PROJECT A BUILDING

NOVEMBER, 2017

PREPARED BY CONSULTANT Q

CONSTRUCTION MANAGEMENT PLAN

Image: Concept Rendering Only

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Section 1 – Introduction

Section 1.1 – Project Description and Objectives

Company A is proposing to develop a four-story building consisting of 600 m^2 of commercial space at ground level, 30 residential units, and an underground parking level. This project is located in downtown Halifax, encompassing the entire block between First Street, Second Street, Third Street, and Fourth Street.

Commercial and residential buildings are located on the west side of Second Street, consisting of shops and restaurants. Additional shops and a park are located north of Third Street and an abandoned building is located east of Fourth Street. A library is located south of First Street.

Consultant Q, together with Company A, has prepared this Construction Management Plan (CMP) in an effort to reduce negative impacts to the community as a result of construction activities. This CMP is intended to be an evolving document to help guide the project team to mitigate impacts to the adjacent community before they arise and to address unforeseen issues. CMP drawings can be found in Appendices A, B, C, and D and were prepared by a certified temporary workplace signer (TWS).

Should any changes be required to any aspect of this CMP, an email and hard-copy of the proposed changes shall be sent to HRM for review a minimum of 10 days prior to their proposed implementation. Changes will only be implemented following approval from HRM.

Section 1.2 – Project Contact Information

The project team for the proposed development consists of:

Owner:
Company A
123 Fake Street, Suite 221, Halifax, NS, B1B ___
24 Hour Emergency Contact: Company A Contact Name – (902) 999-____

Site Contractor:
Contractor Z
404 Notfound Avenue, Dartmouth, NS, B2C ___
Contact: Contractor Z Contact Name – (902) 444-____

Traffic Control Services:
Traffic Control B
89 Teal Road, Bedford, NS, B3D-____
Contact: Traffic Control B Contact Name – (902) 777-____

Rodent Control Services:
Rodent Control R
26 Summer Street, Lower Sackville, NS, B4E-____
Contact: Rodent Control R Contact Name – (902) 999-____

Section 2 – Construction Schedule and Logistics

Section 2.1 – Schedule

- Demolition (January 1, 2018 – March 31, 2018) 3 Months
- Excavation (April 1, 2018 – August 31, 2018) 5 Months
- Substructure (September 1, 2018 – June 30, 2019) 10 Months
- Superstructure (July 1, 2019 – June 30, 2020) 12 Months

Project A Schedule

Project Phase	2018												2019												2020					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Demolition																														
Excavation																														
Substructure																														
Superstructure																														

From start to completion, the project will take approximately 2.5 years.

Section 2.2 – Work within the Public Right-of-Way

Each project phase will require encroachments within the Halifax Regional Municipality (HRM) right-of-way (ROW) and will remain in place for the entire phase. Extents of encroachments are provided in the Encroachment Plans in Appendices A, B, C, and D.

Work will be required within the HRM ROW during barrier installation and removal and will vary based on the project phase. Barrier Installation and Removal Plans are provided in Appendices B, C, and D. Removal and reinstatement of roadway painting and installation of pedestrian tactile strips, wayfinding signage, and Pedestrian Management Plan Renderings (PMPRs) will be carried out during barrier installation and removal activities. Additional information regarding barrier installation and removal is provided in Section 5.3. Anticipated dates for this work are as follows:

- Excavation Barrier Installation April 1, 2018
- Excavation Barrier Removal & Substructure Barrier Installation August 31, 2018
- Substructure Barrier Removal & Superstructure Barrier Installation June 30, 2019
- Superstructure Barrier Removal June 30, 2020

During the Substructure Phase, First Street traffic lanes will be narrowed to allow for the installation of services between the building and the public main. This work is expected to be completed on June 15th, 2019. See Section 4.2.8.3 for additional information regarding service installation.

During the Substructure Phase, Third Street will be closed to vehicular traffic to facilitate crane delivery, assembly, and disassembly. This work is expected to be completed on October 31st, 2018 and May 31st, 2019. See Section 4.2.8.3 for additional information regarding street closures. Street closure requests require 10 days (minimum) notice to HRM prior to their planned implementation and must be approved by HRM prior to implementation.

Wayfinding signage and Project Management Plan Renderings (PMPRs) must be in place in advance of encroachment requirements and prior to installations within the ROW being put in place. See Section 5.3 and Appendices E and F for additional information regarding wayfinding signage and PMPRs.

Section 2.3 – Hours

- Monday to Friday: 7:00 a.m. – 7:00 p.m.
- Saturdays: 7:00 a.m. – 7:00 p.m.
- Sundays, Statutory Holidays, & Remembrance Day: 9:00 a.m. – 7:00 p.m.
- Work Within First Street: 9:00 a.m. – 4:00 p.m.

Construction will be completed during daytime hours to avoid interruptions to local residents in the evenings and night. Construction activities must adhere to all restrictions outlined in the HRM Noise Bylaw (N-200). Work within First Street will be restricted as per the requirements of the HRM Traffic Control Manual Supplement (TCM).

Section 2.4 – General Notes

Rodent control methods will be undertaken 6 weeks (minimum) prior to the commencement of demolition and are outlined in Section 7.3.6.

Although most signs will be mounted on existing permanent poles, some signs may require to be mounted using temporary concrete sign bases complete with embedded steel poles. These sign bases will weight approximately 90 kg (200 lb.) to prevent them from being stolen and will be square to prevent them from rolling if toppled. They will be positioned away from, or along the edges of, pedestrian routes to prevent the impedance of pedestrians.

Section 3 – Relevant Regulations & Guidelines

Section 3.1 – Occupational Health & Safety Regulations

This CMP shall be utilized in agreement with all applicable Provincial and Federal Occupational Health and Safety Regulations. At a minimum, construction activities must at all times meet the standards of:

a) National Building Code of Canada, as adopted and modified under the Building Code Act and the Nova Scotia Building Code Regulations made under that Act;
b) Nova Scotia Occupational Health and Safety Act, and the Nova Scotia Occupational Safety General Regulations made under that Act;
c) The Transportation Association of Canada (TAC)'s Manual of Uniform Traffic Control Devices for Canada (MUTCDC); and
d) Nova Scotia Temporary Workplace Traffic Control Manual (NSTCM).

Section 3.2 – Municipal Regulations & Guidelines

In addition to the Provincial and Federal standards referenced in Section 3.1, this CMP shall be utilized in agreement with and meet, at a minimum, the standards of all relevant municipal by-laws including, but not limited to, the following:

a) S-300 Streets;
b) E-200 Encroachments;
c) B-201 Building;
d) N-200 Noise;
e) T-600 Trees;
f) S-900 Controlled Access Streets;

g) T-400 Truck Routes;
h) W-101 Discharge into Public Sewers;
i) B-600 Blasting; and
j) HRM TCM Supplement.

Section 4 – Vehicle and Pedestrian Management

Section 4.1 – Vehicular Traffic Control

This project site is located in a dense urban environment which poses specific risks related to vehicular traffic. This CMP identifies vehicle traffic controls to protect motorists, the public, and on-site workers.

Prior to any construction activity, all temporary workplace traffic control devices and signage will be in place as per the Nova Scotia Temporary Workplace Traffic Control Manual (latest edition) in accordance with the CMP drawings.

Construction is planned on the Neighbour D property, east of Fourth Street, northeast of the Project A site, which is expected to take place simultaneously with Project A construction activities. The owner and Neighbour D have agreed to coordinate traffic and construction management such that only one project at a time will have traffic control on the same street.

Ends of F-Type concrete barriers at starts of temporary sidewalks shall have reflective tape complete with contrasting colours to assist in identifying temporary crosswalks. Similar reflective tape with contrasting colours will be provided along the sides of F-Type concrete barriers, near their tops, both on the vehicular traffic side and the pedestrian traffic side to assist in delineation of travel ways and walkways at night.

Section 4.1.1 – Payment of Applicable Fees

Payment of all applicable fees will be made in accordance with HRM Administrative Order 15 (AO15). Requests for lane and street closures must be submitted to HRM a minimum of 10 days prior to their planned implementation for review and approval.

Section 4.1.2 – Vehicular Hazard Assessment

See Appendix Q for vehicular and pedestrian hazard assessment information which validates Company A's rationale for requiring street encroachments and temporary sidewalks.

Section 4.1.3 – Traffic Control Plan Preparation & Monitoring

Separate Traffic Control Plans (TCPs) have been prepared as required for each project phase in accordance with the standards identified in the TAC Manual of Uniform Traffic Control Devices, the NSTIR Temporary Workplace Traffic Control Manual, and the HRM Traffic Control Manual Supplement.

TCPs have been prepared by Consultant Q's certified temporary workplace signer (TWS), *First Name Last Name*. The TCPs illustrate the proposed signage which will be installed to warn vehicular traffic ahead of, and throughout, the construction zone. Traffic control features and methods as well as information related to the TCPs are provided in Sections 4.1.8.

Section 4.1.4 – Notifications of Traffic Closures

The contractor shall notify HRM and the public to proposed traffic closures as outlined in Section 8.3.

Section 4.1.5 – Traffic Control Element Inspection & Maintenance

All TCPs will be implemented and monitored by Traffic Control B and its team of certified Traffic Control Persons (as recognized by the Nova Scotia Department of Transportation and Infrastructure Renewal). Construction warning signage will be displayed throughout the approaches, to and adjacent to, the project site in accordance with the Nova Scotia Temporary Workplace Traffic Control Manual. Traffic Control B will inspect traffic control elements at the start and end of the work day, or more frequently as required, and will maintain traffic control elements as required to ensure that the TCPs are effectively and correctly implemented. See Appendix N for a sample construction management plan element inspection sheet to be completed by both Traffic Control B and the contractor.

Section 4.1.6 – Changes to Traffic Control Plans

Requests for modifications to TCPs will be sent to HRM for approval a minimum of 10 days prior to their proposed implementation.

Section 4.1.7 – Emergency Vehicle Access

Emergency vehicle access to the project site will be maintained at all times throughout the life of the project. The rigid fence constructed around the project site will be assembled such that access to the existing fire hydrant along Second Street will remain unobstructed to emergency vehicles and personnel throughout construction.

In cases of emergencies, on-site workers will exit the project site through gates along Third Street. These gates will remain unlocked at all times when workers are on site to allow emergency response units to access the site.

Section 4.1.8 – Traffic Control Plans & Haul Route Plan

Traffic Control Plans, Encroachment Plans, a Haul Route Plan, Barrier Installation & Removal Plans, Services Installation Plans, and Street Closure Plans are provided in Appendices A through D.

Section 4.1.8.1 – Demolition Phase Traffic Control

During the Demolition Phase, traffic will be unaffected by construction activities. Encroachments will be limited to the curbs directly adjacent to the project site along First Street, Second Street, Third Street, and Fourth Street. A sliding gate along Third Street will provide work vehicle and personnel access to the site. This gate will be identified using signage mounted on the gate. The Demolition Phase Encroachment Plan is provided in Appendix A.

Section 4.1.8.2 – Excavation Phase Traffic Control

During the Excavation Phase, 1.5 m wide temporary sidewalks will be installed along the north side of First Street, the east side of Second Street, and west side of Fourth Street. These streets will all remain open to two-way traffic and driving lane widths will remain at 3.5 m (minimum).

With the approval of HRM Development and Traffic Authorities, a section of Third Street will be fenced and effectively closed to traffic to facilitate loading and deliveries. This fenced compound will allow for two 3.5 meter (minimum) wide lanes to remain, thereby allowing two-way traffic to continue. This loading area will be the only access point to the site for the remainder of the project's construction. Entrance and exit gates to this loading area will be identified using signage mounted on the gates. Emergency vehicle access to the project site will be maintained at all times throughout the life of the project.

During blasting, solid plywood hoarding will be designed and certified by a Professional Engineer (P.Eng.) and mounted on sections of the rigid fence adjacent to blasting areas to protect vehicles from potential blasting debris.

A Barrier Installation Plan for the Excavation Phase is provided in Appendix B. During barrier installation, traffic along First Street will be reduced to one lane (a minimum of 3.5 m wide) to facilitate the installation of F-Type jersey barriers adjacent to the temporary sidewalks and for existing paint lines along First Street to be removed. Traffic will be closed to the westbound lane. This will be delineated using temporary workplace signage and traffic cones complete with a detour route for westbound traffic. This detour will direct westbound traffic north along Fourth Street, west along Third Street, and south along Second Street to return vehicular traffic to First Street. Temporary workplace signage and traffic cones will be used on Second Street, Third Street, and Fourth Street to delineate two-way traffic.

Section 4.1.8.3 – Substructure Phase Traffic Control

Similar to in the Excavation Phase, during the Substructure Phase, 1.5 m wide temporary sidewalks will be installed along the north side of First Street, the east side of Second Street, and west side of Fourth Street. These streets will all remain open to two-way traffic and driving lane widths will remain at 3.5 m (minimum).

With the approval of HRM Development and Traffic Authorities, a section of Third Street will be fenced and effectively closed to traffic to facilitate loading and deliveries. Additional space in this loading area will be required compared to the Excavation and Superstructure Phases for material storage while the foundation base is being prepared and concrete slabs are poured and to facilitate the pouring of concrete by large pumper and mixer trucks. This fenced compound will allow for one 3.5 meter (minimum) wide lane to remain open to westbound traffic. Signage will be placed along the west end of Third Street notifying traffic that the street will be closed to eastbound traffic. This loading area will be the only access point to the site. Entrance and exit gates to this loading area will be identified using signage mounted on the gates. Emergency vehicle access to the project site will be maintained at all times throughout the life of the project.

A Barrier Installation & Removal Plan for the Substructure Phase is provided in Appendix C to facilitate the relocation of F-Type jersey barriers and fencing along Third Street.

A Third Street Closure Plan is provided in Appendix C to facilitate the delivery, assembly, and disassembly of the crane to be used during building construction. During the Third Street closure, Traffic Control Persons and temporary workplace signage will direct Third Street traffic through a detour route via Seventh Street.

A Services Management Plan outlining vehicular traffic management requirements during the installation and removal of services within First Street is provided in Appendix C. During this work, barriers will be relocated around the service trench excavation and an altered centerline will be delineated using temporary workplace signage and traffic cones to allow two-way traffic to continue with 3.5 m wide (minimum) travel lanes.

Section 4.1.8.4 – Superstructure Phase Traffic Control

Like in the Excavation and Substructure Phases, during the Superstructure Phase 1.5 m wide temporary sidewalks will be installed along the north side of First Street, the east side of Second Street, and west side of Fourth Street. These streets will all remain open to two-way traffic and driving lane widths will remain at 3.5 m (minimum).

With the approval of HRM Development and Traffic Authorities, a section of Third Street will be fenced and effectively closed to traffic to facilitate loading and deliveries. This fenced compound will allow for two 3.5 meter (minimum) wide lanes to remain, thereby allowing two-way traffic to continue. This loading area will be the only access point to the site. Entrance and exit gates to this loading area will be identified using signage mounted on the gates. Emergency vehicle access to the project site will be maintained at all times throughout the life of the project.

A Barrier Installation & Removal Plan for the Superstructure Phase is provided in Appendix D and is similar to the Barrier Installation Plan for the Excavation Phase.

Section 4.1.9 – Haul Route Plan

A Haul Route Plan (HRP) is provided in Appendix A and will be implemented throughout all phases of this construction project. This HRP includes the proposed route which construction and delivery trucks will use throughout construction and adheres to the HRM Traffic Control Manual Supplement. As shown in the HRP, haul routes will extend to their origins and destinations by streets approved in the HRM Truck Route Bylaw (T-400). The haul route consists of Tenth Street, Eleventh Street, Twelfth Street, Thirteenth Street, Seventh Street, Fourth Street, Third Street, Second Street, Eighth Road, and Ninth Road.

Section 4.1.10 – Parking

During the Demolition Phase, on-street parking will not be affected. During the Excavation, Substructure, and Superstructure Phases, parking meters along the east side of Second Street and the north and south sides of Third Street will be out-of-service. Please refer to the Encroachment Plans (see Appendices A though D) for additional information.

Additional parking will be provided behind the library on First Street and an underground parking compound east of Fifth Street. Locations of these parking areas are provided in the Pedestrian Management Plan Renderings (PMPRs) which will be posted through the project site and adjacent areas. Pedestrian Management Plans (PMPs) and PMPRs are provided in Appendices A through E.

Section 4.1.10.1 – Parking Stall Removal

During the Demolition Phase, no on-street parking stalls will be removed. During the Excavation, Substructure, and Superstructure Phases, 18 parking spots (at parking meters) will be placed out of service. These are further identified in Section 4.1.10.3.

Section 4.1.10.2 – Contractor Parking

To minimize parking requirements in adjacent neighbourhoods, on-site workers will be required to carpool to the project site. The contractor has proposed to coordinate this at the Mumford Road Bus Terminal. Once the underground parkade has been constructed, some on-site workers will park in the parkade.

Section 4.1.10.3 – Out-of-Service Parking Meter Fees

During the Excavation, Substructure, and Superstructure Phases, parking meters adjacent to the project site will be removed or covered and “No Stopping” signs will be mounted in their place. As such, these parking meters and spaces will be unavailable from April 2018 to June 2020. These parking meters are located as follows and are identified in the Encroachment Plans (see Appendices A through D):

1. 3 along the east side of Second Street;
2. 9 along the north side of Third Street; and
3. 6 along the south side of Third Street.

Company A will reimburse the Municipality for out-of-service parking meters at the rate established by Council from time to time.

Section 4.1.10.4 – Temporary Parking

During the Excavation, Substructure, and Superstructure Phases, temporary free parking access will be provided behind the library on Second Street and pay parking will be provided in a parkade along Fifth Street. These parking areas are identified in the Traffic Control Plans and the Pedestrian Management Plan Renderings (see Appendices A through E). The owner has obtained a written letter from each of these property owners to allow additional parking within their parking areas.

Company A is not requesting additional temporary on-street parking at this time.

Section 4.1.10.5 – Net Parking Loss

During the Demolition Phase, there will be no net parking loss. During the Excavation, Substructure, and Superstructure Phases, there will be a net parking loss of 18 spaces (see Section 4.1.10.3).

Section 4.1.10.6 – Parking Signage

Signage showing the temporary parking locations (see Section 4.1.10.4) is included in the Traffic Control Plans and Pedestrian Management Plan Renderings (see Appendices A through E) which will be mounted prominently around the project site such that they will be identifiable to motorists and pedestrians.

Section 4.1.10.7 – Parking Within Encroachment Areas

Encroachment areas are intended for use as loading areas and temporary pedestrian routes. On-site workers will not be permitted to park within the encroachment areas.

Section 4.2 – Pedestrian Management

Pedestrian management will be of foremost consideration throughout the construction of this project. Company A has prepared Pedestrian Management Plans (PMPs), Pedestrian Management Plan Renderings (PMPRs), and wayfinding signage to assist pedestrians in navigating their way around this project site. These plans and signs are provided in Appendices A through F.

Construction is planned on the Neighbour D property, east of Fourth Street, northeast of the Project A site, which is expected to take place simultaneously with Project A construction activities. The owner and Neighbour D have agreed to coordinate pedestrian management such that only one project at a time will have closed sidewalks on the same street.

Although most signs will be mounted on existing permanent poles, some signs may require to be mounted using temporary concrete sign bases complete with embedded steel poles. These sign bases will weight approximately 90 kg (200 lb.) to prevent them from being stolen and will be square to prevent them from rolling if toppled. They will be positioned away from, or along the edges, of pedestrian routes to prevent impedance of pedestrians. Some Pedestrian Management Plan Rendering signs and wayfinding signs will be mounted to existing fences on private property. Additional information related to these items is provided in Section 5.3.

Section 4.2.1 – Bus Stop Relocation

Pending approval from HRM Transit, a bus stop along First Street will be relocated for the duration of this project's construction. A temporary alternative bus stop is proposed near the northeast corner of the intersection of First Street and Sixth Street. This bus stop relocation is required to provide an alternative public transit access point while the existing sidewalk is closed and temporary sidewalks complete with F-Type concrete barriers are in place. Additional bus stop relocation information is provided in Appendices A though E.

Section 4.2.2 – Payment of Applicable Fees

Payment of all applicable fees will be made in accordance with HRM Administrative Order 15 (AO15). Requests for lane and street closures must be submitted to HRM a minimum of 10 days prior to their planned implementation for review and approval.

Section 4.2.3 – Pedestrian Hazard Assessment

See Appendix M for Pedestrian Hazard Assessment information which validates Company A's rationale for requiring street encroachments and temporary sidewalks.

Section 4.2.4 – Pedestrian Management Plan Preparation & Monitoring

Separate Pedestrian Management Plans (PMPs) have been prepared as required for each project phase. PMPs have been prepared by Consultant Q's certified temporary workplace signer (TWS), *First Name Last Name*. The PMPs illustrate the proposed signage which will be installed to warn pedestrian traffic ahead of and throughout the construction zone. Pedestrian management features and methods as well as information related to the PMPs and Pedestrian Management Plan Renderings are provided in Section 5.3 and in Appendices A though E.

Section 4.2.5 – Notifications of Pedestrian Closures

The contractor shall notify HRM and the public to proposed pedestrian closures as outline in Section 8.3.

Section 4.2.6 – Pedestrian Management Plan Compliance

All PMPs will be implemented and monitored by Contractor Z. Construction warning signage will be displayed throughout the approaches to, and adjacent to, the project site. Contractor Z will inspect pedestrian management elements at the start and end of the work day, or more frequently as required, and will maintain pedestrian management elements as required to ensure the PMPs are effectively and correctly implemented. See Appendix N for a sample construction management plan element inspection sheet to be completed by both Traffic Control B and the contractor.

Section 4.2.7 – Changes to Pedestrian Management Plans

Requests for modifications to PMPs will be sent to HRM for approval a minimum of 10 days prior to their proposed implementation.

Notification of pedestrian disruptions will be distributed to affected residents and businesses a minimum of 5 days in advance of disruptions. Modifications to PMPs for unforeseen events will be sent to the Municipality for approval.

Section 4.2.8 – Pedestrian Management Plans

Pedestrian Management Plans (PMPs) have been prepared by Consultant Q's certified temporary workplace signer (TWS), *First Name Last Name*. Separate PMPs have been prepared as required for each project phase (see Appendices A through D). The Pedestrian Management Plans illustrate the pedestrian routes throughout construction and signs which will be erected to warn and direct pedestrians in a safe and convenient manner.

Section 4.2.8.1 – Demolition Phase Pedestrian Management

The Demolition Phase involves demolishing the existing multi-level building on site. Throughout this work potential hazards related to falling debris and construction equipment will be present and, as such, it will be unsafe for pedestrians to be within 3 m of the property. Therefore, it is proposed that all existing sidewalks adjacent to the project site be shut down and that alternate pedestrian routes be established using pedestrian signage, directing pedestrians around Fourth Street, Seventh Street, and Second Street.

A 1.8 m (minimum) high rigid fence will separate the project site from public property. A sliding gate along Third Street will provide work vehicle and personnel access to the site. This gate will be identified using signage mounted on the gate.

Section 4.2.8.2 – Excavation Phase Pedestrian Management

The Excavation Phase will require an approximate 10 m deep excavation to construct the parking level. During this work, three 1.5 m wide temporary sidewalks will be installed along the north side of First Street, the east side of Second Street, and west side of Fourth Street. These temporary sidewalks will be protected from vehicular traffic using F-Type concrete barriers.

With the approval of HRM Development, the south side of Third Street will be fenced and closed to pedestrians to facilitate loading and deliveries. This loading area will be the only access point to the site for the remainder of the project's construction. Entrance and exit gates to this loading area will be identified using signage mounted on the gates. Emergency vehicle access to the project site will be maintained at all times throughout the life of the project. Pedestrians will be prevented from using the sidewalk on the south side of Third Street and will instead be redirected by signage to the north side of Third Street. No other businesses or buildings are located along these sections of closed sidewalk.

The temporary sidewalk along First Street will require the relocation of the bus stop as per Section 4.2.1.

Throughout the Excavation Phase, a 1.8 m (minimum) high rigid fence will be constructed around the development to prevent pedestrians from entering the site. This fence will be fixed to existing curbs or sidewalks or to F-Type concrete barriers.

During blasting, solid plywood hoarding will be mounted on the section of the rigid fence adjacent to blasting areas to protect pedestrians from potential blasting debris. This hoarding will be designed and certified by a Professional Engineer (P.Eng.).

A Barrier Installation Plan for the Excavation Phase is provided in Appendix B. During barrier installation, the pedestrian routes immediately adjacent to the project site will be closed to the public. Therefore, alternative pedestrian routes, similar to those for the Demolition Phase, will be established using pedestrian signage, directing pedestrians around Fourth Street, Seventh Street, and Second Street.

Section 4.2.8.3 – Substructure Phase Pedestrian Management

The Substructure Phase Pedestrian Management Plan is similar to the Excavation Phase Pedestrian Management Plan (see Section 4.2.8.2).

A Barrier Installation & Removal Plan for the Substructure Phase is provided in Appendix C to facilitate the relocation of F-Type jersey barriers and fencing along Third Street. This will not affect the pedestrian routes during the Substructure Phase.

A Third Street Closure Plan is provided in Appendix C to facilitate the delivery, assembly, and disassembly of the crane to be used during building construction. This will not affect the pedestrian routes during the Substructure Phase.

A Services Management Plan outlining pedestrian management and routes during the installation and removal of services within First Street is provided in Appendix C. During this work, barriers will be relocated around the service trench excavation. Pedestrians will be unable to use the temporary sidewalk along the north side of First Street during this time and will be redirected to Fourth Street, Seventh Street, and Second Street using pedestrian signage.

Section 4.2.8.4 – Superstructure Phase Pedestrian Management

The Superstructure Pedestrian Management Plan is similar to the Excavation Phase Pedestrian Management Plan (see Section 4.2.8.2). Additional overhead protection will be provided during the Superstructure Phase by

scaffolding which will be designed and certified by a Professional Engineer (P.Eng.). This scaffolding will be located along the temporary sidewalks on First Street, Second Street, and Fourth Street and will be illuminated at all times.

A Barrier Installation & Removal Plan for the Superstructure Phase is provided in Appendix D and is similar to the Barrier Installation Plan for the Excavation Phase.

Section 4.2.9 – Pre-Project Hazard Assessment

See Appendix Q for vehicular and pedestrian hazard assessment information which validates Company A's rationale for requiring street encroachments and temporary sidewalks.

Section 4.2.10 – Visually Impaired Persons

Construction areas can be particularly difficult to navigate for visually impaired persons. Consultant Q has reviewed elements identified by the Canadian National Institute for the Blind (CNIB) to assist the visually impaired and has incorporated these elements into the design of the CMP.

Ends of F-Type concrete barriers at starts of temporary sidewalks will have reflective tape complete with contrasting colours to assist the visually impaired in navigating their way around this project site. Similar reflective tape with contrasting colours will be provided along the sides of F-Type concrete barriers, near their tops, both on the vehicular traffic side and the pedestrian traffic side.

Safe Harbour Areas have been identified in the PMPs (see Appendices A through D) which will provide shelter from traffic for visually impaired and handicapped persons in advance of street crossings. These areas have a diameter of 1.5 m (minimum), as identified by Public Services and Procurement Canada, to allow wheelchairs to complete full 180 degree turns while protected from vehicular traffic.

Tactile pedestrian launch bars will also be installed and maintained by the contractor. They will be located at the entrances to temporary pedestrian sidewalk crossings and will extend the entire width between the F-Type concrete barriers. They will serve to help identify street crossing locations to visually impaired persons and to orient them in the direction of the crossings. These tactile pedestrian launch bars will be textured and painted yellow such that they are easily distinguished from other surface features. They will be fixed to the existing roadway asphalts using product-specific adhesives. It will be the contractor's responsibility to regularly monitor and inspect the tactile pedestrian bars and to remove and reinstall them as necessary to ensure their continued functionality. Details regarding these tactile pedestrian launch bars are provided in Appendix O.

Sawhorse barricades painted "safety orange" will be located at all termination points along pedestrian routes to assist all pedestrians, especially visually impaired persons, in identifying the transition between pedestrian routes and traffic travel ways. These sawhorse barricades will be constructed complete with an orange-painted wooden 2" x 4" board complete with visual and braille text indicating "No Crossing" which will be fixed along the bottom of the sawhorse barricade for cane detection. Sawhorse barricades will be set up at existing street crossings to clearly identify that these crossings are out-of-service.

Braille text is provided on all Pedestrian Management Plan Renderings (PMPRs) and wayfinding signs. This braille text will assist the visually impaired in navigating the temporary sidewalks and areas adjacent to the construction site. Section 5.3 and Appendices E and F provide additional information regarding these signs. Braille versions of the Community Consultation Pamphlets (see Section 8.1) have also been made available to the public at community consultation meetings.

Section 4.2.11 – Accessibility

All pedestrian routes shall be barrier-free, utilizing existing curb cuts and sidewalk ramps. It will be the contractor's responsibility to keep all pedestrian routes free and clear of obstructions at all times, including snow, construction debris, and public debris to ensure their continued functionality.

Section 5 – Construction Site Protection and Hoarding

Section 5.1 – Site Protection and Hoarding Materials

Section 5.1.1 – Concrete F-Type Barriers

Concrete F-Type barriers will be installed as per the CMP drawings throughout all project phases. It will be the contractor's responsibility to regularly inspect the condition and layout of these barriers to ensure their continued functionality.

Concrete F-Type barriers shall generally be assembled in series such that their "J-J Hooks" interconnect and the barriers work together as a single unit. Ends of barriers will have reflective tape with contrasting colours to assist in identifying temporary pedestrian crossings. The sides of the F-Type concrete barriers, along their tops, will have additional reflective tape with contrasting colours to assist in delineating traffic travel ways and pedestrian routes. This tape will be placed on both the traffic sides and the pedestrian sides of the barriers, as applicable.

Section 5.1.2 – Fencing

Throughout all construction phases, a rigid fence will surround the development. This fence will be drilled and bolted into the surfaces of out-of-service concrete curbs or sidewalks. Figure 1 below shows a fence assembly example. It will be the contractor's responsibility to regularly inspect the rigid fences to ensure their continued structural integrity. Any deficiencies in fencing must be addressed immediately to prevent pedestrians from entering the project site through holes or overturned fences. The fence structure will be sufficiently strong such that it cannot be moved, removed, or overturned without the use of tools.

Figure 1: Rigid Fence Fixed to Concrete Sidewalk

Section 5.1.3 – Translucent Mesh

Within 2 m of the public ROW, rigid fencing will be covered with a translucent mesh, a minimum of 1.8 m high, to help control dust and minimize noise.

Section 5.1.4 – Hoarding

During blasting, solid plywood hoarding will be designed and certified by a Professional Engineer (P.Eng.) and mounted on the section of the rigid fence adjacent to blasting areas to protect pedestrians from potential blasting debris. All hoarding will be installed as per HRM specifications and guidelines.

Section 5.1.5 – Covered Ways

All covered ways, including scaffolding for temporary sidewalks shall be illuminated at all times. All covered ways, including scaffolding, will be designed and certified by a Professional Engineer (P.Eng.).

Section 5.1.6 – Snow Removal

It will be the contractor's responsibility throughout all construction phases to keep all temporary sidewalks clean and free of snow and ice. The contractor will not dump snow or ice onto adjacent public property and will truck snow off site as required to prevent the unsafe build-up of snow piles.

The contractor will be responsible to remove snow and ice as required to ensure that emergency access is maintained to the project site, existing Siamese connection (when still in operation), and hydrant along Second Street.

Section 5.1.7 – Site Lines

Rigid fences and signage will be installed as per the CMP drawings such that vehicular site lines are maintained around the corners of street intersections.

Section 5.1.8 – Emergency Access & Egress

Along Third Street, the site will be accessible through two separate gates. These gates are the only locations that will receive equipment/materials during construction and will be locked at all times after work hours. In cases of emergencies, on-site workers will exit the project site through these gates. These gates will remain unlocked at all times when workers are on site so as not to not restrict emergency response units from accessing the site. In addition, the entrance gates will be designated "Entrance Gate" and "Exit Gate" as shown in the CMP drawings.

An existing fire hydrant located along Second Street will remain protected from construction activities. This fire hydrant, along with the existing and proposed fire department connections (Siamese connections) will be accessible to firefighters throughout all phases of the project.

Section 5.1.9 – View Ports

With the exception of blasting protection hoarding, the contractor shall include cut-out viewing ports complete with a transparent shield in all solid hoarding to allow for public viewing. These viewing ports will be spaced at no greater than 20 m apart.

Section 5.1.10 – Reinstatement of Public Property

The contractor will be responsible to repair and pay for any and all damages incurred due to temporary encroachments including, but not limited to:

1. Rigid fence and scaffolding holes reinstated with concrete to existing conditions or better;
2. Street lines repainted to existing conditions;
3. Damaged sidewalks, curbs, sodding, and other public elements reinstated to existing conditions or better;
4. Tactile pedestrian launch bars removed and asphalt underneath treated with asphalt sealant;
5. Cracked asphalt within the encroachment areas repaired using hot rubber (or approved equivalent); and
6. Parking meters to be reinstated to existing conditions and any damaged parking meters replaced to existing conditions or better.

Section 5.2 – Site Protection Aesthetics

Pedestrian Management Plan Renderings and wayfinding signage (see Section 5.3) will improve project site aesthetics and provide the public with information related to the project and nearby amenities. In addition, throughout all phases of the project, the contractor shall regularly inspect the project site and adjacent areas and keep these areas clean and free of debris, snow, and ice.

The owner is not seeking a reduction in encroachment fees for site aesthetics at this time.

Section 5.3 – Signage

Section 5.3.1 – Project Management Plan Renderings

Pedestrian Management Plan Renderings (PMPRs) will be mounted at the locations identified on the PMPs to assist pedestrians in navigating around the project site and to keep the public informed of general project details and project contact information. PMPRs will be located at pedestrian pinch points to give pedestrians advanced warnings to possible obstructions due to construction activities. PMPRs for this project will be located at:

1. The intersection of Fourth Street & Seventh Street;
2. The intersection of Second Street & Seventh Street;
3. The intersection of First Street & Second Street;
4. The intersection of First Street & Fourth Street;
5. The intersection of Third Street & Fourth Street;
6. North of the intersection of Second Street & Third Street; and
7. Around all sides of the project fencing, facing the public.

These PMPRs will be printed on sign boards no less than 900 mm x 600 mm in dimension and will be placed at the project site a minimum of 10 days prior to the commencement of work. PMPRs are provided in Appendix E.

PMPRs have been provided for each project phase and reflect the PMPs outlined in Section 4.2. They identify:

1. Pedestrian travel routes;
2. The location of the project site;
3. Street names;
4. Names and locations or nearby businesses and points of interest;
5. Bus stop locations;
6. Alternative parking locations;
7. Emergency contact information; and
8. Braille text indicating the above items.

PMPRs will be mounted to existing poles and fences as shown in Appendix P. The owner has obtained written letters from property owners on whose properties signs are to be mounted.

Section 5.3.2 – Pedestrian Detour Wayfinding

Wayfinding signs will be mounted at the locations identified on the PMPs to assist pedestrians in navigating around the project site directing them to local points of interest. These signs will be aesthetically pleasing and are meant to encourage the public to continue using public spaces and visiting local businesses during construction activities. Together with PMPRs, wayfinding signs will be located at pedestrian pinch points to give pedestrians advanced warnings to possible obstructions due to construction activities. Wayfinding signs for this project will be located at:

1. The intersection of Fourth Street & Seventh Street;
2. The intersection of Second Street & Seventh Street;
3. The intersection of First Street & Second Street;

4. The intersection of First Street & Fourth Street;
5. The intersection of Third Street & Fourth Street; and
6. North of the intersection of Second Street & Third Street;

These signs will be printed on sign boards no larger than 280 mm x 435 mm in dimension and installed at heights on no greater than 2.0 m. Wayfinding signs are provided in Appendix F. This signage will be provided during all project phases and will include:

1. The pedestrian's current location;
2. Directional arrows to nearby businesses and points of interest;
3. Emergency contact information;
4. Miniature versions of the PMPRs; and
5. Braille text indicating the above items.

Wayfinding signs will be mounted to existing poles and fences as shown in Appendix P. The owner has obtained written letters from property owners on whose properties signs are to be mounted.

Section 6 – Lifting, Hoisting and Crane Operations

Section 6.1 – Navigation Canada & Transport Canada Regulatory Approvals

This project will require a tower crane near the southeast corner of the project site. The top of the crane is expected to be at an elevation of approximately 60 m above the sidewalk at the southeast corner of the project site (approximately 95 m above geodetic sea level).

Consultant Q has reviewed the crane location and height relative to local flight paths and has confirmed the crane will be outside of flight path boundaries. Therefore, Transport Canada approval is not required and Nav Canada does not require notification. The owner has obtained letters from both agencies confirming this acceptance.

During crane assembly and disassembly, crane components will be unloaded from a transport truck within the loading area on Third Street. These components will be assembled within the project site by site equipment. Third Street will need to be shut shown during this installation as per the Third Street Closure Plan.

Section 6.2 – Operations above the Public Realm

Temporary sidewalks will be utilized for this project such that, during crane lifting operations, loads are never suspended over the public realm. The owner has received written approval from all neighbouring properties on the north side of Third Street to allow the crane to sway over their properties during crane installation. Additional encroachments for crane operation will not be required.

Section 7 – On-Site Conditions

Section 7.1 – Site Safety and Security

All contractors on site will be required to be registered members in good standing with the Nova Scotia Construction Safety Association. Contractors will be required to comply with all applicable safety codes and regulations. The contractor will be required to provide a mandatory site safety orientation for all trades and site visitors.

The contractor will be required to have certified first aid responders on site during all construction activities. First aid kits will be made available at the project site and site office and locations of first aid kits will be prominently posted and communicated to all on-site workers and visitors. In addition, fire extinguishers and burn kits will remain available on site at all times. The contractor will be responsible to carry out regular inspection of first aid

kits, fire extinguishers, and burn kits and to note any deficiencies and replenish kits as required for any missing or used items.

Section 7.1.1 – Access & Egress Gates

Signs identifying the "Entrance Gate" and "Exit Gate" will be prominently posted as per the TCPs (see Appendices A through D). These signs will be mounted directly onto the gates using steel cables.

Section 7.1.2 – Hazard Warning Signage

Hazard warning signs will be fastened to the "Entrance Gate" and "Exit Gate" warning personnel of potential hazards and personal protective equipment (PPE) required.

Section 7.1.3 – Gate Locking & Monitoring

Gates will be locked during non-work hours and will be closed at all times not in use. During holidays and weekends, the contractor will be responsible to check the project site gates daily to ensure they are secure.

Section 7.1.4 – Hoarding Signage

Hoarding will be marked with "No Trespassing – Construction Personnel Only" signs. All personnel on the construction site will be required to use all proper personal protective equipment (PPE) at all times. PPE requirements will be prominently posted and visitors will be required to sign in at the project site office before entering the site. A warning of potential fines will be included for those who violate PPE requirements.

Section 7.1.5 – Inspection Reports

The contractor will regularly inspect hoarding and address all safety-related and other deficiencies in a prompt and timely manner. Inspection reports on maintenance activities carried out will be kept on site at all times.

Section 7.1.6 – Dangerous Activities

Public safety and the safety of on-site workers will be of critical importance throughout all construction phases and all works will be carried out in accordance with the Nova Scotia Occupational Health and Safety Act. For all dangerous activities, first aid kits will be readily available as outlined in Section 7.1. See Appendix Q for vehicular and pedestrian hazard assessment information.

Section 7.1.6.1 – Hot Works

Hot works will be undertaken a minimum of 3 m inside the project site property boundary. During hot works, the contractor will ensure that a first aid kit and fire extinguisher are readily available (in addition to the first aid kits and fire extinguishers identified in Section 7.1) in the immediate vicinity of the work such. In addition, hot works will be undertaken away from heavy equipment and heavy equipment routes.

Section 7.1.6.2 – On Site Smoking

Smoking will not be permitted on the project site. In addition, under no circumstances will smoking or open flames be permitted within the vicinity of combustible or explosive materials, to a minimum standard as identified in the material's product specifications. See Section 7.1.9 for information related to the designated smoking area.

Section 7.1.6.3 – Ignition Source Controls

It will be the contractor's responsibility to review potential ignition sources regularly and to proactively mitigate the potential for them to ignite. Potential ignition sources include faulty wiring, hot surfaces and motors, welding,

grinding, and other sparks, convex lenses (magnifying glasses), and reactive chemicals. Material and equipment specifications and best practices will be followed during all construction activities to reduce the risk of ignition. In addition, potential ignition sources and work which may result in potential ignition will be kept away from heavy equipment and heavy equipment routes.

Section 7.1.6.4 – Storage of Combustible Materials

On-site materials will be protected as required from environmental conditions such as snow, rain, and wind to prevent materials from causing harm to on-site workers or the general public. Combustible materials, as well as explosive, reactive, and corrosive materials, will be stored in accordance with their product specifications using storage sheds and containers within the loading area and on-site as required and will be kept away from heavy equipment and heavy equipment routes.

Section 7.1.6.5 – Waste Management Practices

Throughout construction the contractor will be required to maintain a clean and tidy work environment and work to proactively eliminate risks. The contractor will monitor the project site at the start and end of the work day, or more frequently as required, to ensure that waste is removed in a prompt and timely manner such that it does not pose a risk to on-site construction activities, on-site workers, or the general public.

Section 7.1.7 – Emergency Contact Information

As outlined in Section 5.3, throughout all project phases, developer and contractor emergency contact information will be prominently posted on Pedestrian Management Plan Renderings and wayfinding signs.

Section 7.1.8 – After-hours Lighting

All covered pedestrian travel ways will be illuminated at all times throughout their use. No additional after-hours lighting is expected at this time.

Section 7.1.9 – Smoking Area

Smoking will not be permitted on the project site. A designated smoking area will be set up adjacent to the Project Site Office Trailer on the abandoned library property east of Fourth Street, northeast of the project site. Signs will be displayed showing the location of the designated smoking area. The owner has obtained a written letter of permission from the abandoned library property owner to allow this smoking area and the project site office trailer in this location.

Section 7.1.10 – Fire Suppression System

The Siamese connection for the existing building will remain accessible and in operation until demolition of that section of the building begins. Once the Siamese connection is no longer operable, signage identifying the Siamese connection as “Fire Department Connection – Out of Service” will be prominently displayed above the connection. Once the new Siamese connection for the new building has been installed and is operational, access will be provided to the Siamese connection and signage identifying the Siamese connection “Fire Department Connection – Do Not Block” will be put in place. The PMPs identify the shortest unencumbered route from public property to these Siamese connections and locations of Siamese connection signage. Note that all Siamese connection signs must have white backgrounds, bold red lettering, and dimensions of 356 mm x 254 mm. They will be constructed of weatherproof engineering grade reflective aluminum and mounted 600 mm above the top of the Siamese connection.

Section 7.2 – Material Handling, Loading/Unloading, Delivery, and Vehicle Staging

Encroachments will be used to create a loading zone within Third Street to allow for safe material handling, loading and unloading, deliveries, and vehicle staging. Barriers and fencing in this area will separate construction activities from public traffic along Third Street. This loading area is identified in the Encroachment Plans. The Haul Route Plan shows the route for trucks travelling to and from the project site, as outlined in Section 4.1.9 of this report.

First Street, Second Street, and Fourth Street are "Peak Hour Restricted" as per the HRM Traffic Control Supplement. As such, deliveries to and from the site will be scheduled between 9:00 a.m. and 4:00 p.m. to avoid disruptions to neighbouring businesses.

On-site materials will be protected as required from environmental conditions such as snow, rain, and wind to prevent materials from causing harm to on-site workers or the public. Particular efforts will be made to prevent dust and other materials from becoming airborne during high wind events.

See Appendix Q for vehicular and pedestrian hazard assessment information.

Section 7.3 Environmental Controls

Section 7.3.1 – Street & Right-of-Way Cleaning

The contractor owns a street cleaner which will be used regularly to sweep streets and travel ways in and around the project site. Pedestrian travel ways will be hand swept daily, or more frequently as required. It will be the responsibility of the contractor to keep the 1.5m temporary sidewalks free and clear of snow, ice, and debris. The contractor will also be responsible to remove snow on the street side of F-Type jersey barriers and fences within the ROW that cannot be removed by typical Municipality ploughing operations.

Section 7.3.2 – Stormwater Management and Runoff Pollution

The contractor will be required to prevent sediment from entering all adjacent catch basins and leads through the use of erosion and sediment controls (see NSE Erosion & Sedimentation Control Handbook for Construction Sites). All water on site will be treated and pumped to an adjacent catch basin in accordance with HRM Bylaw W-101. The proposed construction will not cause negative impacts to the storm systems or affect drainage paths.

To achieve this, the contractor will install and maintain sediment traps in all catch basins directly adjacent to the project site. The contractor has obtained written approval from Halifax Water to create a temporary sedimentation pond during the excavation phase of this project. For this phase, the contractor will direct stormwater within the project site to a low point where suspended particles in the sediment-laden water will settle out. This water will be pumped out of the project site directly into a catch basin near the north east corner of the site. The sediment trap in this catch basin will provide further protection against storm system sedimentation. These features are identified in the Excavation Phase Encroachment Plan.

Note that the Stormwater Management Plan for this project (prepared by others), identifies surface drainage patterns, catch basin locations, material storage locations and protection measures, construction phasing, site entrance/exit locations, and runoff quantity and control measures (for construction phases and at project completion).

Section 7.3.3 – Noise Pollution

The contractor will at all times adhere to the HRM Noise Bylaw (N-200). No work will take place on the project site outside those hours identified in Section 2 of this report.

Section 7.3.4 – Dust Pollution

As outlined in Section 5.1 of this report, fencing and opaque mesh will assist in preventing the spread of dust throughout the project site.

In addition to the fencing and opaque mesh, the contractor will be responsible to carry out the following dust/debris controls;

1. Adjacent streets and properties will be regularly swept clean;
2. The excavation access will regularly be topped with clean gravel to prevent tire tracing from trucks;
3. Catch basins within and adjacent to hoarding will have sediment traps installed;
4. On dry days the site will be watered to prevent dust from becoming airborne; and
5. The upper levels of the new building will be regularly swept clean and materials secured to prevent construction debris from exiting the building site.

Section 7.3.5 – Emissions Control

All construction vehicles will be required to use the loading area for parking and idling to keep exhaust emissions within the construction zone as much as possible. Vehicles will be staged so that idling will not occur for more than 3 minutes at a time. Note that, unless a vehicle motor is required to run to complete work functions, it must be turned off after no more than 3 minutes. Signs identifying these idling requirements will be posted on the front of the project site office trailer and within the loading area.

Section 7.3.6 – Rodent Control

Rodent movement increases during construction activities. The owner has engaged a certified rodent control professional, Rodent Control R, to prepare a Rodent Control Plan (RCP) to help mitigate this. The RCP applies to all project phases with the goal of preventing movement of rodents off-site to find safe refuge in adjacent areas.

Section 7.3.6.1 – Rodent Control Credentials

Rodent Control R is certified by the Canadian Pest Management Association (CPMA), is a member in good standing with the National Pest Management Association (NPMA), and is certified to be in conformance with ISO 9001:2008. All rodent control technicians on site will hold Nova Scotia Environment (NSE) pest control licenses. Proof of these documents will be kept on site at the project site office trailer and remain available at all times.

Section 7.3.6.2 – Rodent Control Management

The RCP will consist of a baiting and monitoring program. Bait stations (traps) will be placed approximately every 15 meters (50 feet) as outlined in the NPMA Pest Management Standards for Food Processing & Handling Facilities. Auxiliary buildings will remain locked and secure during all non-work hours and sewer laterals to be removed will be removed in a prompt and timely manner such that they do not provide safe refuge for rodents. In addition, standing water will be promptly pumped off-site to abate attractive conditions for rodent habitation.

Rodent Control R will begin 6 weeks prior to the commencement of the demolition phase by placing 40 bait stations (10 per floor) inside the existing building on site (to be demolished) and around the perimeter of the project site. This will help to lower the number of active rodents inside the project area prior to demolition. At the end of this 6 week period, Rodent Control R will submit a rodent control effectiveness report to HRM for review. During construction phases (demolition, excavation, substructure, and superstructure), additional bait stations and catch basins will be set on neighbouring properties and within the HRM ROW. See the Rodent Control Plan drawing in Appendix A for bait station and baited catch basin locations. The owner has obtained letters of approval from neighbouring property owners and HRM to place bait stations in these locations and a letter of approval from Halifax Water to include bait in the catch basins to be baited.

Bait stations will be secured in their locations using wooden stakes (for open sodded and dirt locations), weighted patio stones (behind walls and on paved areas), and zip-ties (fixed to fences). Photos of bait station locations for bait stations on neighbouring properties and within the HRM ROW are provided in Appendix L. Bait stations within the project site will be fixed to rigid fences using zip-ties and will be placed on the private side of property line.

Bait stations and catch basins will be baited using Contrac Blox in accordance with the Environment Canada Pest Control Products Act. Information and specifications for bait stations and bait are provided in Appendix L. Each bait station and catch basin will be assigned a Universal Product Code (barcode). Catch basins will be baited using a stainless steel wire which will hang from the top of the catch basin with bait hanging just above the catch basin channel.

Rodent Control R will provide weekly monitoring of every bait station and catch basin. During each visit to an individual bait station or catch basin, the Rodent Control R technician will open the bait station (or pull up the catch basin wire), scan the unit's bar code using a handheld scanner, record the amount of bait consumed, the amount of bait replenished, the site conditions (weather), and the condition of the bait and bait station (or catch basin). The technician will then upload this data into the Rodent Control R software which will track bait consumption trends throughout the life of the project. Rodent Control R will review bait consumption trends weekly to confirm the effectiveness of the plan. Bait stations may be added in areas of particularly high consumption trends. Handheld scanner information and software tracking templates are provided in Appendix L. Rodent Control R will also set up a digital portal with all rodent control records. Access to this portal will be provided to HRM, the contractor, and the owner. Visible rodent carcasses will be collected and removed from the project site and neighbouring areas on a weekly basis.

A rodent control package will be kept on site at all times and be housed in the project site office trailer. It will include copies of Rodent Control R's certifications, letters of good standing, letters of conformance, technician names and licenses, rodent control plans, and rodent control records. Rodent Control R technicians will be required to sign in and out upon arrival to, and departure from, the project site.

Section 7.3.6.3 – Rodent Control Safety Considerations

Public safety will be of critical importance for rodent control activities. Physical (snap) traps will be prohibited unless approved by HRM (the contractor must request proposed CMP changes to HRM a minimum of 10 days prior to planned implementation for review). Trap size will be sufficiently small to prevent children, dogs, or cats from entering and becoming poisoned and the bait/poison will be sufficiently weak so as not to not kill children, dogs, or cats. In addition, bait stations will be tamper proof and bait will be securely fixed inside so that it cannot be shaken out. Bait stations will be opaque to protect the public from unsightly images.

Section 7.3.6.4 – Project Closure

Following completion of this project, Rodent Control R will promptly collect and appropriately dispose of all unused bait, bait stations, and remaining carcasses and will provide a close out letter to HRM outlining the work that was completed throughout construction and confirming that all necessary clean-up has been completed.

Section 7.3.7 – Light Pollution

Subject to approval by HRM Right-of-Way Services, temporary lighting used to illuminate temporary walkways will adhere to the ANSI/IES RP-8-14 Roadway Lighting Guidelines. The design of the lighting will be completed by a Professional Engineer (P.Eng.) registered in the province of Nova Scotia such that it does not negatively impact adjacent properties.

Lighting of the project site (private property) will be 3 m (maximum) above the highest elevation of the building or excavation and will be directed inwards towards the property.

Section 8 – Community Engagement & Notification

Section 8.1 – Pre-CMP Community Engagement

The owner and contractor have been in contact with neighbours over the past year to discuss the proposed work. This has included community consultation meetings for which notifications were sent to neighbouring property owners within 200 m of the project site. These meetings were also advertised on local radio stations and in local newspapers. Community consultation pamphlets, both for the visually able and the visually impaired, have been widely distributed during these project meetings (see Appendix G). A website, Facebook page, and Twitter account have also been set up for this project to encourage public knowledge of this project.

A sample of meeting minutes for these community consultation meetings is provided in Appendix J. These meeting minutes outline who attended the meetings, what materials were presented to the public, notes on discussions that took place, requests by and specific needs for the community and businesses, the chance to sign up for monthly project notifications, and how the owner and contractor plans to take the gathered information to work in harmony with the public.

During construction, project contact information will be easily identifiable on Pedestrian Management Plan Renderings (PMPRs) and wayfinding signage which will be posted around the project site as identified in the Pedestrian Management Plans (PMPs) and Appendices E & F.

Section 8.2 – Scheduled Community Notifications

As mentioned in Section 8.1, monthly project updates will be distributed to those signed up to receive project notifications. These notifications will be sent on or before the fifth day of each month and will also be distributed through the project's website, Facebook page, and Twitter account. These notification letters will include:

a) The date the letter is sent;
b) The development name and owner and contractor contact information;
c) Brief updates on project progress;
d) Brief updates on expected upcoming construction activities that may affect the community;
e) Specific details of any work within the ROW that is to occur outside of the approved encroachment that may result in additional traffic control measures or closures; and
f) Any other relevant information.

It will be the owner's responsibility to provide further communication as required by the community including providing communication through additional media forms (letters, additional community consultation meetings, etc.) as required by community members. A sample Monthly Project Update Letter is provided in Appendix K.

Section 8.3 – Closure Notification Requirements

Notification of street closures and public service interruptions will adhere to the requirements of the HRM Traffic Control Manual Supplement. Street closure requests require 10 days (minimum) notice to HRM prior to their planned implementation and must be approved by HRM prior to implementation. Notification to the affected public will be made a minimum of 5 days prior to the disruption. These notifications will be hand delivered and the contractor will keep and maintain a list of all effectively notified property owners such that they ensure all affected parties are notified. The contractor will notify HRM immediately upon confirmation of affected parties that have been notified and their respective civic addresses. A Draft Notification Letter is provided in Appendix I.

Section 9 – Permit & Notification Requirements

The contractor will be responsible to coordinate a pre-construction meeting 10 days prior to construction commencement to review the CMP on site. Attendees will include the contractor, the owner, HRM, Halifax Water (HW), utility companies, and representatives from neighbouring properties.

Section 10 – Regulation & Enforcement

Section 10.1 – Inspection & Monitoring

The contractor will be responsible to monitor the implementation of the CMP on a daily basis, or more frequently as necessary, to ensure its continued effectiveness. The contractor will complete a daily inspection/maintenance log of all CMP elements.

As outlined in Section 1, any changes required to this CMP must be sent to HRM for review 10 days (minimum) prior to their proposed implementation. Changes may only be implemented following HRM approval.

Section 11 – Summary

This CMP has been prepared with the goal to minimize negative impacts to the community, pedestrians, and traffic throughout construction of this project. This CMP will be used as a minimum standard and any further safety protection required, or methods to provide a more positive environment, will be used throughout construction as necessary as approved by HRM.

Should you have any questions or comments related to this document, please contact Consultant Q. For all construction-related inquiries, please contact the owner, contractor, or traffic control service provider (see contact information in Section 1.2).

Regards,

Consultant Q

Appendices

Appendix A – Demolition Phase CMP Drawings

i) Encroachment Plan – Demolition Phase
ii) Pedestrian Management Plan – Demolition Phase
iii) Haul Route Plan – All Phases
iv) Rodent Control Plan – All Phases

Appendix B – Excavation Plan CMP Drawings

i) Encroachment Plan – Excavation Phase
ii) Pedestrian Management Plan – Excavation Phase
iii) Traffic Control Plan – Excavation Phase
iv) Barrier Installation & Removal Plan – Excavation Phase

Appendix C – Substructure Phase CMP Drawings

i) Encroachment Plan – Substructure Phase
ii) Pedestrian Management Plan – Substructure Phase
iii) Traffic Control Plan – Substructure Phase
iv) Barrier Removal Plan – Substructure Phase
v) Services Installation Plan – Substructure Phase
vi) Street Closure Plan – Substructure Phase

Appendix D – Superstructure Phase CMP Drawings

i) Encroachment Plan – Superstructure Phase
ii) Pedestrian Management Plan – Superstructure Phase
iii) Traffic Control Plan – Superstructure Phase
iv) Barrier Installation Plan – Superstructure Phase

Appendix E – Pedestrian Management Plan Rendering

i) Pedestrian Management Plan Rendering – Demolition Phase
ii) Pedestrian Management Plan Rendering – Excavation, Substructure, and Superstructure Phases
iii) Pedestrian Management Plan Rendering – Services Installation

Appendix F – Wayfinding Signage

i) Wayfinding Sign – Demolition Phase – Fourth Street & Seventh Street
ii) Wayfinding Sign – Demolition Phase – Second Street & Seventh Street
iii) Wayfinding Sign – Demolition Phase – First Street & Second Street
iv) Wayfinding Sign – Demolition Phase – First Street & Fourth Street
v) Wayfinding Sign – Demolition Phase – Third Street & Fourth Street
vi) Wayfinding Sign – Demolition Phase – North of Second Street & Third Street
vii) Wayfinding Sign – Excavation, Substructure, & Superstructure Phases – First Street & Second Street
viii) Wayfinding Sign – Excavation, Substructure, & Superstructure Phases – First Street & Fourth Street
ix) Wayfinding Sign – Excavation, Substructure, & Superstructure Phases – Third Street & Fourth Street
x) Wayfinding Sign – Excavation, Substructure, & Superstructure Phases – North of Second Street & Third Street
xi) Wayfinding Sign – Services Installation – First Street & Second Street
xii) Wayfinding Sign – Services Installation – First Street & Fourth Street
xiii) Wayfinding Sign – Services Installation – Third Street & Fourth Street
xiv) Wayfinding Sign – Services Installation – North of Second Street & Third Street

Appendix G – Community Consultation Pamphlet

Appendix H – Development Information Sign

Appendix I – Draft Notification Letter

Appendix J – Community Consultation Meeting Minutes

i) Community Consultation Meeting Minutes Template

ii) Sample Community Consultation Meeting Minutes

Appendix K – Monthly Project Update Letter

Appendix L – Rodent Control Specifications & Templates

i) Weekly Record Log
ii) Monthly Activity Log
iii) Trap Setup Location Photo Library
iv) Contrac Box Specifications
v) Smart Scan Information Pamphlet
vi) Bait Trap Specifications

Appendix M – Construction Management Plan Change Request

Appendix N – Construction Management Plan Inspection Sheet

Appendix O – Tactile Pedestrian Launch Bar Information

Appendix P – Pedestrian Management Plan Rendering & Wayfinding Sign Mounting Information

Appendix Q – Hazard Assessment