graffiti are beginning to increase; and
 - Existing on-street parking is needed to maintain the viability of businesses.

Public Input

On January 22, 2009, a Public Open House was held to present and review the Quinpool Road Streetscape design project. The following comments were received from the attendees (refer to Appendix E for a more detailed description):

- A majority requested that a crosswalk between Preston and Vernon be included in the streetscape design.
- Many supported improving the streetscape by burying the overhead power and communication lines.
- Concerns were raised about allowing through traffic from Vernon Street to Quingate Place because it would increase traffic in the surrounding neighbourhoods.
- Monastery Lane was identified as a major traffic pinch point
 - numerous participants suggested restricting left turns from Monastery onto Quinpool Road,
- Inadequate snow removal was consistently identified as a barrier to
 pedestrian access along the street. It was suggested that more attention
 be paid to designing the sidewalk space with winter snow
 storage/removal considerations in mind.
- The lay-by in front of the Quinpool Centre should be used for public amenity space.
- Bikes and cars are incompatible; a shared bicycle lane and more bicycle racks should be added to the street.
- The addition of more planters and street trees was supported.
- The inclusion of more public art on the streetscape was a common suggestion.
- Some felt that a central boulevard could move cars closer to the sidewalk, making sidewalks less safe for pedestrians.
- Better lighting options were supported.
- Existing trees should be maintained.

Conclusion:

The four options balance the importance of Quinpool Road being a principal connector to the downtown core while improving the pedestrian environment and supporting the extension of business activity from indoors to outdoors. The Treed Median (Option 1) creates a visual connection between Quinpool Road and the surrounding community; the North Side Linear Park (Option 2) creates a central focus point, recognizing the distinct character differences between the north and south sides of the street; the Status Quo (Option 3) focuses on street improvements while maintaining the existing lane configuration and vehicle movement patterns; and the Sidewalk Widened (both sides) (Option 4) focuses on providing space for cafes and retail uses and combining some of the advantageous features from the previous options

Option 4 with total undergrounding is the preferred option based upon the analysis.

2 Site Analysis

2.1 Design Challenges

2.1.1 Vehicle Traffic

The Pedestrian Barrier

Quinpool Road is a key arterial route into Halifax. Traffic volumes and the width of the roadway create barriers to pedestrian movement from north to south across the street.

Congestion

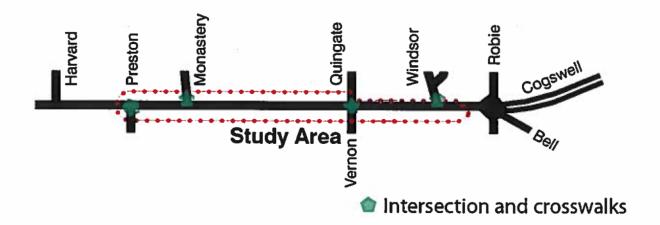
The block between Monastery Lane and Preston Street is the major area of congestion along Quinpool Road. Existing parking, left turns onto Preston St., and traffic turning onto and off of Monastery Lane are all factors that contribute to this bottleneck.

Intersections and Crossings

There are two signalized intersections and two key crossings in the Quinpool Road study area, one at Preston and the other at Vernon. The Vernon Street intersection is a barrier to universal accessibility due to the length of the crossing making it challenging for people in wheelchairs and people visually impaired. In addition, all of the intersections are poorly illuminated for pedestrians.



The congestion between Monastery Lane and Preston Street.



Bicycles

Quinpool Road is a heavily used by local and commuter cyclists. There is a lack of bicycle racks along the street. Cyclists use the outside lanes of Quinpool Road to access Bell Road, where the bike lanes are formalized.

Quingate Place has also been identified as a major cyclist and pedestrian shortcut to Windsor Street. The Vernon Street intersection has been noted as a problem area for cyclists due to the lack of through lanes on to and off of Quingate Place. The existing lane widths on Quinpool are currently too narrow to provide for formal shared lanes.

2.1.2 Mega-block

Porosity

The porosity of Quinpool refers to pedestrian movement from adjacent neighbourhoods on the north and south sides of the street between buildings, through parking lots and through buildings onto Quinpool Road. There are 3 existing "short cuts" contributing to the porosity on the south side of Quinpool at Blockbuster, 6112 Quinpool Road and Bens Bakery. On the north side of the street there are pedestrian access points at Monastery, and Quingate Place, with private access through Quinpool Centre via Canadian Tire, the mid-block atrium, NSLC, Wendy's and through Atlantic Superstore. Otherwise there is limited "through block" public access to the commercial uses along the south side of Quinpool Road.

Street Fabric

The 300 m long "mega-block" created by Quinpool Centre, has negatively impacted the "street fabric" and character of Quinpool Road. The lack of active store frontage along the street combined with the long stretches of blank wall creates a sterile, uninviting pedestrian environment. The south side of Quinpool Road is characterized by older two storey structures with access between buildings and shop frontages along the sidewalk. When compared to the north side of the street, there is no common massing, or form to tie the area together in a coherent streetscape. This is further exacerbated, as noted in Section 2.1.1, by the wide road and high volume of traffic.

Mid-block Crossing and Jaywalking

A number of pedestrians were observed crossing mid-block between Preston Street and Vernon Street where no formal crossing exists. The need for a formailzed mid-block crossing was reiterated as one of the key issues during the consultation process. However, HRM Traffic and Right-of-Way has indicated that the location does not meet current accepted engineering standards for the placement of a marked pedestrian crossing.

2.1.3 Parking and Loading

It is essential to maintain on-street parking and loading along Quinpool Road since a number of businesses load merchandise from the front of the store and rely on convenient customer parking to support their business. Businesses along the street have requested additional unrestricted on-street parking. Existing on-street parking between Monastery Lane and Preston Street contributes to the congestion issues in this area because vehicles parked on the north side create a single through traffic lane to the intersection at Preston



A bicyclist in front of Quinpool Centre using the lay-by as a bike lane.

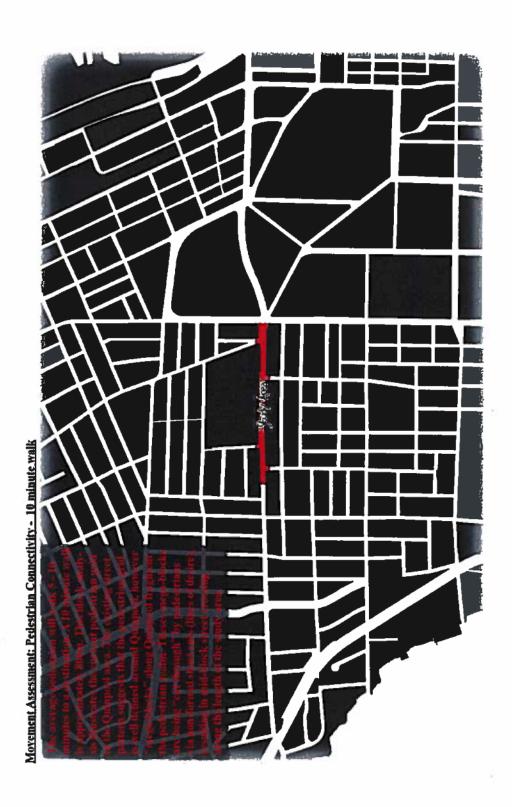


The blank wall along Quinpool Centre creates an uninviting environment



One example of mid-block crossing that is common between Vernon and Monastery Lane

where traffic can turn left. Vehicles making left turns hold up traffic. This is further exacerbated by vehicles exiting or entering Monastery Lane.



2.1.4 Pedestrian Environment

Driveways

Three driveways, (Blockbuster/Ben's Bakery and 6112 Quinpool Road) along the south side of Quinpool Road provide linkages to Pepperell Street. Although these driveways provide shortcuts to adjacent neighbourhoods, they can also pose safety concerns, especially after dusk. In addition, they create gaps in the street wall that are not aesthetically pleasing.

Street Scale

Street width to building height ratios of 1:1 are ideal (APA, 2006); however, along Quinpool Road these ratios vary from 3:1 to 8:1. The width of the street, in combination with undefined pedestrian and vehicle areas, makes the space uncomfortable for pedestrian use.

Vegetation

There are 17 existing trees within the study area. The majority (12) of the mature trees are located in front of St. Pats and the Quinpool Centre. The poor health of vegetation along the street creates a feeling of neglect, the elm tree in front of the Atlantic Superstore creates a barrier to pedestrians and snow removal and the planters around the existing trees are beginning to deteriorate, further adding to the perception of neglect.

Undergrounding

The above-ground electrical and telecommunications wires and wooden telephone poles are unattractive. The wires detract from sight lines and views onto and off of the street, and reduce the vertical space available for planting large trees. Underground electrical and telecommunications wires are less prone to wind and weather damage providing a more reliable electricity supply and require less maintenance than above-ground utilities. The wooden poles are littered with posters and graffiti.

Crime Prevention Through Environmental Design (CPTED)

Areas of Quinpool Road are poorly maintained. Sidewalks are patched with asphalt, the concrete has deteriorated, telephone poles are covered with remnants of old posters and graffiti, and planters hold dead or dying plants. Lighting levels along the street are not uniform and there is a lack of telephones for providing access to emergency services. This creates a sense of insecurity for people using the street. (See Appendix D for CPTED assessment notes).

Lighting

The existing lighting levels along Quinpool Road are not uniform. The sidewalks are lit by "spill over" from the roadway and from adjacent store frontages, causing illumination levels to vary significantly along the street. Parking lots lack lighting or their illumination levels are low and are a CPTED concern.

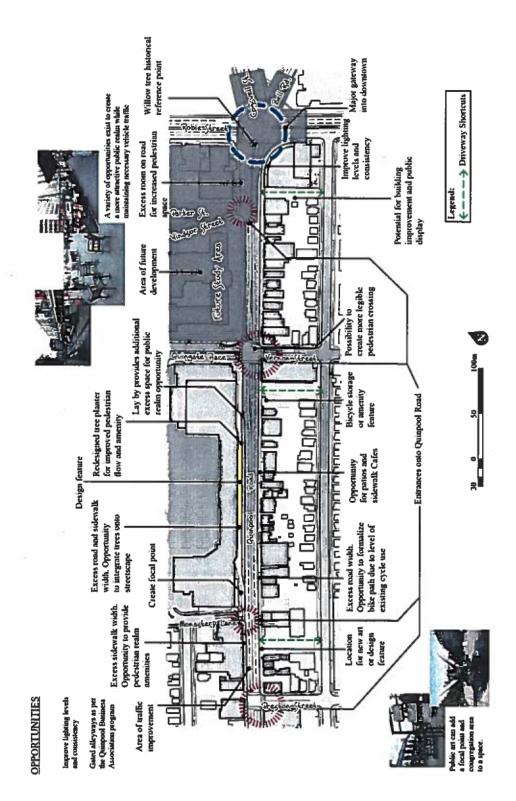


An example of the dark driveways that are common on the south side of Quinpool Road



Overhead wires can confuse and clutter vistas along a streetscape

2.2 Opportunities



3 Section Three: Design Options

3.1 Supporting a Successful Main Street

Quinpool Road acts as a main street for many of the neighbourhoods on Halifax Peninsula. A main street is a central shopping district that is considered the heart of a community, a vital role that must be recognized during the design process. There are a number of characteristics that are typical to main streets:

- Service the community with a wide variety of amenities and destinations.
- Provide important employment areas and an ideal location for independent businesses that service the community.
- Provide pedestrian-oriented environments.
- Provide areas for social interaction and enable pedestrian vitality

3.2 Guiding Principles

The Quinpool Road Streetscape Design Project guiding principles provided a framework for the development of several design options. The principles are based on the project's goals, objectives, site analysis, best practices, and the consultation processes. The guiding principles are:

Movement

Quinpool Road should be enhanced for pedestrians, cyclists, and transit while maintaining vehicle flow. Quinpool Road must be maintained as a arterial connection to the downtown core for vehicular traffic, including cars, transit, and delivery vehicles. However, pedestrians and cyclists must also be recognized as key users of the space and their experience through the space must be considered in the street design.

Transition:

There should be a transition area provided between moving vehicle traffic and the pedestrian environment. The transition area will provide space for storing vehicles and bicycles, for picking up and dropping off, allowing space for taxi and transit riders, and delivery of merchandise. To clearly differentiate the pedestrian and vehicle realms, the edges of the street elements should be defined with street trees, street furniture, and colour/texture change. In addition, improved legibility of the intersections and crosswalks should be achieved using colour changes, texture changes, and lighting to more clearly define pedestrian areas and signify the entrance into a special place.

Safety

Quinpool should provide for a safe and comfortable environment. Safety is essential to a well-utilized public space. Bike lane and intersection safety is based on visibility, visual markers, and separation of pedestrian spaces from vehicular traffic. This is achieved by using signage, lighting, and visual cues such as colour and texture changes, physical barriers, such as bollards and

curbs, and vertical separation, such as raised sidewalks, to define the space for the driver, cyclist, and pedestrian.

Application of Crime Prevention Through Environmental Design (CPTED) principles increase the safety of a public space. Safety of a space is best achieved through natural surveillance. Natural surveillance is the visibility into and out of a space. Passers-by need to be able to see into a space, and people in the space need to have unobstructed sight lines of the surrounding area.

<u>Vitality</u>

Ouinpool Road should provide places for social interaction to promote outdoor activity that reinforces the commercial activity within the commercial establishments. The Quinpool Road Streetscape Design project is an exercise in placemaking. The goal of placemaking is to create a space that attracts people to utilize the area for a wide variety of activities. This can be achieved by creating an environment that provides the opportunity for ten or more different activities at any given time along the streetscape such as outdoor eating establishment, benches, and artwork (Project for Public Spaces (PPS), 2000). Street trees and other vegetation along the street are key components to improve the aesthetics of the street. By planting trees, adding benches and pedestrian-level lighting, and increasing the number of waste receptacles, Quinpool will become a more comfortable, safer and cleaner environment. Colour and texture changes in the paving material will differentiate between pedestrian and vehicle areas, adding to the safety. Public art features will be incorporated into the pedestrian environment to further enhance the experience of the street.

Universal Accessibility

Quinpool Road should be designed so the area is accessible to all. Accessibility can be achieved by designing the public realm for children, the mobility impaired and the elderly. Colour and paving changes provide visual and physical cues. Accessibility is also achieved by providing areas of refuge at long crosswalks and steep slopes. Poorly maintained walkways create barriers for the elderly and mobility impaired.

Sustainability

HRM has compiled an integrated systems approach to address sustainablilty issues and attain their goal of creating a healthy, sustainable, and vibrant community. The design and construction of Quinpool Road streetscape will reduce:

- The ongoing build up of substances taken from the earth's crust
- The ongoing build up of substances produced by society
- The ongoing degradation of natural systems by physical means
- Undermining the ability of people to meet their human needs

(Refer to Appendix H on Sustainability Analysis).

3.3 "Big" Ideas

The design approach sought out a few crucial, big ideas to address current and future needs while creating a memorable sense of place:

- 1. The median extension from the Common is "common" to all options except status quo. The treed median will be a continuation of the Cogswell treed median creating a connection to the Common. This will tie the street to the Common, create a greater sense of enclosure, and contribute to the reduction of the urban heat island effect. This will be combined with the use of street trees paving and colour changes, site furnishings, a consistent design vocabulary for on-street amenities, interactive elements and areas of interest for the users of the space to clearly articulate the pedestrian environment. The median will shorten the physical and visual impact of the road width and contribute to a more comfortable and safe pedestrian experience.
- 2. The provision of **outdoor activity space** is especially significant for the manner in which it supports business. The flexibility on the sidewalks will allow for outdoor retail and sidewalk café opportunities while promoting an active pedestrian environment.
- 3. Active Transportation infrastructure will be accommodated within the existing right-of-way. This infrastructure includes both sidewalks and shared bike lanes. Sidewalks will vary between 3 m to 5 m. A 4.2 m shared bike lane will be created in the outer lanes along Quinpool Road, between Robie Street and Monastery Lane. The shared bike/ time-of-use vehicle parking lane is used for through traffic by both cyclist and cars during rush hour, and as a bike/vehicle parking lane during non-rush hour periods. In addition, the number of bike racks, including covered bike storage at key locations, will be increased to attract cyclists to this commercial destination.
- 4. The use of trees and street furnishings will create the sense of **enclosure** resulting in a more comfortable and safe pedestrian environment. The median tree planting will reduce the visual scale of the street, while sidewalk tree planting will provide enclosure creating a more human scale pedestrian environment. The trees will also help reduce the urban heat island effect, and create a visual connection to the Halifax Common and surrounding neighbourhoods. The trees will provide a comfortable and attractive sidewalk space and a physical separation between pedestrians and traffic.
- 5. Porosity: Connection points from Allan and Pepperel Street to Quinpool between Vernon and Monastery are limited. As such, each "entrance" should be highlighted using design elements such as lighting and paving materials. Most of the pedestrian access points along the street are on private property through parking lots requiring partnerships between the Quinpool Business Association, HRM, and local businesses to achieve design consistency. Formalizing linkages to Quinpool's commercial "mega blocks" from adjacent









An example of creating enclosure using trees and street furnishings

neighbourhoods is an element of sustainability in promoting connectivity of a community and encouraging walking. Formalizing the linkages will require improvements in the design to improve safety (e.g. improved lighting in parking lots) and development of store frontages (e.g. Quinpool Place) to enhance connection points through buildings.

3.4 Proposed Design Solutions

3.4.1 Pedestrian Related Elements

Sidewalk Width

The sidewalk widths currently range from 2 to 5 m. The south side of the street has slightly wider sidewalks in most areas, with an average sidewalk width of 4.0 m within the study area, while the north sidewalk has an average width of 3.2 m. The current sidewalk width provides more than adequate room for the current pedestrian use. Based on the analysis a minimum 1.5 m clear pedestrian travel way needs to be maintained. The existing sidewalk widths along the south side of Quinpool Road will be maintained or increased. Amenities are proposed along the sidewalk with a minimum 1.5 m wide clear pedestrian travel way along the entire length of the street. The sidewalk width is also essential to accommodate street trees (1.2 m wide area), cafés (between 1.0 - 2.0 m wide area) and other outdoor retail.



The existing sidewalk width on Quinpool Road between Robie and Vernon Street

The sidewalk design should:

- Provide universal access
- Improve pedestrian flow
- Integrate sustainable materials
- De-clutter by consolidating amenities on multi-functional poles
- Create an attractive pedestrian environment
- Promote a comfortable, interesting and safe street
- Differentiate the pedestrian environment from the vehicular zone
- Provide space for public art, street trees and other amenities
- Provide the opportunity for outdoor cafés and sales areas

Sidewalk Materials

The sidewalk materials proposed for Quinpool Road include:

- Cast-in-place concrete or reuse of existing concrete sidewalk that is in good condition
- Interlocking pavers and other tactile features

The use and placement of consistent sidewalk materials will create visual cohesion along the sidewalk, and a clearly defined public realm. Colour changes and tactile features will delineate the sidewalk, providing easier street navigation for the visually impaired. Special paving can also be used to highlight focal points and identify destination areas for the visually impaired, such as bus stops.

Where the existing sidewalk is in good condition it will be retained. Material removed from damaged potions of the sidewalk may be recycled for sub-base construction. This approach will contribute to the sustainable streetscape practices.

Street Trees

The neighbourhoods surrounding the Quinpool Road study area have tree-lined streets that enhance the character of the community. Quinpool Road has very few trees located along its length.

The intent of the street tree design is to:

- · Reduce the urban heat island effect
- · Provide shading for pedestrians during summer months
- Provide a visual connection to surrounding green spaces
- Define the pedestrian realm and create separation from the roadway
- · Create outdoor "rooms"
- Promote aesthetic appeal

Placing trees along Quinpool Road will help integrate the street with the Common, Connaught Avenue, and the surrounding neighbourhoods. Street trees are proposed along both sides of the street and will be placed in a manner that does not clutter the street (generally at 10 m intervals). Tree placement will at the same time reflect the commercial character of the street, the desire for outdoor use areas, the location of transit stops and the location of building entrances.

Lighting

Three forms of lighting are being explored for the Quinpool Road design: pedestrian and roadway lighting, accent lighting, and low level lighting. Pedestrian and roadway lighting will be secured to multi-functional light standards. The light fixtures will be designed to reflect the Art Deco theme of the street, providing a place for banners, holiday decorations, and other elements that will improve the character and feel of the streetscape. Accent lighting will be used to highlight focal points and to define special spaces on the street. Low lighting, such as bollards, can provide downward light to highlight texture features in the sidewalk and delineate the sidewalk and intersections.

Four lighting choices are being explored for the street and are compared in the lighting matrix in Appendix F. As shown in the matrix, the choice of lighting can contribute to the sustainable design of the street. The feasibility of incorporating low energy use LED lighting along Quinpool Road is being assessed and will be revisited during the detailed design process.

The intent of the lighting design is to:

- Provide a safe pedestrian and vehicle environment through consistent illumination levels
- Create an attractive and comfortable nighttime street environment
- Achieve design consistency with other streetscape elements
- Provide appropriate levels and direction of lighting

Focal Points/Amenity Space

Ben's Bakery and Quinpool Place have shown interest in upgrading their frontages along Quinpool Road. Enhancements to these large spaces, through the use of elements such as increased vegetation, site furnishings and artwork, will contribute to the whole streetscape. Please refer to Appendix G for design criteria for Quinpool Place and Ben's Bakery concept.

Undergrounding

The undergrounding of overhead wires will contribute greatly to the overall aesthetics of the streetscape. There are two options for undergrounding:

Undergrounding Option 1:

Bury the Telecommunications Lines and Secondary Power Lines Only
Concrete power poles would run along the southern sidewalk carrying primary
power. Underground secondary power would permit electrical access from pull
pits placed under the northern sidewalk. There would be one pull pit on the
northern sidewalk to service secondary power to residences between Monastery
Lane and Preston Street. Streetlight conduits would run under the northern and
southern sidewalks within the project limits.

Undergrounding Option 2:

Bury the Telecommunications Lines and Primary and Secondary Power Lines

This option places the primary electrical conduit and manholes under the northern sidewalk. Secondary power would run from these manholes to the buildings along Quinpool Road. One electrical manhole would be placed on the northern sidewalk to provide secondary power to residences between Monastery Lane and Preston Street. In addition, streetlight conduits would run under the northern and southern sidewalks within the project limits.

Site Furnishings

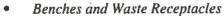
Wayfinding Signs

The proposed wayfinding signage will be consistent with the HRM Capital District wayfinding program. There is an opportunity to accommodate business directories in the wide sidewalk areas.

Bike Racks

Currently, cyclists are forced to lock their bikes to existing street elements, such as light standards and street furniture, impeding the movement of pedestrians along the street.

Based on discussions with HRM Transportation Demand Management staff, a minimum of 36 bike racks (18 on the north and 18 on the south side of the street) spaced at 30 m intervals need to be located along Quinpool Road. Occasional clustering of racks in areas of high use, such as in front of Quinpool Centre and outside of the Atlantic Superstore may provide for appropriate distribution. Bike racks will be grouped with other street elements such as trees or benches. The racks will be situated parallel to the road, enabling bicycles to be parked in a manner to avoid conflict with pedestrian movement.



When placed correctly, these site furnishings can provide refuge areas and promote increased use of the street. HRM has purchased titanium-coloured garbage receptacles and benches for Quinpool Road. The street light fixtures will be the same colour as the benches and garbage containers and all will contribute to the Art Deco theme of Quinpool Road. Additional seating opportunities will be created with the installation of planter walls.

Public Art

Quinpool Road has one formal public art installation along its length, the concrete wall located in front of the Ben's Bakery. The owners of the artwork and the artist are interested in relocating the artwork to the Commons, leaving an open opportunity for the provision of a public amenity space in front of the bakery. (Refer to Appendix G for Concept Plan)

The public art design intent is to:

- Create focal points
- · Support cultural expression
- Improve street aesthetics
- Attract people to the street
- Celebrate Quinpool Road in context of the City

There are many opportunities for public art along Quinpool Road. Two locations lend themselves to sculptural art forms, Ben's Bakery and Quinpool Centre. The Holiday Inn has stated interest in using their existing south west facing blank wall for public art. In addition, smaller forms of art are possible throughout the space. Decorative placarding, historical interpretations, and sidewalk art can all be brought into the space. This adoption of artwork will need to follow the guidelines outlined in the HRM Public Artwork policy.



Bikesblog.org



landscapeform.com



David Zanardi

3.4.2 Vehicle Related Elements

Traffic flow

Maintaining traffic flows on Quinpool Road is essential to the streetscape project. The design proposes to maintain four lanes of traffic through the study area, with the goal of creating a 4.2 m shared use (cyclist and vehicles) outside lane and a 3.3 m inside lane from Robie to Monastery. Monastery to Preston will provide a transition from the new cross section to be built between Robie Street and Monastery Lane and the existing cross section west of Preston Street.

A number of recommendations for future consideration could help to mitigate the current congestion issues:

- Implement time restricted left turns onto Preston Street
- · Design Monastery Lane as a right-in and right-out only street
- Provide a longer left turn lane on Quinpool for traffic turning onto Quingate Place and install a dedicated left turn signal
- Permit through traffic between Vernon Street and Quingate Place

These recommendations are not part of this design because of the lengthy neighbourhood consultation process required to achieve such changes.

Bike Lanes

Shared lanes are proposed between Robie Street and Monastery Lane. The shared lane will be 4.2 m wide to permit use by vehicle traffic and bicycles. The viability of a future extension of this shared use lane from Monastery to Connaught has been confirmed and, subject to public business stakeholder consultation, will be incorporated into any future roadway projects.

Parking and Loading

Quinpool Road has time restricted parking and loading on both the north and the south sides of the street (as discussed in Section 1.2.4), which will be maintained. Most businesses on the south side front load from the street into the store.

3.4.3 Intersection Design Elements

Intersections and Crosswalks

There are seven formal entrances onto Quinpool Road within the study area: (1) Windsor Street; (2) Vernon Street (3) Quingate Place; (4) Monastery Lane; (5) Preston Street; (6) Robie Street, and (7) Quinpool at Preston. Although the Robie Street intersection is a major gateway, the redesign of this area will be undertaken as a separate study in the future.

Currently, designated pedestrian crossings are not well marked or illuminated and do not support universal accessibility (Many curb cuts are too small or oriented in a way that forces strollers and wheelchairs into the roadway).

The intent of intersection and crosswalk design is to provide:

- Universal access
- Improved pedestrian movement
- · An attractive pedestrian environment
- A comfortable and safe street
- Defined entrances to Quinpool Road

Cast in place concrete intersections are proposed at the Preston, Vernon Street, Monastery Lane intersection and at the crosswalks at the Windsor Street intersection. The cast in place concrete will contrast in texture and colour with the asphalt street pavement thereby promoting safety. Visual and tactile cues will support universal accessibility. To improve nighttime crossing, safety, accent lighting will further differentiate the pedestrian and vehicle realms.

3.4.4 Crime Prevention Through Environmental Design Elements

Crime Prevention Through Environmental Design (CPTED) is a tool used to promote safe spaces. CPTED uses four techniques to design spaces that encourage user safety: territoriality; natural surveillance; access control; and, maintenance.

The CPTED intention for Quinpool will be to:

- · Promote visibility and natural surveillance
- Locate way-finding signs and allow access to telephones for emergency services
- Provide proper receptacles for waste
- Define pedestrian/vehicle and public/private realms clearly

The main CPTED design strategy for Quinpool Road is a comprehensive lighting approach to the street to address potential access control issues and visibility of the pedestrian realm. Other design elements will include fencing off gaps between houses that may attract undesirable activities, directing access to clearly demarcated public phones, and installing coloured and textured paving (for territoriality and wayfinding purposes), and waste receptacles (to improve street cleanliness).



Example of a fence/gate that could be used for both visual and CPTED purposes (ironeagle.ca)

4 Options Summary

Four schematic design options have been explored for Quinpool Road. Each of the options creates a more pedestrian focused streetscape, enhance the bicycle infrastructure, and maintains the through vehicle traffic capacity. The four options are:

- Option 1: Treed median
- Option 2: North Side Linear Park
- Option 3: Status Quo-Beautification
- Option 4 -Sidewalk Widened Both Sides

It should be noted that many of the design elements are the same between options; however, they are applied differently to address the design challenges.

Design Summary

Design Elements	Option I	Option 2	Option 3	Option 4
Loading				
Lay-bys		x (Taxi Stand in front of Quinpool Centre)	x (maintain existing)	x (Taxi Stand in front of Quinpool Centre)
Time restricted loading areas	х	x	x	x
Greenspace/Street Trees				<u> </u>
Formal park area		x		
Trees along sidewalk	x	х	х	х
Treed Median	xx(between Robie and Monastery)	х (between Robie and Vernon)		x (between Robie and Vernon
Seating walls		x		x
Benches	x	x	х	x
Parking				
Restricted parking times	х	х	х	x
Accessible parking	x	x	х	х
Taxi Stand/Access-a-bus parking	(off street)	х	х	x
Sidewalks				
Cast in place concrete	х	х	х	x
Pavers	x	х	х	х
Tactile paving (urban braille)	х	x	х	x
Lighting				

			-	
Low level lighting (trees)	х	х	х	х
Street lights	x	х	х	х
Intersections and Crosswalks				
Tactile paving (urban braille)	x	х	х	x
Refuge island	xx	x (limited areas)		x (limited areas)
Textured crosswalk	х	x	x	x
Crime Prevention Through Environmental Design (CPTED)				
New payphones to visible locations	x	х	х	х
Way-finding/ Business Directory	х	x	x	x
Defined Pedestrian Space	х	х	x	x
Waste Receptacles	х	х	x	x
Entrances				
Textured crosswalks	х	х		x
Tactile paving	х	х	x	x
Way-finding				
Business Directories	x	x	х	х
Consistent sidewalk materials	x	х	x	х
Consistent lighting materials	x	х	х	х
Banners (mounted on multi- functional pole)	х	x	х	x
Alternative Transportation				
Additional Bus shelters	x	х		х
Bus stops	x	х	x	x
Bike racks	x	x	х	x
Formalized Shared bike lane (Robic to Monastery)	х	х	(maintain existing lane configurati on)	x (between Vernon and Robie)
Covered Bike rack		x		x
Public Artwork				
Opportunity for major sculpture artwork	x (in median)	x(in linear park space)		х
Integrated public artwork	x	х	x	x

4.1 Design Options

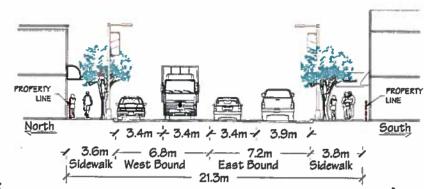
PROPOSED CONDITIONS - ALL OPTIONS

QUINPOOL ROAD

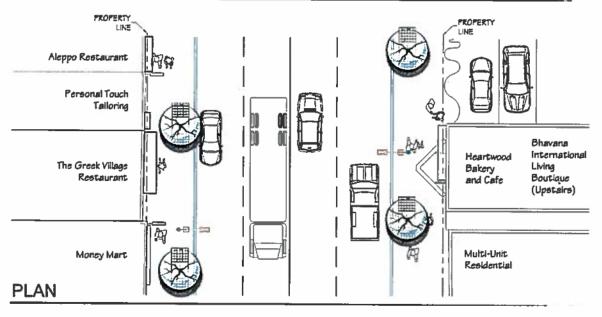
STREETSCAPE DESIGN PROJECT

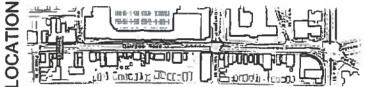
PRELIMINARY TYPICAL SECTION 'A'
PRESTON TO MONASTERY

AVERAGE SPACE LIMITATION: 21 METRES



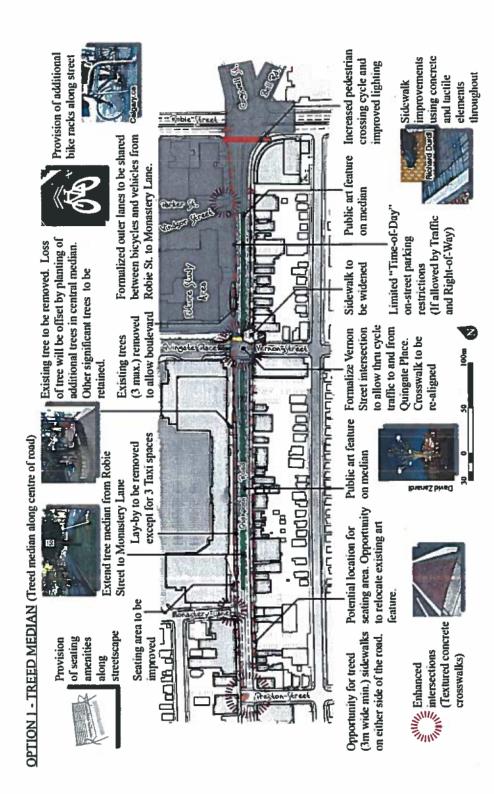
PROFILE







4.1.1 Option 1: Treed Median

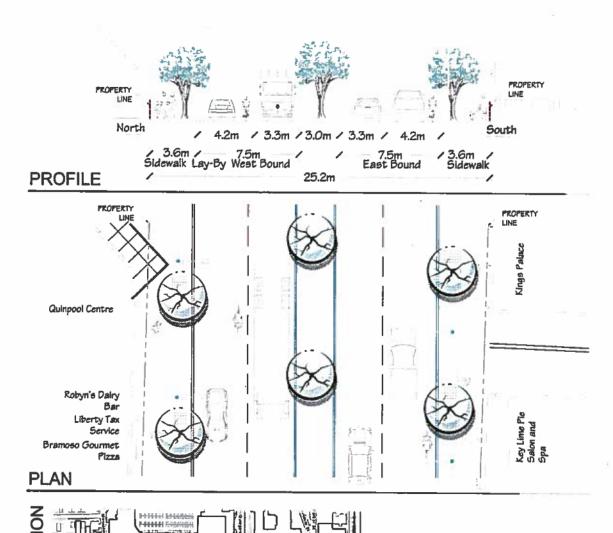


PROPOSED CONDITIONS - OPTION 1

PRELIMINARY TYPICAL SECTION 'B'

MONASTERY TO QUINGATE AVERAGE SPACE LIMITATION: 25 METRES







PROPOSED CONDITIONS - OPTION 1

QUINPOOL ROAD STREETSCAPE DESIGN PROJECT

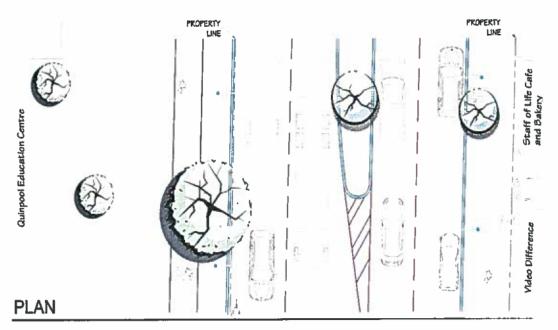
PRELIMINARY SECTION 'C'

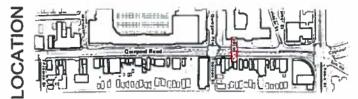
QUINGATE TO WINDSOR

AVERAGE SPACE LIMITATION: 27 METRES



PROFILE







Option 1: Treed Median

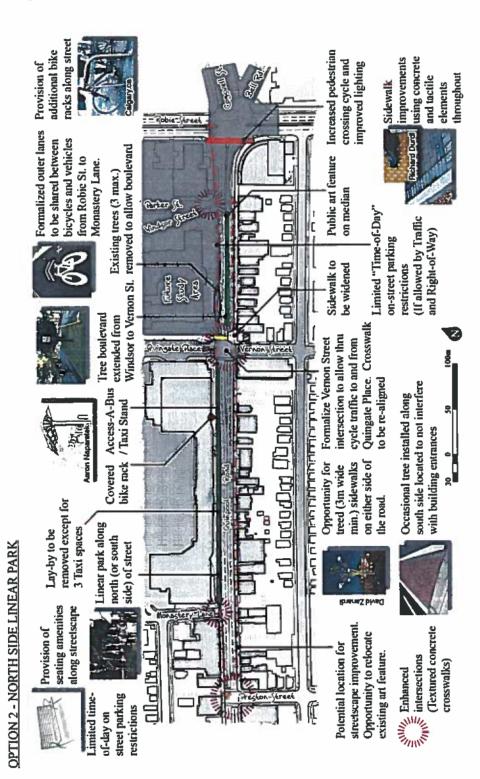
Advantages

- Median will reduce u-turns increasing general safety
- Trees will reduce visual impact of street width
- Trees will assist with urban heat island reduction
- Create visual connection to the Commons and surrounding neighbourhoods
- Provides a flexible option for public art
- Provides a shared bike / vehicle lane from Robie to Monastery
- Trees and street furnishings create enclosure promoting a comfortable pedestrian environment
- Reduces merge delays for transit caused by existing bus lay-bys

Disadvantages

- Highest cost
- Central median will prevent u-turns across Quinpool Road (inconvenient to south-side on-street parking access to westbound traffic)
- Lane re-alignment will result in reducing existing sidewalk width limiting the ability for outdoor activities.
- Loss of mature trees near St. Patrick's High School and Quinpool Place
- Snow removal challenges
- Low pedestrian value in extending outdoor use space for business/street activity
- Treed median will separate the two sides of the shopping street

4.1.2 Option 2: North Side Linear Park



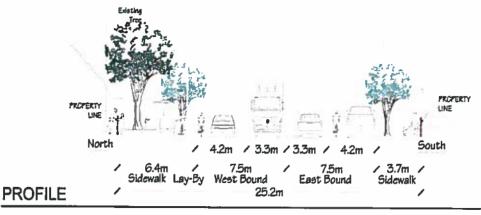
PROPOSED CONDITIONS - OPTION 2

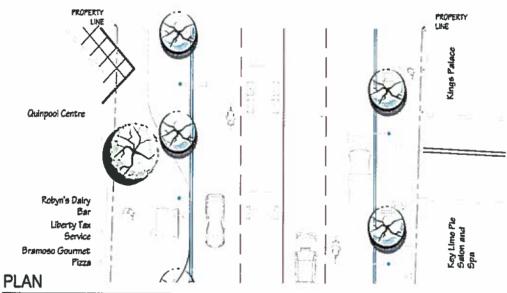
PRELIMINARY TYPICAL SECTION 'B'

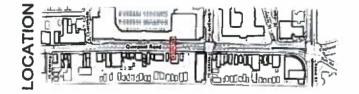
MONASTERY TO QUINGATE

AVERAGE SPACE LIMITATION: 25 METRES











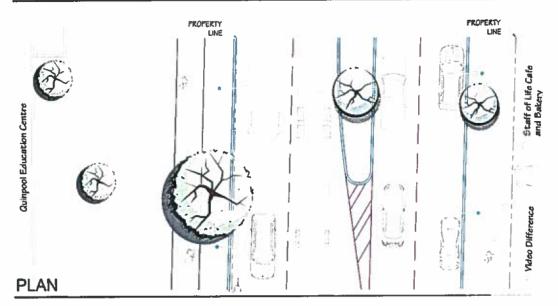
PROPOSED CONDITIONS - OPTION 2

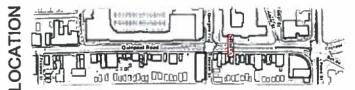
QUINPOOL ROAD STREETSCAPE DESIGN PROJECT

PRELIMINARY SECTION 'C'

QUINGATE TO WINDSOR AVERAGE SPACE LIMITATION: 27 METRES









Option 2: North Side Linear Park

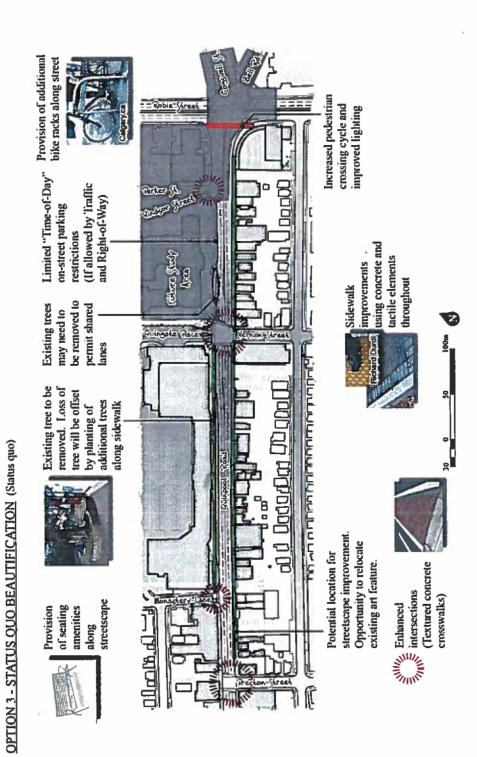
Advantages

- Creates a central focus between Quingate Place and Monastery Lane with opportunity for major piece of public art in the Linear Park
- Provides opportunity for kiosks and streetside vendors on north side of street between Monastery and Vernon/Quingate Place while increasing public space that can be used for informal meeting and pedestrian outdoor activities
- Median creates pedestrian refuge provided between Robie and Vernon
- and a visual linkage to Commons
- Trees will reduce visual impact of street width
- Trees will assist with urban heat island reduction
- Street trees create enclosure making a comfortable pedestrian environment and differentiates the pedestrian environment from the vehicle environment
- Shared bicycle lanes provided from Robie through to Monastery Lane
- Lowest cost.

Disadvantages

- Divides the street into two distinct sides
- Limited space for outdoor cafes on south side
- Pedestrian amenity space focused in widened curb-side area on north side of street that does not directly support extension of business activities outdoors
- Loss of mature tree in good condition and 2 others not in good condition fronting St. Patrick's High School

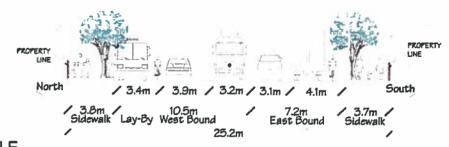
4.1.3 Option 3: Status Quo - Beautification



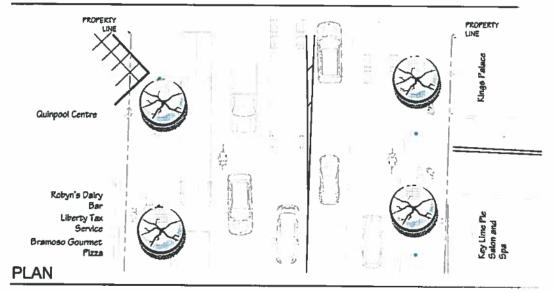
PROPOSED CONDITIONS - OPTION 3

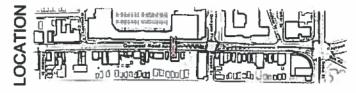
PRELIMINARY TYPICAL SECTION 'B'
MONASTERY TO QUINGATE
AVERAGE SPACE LIMITATION: 25 METRES





PROFILE







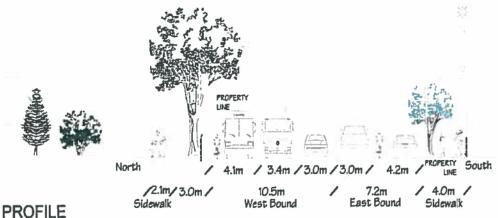
PROPOSED CONDITIONS - OPTION 3

QUINPOOL ROAD STREETSCAPE DESIGN PROJECT

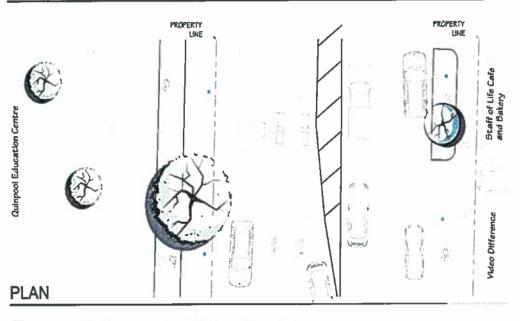
PRELIMINARY TYPICAL SECTION 'C'

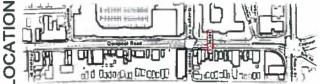
QUINGATE TO ROBIE

AVERAGE SPACE LIMITATION: 27 METRES



PROFILE







Option 3: "Status Quo" - Beautification

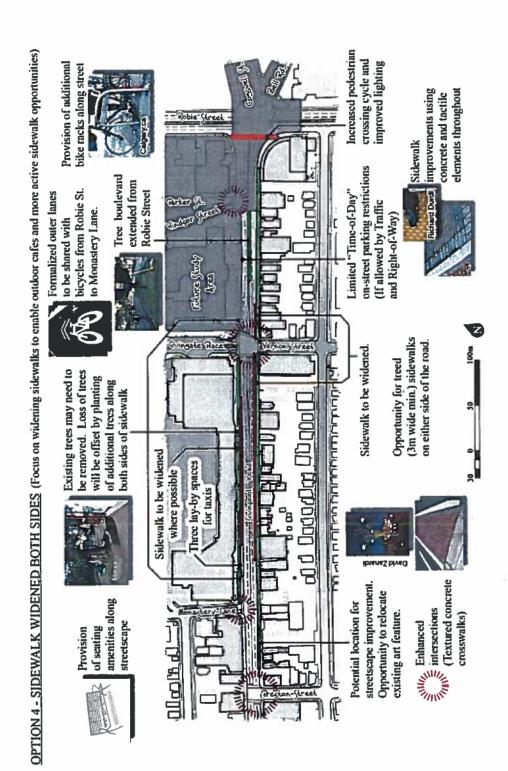
Advantages

- · Lane configuration does not change
- Trees differentiate the pedestrian and vehicular realm
- Maintains the existing street trees

Disadvantages

- No shared curb lane for cyclists and vehicles
- Street scale not addressed
- Does not address pedestrian bottlenecks (e.g. corner at Perks Coffee)
- Limited ability for outdoor pedestrian and commercial activities

4.1.4 Option 4: Sidewalk Widened Both Sides



PROPOSED CONDITIONS - OPTION 4

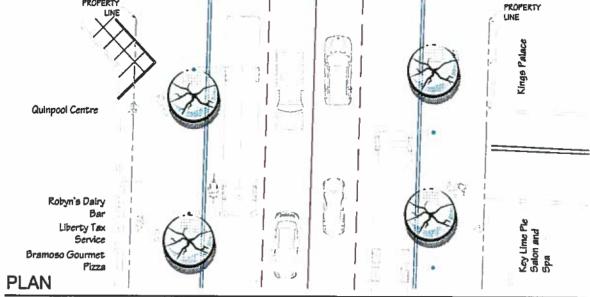
PRELIMINARY TYPICAL SECTION 'B'

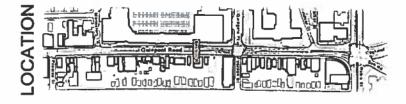
MONASTERY TO QUINGATE

AVERAGE SPACE LIMITATION: 25 METRES











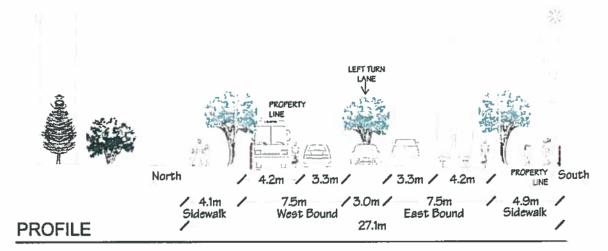
PROPOSED CONDITIONS - OPTION 4

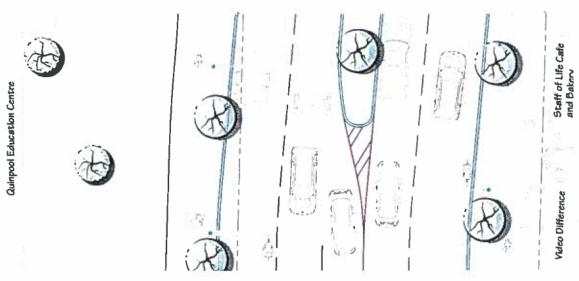
QUINPOOL ROAD STREETSCAPE DESIGN PROJECT

PRELIMINARY TYPICAL SECTION 'C'

QUINGATE TO ROBIE

AVERAGE SPACE LIMITATION: 27 METRES





PLAN





Option 4: Sidewalk Widened Both Sides

Advantages

- · Pedestrian refuge provided between Robie and Vernon
- Trees will reduce visual impact of street width
- · Trees will assist with urban heat island reduction
- · Median creates a visual linkage to the Common
- Sidewalk widened between Vernon and Monastery on north and south sides of street to provide opportunity for pedestrian and commercial outdoor activities
- Proposed shared -bike lane from Robie to Monastery
- Street trees creates enclosure making a comfortable pedestrian environment and differentiates the pedestrian environment from the vehicle environment

Disadvantages

· Loss of mature trees near St. Patrick's High School and Quinpool Place

4.2 Construction Approach

The intent of this project is to complete the construction within a one-year construction season. Both the primary and some of the secondary undergrounding will occur on the northern side. Secondary services will be provided to the southern side from the primary on the north side periodically. The contractor will be required during construction to maintain two through lanes of traffic, and no parking or loading during rush hour. Upon completion of the undergrounding and streetscape works, the road will be resurfaced.

4.3 Quinpool Road Cost Option Summary

COST (in millions excluding HST)	Option 1	Option 2	Option 3	Option 4
Cost of street works with Undergrounding - Primary & Secondary	\$8.8 M	\$8.2M	\$8.7M	\$8.7M
Cost of street works Undergrounding - Secondary Only	\$8.5 M	\$7.9M	\$8.4M	\$8.4M
Difference	\$0.3 m	\$0.3 m	\$0.3 m	\$0.3 m

Undergrounding and Electrical costs

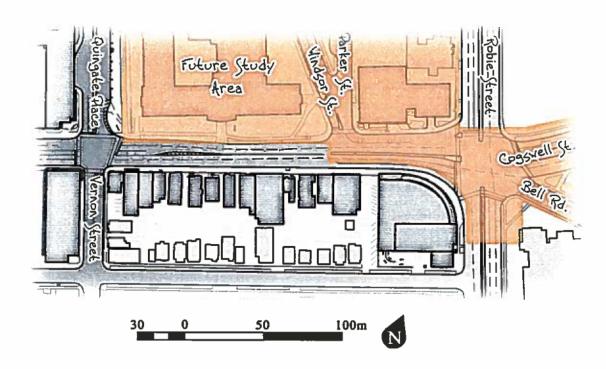
Option 1 Median	Treed	Option 2 North Sid Park	le Linear		Option 3 Status Quo -Beautification		Sidewalk Both Sides
All U/G	Sec. U/G	All U/G	Sec. U/G	All U/G	Sec. U/G	All U/G	Sec. U/G
2.3 M	2.1M	2.3M	2.0M	2.3M	2.0M	2.3M	2.0M

The difference in cost between partial undergrounding to total undergrounding is effectively \$300,000. These costs include supply and installation of the following:

- 1) Electrical and communication conduit,
- 2) Streetlights and streetlight power supply,
- 3) Removal and installation of power poles where required,
- 4) Installation of electrical manholes and communications pedestals,

Out of Scope Separate Cost (Quingate Place to Robie, North Side of Quinpool):

An additional cost of \$872,000 has been established for completing undergrounding and aesthetic improvements along the north side of Quinpool Road between Quingate Place and Robie Street at some point in the future.



5 Conclusion

The four options balance the importance of Quinpool Road being a principal connector to the downtown core while improving the pedestrian environment and supporting the extension of business activity from indoors to outdoors. The Treed Median option creates a visual connection between Quinpool Road and the surrounding community; the North Side Linear Park option creates a central focus point, recognizing the distinct character differences between the north and south sides of the street; the Status Quo option focuses on street improvements while maintaining the existing lane configuration and vehicle movement patterns; and the Sidewalk Widened (both sides) option focuses on providing space for cafes and retail uses and combining some the advantageous features from the previous options.

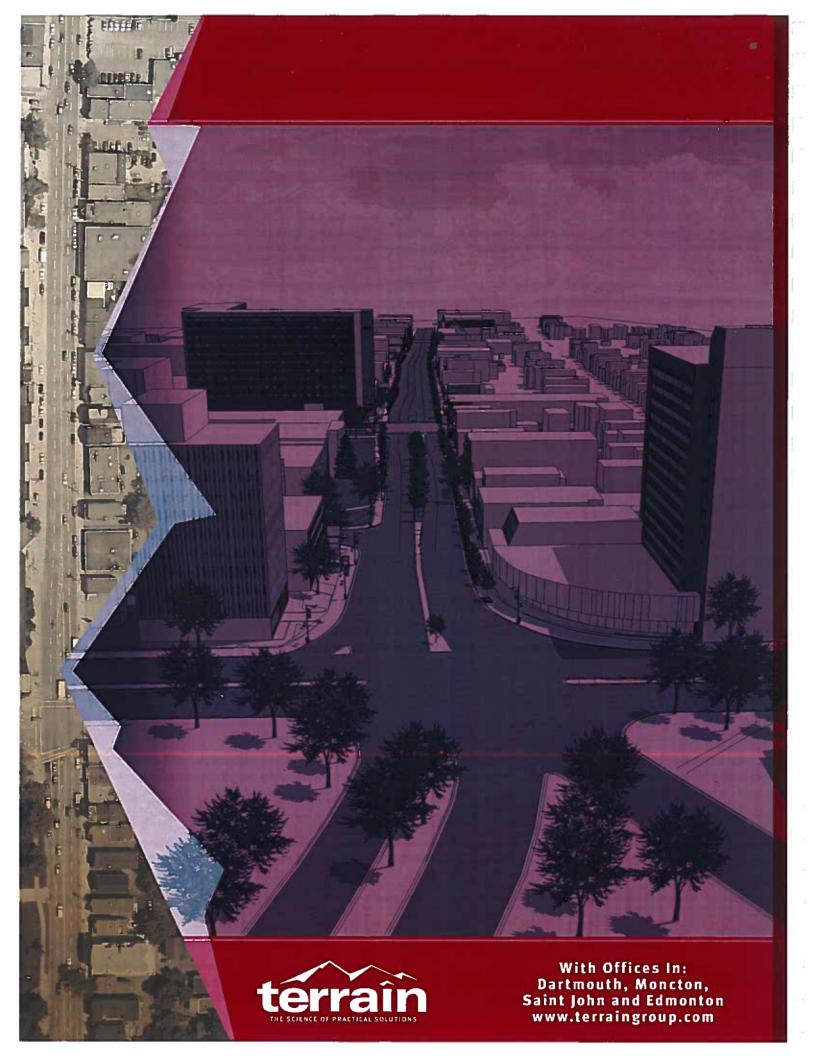
Option 4 with total undergrounding is the preferred option based upon the analysis.

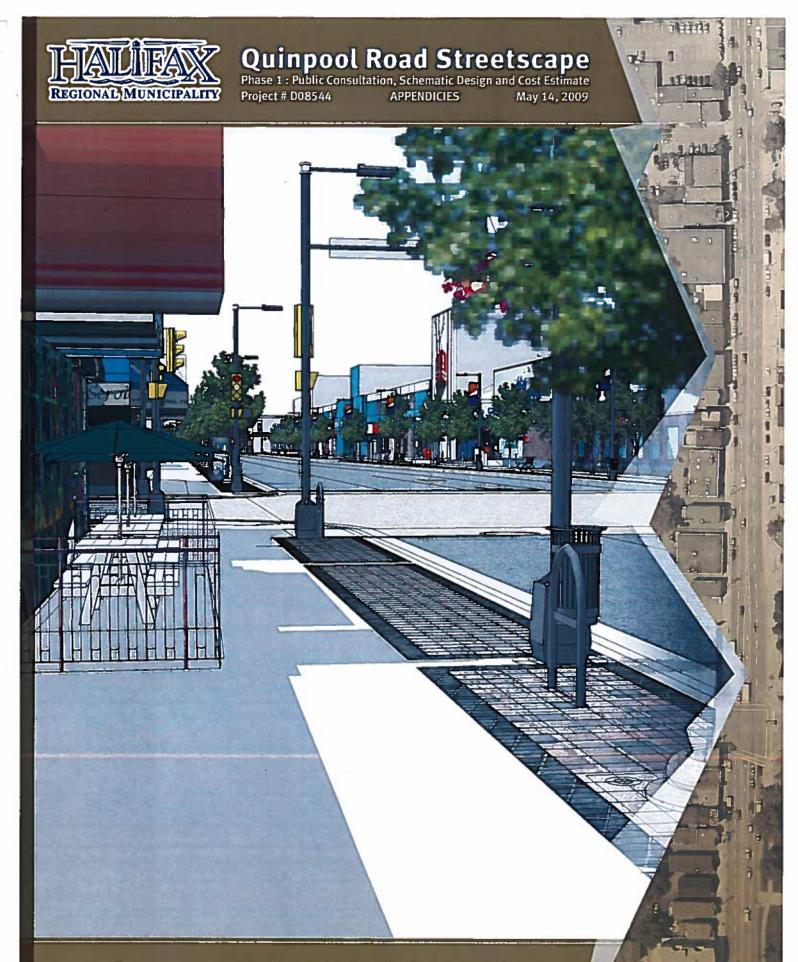
(See Options Analysis Table on Page 51)

Based on the analysis, the recommended option is to proceed with the Widen Sidewalks (Both Sides) option.

Quinpool Road Streetscape Options Analysis	Option I: Treed median	Option 2: North Side Linear Park	Option 3: Status Quo - Beautification	Option 4: Sidewalk Widened Both sides
Utilities undergrounded	х	х	x	х
Aesthetic elements provided to improve appearance and interest of street (e.g. trees, public art)	х	х	x	х
Site furnishing to increase pedestrian comfort (e.g. benches, garbage bins, trees, etc.)	х	х	x	х
Pedestrian space increased	N/C	х	N/C	х
Existing street trees maintained	-		NC	-
Number of street trees increased	xx	x	x	х
Safety concerns addressed (reduce mid-block crossing distance/provide refuge)	xx	x	N/C	х
Existing sidewalk width increased		х	N/C	х
Provide widened sidewalks on south side of the street for street cases	N/C	N/C	N/C	х
Human scale of street improved	xx	x	N/C	х
Universal access measures incorporated (ie. corner bulbing, tactile features,)	x	x	х	x
CPTED measures incorporated	x	х	x	x
Parking maintained	x	х	х	x
Traffic flow improved	N/C	N/C	N/C	N/C
Bicycle flow improved	x	х	N/C	x
Life-cycle accounting measures incorporated (ie. sustainability measures)	x	х	х	x
Streetscape can be operated year round.	x	x	х	x
Avoids creating two distinct shopping districts	-	-	N/C	N/C
Opportunities to expand business outdoors	-	x	N/C	xx
Cost (lowest overall)	-	x	N/C	N/C
SCORE	10	14	9	16

exceeds criteria: XX; meets criteria: X; decrease from existing: -; no change: N/C







In Association With:

Gordon Ratcliffe Landscape Architects

ALAN BAXTER & ASSOCIATES





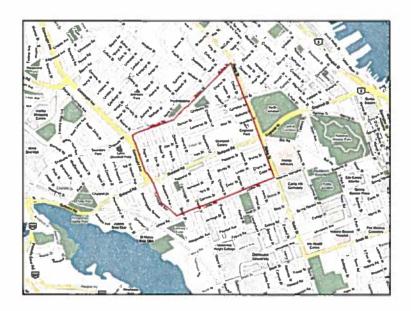
QUINPOOL ROAD

STREETSCAPE DESIGN PROJECT

Appendix A Area Demographics

Area Demographics

Quinpool Road is centrally located on the peninsula, separating the north and south ends of Halifax. To gain a better understanding of the characteristics of the population within the Quinpool Road area, Statistics Canada 2006 census data collected in Census Tracts 0011.00 and 0012.00 was reviewed. As illustrated in the map below, this is an area of 1.33 sq.km. bounded by Connaught Avenue to the southwest, Chebucto Road and North Street to the northwest, Robie Street to the northeast, and Jubilee Road to the southeast (Statistics Canada, 2008).



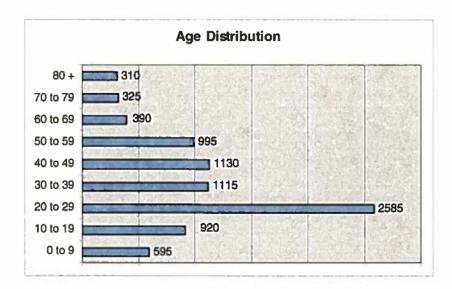
Population Density

A population of approximately 8,400 people live within the Quinpool Road study area. The population density in this area is far greater than the population density of HRM and the Halifax Pennisula, with 6,287.2 persons per square kilometre, (67.8 persons per square kilometre and 3,239.9 per km.sq, respectively).

Population Density	Quinpool Road Area	HRM	Peninsula
Population	8,362	372,858	57,993
Land Area (Sq. Km)	1.33	5,495.62	17.9
Population Density per Sq. Km.	6,287.2	67.8	3234.9

Age Distribution

As shown in the age distribution chart below, approximately 31% of the population is between the ages of 20 to 29, which is reflective of the large student population living in the Quinpool Road area. In addition, the large percentage of people between the ages of 20-29 living in this area brings the median age of the population to 31, a young population when compared to HRM as a whole where the median age of the population is 39.0 (Statistics Canada, 2008).



Population Mobility

Approximately 30% of the population in the Quinpool Road area lived in a different location between 2005 to 2006, while 54% of the population in this area lived in a different location between 2001 to 2006 (Statistics Canada, 2008). This is a high rate of mobility as compared to other areas of the HRM and the Province, which is reflective of the high proportion of people ages 20 to 29 in this area and universities in this area...

Mobility Status		Population Mobility between 2005 to 2006		Mobility 01 to 2006
	#	%	#	%
Same Address (did not move)	5,690	70	3,600	46
Moved within the HRM	1,705	21	2,090	26
Moved within NS, but outside HRM	235	3	695	9
Lived in a different Province or Territory	395	5	1,175	15
Other	70	1	300	4
Total	8,095	100	7,860	100

Dwelling Types

There are a total of 3,660 occupied private dwelling units in the Quinpool Road area, of which 59% are rented units (Statistics Canada, 2008). 60.8% of these dwelling units are apartments with 55.5% of the apartments located in either buildings less than 5 storeys or as flats (apartments, duplex) in houses. There are few buildings with 5 or more stories, as well as few row houses and semi-detached houses in this study area as shown in the table below.

Occupied Private Dwelling Characteristics	Quinpool 1	Quinpool Road Area		RM .
Dwelling Type	#	%	#	%
Single Detached Houses	1,158	35	79,965	51.6
Semi-detached Houses	65	1.5	10,693	6.9
Row Houses	75	1.7	5,424	3.5
Apartments, duplex	786	22.1	6,199	4
Apartments in buildings (less than 5 storeys)	1,263	33.4	34,248	22.1
Apartments in buildings (5 or more storeys)	277	5.3	14,877	9.6
Other Dwellings	36	0.95	3,719	2.4
Total Occupied Private Dwellings	3,660	99.95	155,125	100.1

Transportation Characteristics

A large percentage of the population in the Quinpool Road area walks or bicycles to work, as shown in the table below. These figures support the continued creation of pedestrian and cycling-friendly environments to encourage modes of active transportation. Although the study area along Quinpool Road is not currently a bike route, the portion of Quinpool Road running from Connaught Avenue to the Northwest Arm is considered a high-speed high-volume bike route. Secondary bike routes run perpendicular to Quinpool Road along Beech Street and Vernon Street and parallel to Quinpool Road along Pepperell Street. The HRM Active Transportation plan mapping proposes all of Quinpool Road be made into an active transportation route for cycling and trails.

Mode of Transportation to Work	Quinpool	inpool Road Area HRM		RM
	#	%	#	%
Automobile as Driver	1,355	29	121,400	65
Automobile as Passenger	285	6	19,830	11
Public Transit	735	15	22,115	12
Walked or Bicycled	2,300	48	20,670	11
Other	85	2	2,410	1
Total	4,760	100	186,425	100

Appendix B Pedestrian Analysis

Pedestrian Movements

Quinpool Road is an important pedestrian street in HRM, offering numerous amenities and a connection onto the peninsula. Marked crosswalks exist at all of the signalized intersections within the Quinpool Road study area, enabling pedestrians to cross Quinpool Road or the streets that run perpendicular to Quinpool Road. Regardless, pedestrians have been observed jay walking at midblock points within the study area.

Pedestrian counts measuring east and westbound were completed in 2008 at the two signalized intersections within the study area. These counts represent a pedestrian volume in the peak hour; however, changes in pedestrian traffic may be expected at different times of the day, year and during different weather conditions. The greatest number of pedestrians was counted near the Vernon Street and Windsor Street intersections. This may be attributed to the higher density housing in this area, the number of students in this area, and the office tower located at the corner of Quinpool Road and Robie Street.

Location	Direction	8am – 9am	4pm – 5pm
Quinpool Road at Windsor Street	Eastbound	165	48
Quinpool Road at Windsor Street	Westbound	55	105
Quinpool Road at Vernon Street	Eastbound	199	271
Quinpool Road at Vernon Street	Westbound	110	190
Quinpool Road at Monastery Lane	Eastbound	27	62
Quinpool Road at Monastery Lane	Westbound	12	74
Quinpool Road at Preston Street	Eastbound	70	57
Quinpool Road at Preston Street	Westbound	17	75

Source: HRM Transportation & Public Works

Gehl and Fruin Sidewalk Calculations

The desirable sidewalk width for a clear path on Quinpool Road is 1.5m. This is based on applying the 2008 pedestrian counts to calculations advanced by world-renowned urban designers, Jan Gehl and Victor Fruin. Gehl recommends a pedestrian sidewalk capacity of 13 people per minute per metre of sidewalk width. Based on this calculation, the sidewalk widths are of a sufficient size to accommodate the current pedestrian traffic flow along Quinpool Road.

Gehl Calculation

Quinpool Road @ Windsor Street (8:00am - 9:00am)	North	South
Count (8:00am-9:00am)	220	
People Per Minute	3.7	0.0
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.3	0.0
Calculated Required Width	1.8	1.5
Actual	3.1	4.7

Quinpool Road @ Windsor Street (4:00pm - 5:00pm)	North	South
Count (4:00pm-5:00pm)	153	
People Per Minute	2.6	0.0
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.2	0.0
Calculated Required Width	1.7	1.5
Actual	3.1	4.7

Quinpool Road @ Vernon Street (8:00am - 9:00am)	North	South
Count (8am-9am)	97	72
People Per Minute	1.6	1.2
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.1	0.1
Calculated Required Width	1.6	1.6
Actual	2.5	4.1

Quinpool Road @ Vernon Street (4:00pm - 5:00pm)	North	South
Count (4:00pm-5:00pm)	148	148
People Per Minute	2.5	2.5
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.2	0.2
Calculated Required Width	1.7	1.7
Actual	2.5	4.1

Quinpool Road @ Monastery Lane (8:00am - 9:00am)	North	South
Count (8am-9am)	39	
People Per Minute	0.7	0.0
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.1	0.0
Calculated Required Width	1.6	1.5
Actual	3.7	3.7

Quinpool Road @ Monastery Lane (4:00pm - 5:00pm)	North	South
Count (4:00pm-5:00pm)	136	
People Per Minute	2.3	0.0
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.2	0.0
Calculated Required Width	1.7	1.5
Actual	3.7	3.7

Quinpool Road @ Preston Street (8:00am - 9:00am)	North	South
Count (8am-9am)	42	45
People Per Minute	0.7	0.8
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.1	0.1
Calculated Required Width	1.6	1.6
Actual	3.3	3.7

Quinpool Road @ Preston Street (4:15pm - 5:15pm)	North	South
Count (4:15pm-5:15pm)	71	61
People Per Minute	1.2	1.0
Comfortable Density (people/metre/minute)	13.0	13.0
Comfortable Width* (building to obstacles)	0.1	0.1
Calculated Required Width	1.6	1.6
Actual	3.3	3.7

Fruin Calculation

Quinpool Road @ Windsor Street (8:00am - 9:00am)	North	South
Count (8am-9am)	220	
People Per Minute	3.7	0.0
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.1	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.5	1.4
Proposed Width	3.0	2.9
Actual	3.1	4.7

Quinpool Road @ Windsor Street (4:00pm - 5:00pm)	North	South
Count (4:00pm-5:00pm)	153	
People Per Minute	2.6	0.0
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.1	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.5	1.4
Proposed Width	3.0	2.9

Actual	3.1	4.7
Quinpool Road @ Vernon Street (8:00am - 9:00am)	North	South
Count (8am-9am)	97	72
People Per Minute	1.6	1.2
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.1	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.5	1.4
Proposed Width	3.0	2.9
Actual	2.5	4.1

Quinpool Road @ Vernon Street (4:00pm - 5:00pm)	North	South
Count (4:00pm-5:00pm)	148	148
People Per Minute	2.5	2.5
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.1	0.1
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.5	1.5
Proposed Width	3.0	3.0
Actual	2.5	4.1

Quinpool Road @ Monastery Lane (8:00am - 9:00am)	North	South
Count (8am-9am)	39	
People Per Minute	0.7	0.0
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.0	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.4	1.4
Proposed Width	2.9	2.9
Actual	3.7	3.7

Quinpool Road @ Monastery Lane (4:00pm - 5:00pm)	North	South
Count (4:00pm-5:00pm)	136	
People Per Minute	2.3	0.0
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.1	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.5	1.4
Proposed Width	3.0	2.9
Actual	3.7	3.7

Quinpool Road @ Preston Street (8:00am - 9:00am)	North	South
Count (8am-9am)	42	45
People Per Minute	0.7	0.8
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.0	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.4	1.4
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Quinpool Road @ Preston Street (4:15pm - 5:15pm)	North	South
Count (4:15pm-5:15pm)	71	61
People Per Minute	1.2	1.0
Comfortable Density (people/metre/minute)	26.2	26.2
Effective Width	0.0	0.0
Buffer from window shoppers and impediments	1.4	1.4
Comfortable Width* (building to obstacles)	1.4	1.4
Proposed Width	2.9	2.9
Actual	3.3	3.7

Note: Where pedestrian count data was unavailable, calculations were not completed and are shown as a blank space in the table.

*Comfortable pedestrian width signifies the desired unimpeded pathway width from building edge to any obstacles (poles, refuse containers, benches, mail boxes, payphones, way-finding signage, etc.). Fruin recommends adding a minimum of 1.5 m to the comfortable pedestrian width calculation to allow for obstacles and clearance from the face of the curb.

Comfortable pedestrian width based on Fruin, John, J. (1971), Pedestrian Planning and Design, p.78. USA (Sidewalk for multi-directional shoppers, allowing for window shopping).

Appendix C Transit & Traffic Analysis

Transit Movements

Metro Transit currently services Quinpool Road with three transit routes: the #6 Quinpool, the #20 Herring Cove, and the #32 Cowie Hill. Of the three bus routes, the #6 is the only wheelchair accessible bus and the only bus to travel down Quinpool Road on Saturdays, Sundays, and holidays. During peak hours between approximately 6:45 am – 10:00am and 3:00pm – 7:00pm the #6 stops on Quinpool Road approximately every 30 minutes traveling both west and eastbound. After peak commuting times and on weekends and holidays the #6 runs down Quinpool approximately every 60 minutes. The #20 travels down Quinpool Road approximately every 30 minutes all day long going both west and eastbound, while the #32 travels down Quinpool Road the least during the day, traveling eastbound seven times between 6:00am and 9:00am and westbound six times between 3:30pm and 6:15pm.

Six bus stops exist within the study area on either side of the road: Quinpool Rd. at Windsor St.; Quinpool Rd. at Vernon St.; and Quinpool Rd. at Preston St. Approximately 625 people embark and disembark at these stops on a daily basis during the week. The busiest stops are located at Quinpool Road/Vernon Street (heading east and west) and Quinpool Road/Windsor Street (heading west). The average number of passengers utilizing the six stops on a daily basis may be broken down as follows:

Location	Direction	Total Passenger Numbers (Weekday totals)
Quinpool Road at Windsor Street	Eastbound	63
Quinpool Road at Windsor Street	Westbound	122
Quinpool Road at Vernon Street	Eastbound	120
Quinpool Road at Vernon Street	Westbound	168
Quinpool Road at Preston Street	Eastbound	74
Quinpool Road at Preston Street	Westbound	78

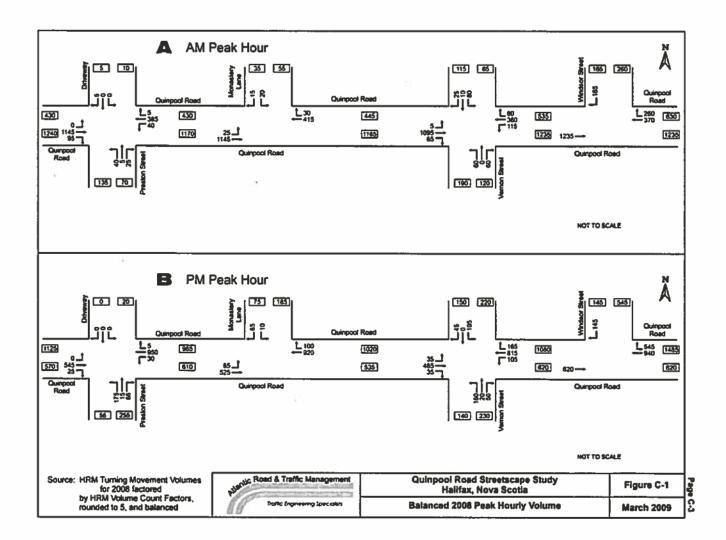
Source: HRM Metro Transit.

Vehicular Traffic Movements

The study area contains 2 signalized intersections and 2 access points, bordered by Preston Street to the west and Robie Street to the east. Quinpool Road is heavily utilized by motorists with traffic volumes ranging between approximately 1,400 to 2,600 cars per hour in the intersections at peak times during the day. The following is based on traffic counts completed in 2008 that measured the total volume of vehicular traffic in the intersections located in the study area.

Location	8am - 9am	4pm - 5pm
Quinpool Road at Windsor Street	2,202	2,562
Quinpool Road at Vernon Street	1,962	2,039

Quinpool Road at Monastery Lane	1,674	1,517
Quinpool Road at Preston Street	1,614	1,423



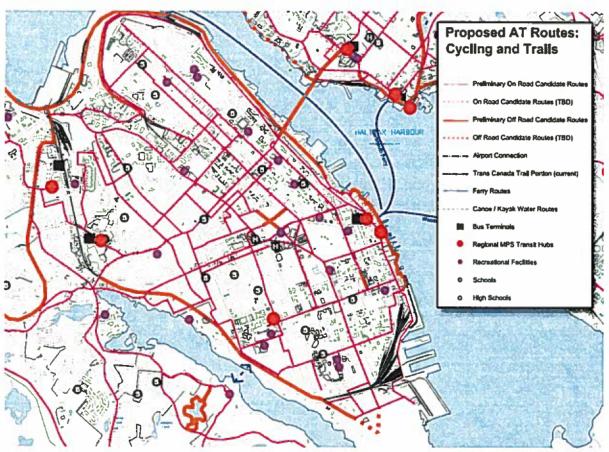
Cycling

Based on observations and consultation, Quinpool Road is used by a large number of cyclists. This is a key route into the downtown and connects to the high volume bike route from the Armdale Round-about to the Bell Road bike lanes that lead to other areas of the city. Two key issues for the street design are the provision of bike racks, and of greater importance, the trade offs between pedestrian space versus increasing lane widths to provide shared bike lanes.

Over 45% of the population in the Quinpool Road area walks or bicycles to work, supporting the continued creation of a cycling-friendly environment (Statistics Canada, 2008). Although the

Quinpool Road streetscape project study area is currently recognized as a formal bike route, Quinpool Road from Connaught Avenue to the Northwest Arm is considered a high-speed high volume bike route. Secondary bike routes run perpendicular to Quinpool Road along Beech Street and Vernon Street and parallel to Quinpool Road along Pepperell and Allan Street.

Quingate Place has also been identified as a major cyclist and pedestrian shortcut to Windsor Street. The Vernon Street intersection has been noted as a problem area for cyclists due to the lack of direct access across the intersection.



Source: HRM Active Transportation Plan (Approved in principal November 2006 by Council)

Desirable width for a shared use bicycle lane is 4.5 meters wide to provide adequate room for both the vehicle and cyclists. The Quinpool Road corridor has limited space, requiring a balance between pedestrians, bicycles, cars, and the commercial uses on the street. Based on this balance, Traffic and Right of Way have agreed to allow the minimum required lane widths for vehicle (3.3 m) and shared-use lanes (4.2 m) in order to minimize the impact of providing for all road users. This will result in an increase in the current outside lane width, but will only result in an overall widening of the existing road in limited sections, and still allow for at least 3.0 m wide sidewalks throughout the entire project area. The 4.2 m shared lane would only occur between Robie and Monastery at this stage. Further investigations have been completed and confirm the viability of extending the 4.2 m shared-use lane from Monastery to Connaught. This extension would form part of any future extensions of the streetscaping up to Connaught Avenue.

Appendix D CPTED Analysis

A CHECKLIST OF SAFETY AUDIT FOR CRIME PREVENTION

✓OUTDOORS

INDOORS

GENERAL AREA: Ouinpool Road

SPECIFIC LOCATION: DATE: November 14, 2008

DAY: <u>Friday</u> TIME: <u>11:30pm</u>

AUDITED BY: Nick Pryce

REASONS FOR AUDITING THE AREA:

→Tips on taking notes:

- Regardless of how sharp your memory is, you will not remember everything. Therefore it is
 important to take good notes. Our experience shows that using a checklist and writing notes
 on it will make it easier to organize your ideas and suggestions later on.
- Write down any questions that you have (even if you don't have the time to find the answers).
- Sometimes a place is so poorly designed that there aren't any real solutions beyond a
 temporary bandaid. It is still important to note the problem. Identifying and naming a
 problem is the beginning of changing your surroundings and the way new buildings and
 spaces are designed.
- Take notes on everything, including your comments on the process of the Audit itself.
- Look over your notes a day or two later to see if they still make sense. Would someone who wasn't on the Audit understand what you mean? If not, try to make your notes clearer.

1.	General Impressions			
a]	Describe your first initial reactions to the site: Well illuminated			
b]	What 5 words best describe the place?			
	Empty - few pedestrians			
	Vehicular traffic - busy			
	Poor maintenance			
2.	Lighting [good lighting allows you to see the area and what's happening in it]			
a]	What is your impression of the lighting? very poor poor too dark satisfactory ✓good too bright very good			
b]	Is the lighting consistent throughout the space? yes ✓no			
c]	Are any lights out? No			
d]	If so, how many?			
e]	What proportion of lights are out? [e.g. Maybe only two bulbs in your hallway are burned out, but if there are only three bulbs to start with, then a more powerful way to say this is that two-thirds of the lights are out.]			
Are	you able to see and identify a face 25 metres (75 feet) away? Average			
Do y	you know where/whom to call if lights are out, broken, not yet turned on, etc.? yes ✓no			
f]	Outdoors: Is the lighting obscured by trees or bushes? Yes, at times			
g]	How well does the lighting illuminate pedestrian walkways and sidewalks? very poor poor satisfactory ✓ good very good			
3.	Signage [good signage lets you know where you are, what resources are available, and helps you develop some familiarity with the location]			
a]	Is there a sign (i.e. room no., building name) identifying where you are? ✓ yes no			

b]	If no, are there directional signs or maps nearby which can help you identify where you are?				
	yes ✓no				
c]	Are there signs which show you where to get emergency assistance if needed? yes ✓no				
d]	Are there signs which direct you to wheelchair access? yes ✓no				
e]	Do exit doors identify where they exit to? N/A				
f]	Is there information posted describing the hours the building is legitimately open?				
g]	What is your impression of the overall signage? very poor poor ✓ satisfactory good very good				
4.	Sightlines [clear sightlines are important as they let you see, without interference, what lies ahead]				
a]	Can you clearly see what is up ahead? Yes				
b]	If no, the reasons may be: Indoors: sharp corners walls pillars others				
	Outdoors: bushes fences hill others				
c]	Are there places someone could be hiding? Yes				
d]	If yes, where? Driveways, sides of buildings - mostly on south side				
e]	What would make it easier to see? e.g.:				
	transparent materials like glass vehicles moved angled corners security mirrors trimmed bushes snow cleared				
	Other comments? Better lighting in driveways would improve sightlines				

5.	Isolation Eye Distance [this lets you assess how far away things are from the location and if someone would see you if you were in trouble]			
a]	At the time of your Audit, did the area feel isolated? No			
b]	How many people are likely to be around?			
	 In the early morning: none a few several many 			
	 During the day: none a few several many 			
	• In the evening:			
	none a few several many			
	 Late at night (pfter 10 pm): none ✓a few several many 			
c]	Is it easy to predict when people will be around? Yes			
d]	Is there a monitor or surveillance system? No			
e]	Other comments?			
6.	Isolation Ear Distance [lets you assess if you could be heard in an emergency]			
a]	How far away is the nearest person to hear a call for help? ~ 25 m			
b]	How far away is the nearest emergency service such as an alarm, security personnel, cristelephone? <u>Don't know</u>	is		
c]	Can you see a telephone, or a sign directing you to emergency assistance? No			
d]	Is the area patrolled? <u>Don't know</u>			
e]	If yes, how frequently? every hour once per afternoon/evening don't know			
	Other comments?			

7. Movement Predictors [a predictable or unchangeable route or path; this allows you to assess whether or not you can determine the way or direction people will move]

a] How easy is it to predict people's movements (e.g. their routes)? Very easy b] Is there an alternative well-lit route or path available? yes _√no don't know d] Can you tell what is at the other end of the path, tunnel, or walk? yes _√no don't know Are there corners, alcoves, or bushes where someone could hide and wait for you? Yes e] - alcoves exist f] Other comments? Sides of buildings / driveways are dark 8. Possible Entrapment Sites [lets you assess whether or not there are locations which are of special concern] Indoors: al Are there empty rooms that should be locked? N/A bl Are there small, well-defined areas? N/A Outdoors: cl Are there small, confined areas where you would be hidden from view? e.g.: unlocked equipment or utility shed ✓alley or lane ✓ recessed doorway construction site ✓others: Parking lot & public art wall 9. Escape Routes [lets you assess whether or not there are ways to escape should there be an incident] a] How easy would it be for an offender to disappear? Very easy b] How difficult would it be for you to escape to safety if you had to? very difficult √quite difficult don't know

10.	Nearby Land Uses [lets you assess the impact of how the land is used as it relates to your comfort and safety]				
a]	What is the surrounding or nearby land used for? <pre> stores</pre>				
b]	Can you identify who owns or maintains nearby land? Some of it				
c]	What are your impressions of nearby land use? very poor poor ✓ satisfactory good very good				
d]	Is the land use in the area changing? Not really				
e]	Does its new use make you feel more or less comfortable than its old use?				
f]	What about the land use change makes you feel more or less comfortable?				
g]	Would other materials, tones, or textures improve your sense of safety?				
11.	yes no Factors That Make the Place More Human [these questions let you assess whether or not the location is used or abused by people]				
a]	Does the place feel cared for?				
b]	Does the place feel abandoned? Yes				
c]	What gives you that feeling? The state of the sidewalk and buildings				
d]	Is there graffiti on the walls? ✓yes no				
e]	In your opinion, are there racist or sexist				
f]	slogans/signs/images on the walls? yes \(\sqrt{no} \) Are there signs of vandalism? yes \(\sqrt{no} \)				
g]	Would other materials, tones, textures or colours improve your sense of				
	safety? ✓yes no				

h]	Other comments?
12.	Maintenance [these questions help you tell if the area is well looked after and well used by people]
a]	What are your impressions of maintenance? very poor satisfactory good very good
b] c]	Is there litter lying around? ✓ yes no Is there need for major repair? ✓ yes no
d]	Do you know to whom maintenance concerns / should be reported? yes ✓no
e]	From your experience, how long do repairs generally take? A long time
13. O detai	everall Design [lets you express your overall feeling after you have looked at the site in l]
a]	Describe your impression of the overall design: very poor ✓ poor
b] I	satisfactory good very good If you weren't familiar with the place would it be easy to find you way around? yes ✓no
cl Is t	the entry visible and well defined?
	yes ✓no
d] Ar	re public areas visable? yes ✓no
el do	es the place make sense
•	yes √no
f] Is t	he place too spread out?
	yes √no

From the Crime Prevention Safety Audit questions that you just completed, identify what can be done to make you feel safer about this location?

What improvements would you like to see?

Maintenance

Increased density

g] Other comments?

Appendix E Consultation

Consultation

Property and Business Owner Consultations

The consultation with property and business owners focused on the issues currently experienced, their opinion of potential design approaches, plans they had for their own frontages, and the time frame for construction. Below is a brief summary of the key issues.

Street Design Issues and Suggestions

Property and business owners have generally been in favour of this project. The majority of individuals consulted stated that pedestrian safety was the most important improvement needed for Quinpool Road. Property and business owners would support improved lighting, street furniture, and new pedestrian crosswalks.

Loading and unloading varies depending on the specific building. Some retailers load from the side and rear of the buildings, while a large number of retailers receive goods through the front entrance on Quinpool Road. Trucks loading on the street have not been noted as a contributing factor to congestion on the street.

Most retailers wish to maintain or increase the number of parking stalls available to customers using Quinpool Road. Several retailers noted that lack of available parking has limited their ability to do business and removing stalls would further reduce their business.

Construction Period and Individual Site Upgrades

The construction period has not been identified as a major concern from business owners and operators. Some businesses have expressed concern over disruptions during the period from September to November, which is typically when students return to the area.

Of the retailers and landowners contacted, few had plans to upgrade their individual façade. Vogue Optical indicated that they are undertaking façade changes to all of their stores.

Sidewalk Patios

There was interest from restaurants and café owners in utilizing additional sidewalk space for patios and outdoor seating. Some businesses currently using sidewalk space for patios expressed interest in expanding their outdoor space.

Artwork - Ben's Bakery Wall (Canada Bread Atlantic)

Ben's Bakery (now known as Canada Bread Atlantic) has expressed interest in re-locating the artwork that fronts onto Quinpool Road. Ben's has indicated that they would like to open the space to enable better pedestrian access to their thrift store. The intent would be to locate the artwork nearby in Halifax.

Stakeholder Consultation

HRM Transportation & Public Works

Traffic and Right-of-Way Services

HRM Traffic was generally supportive of the overall streetscape improvements proposed for Quinpool Road. The proposed 4.2 and 3.3 metre lane widths work well with the street configuration and are not anticipated to impact traffic flow on Quinpool Road.

There was some interest from various stakeholders in changing the intersection of Quinpool Road and Monastery Lane to permit only right-in and right-out traffic flow. HRM Traffic advised that in order to move forward with reviewing this option, a neighbourhood consultation process would be required. The process typically requires more time to complete than can be accommodated by the time lines for the streetscape project.

It was also noted that design changes to the Robie Street/Quinpoool Road intersection and the redevelopment of the former St. Patrick's High School site are part of another study and do not form a part of the streetscape design.

Regarding crosswalks, HRM Traffic and Right-of-Way Services receive numerous requests for the marking of crosswalks at various locations. In order to make an objective assessment as to where marked crosswalks are to be installed, mid-block or otherwise, Traffic and Right-of-Way Services has established an objective criteria to be followed when investigating such requests. The Traffic Authority has adopted the Transportation Association of Canada (TAC) warrants for marked crosswalk installation to be used for HRM roadways.

One of the TAC criteria is that marked crosswalks should not be installed within a minimum distance of 200 metres from adjacent traffic control signals. This spacing criteria is also used in most other marked crosswalk warrant systems currently in use in North America. Since the distance between the traffic signals at Preston Street and Vernon Street is approximately 370 metres, and Monastery Lane falls between these two streets, there would be no mid-block location between Monastery Lane and Vernon Street that would meet the spacing criteria.

It could be argued that there are currently marked crosswalks at Harvard Street and Beech Street that fall within 200 metres of the traffic signals at Oxford Street, and that since the spacing criteria is not met there, it does not have to be met elsewhere. It should be noted, however, that those particular marked crosswalks were installed decades ago before there were any engineering standards established. These crosswalks have been continuously maintained for years and legal opinion has suggested that they should remain unless there are exceptional safety issues to justify their removal. Although there may not be enough justification to remove these crosswalks, it should be noted that it does not mean they are without significant disadvantages.

Installing a marked crosswalk does not inherently make crossing safer at a particular location. In fact, several long-term engineering studies have suggested that in some cases marked crossings can lull pedestrians into a false sense of security and contribute to a lack of caution when crossing the street. When a pedestrian chooses to cross at an unmarked location, however, they tend to be more cautious and

won't cross unless they feel it is safe to do so. There are also drawbacks to the use of pedestrian half signals as well. Half signals increase delay to both pedestrians and drivers. In many cases, pedestrians become impatient, crossing against the signal and drivers running the light to avoid stopping. Both instances have been observed with undesirable regularity at the two existing locations at Harvard Street and Beech Street.

In addition, there are other issues that should be taken into consideration when proposing this mid-block location. The first would be the impact to on-street parking. With the introduction of a marked crosswalk, curbside parking would have to be removed within 5 metres of either side of the crosswalk (10 metres if a pedestrian signal were to be used). This would likely have a significant impact to the loading, transit, and taxi stand that currently occupy the layby in front of the Quinpool Centre. The other issue to consider would be the impact on traffic flow and the ability to coordinate the signals along Quinpool Road to provide for signal progression.

Municipal Operations

HRM has recently installed 55 new pole mounted waste receptacles along Quinpool Road from Robie Street to Connaught Avenue. The pole mount receptacles are preferred because they reduce clutter and provide for easy maintenance and garbage disposal.

Municipal Operations advised that there are maintenance issues with using bricks for the sidewalks because it can be difficult to maintain. It was suggested that stamped concrete or asphalt would be a more durable option for crosswalks. The preferred option is to install concrete sidewalks with a broom finish and a two percent slope with six-inch high back curbs. The curb cuts should include the full ramp because it allows for universal access and better maintenance. The curb cuts require an eight-inch depth for durability. Installing heated sidewalks could reduce maintenance requirements and enable more street furnishings because plows would not be necessary. A pilot project relating to heated sidewalks was proposed as an option.

Elements such as street light standards, bike racks, or other street furniture should be located 18 inches from the curb to avoid damage from snowplows. It was recommended that a 12-metre space be left around bus stops to permit proper snow clearing.

The proposed boulevard option was identified as a possible safety issue because the boulevard space will be used for snow storage during the winter. Pedestrians may not be able to safely cross over the snow obstruction.

Metro Transit

Metro Transit suggested that the bus stops should have enough unobstructed space to accommodate the large articulated buses with three doors. Removing the laybys would be an improvement for buses because they will not be required to merge back into traffic. Bike racks and other street furnishings should be located at least 2.5 metres from a bus stop for access and safety.

Metro Transit noted that they are undertaking some high level concept design of enabling transit-only left turns from Windsor Street onto Quinpool Road. This is part of a larger initiative to improve the peninsula transit corridor.

Overall, Metro Transit was supportive of the proposed design elements.

Urban Forestry

Urban Forestry would like more large stature trees on the street. The large tree located in front of the Quinpool Centre should not be disturbed; however, if removing the tree will contribute to increasing the pedestrian experience on the street then replacing it with other trees is an option. Urban Forestry was supportive of adding a treed boulevard to the street, as well as tree-lined sidewalks.

Infrastructure & Asset Management

Design and Construction Services

Design and Construction Services has been involved in the design process and is supportive of the proposed streetscape design options. They noted that each of the design options is within HRM design standards. Their primary concern relates to the road re-surfacing and the curb and sidewalk renewals.

HRM Regional Police

HRM Community Response Team

HRM Regional Police have been contacted by phone and e-mail. The Quinpool Road Streetscape Design team has not received comments from the police at this time.

<u>Ouinpool Road Mainstreet District Association (ORMDA)</u>

The QRMDA is supportive of the streetscape design elements relating to improving pedestrian access and experience on the street. They support adding more trees to the street and favour the boulevard design option. The QRMDA expressed interest in enabling the boulevard to accommodate future improvements relating to a pedestrian crosswalk. Numerous business owners and operators have inquired about the possibility of installing a mid-block crosswalk on the street.

Utilities

Nova Scotia Power/Aliant/Heritage Gas

All of the utility companies have been involved in providing input into the design component relating to their respective services. This has been reflected in preparing schematic design plans. The intent is to underground all services along Quinpool Road.

Public Input

On January 22, 2009, a Public Open House was held to present and discuss the Quinpool Road Streetscape design project. Included with introducing the project, three potential streetscape design concepts were presented to the participants. The major themes arising from the comments received during the open house regarding each proposed design concept include:

Concept #1 (Boulevard)

- · Creating informal and formal places for people to sit
- · Incorporating artwork into the boulevard median space
- · Creating a new crosswalk for pedestrians and using the median as a refuge space
- · Creating a community group to care for the boulevard space
- · Ensuring boulevard trees do not obstruct view to businesses
- · Preferring trees along sidewalk to create shade and add amenity to pedestrians

Concept #2 (Linear Park)

- · Identifying Monastery Lane as a major pedestrian access point
- · Creating a new crosswalk for pedestrians
- Improving pedestrian lighting standards and traffic signal crossing times
- · Supporting formalizing the Vernon Street intersection to allow through traffic
- Opposing formalizing the Vernon Street intersection to allow through traffic

Concept #3 (Beautification)

- Preferring treed sidewalks over boulevard
- · Maintaining the existing large stature trees on the north side of the street
- Adding more bike racks along the street
- Incorporating a public washroom

Appendix F Street Lighting Assessment

Streetlight Assessment Matrix

es.	Lumec Leonis	Standard Cobra Head	Roadway lighting LED	Ruud LED
Design	x	-	٧.	-
Cost	\$4,100*	\$185	\$1,500	\$750-800
Sustainability				
-energy use	x	-	x	x
-local source	-	-	x	-
-cradle to grave	-	-	x	x
-renewable energy availability	-	-	x	-
Durability	x	-	x	х
Dark Sky Compliant	-	-	х	х
Score	-4	-6	6	3

Meets criteria: x; does not meet criteria: -

^{*}cost of poles and fixtures

Appendix G Focal Point / Amenity Space Design Criteria

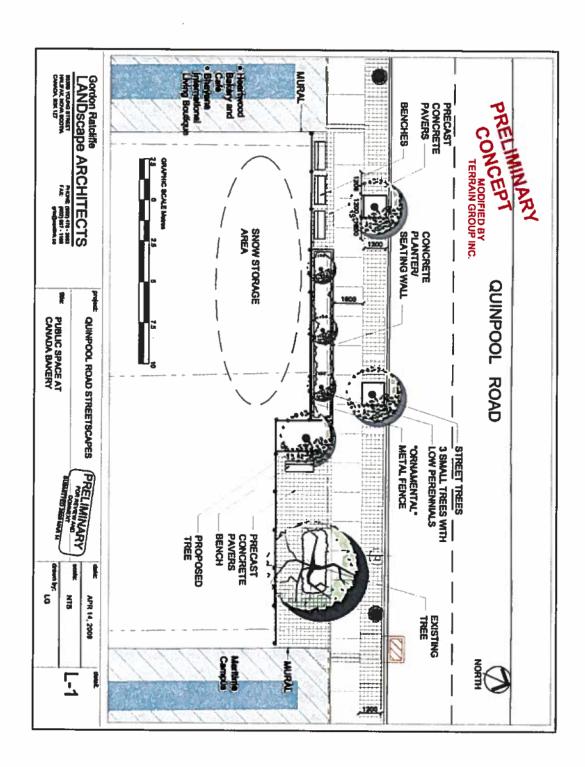
Quinpool Road Streetscape - Recommendations for Improvements to Quinpool Centre Block

Building Facade

- Break up "mega block"
- Create building frontage / store fronts with scale and retail interest consistent with pattern on other blocks on Quinpool Road
- Remove abandoned stairs and other unsightly elements
- Remove / relocate high steel fence at CTC (improve / upgrade Garden Centre area with "green house" type retail space)
- Improve architectural finishes, replace large areas of brick and corrugated steel panel
- Provide more windows / open up existing covered windows at Superstore, NSLC and CTC frontages
- Improve store entrances
- Provide new stairs and ramps / provide barrier free access at all entrances
- Improve / coordinate signage

Streetscape

- Streetscape to reflect / enhance new building facade (integrate design)
- Provide adequate space for smooth flow of pedestrian traffic
- Remove existing obstacles (tree and planters blocking pedestrian flow)
- Remove timber planters and other unsightly elements
- Retain existing hardwood trees at west end of block and existing coniferous trees at both ends of block
- · Provide outdoor café spaces at existing restaurants and dairy bar
- Improve bicycle parking area in front of Superstore (covered parking)
- Provide bicycle parking at other store and business entrances
- Improve existing sitting space
- Develop sitting area at east end of block
- Provide surfaces for public display of posters and notices
- Replace existing lighting
- Provide special lighting to enhance retail entrances and sitting spaces
- Plant street trees wherever they will not interfere with pedestrian flow and transit stop at max. 10 m spacing
- Consider other opportunities for planting (e.g. stairways and store entrances)
- · Planting areas to include curb or planter edges to ensure sustainability



Appendix H Sustainability Analysis





Sustainable HRM - Halifax Regional Municipality is committed to a healthy, sustainable, vibrant community. This includes wise use of our resources, reducing waste and a healthy environment.

NAME OF ACTION/PLAN/PURCHASE: Quinpool Road Streetscape Design and Construction

1. HRM HAS TAKEN AN INTEGRATED SYSTEMS APPROACH TO SUSTAINABILITY. Does this action/plan/purchase move HRM toward sustainability?

To reduce and eventually eliminate HRM's contribution to:	Direction:		Give examples of how the project meets the sustainability criteria:		
Ongoing build-up of substances taken from the earth's crust (or use less or different stuff).	Toward Quickly Neutral	Toward Slowly D Away	Materials being considered for the sidewalks and road will generally be taken from the Earth's crust. However, opportunities to reuse asphalt and old materials for subgrade will be carried out limiting the demand on the resource.		
Ongoing build-up of substances produced by society (or make less or different stuff).	Toward Quickly	Toward Slowly x	Streetlight fixtures being considered for the design are locally sourced LED lights that are dark sky compliant and have renewable energy capabilities.		
	Neutral	Away			
Ongoing degradation of natural systems by physical means (or reduce our impact on life-	Toward Quickly	Toward Slowly	Proposed changes such as an increase in street trees and the installation of dark sky compliant fixtures should improve the natural environment around Quinpool Road.		
sustaining ecosystems).	Neutral x	Away			
Undermining the ability of people to meet their human needs (or meet human needs	Toward Quickly	Toward Slowly x	The proposed redesign of Quinpoot Road will immediately improve the ability of HRM residents and visitors to access numerous amenities on the street by foot and bicycles. In		
fairly and efficiently).	Neutral	Away	addition, proposed changes, such as pavement markings and curb cuts, will reduce the challenges for the mobility impaired. The design will also improve the ability for the two neighbourhoods that are divided by the street to connect through improved crosswalks and streetscape environment.		

Have other costs/ considerations been taken into account; i.e. life cycle costs, pollution mitigation, GHG emi- etc. been considered in the decision					
				<u> </u>	

Z.	DOES THIS ACTION/PLAN/PURCHASE MO	VE HRM TOWARDS OUR COMMITTED VISION OF A HEALTHY,
	STAINABLE, VIBRANT COMMUNITY?	

Yes:

No: x

