OCEAN VISTA – 2215 GOTTINGEN STREET

Construction Management Plan

New Piper Consulting & Engineering Inc.
Rev 2 – November 28, 2022

Original Signed

L.R. McDowell
11170
PROVINCE OF NOVA SCOTIA

This report has been prepared by **Logan McDowell, P.Eng., PMP** in consultation with the developer, project team, and HRM.

Contents

Section 1 – Introduction

Section 1.1 – Project Description and Objectives

EC Gottingen Investments (the Owner) is proposing to develop a twenty-story residential building complete with two levels of underground parking. The property is located in downtown Halifax, bordering sections of Gottingen Street, Prince William Street, and Maitland Street.

The project site is immediately surrounded by mixed-use commercial and residential buildings as well as a former school. This includes a variety of shops and restaurants.

New Piper Consulting and Engineering Inc. (New Piper), together with the Owner and consulting team, 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 the Appendices.

Should any changes be required to any aspect of this CMP, an email and hard-copy of the proposed changes shall be sent to Halifax Regional Municipality (HRM) for review a minimum of ten (10) days prior to their proposed implementation. Changes will only be implemented following approval by HRM. The only departure from this timeframe shall be for unforeseen or unexpected circumstances with a duration of less than twenty-four (24) hours as defined by the Nova Scotia Temporary Workplace Traffic Control Manual.

Section 1.2 – Project Contact Information

The project team for the proposed development consists of:

Owner:
EC Gottingen Investments
65 Strathaven Close, Bedford, Nova Scotia, B4A 4L9
24 Hour Emergency Contact: Elie Chater – (902) 830-7257

Site Contractor:
Dexter Construction
Box 48100, Bedford, Nova Scotia, B4A 3Z2

Traffic Control Services
Titan Traffic Control
1-24 Akerley Boulevard, Dartmouth, Nova Scotia, B3B 1J3
Cheyeanne Chiasson

Section 2 – Construction Schedule and Logistics

Section 2.1 – Schedule

- Phase 1: Excavation December 19, 2022 – June 18, 2023 (6 Months)
- Phase 2: Blasting March 30, 2023 – June 18, 2023 (3 Months)
- Phase 3: Substructure June 18, 2023 – December 17, 2023 (6 Months)
- Phase 4: Superstructure December 18, 2023 – December 22, 2024 (12 Months)

From start to completion, the project will take approximately 2 years.

This CMP calls for a phased implementation. This version of the CMP generally identifies CMP elements to be utilized for Phases 1-3; a future revision of this CMP will include additional items related to Phase 4 and shall be subject to further review and approval by HRM in advance of its implementation.

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

Project Phases 1 – 3 will require encroachments within the HRM right-of-way (ROW) and will remain in place until the completion of Phase 3. These encroachments are necessary for delivery of materials to and from site, concrete operations, and excavation shoring, among other operations. The layby area within Maitland Street shall be the only entry and exit point to the site and shall be set up complete with a minimum of 150 mm of clear stone above the existing curb and sidewalk to protect public infrastructure from construction activities and create a safe and secure work area.

Phase 4 will only require encroachment within the sidewalks adjacent to site, within the layby area along Maitland Street, and for a protected (covered) pedestrian travel way along Gottingen Street; all other work on site during that phase shall be greater than 5 m from the ROW. Extents of Phase 1-3 encroachments are provided in the Encroachment Plan in the Appendix. A Phase 4 Encroachment Plan will be provided in a future revision of this CMP in advance of Phase 4 work.

Work will be required within the ROW during barrier installation and removal and will vary based on the project phase. Barrier installation and removal shall generally be contained within the project's encroachments, although some work will be required within Prince William Street and Maitland Street requiring temporary lane reductions in each case; see the CMP drawings for additional information related to this work. Removal and reinstatement of roadway painting (if any) and installation of pedestrian tactile strips will be carried out immediately following barrier installation and removal activities. Please note that no alterations to vehicular traffic paint lines is anticipated for this project and any pavement marking revisions will be limited to those for pedestrian travel ways (crosswalks). Additional information regarding barrier installation and removal is provided in subsequent sections of this CMP. Anticipated dates for this work are as follows:

- Initial Barrier Installation December 18 2022
- Barrier Removal December 22, 2024

During Phases 1-3, Maitland Street traffic lanes will be reduced to one-way (stop-and-go) traffic to allow for installation of water, sanitary sewer, storm sewer, and electrical services between the building and the public mains. This work is expected to be completed from May 8, 2023 to May 11, 2023. Additionally, during the same time as the above servicing work, the bus lane along Gottingen Street will be briefly closed to accommodate gas servicing from the building to the main; this work will be

completed outside of peak hours to avoid interruption to vehicular traffic along Gottingen Street. See subsequent sections of this CMP for additional information regarding service installation.

During Phases 3 and 4, Maitland Street will be closed to vehicular traffic to facilitate crane delivery, assembly, and disassembly. This work is expected to be completed on January 1, 2024 and December 22, 2024. See subsequent sections of this CMP for additional information regarding street closures. Street closure requests require ten (10) days (minimum) notice prior to their planned implementation and must be approved by HRM prior to implementation.

Section 2.3 – Hours

Hours for construction activities on site will be as follows:

- Monday to Friday 7:00 a.m. – 7:00 p.m.
- Saturdays 7:00 a.m. – 7:00 p.m.
- Sundays, Statutory Holidays, and Remembrance Day 9:00 a.m. – 7:00 p.m.

Construction will be completed during daytime hours to avoid interruptions to local residents in the at night. Construction activities must adhere to all restrictions outlined in the HRM Noise Bylaw (N-200). Work within Gottingen Street will be restricted as per the requirements of the HRM Traffic Control Manual Supplement (HRM TCM). It is particularly noted that Gottingen Street and Cunard Street are both restricted to work within peak hours (although no work is anticipated to be required within Cunard Street). In any case, work within the public right-of-way (ROW) will be limited to those restrictions outlined in the HRM Traffic Control Manual Supplement, Noise Bylaw, Truck Routes Bylaw, and any other restrictions required by HRM.

It is noted that no work related to this project is planned to be completed at night.

Section 2.4 – General Notes

No special rodent control measures are proposed as part of this CMP.

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 weigh approximately 90 kg (200 lb.) to prevent them from being stolen and will be square to prevent them from rolling if toppled. Such signs will be positioned away from, or along the edges of, pedestrian routes to prevent the impedance of pedestrians.

Section 3 – Relevant Regulations and Guidelines

Section 3.1 – Occupational Health and 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 the Act;
b) Nova Scotia Occupational Health and Safety Act and the Nova Scotia Occupational Safety General Regulations made under the Act;

c) The Transportation Association of Canada (TAC) Manual of Uniform Traffic Control Devices for Canada (MUTCDC);
d) Nova Scotia Temporary Workplace Traffic Control Manual (NSTCM).

Section 3.2 – Municipal Regulations and Guidelines

In addition to the Provincial and Federal standards referenced elsewhere in this CMP, this CMP shall be utilized in agreement with and meet, at a minimum, the standards of all relevant municipal bylaws 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

The project is located in a dense urban environment which poses specific risks to vehicular traffic. This CMP identifies vehicular 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 placed as per the NSTCM (latest edition) in accordance with the CMP drawings.

There were no known major nearby construction projects at the time of the preparation of this CMP. Should the project team be made aware of any such project, this CMP will be modified accordingly and approval obtained by HRM prior to implementation of any resulting CMP changes.

Ends of F-type barriers at starts of temporary sidewalks will 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 street closures must be submitted to HRM a minimum of five (5) days prior to their planned implementation for review and approval.

Section 4.1.2 – Vehicular Hazard Management

See the Appendix for vehicular and pedestrian hazard assessment information which validates the Owner's rationale for requiring street encroachments.

Section 4.1.3 – Traffic Control Plan Preparation and Monitoring

Separate Traffic Control Plans (TCP's) have been, and will be, prepared as required for the anticipated project work. This includes general work (Phases 1-3 and Phase 4) as well as servicing and barrier installation work, among other versions as required. These TCP's will be in accordance with the standards identified in the TAC Manual of Uniform Traffic Control Devices, the NSTIR (now NSDPW) Temporary Workplace Traffic Control Manual, and the HRM TCM.

All TCP's will be prepared by the Traffic Control Services provider under the direction of a Temporary Workplace Signer (TWS). All TCP's will illustrate 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 TCP's will be provided in subsequent revisions of this CMP.

Section 4.1.4 – Notifications of Traffic Closures

The Contractor shall notify HRM and the public of proposed traffic closures as outlined in subsequent sections of this CMP. In all cases, notification will be distributed a minimum of five (5) days in advance of closure to the impacted area in accordance with Section 29 of AO15.

Section 4.1.5 – Traffic Control Element Inspection and Maintenance

All TCP's will be implemented and monitored by the Traffic Control Services provider and its team of certified Traffic Control Persons (as recognized by the Nova Scotia Department of Public Works). Construction warning signage will be displayed throughout the approaches to, and adjacent to, the project site in accordance with the NSTCM. The Traffic Control Services provider 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 TCP's are effectively and correctly implemented. See the Appendix for a sample construction management plan inspection sheet to be completed by both the Traffic Control Services provider and the Contractor.

Section 4.1.6 – Changes to Traffic Control Plans

Requests for modifications to TCP's will be sent to HRM for approval including those that may be required to accommodate unforeseen events and obtain approval prior to 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. No hydrants exist within the proposed enclosures or immediately adjacent to the project site and will, therefore, not be impacted by construction activities.

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

Section 4.1.8 – Traffic Control Plans and Haul Route Plan

Traffic Control Plans and the Haul Route Plan are provided in the Appendix of this CMP. Any additional plans, if required, will be included in a future revision of this document.

The owner and project team acknowledge that Gottingen Street is an integral corridor for public transit as well as commuters (pedestrian and vehicular traffic) and, as such, the project team will make all reasonable efforts to limit disruptions within Gottingen Street.

Section 4.1.8.1 – Phase 1-3 Traffic Control

A Phase 1-3 general Traffic Control Plan is included in the Appendix of this CMP. During Phases 1-3, the project site will be separated from the public by F-type barriers, rigid fencing, and opaque hoarding as described elsewhere in this CMP.

Throughout all project phases, Gottingen Street vehicular and bus travel lane widths will remain unaffected along the entire length of the construction in accordance with the TCP. Furthermore, Gottingen Street will remain open to all existing traffic lanes (lanes in each direction plus a bus lane on the northeast side of Gottingen Street).

During Phases 1-3, Prince William Street will be reduced to 3.0 m travel lanes in each direction and "No Stopping" signs will be erected along both sides of the street. Traffic will be maintained in each direction. This encroachment into Prince William Street is required to maintain safe distances from the excavation. During Phase 4 work, this encroachment will be reduced to the back of the curb such that the vehicular travel lanes are not affected.

With the approval of HRM Development and Traffic Authorities, a section of Maitland Street will be closed to traffic to facilitate loading and deliveries. This fenced compound will allow for two 3.0 m 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. Lane widths will be 3.0 m in each direction and "No Stopping" signs will be erected along both sides of the street immediately adjacent to the project site and elsewhere in accordance with the TCP.

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

A Traffic Control Plan provided in the Appendix will allow for the installation of barriers around the project site. During barrier installation, Gottingen Street will remain open. Prince William Street and Maitland Street will be reduced to one lane (a minimum of 3.0 m wide) to facilitate the installation of F-type barriers adjacent to the project site. Lane closures will be delineated using temporary workplace signage. This Traffic Control Plan will also allow for Phase 1-3 barrier removal, transitioning encroachments from those in Phases 1-3 to reduced encroachments of Phase 4.

Immediately after barrier installation along Gottingen Street has been completed (outside of peak hours), portions of Gottingen Street will be closed to allow for existing paint lines to be removed and temporary pavement markings to be painted; a Traffic Control Plan for this scenario is provided in the Appendix. Temporary traffic modifications will be delineated using temporary workplace signage. As noted above, special Traffic Control Plans will also be utilized immediately prior to Phase 1-3 barrier removal to allow for the removal of temporary pavement markings and reestablishment of pre-existing paint lines. Refer to the CMP drawings for additional information related to this.

Lanes will be required to be closed for future services installation as well (for installation of water, sanitary sewer, and storm sewer services within the ROW). During services installation, portions of the Maitland Street right-of-way will be shut down. See the Traffic Control Plans in the Appendix for additional information related to this.

The Traffic Control Plan in the Appendix of this CMP will allow for the transition of the site from its Phase 1-3 encroachments to its Phase 4 encroachments (Phase 1-3 barrier removal). During Phase 1-3 barrier removal, all roadway encroachment barriers except those adjacent to the layby area along Maitland Street will be removed. Encroachments will remain in place along Prince William Street sidewalks (closed) and within Gottingen Street sidewalks (temporary covered walkway) adjacent to the project site. The Gottingen Street bus lane will be temporarily closed; this work will be completed outside of peak hours to avoid unnecessary impacts to the public. Prince William Street will be reduced to one lane (a minimum of 3.0 m wide) to facilitate the removal of F-type barriers adjacent to the project. Lane closures will be delineated using temporary workplace signage. Additinoal information related to the transition from Phases 1-3 to Phase 4 will be provided in a subsequent revision of this CMP and will be reviewed and approved by HRM in advance of the proposed work.

As noted above, Gottingen Street will be partially closed at the transition between Phases 1-3 and Phase 4 to allow for preexisting crosswalk paint to be reinstated and temporary crosswalks to be removed. Additional information related to this transition between phases will be provided in a subsequent revision of this CMP. In any case, street closures will be delineated using temporary workplace signage.

Section 4.1.8.2 – Phase 4 Traffic Control

A Phase 4 Traffic Control Plan will be provided in the Appendix of a future revision of this CMP. During Phase 4, Gottingen Street and Prince William Street will reopen as per their pre-construction configurations. Maitland Street will retain the layby area noted elsewhere in this CMP and will remain reduced to two 3.0 m wide vehicular travel ways (one in each direction) with “No Stopping” signs in place adjacent to the project site.

A Phase 4 Barrier Removal Plan will be provided in the Appendix of a future revision of this CMP. During Phase 4 Barrier Removal, all remaining encroachment barriers (those along Maitland Street) will be removed. Maitland Street will be reduced to one lane (a minimum of 3.0 m wide) to facilitate the installation of F-type barriers adjacent to the project site. Lane closures will be delineated using temporary workplace signage.

Section 4.1.9 – Haul Route

The Haul Route Plan (HRP) provided in the Appendix of this CMP 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 TCM. 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 Robie Street, Cunard Street, Gottingen Street, Prince William Street, Maitland Street, Cornwallis Street, and North Park Street.

Section 4.1.10 – Parking

No metered parking spaces exist in the vicinity of the work. Therefore, no metered parking spaces will be removed to accommodate this project.

No parking spaces (metered or unmetered) currently exist along Gottingen Street in the vicinity of the work. Therefore, no metered or unmetered parking spaces will be removed along Gottingen Street to accommodate this project.

During Phases 1-3, an encroachment will be required within the Prince William Street right-of-way. There are no current metered parking spaces or full-time parking spaces along Prince William Street within the vicinity of the work. Therefore, no full-time parking spaces will be removed along Prince William Street to accommodate this project. There are, however, three (3) one-hour parking spaces (1 Hr 8AM-4PM MON-FRI) and one (1) accessible parking space (ACCESSIBLE PARKING BY PERMIT ONLY 3 Hr) which will be removed during these project phases to accommodate construction activities.

Due to the proposed encroachment into Prince William Street, during Phases 1-3, the existing accessible parking space located within Prince William Street will be relocated to a location on the northeast side of Cunard Street immediately adjacent to Gottingen Street. A new accessible parking sign will be located on a square concrete base. Refer to the CMP drawings in the Appendix for additional information.

Throughout all project phases, an encroachment will be required within the Maitland Street right-of-way. There are no current metered parking spaces along Maitland Street within the vicinity of the work. There are three (3) unmetered parking spaces (2 Hr 8AM-PM MON-FRI) along the southwest side of Maitland Street and twelve (12) unmetered parking spaces (2 Hr 8AM-PM MON-FRI) along the northeast side of Maitland Street (all southeast of the Prince William Street intersection). There are also three (3) unmetered parking spaces (NO PARKING EXCEPT BY PERMIT 8AM-4PM MON-FRI) along the northeast side of Maitland Street (northwest of the Prince William Street intersection). These encroachments will be required to allow for the construction and delivery layby area to be located within Maitland Street immediately adjacent to the project property and to all vehicular maneuvering through Maitland Street during this time.

Section 4.1.10.1 – Parking Stall Removal

Only the parking stalls noted in the above sections will be removed as part of this project. No metered parking stalls will be removed for this project.

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 project team has proposed to coordinate this at the Mumford Road Bus Terminal. Once the parkade has been constructed, some on-site workers will park in the parkade.

Section 4.1.10.3 – Out-of-Service Parking Meter Fees

No metered parking stalls will be affected by project activities throughout any work phase. As such, no reimbursement will be required by the developer to the Municipality for out-of-service parking meters.

Section 4.1.10.4 – Temporary Parking

Due to the limited reduction of on-street parking, no additional temporary parking considerations have been made in support of this project.

The developer is not requesting additional temporary street parking at this time.

Section 4.1.10.5 – Net Parking Loss

During Phases 1-3, there will be net parking loss as follows:

Gottingen Street:

- **No change**

Prince William Street:

- one (1) accessible parking space along Prince William Street (temporarily relocated)
- three (3) limited access parking spaces
- **four (4) parking spaces total (permanent and limited access)**

Maitland Street:

- eighteen (18) limited access parking spaces
- **eighteen (18) parking spaces total (permanent and limited access)**

TOTAL:

- one (1) accessible parking space along Prince William Street (temporarily relocated)
- twenty-two (22) limited access parking spaces
- **twenty-three (23) parking spaces total (permanent and limited access)**

During Phase 4, there will be net parking loss as follows:

Gottingen Street:

- **No change**

Prince William Street:

- **No change**

Maitland Street:

- eighteen (18) limited access parking spaces
- **eighteen (18) parking spaces total (permanent and limited access)**

TOTAL:

- eighteen (18) limited access parking spaces
- **eighteen (18) parking spaces total (permanent and limited access)**

Section 4.1.10.6 – Parking Signage

Existing parking signage that is affected by this project will be covered for the duration of the time they are placed out of service and will be reinstated when they are placed back into service.

Section 4.1.10.7 – Parking Within Encroachment Areas

Encroachment areas are intended for use as loading areas and for construction activities. On-site workers will not be permitted to park within encroachment areas.

Section 4.2 – Pedestrian Management

Pedestrian management will be of foremost consideration throughout this project. The Traffic Services Provided will prepare Pedestrian Management Plans (PMPs) to assist pedestrians in navigating their way through around this site. These plans will be shown in the Appendix of a future revision of this CMP. No special Pedestrian Management Plan Renderings (PMPRs) are planned for this project.

Construction is not planned to take place on any neighbouring properties as part of this project. Additionally, the project team is unaware of any significant projects occurring nearby which would need to be planned for in coordination with this work.

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 weigh approximately 90 kg (200 lb) to prevent them from being stolen and will be square to prevent them from rolling if toppled. The will be positioned away from, or along the edges of, pedestrian routes to prevent impedance of pedestrians. Additional information related to these items is provided in subsequent sections of this report.

Section 4.2.1 – Bus Stop Relocation

No bus stops will be relocated in support of this project.

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 which must be received prior to proceeding.

Section 4.2.3 – Pedestrian Hazard Assessment

See the Appendix for pedestrian hazard assessment information which validates the developer's rationale for requiring street encroachments and temporary sidewalks.

Section 4.2.4 – Pedestrian Management Plan Preparation and Monitoring

Separate Pedestrian Management Plans (PMPs) will be prepared for this project as required to reflect the specific needs of each individual project phase. PMPs shall be prepared by a temporary workplace signer (TWS). All PMPs shall 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 are provided in subsequent sections of this report and the Appendix; PMPs will be provided in a future revision of this CMP.

Section 4.2.5 – Notifications of Pedestrian Closures

The contractor shall notify HRM and the public of proposed pedestrian closures as outlined in subsequent sections of this report.

Section 4.2.6 – Pedestrian Management Plan Compliance

All PMPs will be implemented and monitored by the contractor. Construction warning signage will be displayed throughout the approaches to, and adjacent to, the project site. The contractor 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 the Appendix for a sample construction management plan element inspection sheet to be completed by both the traffic control company 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 and approval shall be received prior to proceeding.

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) will be prepared by a certified temporary workplace signer (TWS). Separate PMPs will be prepared as required for each project phase (these will be included in the Appendix of a future revision of this CMP). The Pedestrian Management Plans will illustrate 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 – Phase 1-3 Pedestrian Management Plan

Phases 1-3 involve excavation, blasting, and substructure activities. 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 closed and that alternative pedestrian routes be established using pedestrian signage directing pedestrians around Gottingen Street, Prince William Street, and Maitland Street. Temporary crosswalks will be painted northwest of the intersection of Gottingen Street and Prince William Street (crossing Gottingen Street) and southeast of the intersection of Gottingen Street and Cunard Street (crossing Gottingen Street) while an existing crosswalk northwest of the intersection of Gottingen Street and Cunard Street (crossing Gottingen Street) will be grinded off and signage covered for the duration of Phases 1-3 (see CMP drawings in the Appendix for additional information related to this).

A 1.8 m (minimum) high rigid fence will separate the project site from public property. Gates at the ends of the Maitland Street layby area will provide work vehicle and personnel access to the site. These gates will be identified using signage mounted on the gates themselves.

During blasting, solid plywood hoarding will be mounted on the section of 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.).

Barrier installation and removal information is provided elsewhere in this CMP. During barrier installation along Prince William Street, portions of Prince William Street will be closed to vehicular traffic. Likewise, during barrier installation along Maitland Street, portions of Maitland Street will be closed to vehicular traffic. Separate traffic control signage will be utilized by the traffic control company during this work. During barrier installation along Gottingen Street, Gottingen Street vehicular traffic will be unaffected; barriers in this area will be installed from within the encroachment and project area.

Section 4.2.8.2 – Phase 4 Pedestrian Management Plan

Phase 4 will involve superstructure construction activities above existing grade. 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 alternative pedestrian routes be established using pedestrian signage directing pedestrians around Gottingen Street, Prince William Street, and Maitland Street. However, for this phase, the developer proposes to construct a temporary

pedestrian route complete with overhead protection along Gottingen Street adjacent to the project site; this overhead protection will be provided via scaffolding which will be designed and certified by a Professional Engineer (P.Eng.). This scaffolding will be located along the existing Gottingen Street sidewalk and will be illuminated at all times.

A 1.8 m (minimum) high rigid fence will separate the project site from public property. Gates at the ends of the Maitland Street layby area will continue to provide work vehicle and personnel access to the site and will be identified using signage mounted on the gates themselves.

During the removal of barriers at the project's conclusion, the Traffic Control Plan in the Appendix of this CMP will be utilized.

Additional information related to Phase 4 CMP elements will be provided in a subsequent CMP revision.

Section 4.2.9 – Pre-Project Hazard Assessment

See the Appendix for vehicular and pedestrian hazard assessment information which validates the developer'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. The project team 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 the 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 shall be planned for in the preparation of all PMPs, as well as the Encroachment Plans (see Appendix) 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 (in areas where they are not already installed). 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 person 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 tactile pedestrian launch bars and to remove and reinstall them as necessary to ensure their continued functionality. Details regarding tactile pedestrian launch bars are provided in the Appendix.

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" (or similar text) 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.

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 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 "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 with 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 generally be rigidly connected to F-type barriers because the extents of encroachment generally border vehicular travel ways. In other areas, fencing will be rigidly fixed into the surfaces of out-of-service concrete curbs or sidewalks. It is the contractor's responsibility to ensure the fencing's 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.

Section 5.1.3 – Translucent Mesh

At vehicular traffic intersections within 2 m of the public right-of-way, rigid fencing will be covered with a translucent mesh, a minimum of 1.8 m high, to help control dust and minimize noise while maintaining visibility. See the CMP drawings in the Appendix for locations of translucent mesh.

Section 5.1.4 – Hoarding

Within 2 m of the public right-of-way, solid (opaque) hoarding will be mounted on F-type concrete barriers and rigid fencing (to a minimum height of 1.8 m) except for areas immediately adjacent to vehicular traffic intersections which will be covered with translucent meshto maintain visibility.

During blasting, solid plywood hoarding will be utilized in all affected areas; it shall 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.

See the CMP drawings in the Appendix for locations of solid (opaque) hoarding.

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.

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.

In areas adjacent to intersections, solid hoarding will note be included; instead, rigid fencing complete with translucent dust control mesh shall be utilized to maintain visibility. Refer to the CMP drawings in (see Appendix) for further information related to these locations.

In all cases, ample visibility will be maintained throughout all phases of the project.

Section 5.1.8 – Emergency Access and Egress

Along Maitland 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 restrict emergency response units from accessing the site. In addition, the entrance gates will be designated "Entrance Gate" (northwest end of Maitland Street encroachment) and "Exit Gate" (southeast end of Maitland Street encroachment).

No existing fire hydrants will be blocked in relation to this project. All existing fire hydrants 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 the solid hoarding adjacent to Gottingen Street 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).

It is also noted that all existing trees and planter boxes located within Gottingen Street are to remain and shall be protected by the contractor from construction-related activities.

Section 5.2 – Site Protection Aesthetics

Throughout all project phases, 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 – Pedestrian Management Plan Renderings

The pedestrian management plans for this project will have relatively low impacts on pedestrian travel in the areas around the project site and the developer is committed to using clear and accurate signage and protections to effectively help pedestrians navigate around the project site. As such, special Pedestrian Management Plan Renderings (PMPRs) have not been provided for this project.

Section 5.3.2 – Pedestrian Detour Wayfinding

As noted above, the pedestrian management plans for this project will have relatively low impacts on pedestrian travel in the areas around the project site and the developer is committed to using clear and accurate signage and protections to effectively help pedestrians navigate around the project site. As such, special Pedestrian Detour Wayfinding signage has not been provided for this project.

Section 6 – Lifting, Hoisting, and Crane Operations

Section 6.1 – Navigation Canada and Transport Canada Regulatory Approvals

The project will require a tower crane for construction activities. The developer is in currently in the process of retaining contractors to carry out formwork and crane activities for this site. This CMP will be updated upon the selection and consultation with the crane and formwork contractors. A Crane Plan has been provided in the Appendix of this CMP.

Upon the selection of the above-noted contractors, the project team will review crane locations and heights relative to local flight paths and will confirm that the crane is outside of such flight paths. However, at the time of the preparation of this CMP, the project is outside of relevant flight path boundaries. Therefore, Transport Canada approval is not required and Nav Canada does not require notification. However, upon the selection of formwork and crane contractors, the project team will obtain 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 Maitland Street. These components will be assembled within the project site using site equipment. Maitland Street will be shut down during this installation (and during disassembly)

as per the Maitland Street Closure Plan (which will be included in the Appendix of a future revision of this CMP).

Section 6.2 – Operations Above the Public Realm

Temporary sidewalks and street encroachments will be utilized for this project such that, during crane lifting operations, loads are never suspended over the public realm. Upon the selection of a crane contractor, the owner will pursue written approval from relevant neighbouring properties to allow the crane to sway over their properties during crane installation and operation. 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 inspections 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 and Agrees Gates

Signs identifying “Entrance Gate” and “Exit Gate” will be prominently posted. 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 and 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 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 elsewhere in this report. See the Appendix 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 other sections of this report) in the immediate vicinity of such work. 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.

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 courses include faulty wiring, hot surfaces and motors, welding, grinding, 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

Throughout all project phases, developer and contractor emergency contact information will be prominently posted along construction hoarding.

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 on a neighbouring property with the written consent of that property owner or their representative.

Section 7.1.10 – Fire Suppression System

Once the 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. 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, and Vehicle Staging

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

No portions of Gottingen Street, Prince William Street, or Maitland Street in the vicinity of the proposed work, or that make up portions of the haul route, are peak hour restricted. However, deliveries will generally be scheduled between 9:00 a.m. and 4:00 p.m. to help 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 and the public. Particular efforts will be made to prevent dust and other materials from becoming airborne during high wind events.

See the Appendix for vehicular and pedestrian hazard assessment information.

Section 7.3 – Environmental Controls

Section 7.3.1 – Street and Right-of-Way Cleaning

The contractor will utilize a street cleaner to regularly 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 any 1.5 m wide temporary sidewalks free and clear of snow, ice, and debris. The contractor will also be responsible to remove snow on the street side of the F-type concrete barriers and fences within the right-of0way 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 Nova Scotia Environment Erosion and 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. Construction activities for this project will not cause negative impacts to stormwater management systems or affect drainage paths.

To achieve the above stormwater management objectives, the contractor will install and maintain sediment traps in all catch basins directly adjacent to the project site. If necessary for dewatering, the contractor will obtain written approval from Halifax Water to create a temporary sediment pond during the excavation phase of this project; however, such a settling pond is not anticipated to be required at this time.

Note that stormwater management plan elements for this project have been prepared by others. The stormwater management plan identifies surface drainage patterns, catch basin locations, and other elements relevant to stormwater management on site.

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 prior sections of this report.

Section 7.3.4 – Dust Pollution

As outlined in other sections 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 noted above, 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 be regularly 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.
5. The upper levels of the new building will be regularly swept clean and materials secured to prevent 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 areas.

Section 7.3.6 – Rodent Control

Rodent movement generally increases during construction activities. However, since the project site is currently vacant (no structures on site), rodent activity related to the project work is not expected to

increase. As such, the developer has not engaged with a rodent specialist and has not created a specific Rodent Control Plan. However, should rodent activities require additional action, the developer will act upon complaints received from neighbouring properties and/or direction received from the Municipality to do so.

Section 7.3.7 – Light Pollution

Subject to approval by HRM Right-of-Way Services, 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 towards the property.

Section 8 – Community Engagement and Notification

Section 8.1 – Pre-CMP Community Engagement

The owner has been in contact with neighbours over the past year to discuss the proposed work. Due to the limited scale of public impacts (minimal changes to pedestrian and vehicular travel routes and parking), no formal public consultation meetings have taken place, nor are any currently planned, for this development.

Notification will be provided to all neighbours within a 200 m radius of the project site to inform them that they may sign up for a monthly construction project notification for this development.

Section 8.2 – Scheduled Community Notifications

As noted above, 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 be distributed either via hand-delivery or email (based on the respondent's preference). These notification letters will include:

1. The date the letter is sent.
2. The development name and owner and contractor contact information.
3. Brief updates on project progress.
4. Brief updates on expected upcoming construction activities that may affect the community.
5. Specific details of any work to be completed within the right-of-way that is to occur outside of the approved encroachment that may result in additional traffic control measures or closures.
6. 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, community consultation meetings, etc.) as required by community members. A sample monthly project letter is provided in the Appendix.

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

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 the Appendix.

Section 9 – Permit and 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, utility companies, and representatives from neighbouring properties.

The owner also acknowledges that additional right-of-way (ROW) permits may be required by HRM in support of this project; such any such permits be required, they will be obtained further to this CMP.

Section 10 – Regulation and Enforcement

Section 10.1 – Inspection and Monitoring

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

As outlined elsewhere in this report, any changes to the CMP must be sent to HRM for review 10 days (minimum) prior to their proposes implementation. Changes may only be implemented following HRM approval.

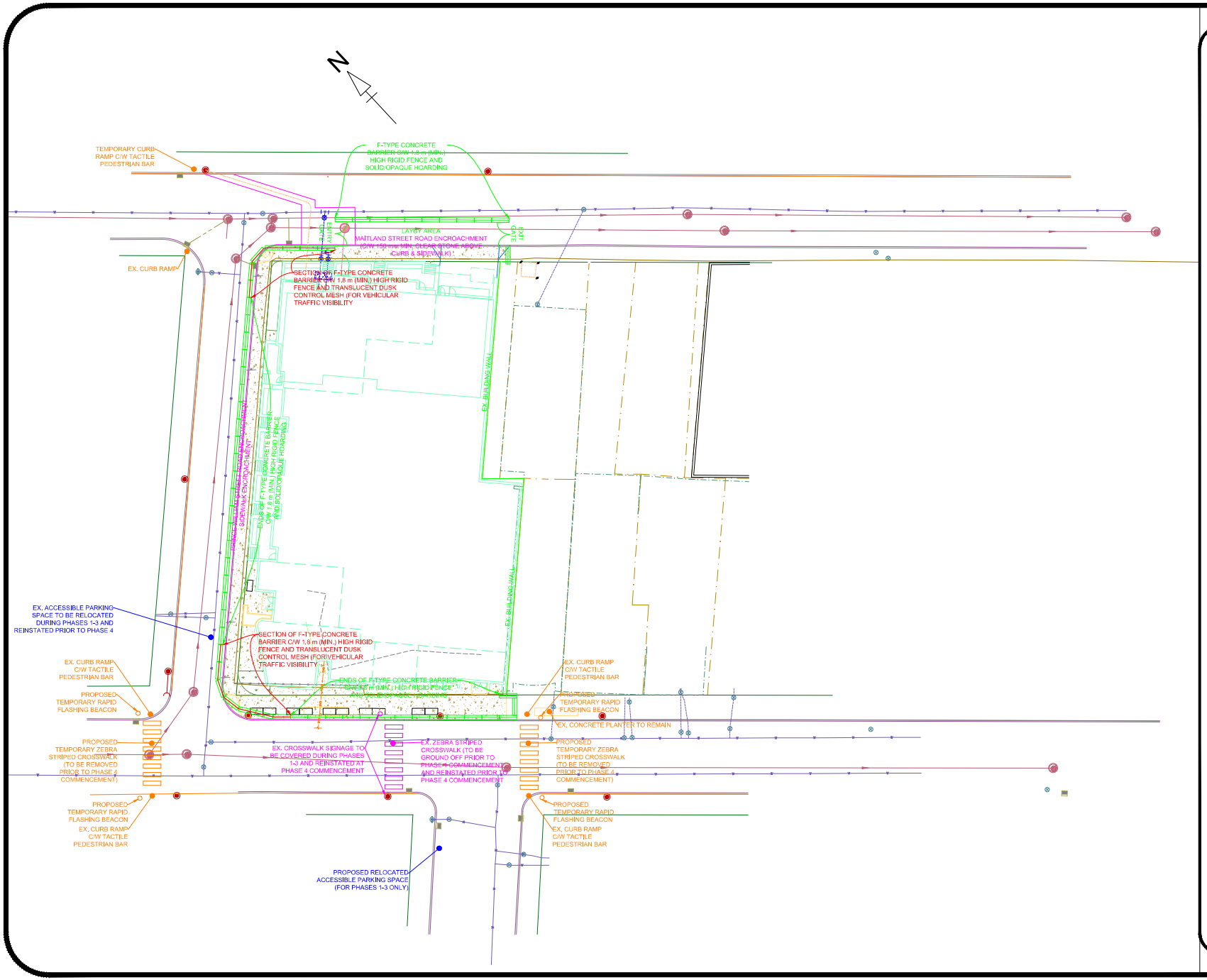
Section 11 – Summary

This CMP has been prepared with the goal to minimize negative impacts to the community, pedestrians, and vehicular traffic throughout the 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 and as approved by HRM.

Should you have any questions or comments related to this document or construction-related inquiries, please contact the owner, contractor, or traffic control service provider.

APPENDIX

Appendix A – CMP Drawings



General Notes

GENERAL:

1. THIS PLAN IS FOR APPROVAL PURPOSES ONLY (NOT FOR CONSTRUCTION OR ANY OTHER PURPOSES NOT EXPRESSLY INDICATED HEREIN). CONTACT NEW PIPER FOR ANY DISCUSSION RELATED TO ITEMS SHOWN HEREIN.
2. NEW PIPER SHALL NOT BE RESPONSIBLE FOR SURVEY LAYOUT, CONSTRUCTION ADMINISTRATION, AS-BUILT SURVEYS, OR RECORD DRAWINGS FOR THIS PROJECT.
3. PROPERTY BOUNDARIES & SURVEY INFORMATION SHOWN ARE BASED ON INFORMATION PROVIDED BY OTHERS. NEW PIPER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THESE OR OTHER ITEMS COLLECTED AND PROVIDED BY OTHERS.
4. LOCATIONS OF FEATURES (SERVICES, SITE FINISHES, ETC.) NOTED ARE FOR INFORMATION PURPOSES ONLY AND ARE SUBJECT TO FINAL DESIGN AND APPROVAL AS WELL AS CONFIRMATION IN THE FIELD DURING CONSTRUCTION.
5. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL RELEVANT LOCAL STANDARDS. SHOULD THE CONTRACTOR OR OTHERS FIND ANY DISCREPANCIES BETWEEN THIS DRAWING AND RELEVANT REGULATIONS, THEY MUST NOTIFY NEW PIPER IMMEDIATELY AND OBTAIN DIRECTION PRIOR TO PROCEEDING.
6. NEW PIPER IS NOT RESPONSIBLE FOR ANY REWORK, WORK RELATED TO REVISIONS REQUIRED TO THIS DRAWING, OR ANY OTHER COST INCREASES THAT MAY ARISE FROM CONDITIONS BEING DISCOVERED WHICH VARY FROM THOSE IDENTIFIED DURING THE PROJECT PLANNING PROCESS.
7. ALL UNITS SHOWN ARE IN METRIC.
8. SEE THE RELATED CMP REPORT FOR ADDITIONAL INFORMATION RELATED TO CONSTRUCTION MANAGEMENT REQUIREMENTS.

ENCROACHMENT SUMMARY:

SIDEWALK ENCROACHMENTS:
341 m^2 TOTAL

ROAD ENCROACHMENTS:
123 m^2 PRINCE WILLIAM STREET
\+ 154 m^2 MAITLAND STREET
= **277 m^2 TOTAL**

No.	Revision/Issue	Date
2	REDUCED ENCROACHMENTS	NOV.28, 2022
1	REVISED PER HRM COMMENTS	SEP.28, 2022

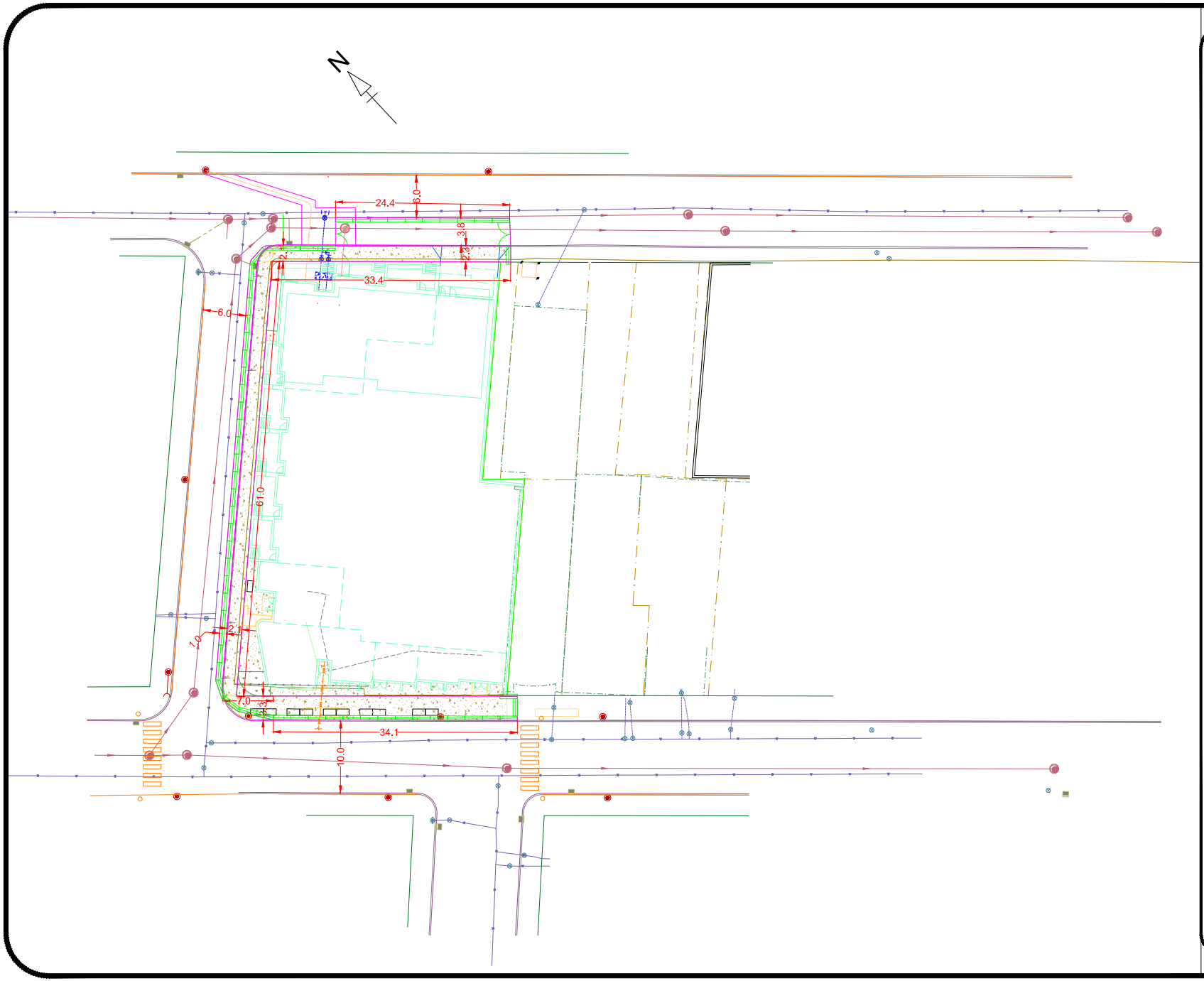
Firm Name and Address

NEW PIPER
CONSULTING & ENGINEERING INC.

Project Name and Address

OCEAN VISTA
2215 GOTTINGEN STREET
HALIFAX, NS
B3K 3B5

Project	OCEAN VISTA
Date	AUG.12, 2022
Scale	As Noted
Sheet	CMP1 SITE PLAN



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7. ALL UNITS SHOWN ARE IN METRIC.
8. SEE THE RELATED CMP REPORT FOR ADDITIONAL INFORMATION RELATED TO CONSTRUCTION MANAGEMENT REQUIREMENTS.

ENCROACHMENT SUMMARY:

SIDEWALK ENCROACHMENTS:
337 m² TOTAL

ROAD ENCROACHMENTS:
61 m² PRINCE WILLIAM STREET
\+ 96 m² MAITLAND STREET
= **157 m² TOTAL**

No.	Revision/Issue	Date
2	REDUCED ENCROACHMENTS	NOV.28, 2022
1	REVISED PER HRM COMMENTS	SEP.28, 2022

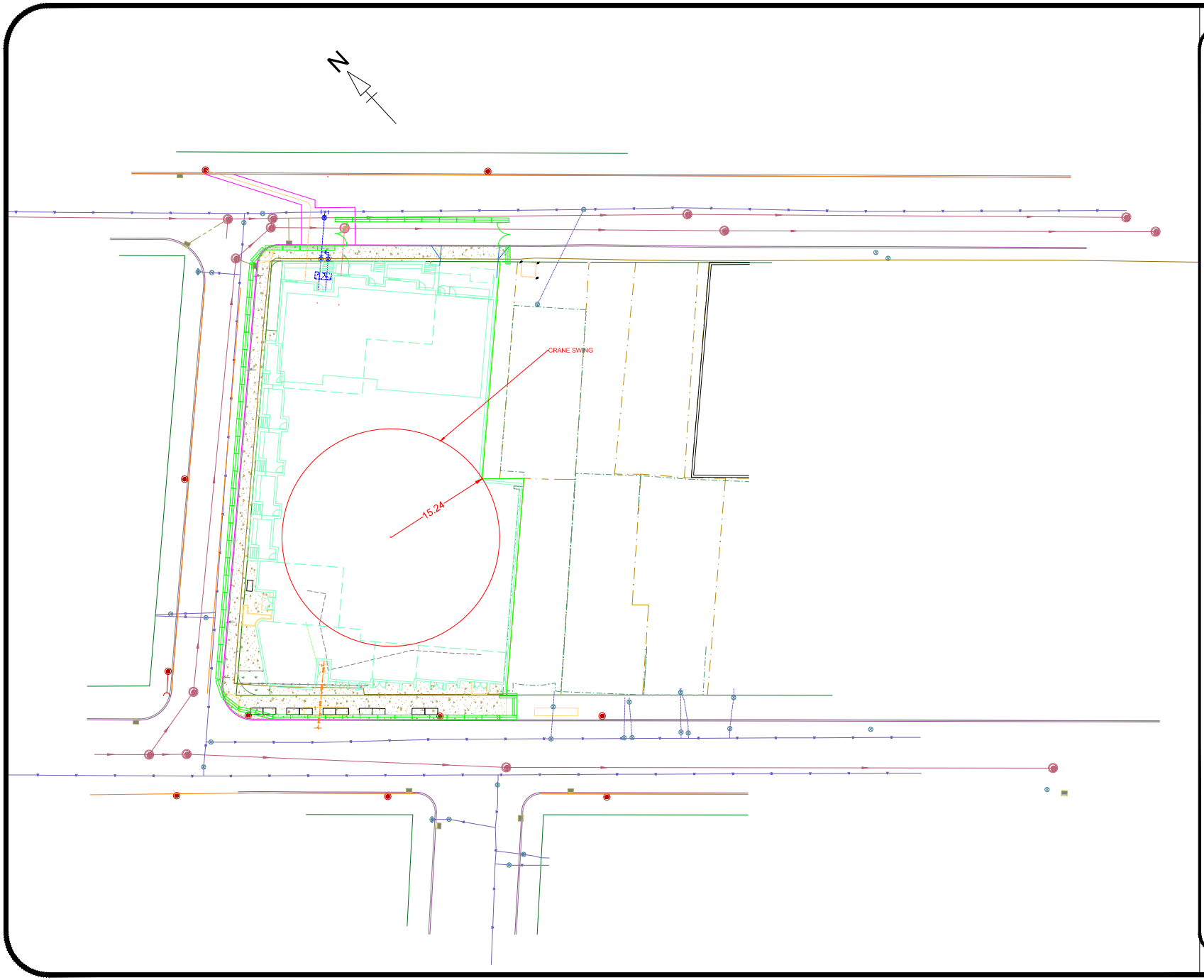
Firm Name and Address

NEW PIPER
CONSULTING & ENGINEERING INC.

Project Name and Address

OCEAN VISTA
2215 GOTTINGEN STREET
HALIFAX, NS
B3K 3B5

Project: OCEAN VISTA	Sheet: CMP2
Date: AUG.12, 2022	ENCROACHMENT PLAN
Scale: As Noted	



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8. SEE THE RELATED CMP REPORT FOR ADDITIONAL INFORMATION RELATED TO CONSTRUCTION MANAGEMENT REQUIREMENTS.

CRANE REQUIREMENTS:

9. THE CRANE WILL BE LOCATED WITHIN THE COURTYARD OF THE PROPOSED BUILDING.
10. THE CRANE WILL HAVE A TOTAL SWING DIMENSION OF 15.24 m (50') AS NOTED.
11. CRANE ACTIVITIES SHALL BE CONTAINED WITHIN THE PROJECT PROPERTY. IF FOR ANY REASON THE SWING MUST EXTEND OVER PRIVATE PROPERTY THE OWNER SHALL OBTAIN PERMISSION FROM THE ADJACENT PROPERTY OWNER IN WRITING. IF THE SWING REQUIRES TO UTILIZE PORTIONS OF HRM PROPERTY (I.E. THE HRM RIGHT-OF-WAY), A SEPARATE ENCROACHMENT SHALL BE APPLIED FOR AND OBTAINED BY THE OWNER PRIOR TO ITS USAGE AND COMMENCEMENT OF CONSTRUCTION.

No.	Revision/Issue	Date
2	REDUCED ENCROACHMENTS	NOV.28, 2022
1	REVISED PER HRM COMMENTS	SEP.28, 2022

Firm Name and Address

NEW PIPER
CONSULTING & ENGINEERING INC.

Project Name and Address

OCEAN VISTA
2215 GOTTINGEN STREET
HALIFAX, NS
B3K 3B5

Project: OCEAN VISTA	Sheet: CMP3
Date: AUG.12, 2022	CRANE PLAN
Scale: As Noted	


Haul Route Plan
N.T.S.
CMP4
PRINCE WILLIAM STREET
GOTTINGEN STREET
CUNARD STREET
MAITLAND STREET
ROBIE STREET
CUNARD STREET
NORTH PARK STREET
CORNWALLIS STREET
Gottingen St
Creighton St
Maynard St
Agricola St
John St
Davison St
Brunswick St
Barrington St
Bauer St
Cogswell St
Robie St
Cunard St
Novo Wallis St
Google Earth
Image Landsat / Copernicus
1000 ft
N

TITAN TRAFFIC

Date: 2022-11-29 **Author:** Harris Purvis Tws At Titan Traffic Ticket # 0016624 **Project:** prince William St Job

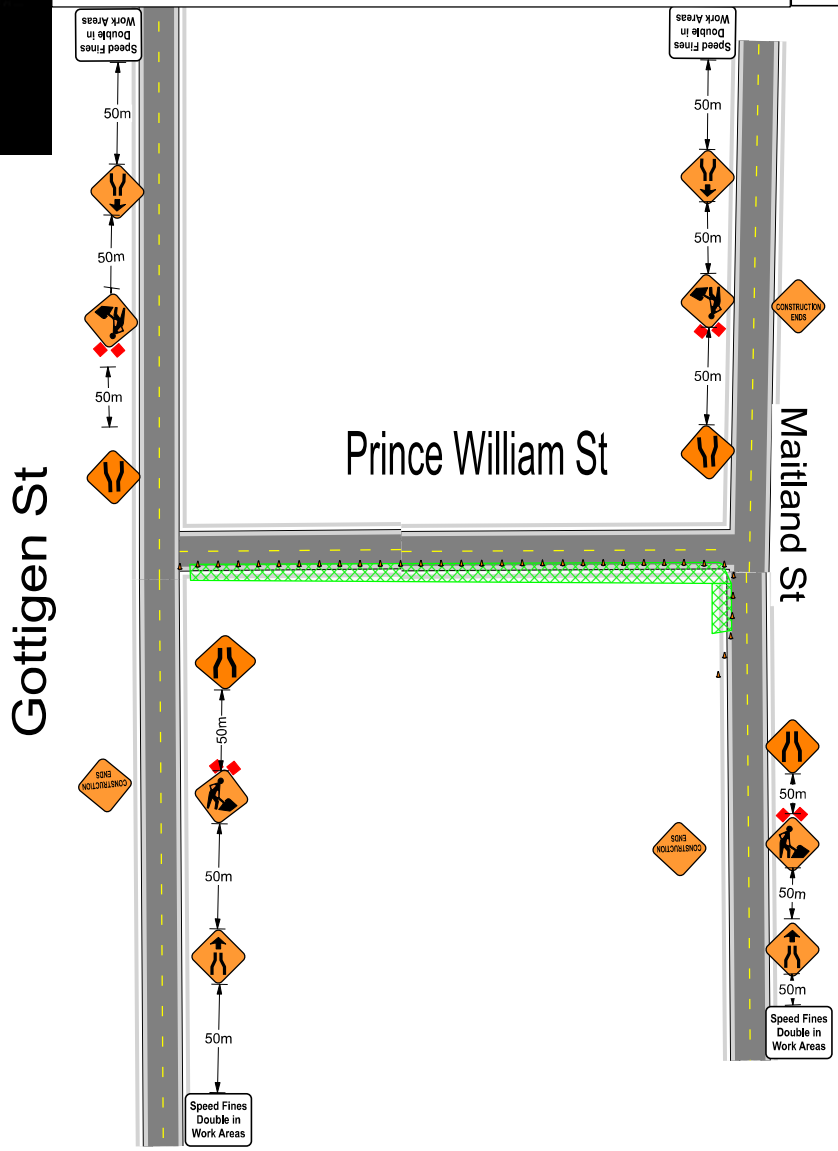
Comments:

Application Guides B2 & C101
Speed Limit 50km
Sign Procedure 13.5.14
Delineator Procedure 13.5.18

Manifest

34 x	Cone
4 x	TC-171 TC-171(NS) Speed Fines Double in Work Areas
4 x	TC-2 TC-2
4 x	TC-34 TC-34
4 x	TC-34A (NS) TC-34A
3 x	TC-4 TC-4

CMP 5.1
TRAFFIC CONTROL PLAN
(GENERAL WORK)
N.T.S.



CMP 5.2
BARRIER INSTALLATION, SERVICING, AND LINE PAINTING PLAN
N.T.S.

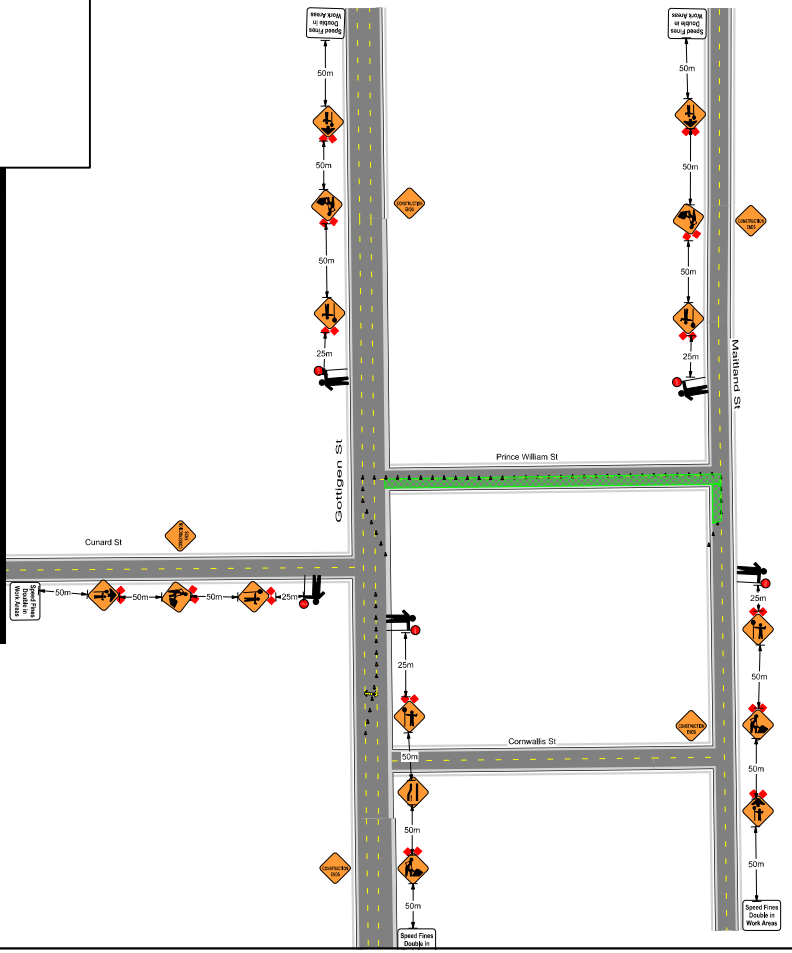
Date: 2022-11-30 **Author:** Harris Purvis Tws Titan Traffic Ticket # 0016624 **Project:** Prince William St Job

Comments:

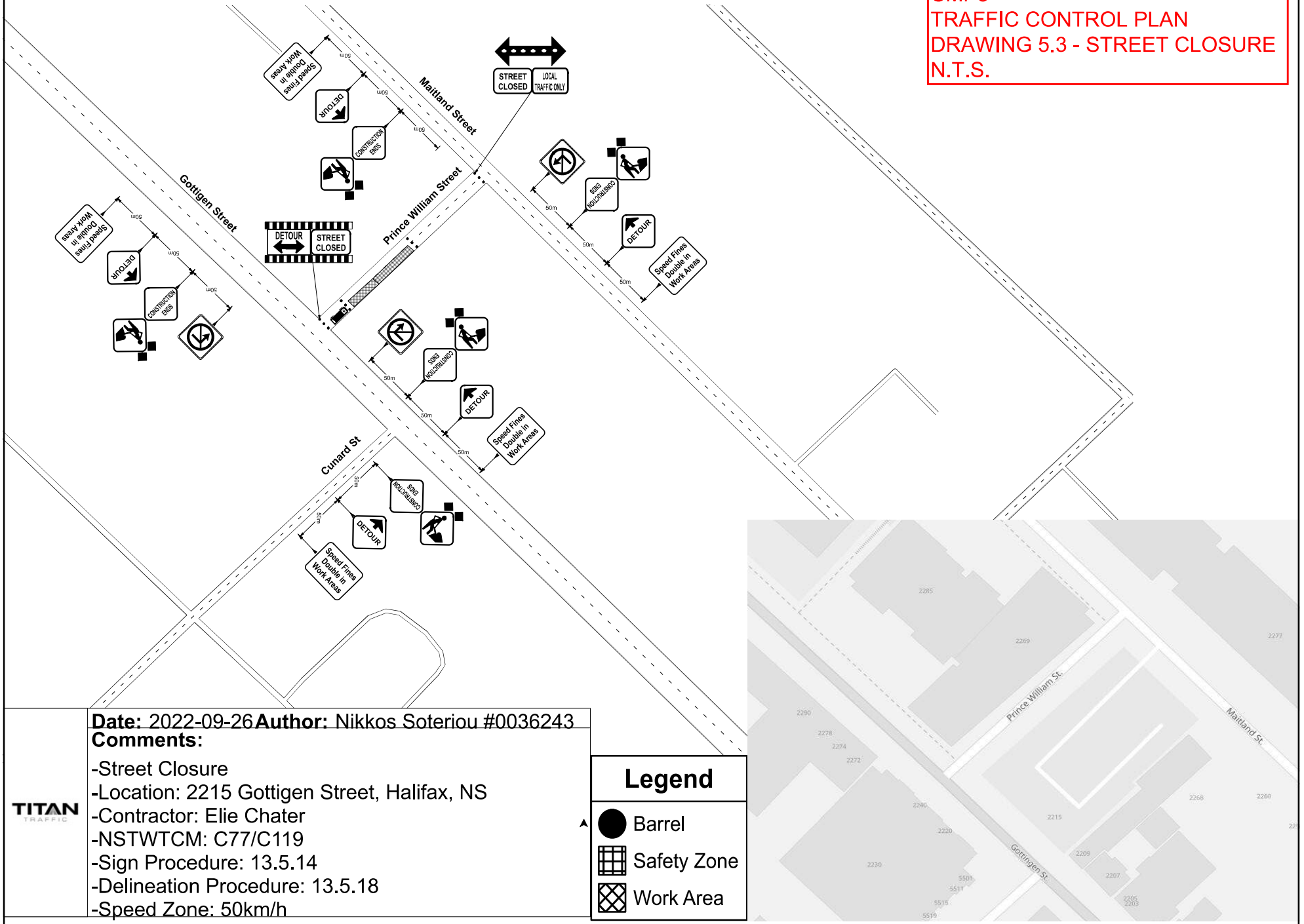
Application Guides
B35/C122/C112
Speed Zone 50km

Manifest

59 x Cone
5 x TC-171 TC-171(NS) Speed Fines Double in Work Areas
5 x TC-2 TC-2
5 x TC-21 TC-21
5 x TC-4 TC-4
5 x Traffic Controller Stop
4 x TC-21A (NS) TC-21A
1 x Flashing Light Unit TC-9
1 x TC-5L TC-5L



CMP5
TRAFFIC CONTROL PLAN
DRAWING 5.3 - STREET CLOSURE
N.T.S.



TITAN TRAFFIC

Date: 2022-09-26 **Author:** Nikkos Soteriou #0036243

Comments:

-Street Closure
-Location: 2215 Gottigen Street, Halifax, NS
-Contractor: Elie Chater
-NSTWTCM: C77/C119
-Sign Procedure: 13.5.14
-Delineation Procedure: 13.5.18
-Speed Zone: 50km/h

Legend

- Barrel
- Safety Zone
- Work Area

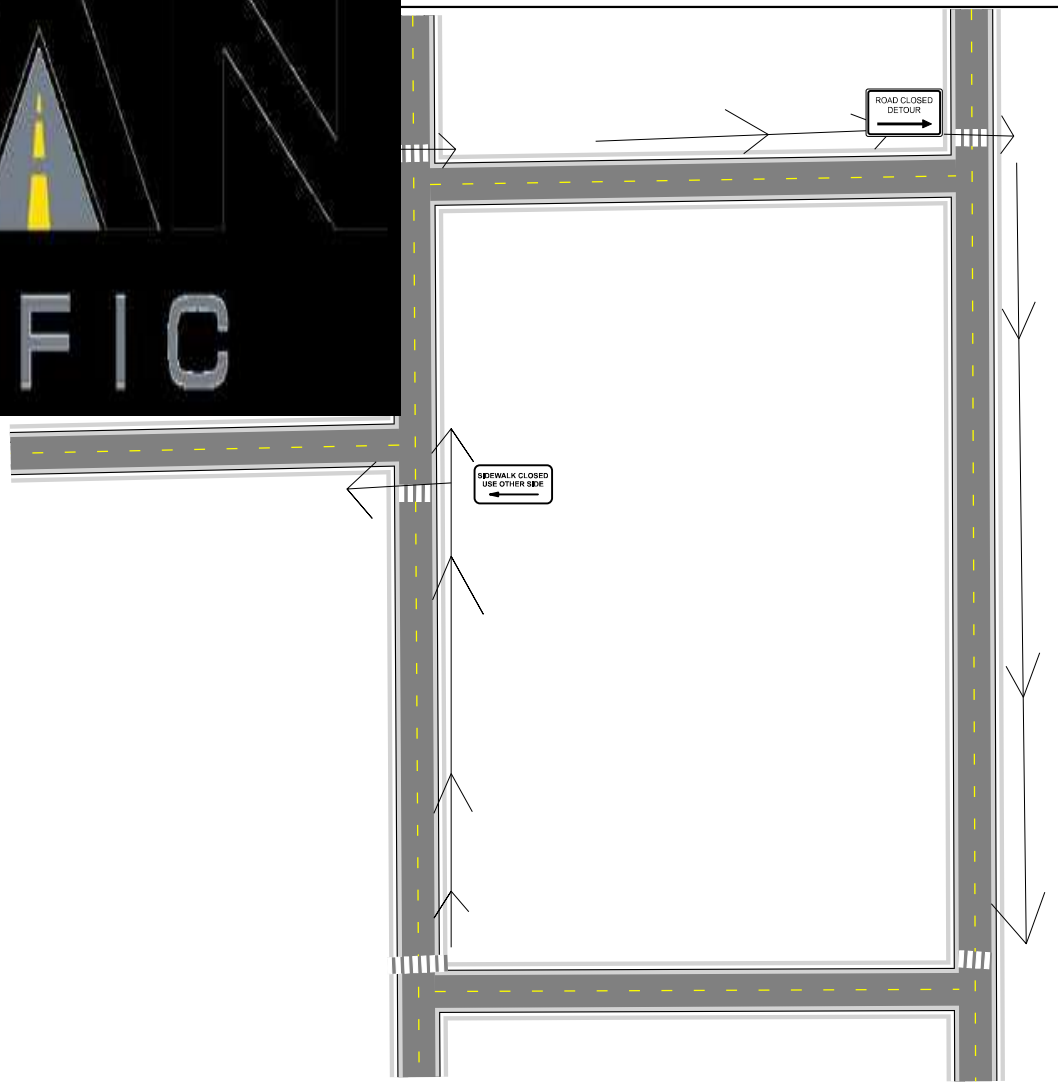
Date: 2022-12-01 **Author:** Harris Purvis Tws Titan Traffic Ticket # 0016624 **Project:** Prince Williams Job

Comments:

sidewalk closed route

CMP 6
PEDESTRIAN MANAGEMENT PLAN
N.T.S.

TITAN TRAFFIC



Appendix B – Development Information Sign

OCEAN VISTA

2215 GOTTINGEN STREET, HALIFAX

October, 2022 - October, 2024

MULTI-UNIT RESIDENTIAL BUILDING

Owner:
EC Gottingen Investments
65 Strathaven Close, Bedford, NS B3K 3B5

24 HOUR EMERGENCY CONTACT:
Elie Chater - (902) 830-7257

Contractor:
To Be Determined

Appendix C – Draft Notification Letter

OCEAN VISTA – 2215 GOTTINGEN STREET

DRAFT NOTIFICATION LETTER

EC Gottingen Investments
65 Strathaven Close
Bedford, NS B3K 3B5

Bus: (902) 830-7257
Email: echater@eastlink.ca

Date

NOTIFICATION OF CONSTRUCTION ACTIVITIES: STREET NAME, HALIFAX, NOVA SCOTIA

This letter is to inform you that to facilitate construction in association with the Ocean Vista project, utility disruptions will occur on or about **DATE** with an anticipates duration of approximately **TIME**. The street will be open?/closed? to traffic during this time, but will require traffic to be reduced to one lane(?).

Should you have any questions or concerns related to the above items, please contact the below:

CONTACT INFORMATION:

General Contractor: To Be Determined

Our company has been retained by EC Gottingen Investments as the general contractor to complete work on the Ocean Vista development. Should any questions arise throughout construction, please feel free to contact the undersigned.

Yours Truly;
Contractor Representative

Appendix D – CMP Change Request

OCEAN VISTA – 2215 GOTTINGEN STREET

DRAFT CMP CHANGE REQUEST

EC Gottingen Investments
65 Strathaven Close
Bedford, NS B3K 3B5

Bus: (902) 830-7257
Email: echater@eastlink.ca

Date

CONSTRUCTION MANAGEMENT PLAN CHANGE REQUEST

This letter is to formally request a change to the construction management plan (CMP) for the Ocean Vista development located at 2215 Gottingen Street, Halifax. We hereby request the following changes to the CMP to be reviewed and approved by Halifax Regional Municipality (HRM). These changes are required due to _____. The proposed date of implementation for these changes is ____start date___, ____ and are expected to be required until ____end date___, ____. These changes will impact vehicular traffic and pedestrians by _____. Please see the attached sketch which outlines the changes being requested.

Should you have any questions or concerns related to the above items, please contact the below:

CONTACT INFORMATION:

General Contractor: To Be Determined

Our company has been retained by EC Gottingen Investments as the general contractor to complete work on the Ocean Vista development. Should any questions arise throughout construction, please feel free to contact the undersigned.

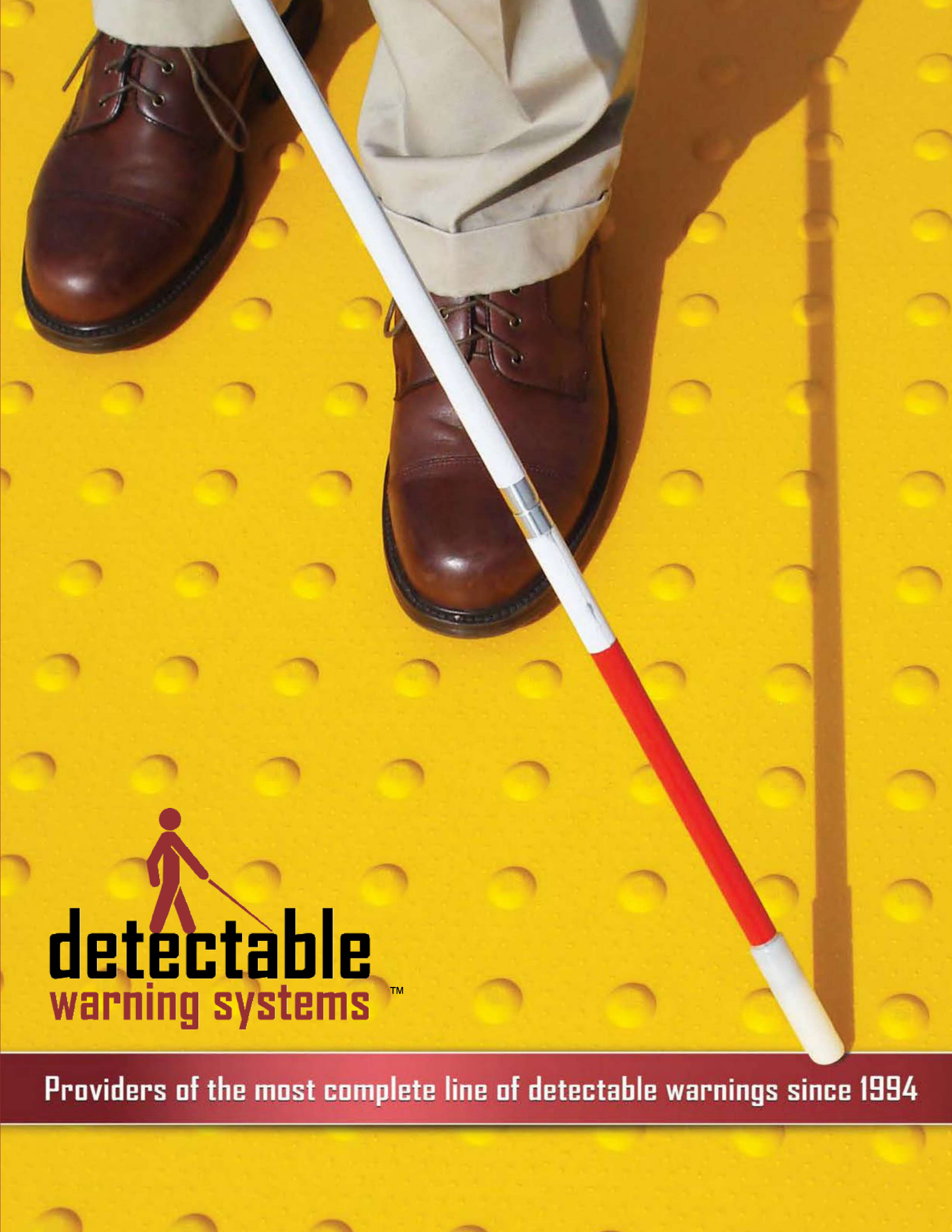
Yours Truly;
Contractor Representative

Appendix E – CMP Inspection Sheet

Project: ____________ Location: ____________ Phase: ____________ Date: ____________ Inspector: ____________

CONSTRUCTION MANAGEMENT PLAN - INSPECTION CHECKLIST								
CMP Element	Set-up per PMP?			Condition?		Action Required	Action Completed	Comments
	Yes	No	N/A	Good	Bad			

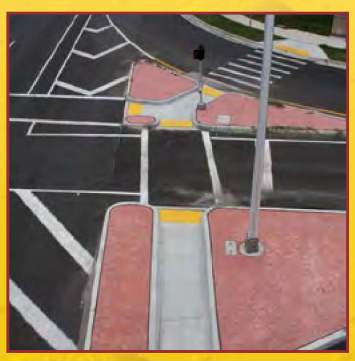
Appendix F – Tactile Pedestrian Bar Information



detectable warning systems™

Providers of the most complete line of detectable warnings since 1994

detectable
warning systems



The Most Complete Line of Detectable Warnings Since 1994

Detectable Warning Systems has been a pioneer in providing innovative and economical detectable warning products. Our products provide ADA compliant tactile warning surfaces for visually impaired pedestrians at a reasonable cost to contractors, cities, counties, transit authorities and other agencies.

Partnership with Cape Fear Systems / AlertTile®

In early 2012 Detectable Warning Systems merged its operations with Cape Fear Systems, producers of the AlertTile line of detectable warnings since 2001. Through this partnership we now manufacture the best and most diversified line of products in the industry.

Products to Meet any Job Specification

Whatever the specifications of your job, Detectable Warning Systems has the product you need. With the flexible RediMat and rigid AlertTile we can meet the needs of any retrofit, surface applied job. And for cast in place requirements we have the AlertCast – the best overall cast in place detectable warning available, and the proven, heavy duty EZ Set Tile.

Superior Customer Service

With a highly trained staff we work with you and your customers during the entire project cycle. From design to bidding, procurement and installation - our team is with you all the way. We welcome the opportunity to partner with our customers to ensure 100% satisfaction on every job.

ADA Compliance and a 5-Year Warranty

All of our products are ADA compliant and meet or exceed ADAAG, FHWA, California Title 24, state and local requirements. And they are backed by a 5-year warranty covering defects in materials and workmanship.

All of our products are proudly made in the U.S.A.

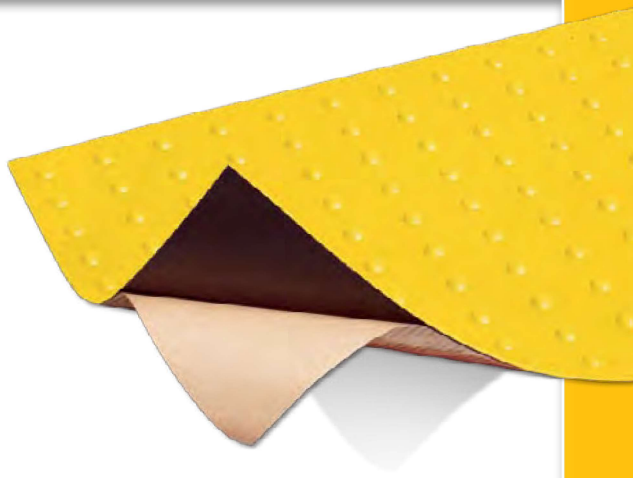
INSTALLER FRIENDLY

Phone: 866.999.7452

info@detectable-warning.com
www.detectable-warning.com

RediMat™

the original flexible surface applied mat



The original surface applied RediMat detectable warning is constructed of extremely durable, UV protected polyurethane. This flexible mat has a proprietary pre-applied adhesive system that enables installation in less than 10 minutes, drastically reducing labor time and expense, but not at the cost of durability.

Features

- **No adhesives to apply** – simply remove protective backing, exclusive peel & stick technology
- **Installs on both asphalt and concrete** – multi-surface adhesive system
- **Conforms to uneven surfaces** – flexible polyurethane material
- **Unbreakable** – will not chip, crack, or splinter
- **Radius Ready** – Available in "*Wedge*" shape
- **Beveled Edge** – For easy pedestrian access
- **RediMatWZ**™ – For temporary work zone applications, reusable, and safety orange color
- Includes stainless steel anchors to meet DOT requirements

Installation

Easiest installation of any surface applied detectable warning. Just peel and stick, roll the mat to ensure a secure bond and install stainless steel anchors. Less than 10 minutes - start to finish.

Physical Characteristics

- **Hardness -** 90 (Shore A)
- **Stain Resistance -** No Significant Change
- **Dome Spacing -** Inline, 2.35"
- **Slip Resistance -** .90
- **Taber Abrasion** - (1000gms/1000 cycles) 150mgs
- **Color** - Integral Throughout

Colors

Safety Yellow | Brick Red | Black

Sizes

2' x 2' * | 2' x 3' | 2' x 4' | 2' x 5' | 3' x 2.5' | 3' x 4' | Wedge (10 ft radius)

*Special order only

detectable warning systems

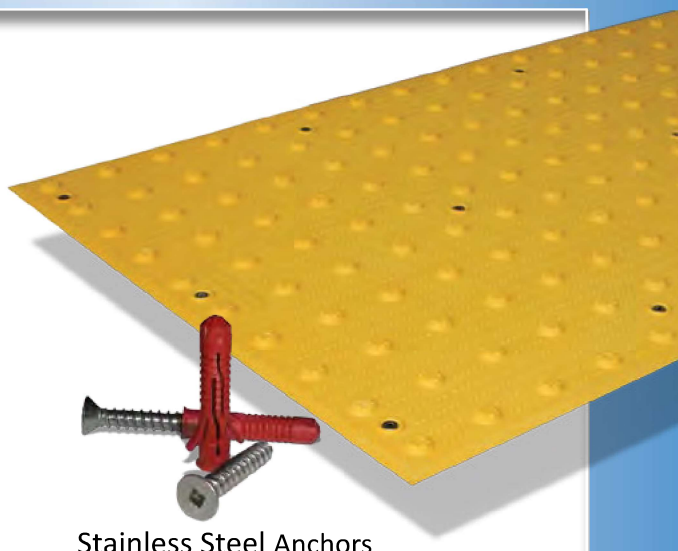
866.999.7452
www.detectable-warning.com

alerttile®

semi-rigid surface applied detectable warning

AlertTile® is a glass reinforced thermoset composite engineered for superior impact resistance, slip resistance, wear resistance and long-term durability for retrofit applications.

AlertTile®'s exclusive design incorporates a thin, slightly flexible profile with a perimeter beveled edge to provide a safe pedestrian transition.



Stainless Steel Anchors

Features

- **Semi-rigid composition** – 30,000 psi strength yet flexible enough to conform to ramp irregularities
- **Premium UV Treatment**– ensures long term color retention
- **Proven Anchoring System** – premium adhesive and HILTI HUD-1 anchors with stainless steel screws
- **Perimeter Beveled Edges** – for safe pedestrian transition
- **AlertTile Universal** – uses patented Penetrator anchors for cast in place applications, allows distributors ability to stock single tile for surface and cast in place installations

Installation

Fast, easy installation with included adhesive and anchor system. Apply adhesive to scored areas on back, place in desired location and install anchors

Physical Characteristics

- **Compressive Strength -** 30,000 psi
- **Flexural Strength -** 18,000 psi
- **Dome Spacing -** 2.35" Center to Center
- **Slip Resistance -** Dry = 1.03 / Wet = .83
- **Freeze / Thaw Durability** - Pass-No change
- **Color** - Integral Throughout

Colors

Safety Yellow | Colonial Red | Brick Red | Black | Gray

Sizes

2' x 3' | 2' x 4' | 2' x 5' | 3' x 2' | 3' x 2' (3' x 4')

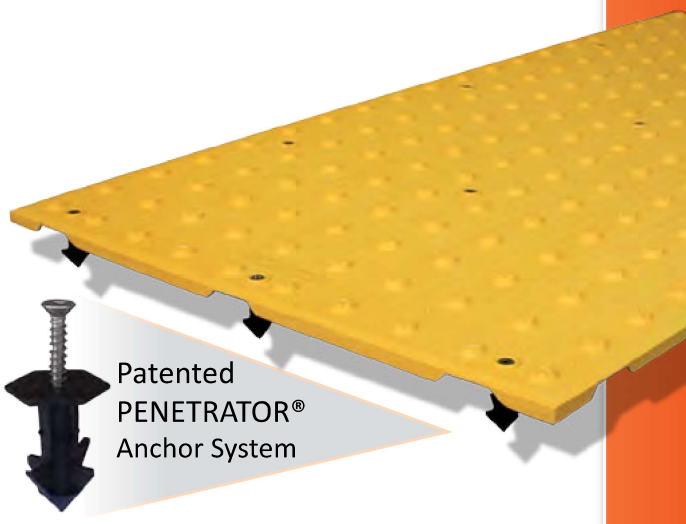
detectable warning systems

866.999.7452
www.detectable-warning.com

alertcast®

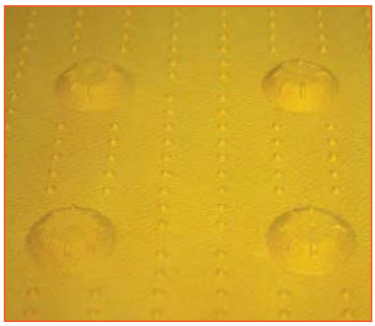
the industry's best replaceable cast-in-place detectable warning

AlertCast® is a glass-reinforced thermoset composite engineered for superior impact resistance, slip resistance, wear resistance and long-term durability. The exclusive design incorporates a top panel of superior slip-resistant truncated domes and bottom docking anchors that are embedded into wet concrete.



Features

- **Replaceable, uses patented PENETRATOR anchoring system** – simple wet concrete installation with minimal aggregate displacement and maximum holding capabilities. Easy tile replacement should the need arise.
- **Premium UV Treatment** – ensures long term color retention
- **Superior strength and impact resistance** – reinforced to over 30,000 psi, yet lightweight
- **All weather performance** – hot and cold climate superiority
- **Delivered ready to install** – anchors in place, protective sheeting with attached installation instructions in English and Spanish



Superior Wet/Dry Slip Resistance

Installation

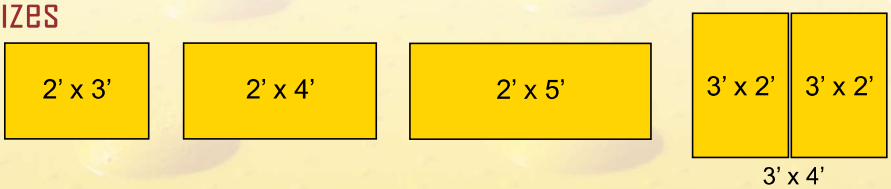
Simple place and press process with the patented PENETRATOR® anchor system.

Physical Characteristics

- **Compressive Strength -** 30,000 psi
- **Flexural Strength -** 18,000 psi
- **Dome Spacing -** 2.35" Center to Center
- **Slip Resistance -** Dry = 1.03 / Wet = .83
- **Freeze/Thaw Durability** - Pass - No Change
- **Color** - Integral Throughout

Colors

Sizes



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866.999.7452
www.detectable-warning.com

Detectable Warning Systems, Inc.

SURFACE APPLIED DETECTABLE WARNING MATS

RediMat Submittal

PART 1 - GENERAL

1.01 SECTION CONTENTS

A. Description
B. Related Work Specified Elsewhere.
C. Submittals
D. Quality Assurance.
E. Delivery, Storage & Handling
F. Site Conditions
G. Extra Stock
H. Guarantee
I. Manufacturers
J. Materials.
K. Installation.
L. Cleaning & Protecting

1.02 DESCRIPTION

A. This Section specifies furnishing and installing RediMat surface applied polyurethane detectable warning mat where indicated, using an exterior grade tactile warning surface described herein.

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Drawings and general provisions of Contract, including General and Special Conditions and Division 1 Specifications Section, apply to this Section.

1.04 SUBMITTALS

A. Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.

B. Samples for Verification Purposes: Submit three (3) samples of RediMat surface applied polyurethane tactile mat of the kind proposed for use.

D. Material Test Reports: Submit test reports from qualified independent testing laboratory indicating that materials proposed for use are in compliance with requirements and meet the properties indicated.

A. Maintenance Instructions: Submit copies of manufacturer's specified maintenance practices for each type of tactile tile and accessory as required.

1.05 QUALITY ASSURANCE

A. Provide surface applied tactile mat and accessories as produced by a single manufacturer.

B. Installer's Qualifications: Engage an experienced Installer qualified for installation, who has successfully completed tile installations similar in material, design, and extent to that indicated for Project. .

C. Americans with Disabilities Act (ADA): Provide tactile warning surfaces which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title 49 CFR TRANSPORTATION, Part 37.9 STANDARDS FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES. In addition products must comply with CALIFORNIA TITLE 24 requirements regarding patterns, color and sound on cane contact.

D. Polyurethane tactile mat incorporating truncated domes shall conform to the following:

1. Water Absorption of mat when tested by ASTM-D570 not to exceed 0.35% -after vacuum.
2. Compressive Strength - ATM D695-96 5,000 psi
3. Slip Resistance- ASTM F1679-96 - .89
4. Impact Resistance ASTM D5420-96 No cracking up to 80 inch pounds
5. Accelerated Weathering ASTM G154/ASTM D4587 Delta E <6.5 after 500 hours
6. Flexural Strength ASTM 790-96a 13,000 psi
7. Stain & Chemical Resistance ASTM 1308-87 No Change
8. Tensile Strength ASTM D412 Not less than 1,100 psi
9. Hardness of mat when tested to ASTM-D2240: 90 (Shore A).
10. Specific Gravity of mat when tested to ASTM-D792: 1.22
11. Abrasion/Wear Resistance -weight loss of mat when tested to ASTM- D4060 - 4.7 mgs.

1.06 DELIVERY, STORAGE AND HANDLING

A. Mat and adhesive materials shall be packaged durable cartons to prevent damage in shipment or handling. Mats should remain in the factory cartons until reaching the job site and installation has begun. Mats shall be kept dry and away from sources of heat. Store at 80 degrees F or less. Store on flat level surface.

B. Mats shall be delivered to location at building site for storage prior to installation.

1.07 SITE CONDITIONS

A. Environmental Conditions and Protection: Maintain minimum air and surface temperature of 50 degrees F and rising in spaces to receive tactile mats prior to installations, during installation, and for not less than 2 hours after installation.

B. Provide barricades or screens to protect passengers or public.

1.08 EXTRA STOCK

A. Deliver extra stock to the Owner. Furnish new materials from same manufactured lot as materials installed and enclose in protective packaging with appropriate identification. Furnish not less than two or (10)% of the supplied materials for each type, color and pattern installed.

1.09 Warranty

A. Surface applied detectable warning mat shall be warranted in writing for a period of five years from date of final completion.

PART 2 – PRODUCTS

2.01 MAT SPECIFICATIONS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

The polyurethane detectable warning mat specified is based on the Detectable Warning RediMat manufactured by Detectable Warning Systems, Inc. (866-999-7452).

B. It is an unbreakable, UV protected, flexible polyurethane material with a proprietary pre-applied adhesive system that employs peel and stick technology. Existing engineered ADA field tested products in service for a minimum of 2 years which are subject to compliance with requirements, may be incorporated in the work and shall meet or exceed the specified test criteria and characteristics.

1. Materials – mat to be produced with a glass reinforced, UV treated polyurethane material for durability, strength and sun degradation.

2. Composition – mat to be a molded material that is 100% solid throughout, including surface and truncated domes. This requirement is for durability and safety concerns.

3. Color - Color shall be homogenous throughout the mat. Colors must provide light-on-dark or dark-on-light contrast with the surrounding substrate/surface

4. Pre-applied adhesive – attached peel and stick adhesive must completely cover the underside of the mat and be composed of materials that adhere to substrate (concrete or asphalt) without the requirement of any additional materials or actions such as primers or concrete sealers being applied to the substrate.

.

2.02 INSTALLATION MATERIALS

A. Stainless steel concrete screws 3/16” x 1 ¼” for pre-drilled holes (number to vary depending on mat size)

B. Nylon finishing washers colored to match mat color.

PART 3 EXECUTION

3.01 INSTALLATION

A. During all surface preparation and mat installation, procedures must ensure adequate safety guidelines are in place and that they are in accordance with the applicable industry and government standards.

B. Throughout the installation phases of surface preparation and mat setting, ensure that care is taken to prevent damage to any work.

C. Immediately prior to installing the surface applied tactile mats, all surfaces must be inspected to ensure that they are clean, dry, free of voids, curing compounds, projections, loose material, dust, oils, grease, sealers and determined to be structurally sound before the application warning mat. . All new substrate concrete paving must have been cured for at least 28 days prior. If present, all concrete curing compounds shall be removed with sandblasting. The proprietary sealant/adhesive requires that the substrate and the ambient temperature are 50 degree F minimum and rising, and completely dry with no precipitation during 24 hours prior to installation. Assure that sprinklers or other water sources will not be turned on during the installation and adhesive curing process.

D. Place mats as shown on the drawings. Inspect the mats and clean all dust and other contaminants from the surfaces to be adhered. Set the mats in place one at a time, true and square, following the manufacturers written instructions.

E. Carefully remove the paper backing. Place adjoining mats with a 1/8" gap against each other in their pre-laid positions. Press firmly from the center out to remove all trapped air. Using, hand, foot and/or roller apply pressure over the entire surface of the mat to insure complete contact with the concrete substrate.

F. After the mats have been installed stainless steel concrete screws shall be installed. Drill holes true and straight to the depth required using the recommended bit with holes located by the preformed holes in the mats. Clean dust from the holes to provide clear passage for the anchor. Mechanically fasten tiles to the floor by hand using Phillips screwdriver. Set screws to a depth and tightness that will allow the washer to slightly turn. Ensure the fastener has been set to full depth, straight and true.

G. After fasteners have been set cut the nozzle of the included sealant tube at a 45 degree angle. Apply a smooth, thin bead of sealer around the perimeter (sealer is not required between adjoining mats).

H. After the mats have been fully installed, and sealer has cured, the surface can be cleaned, if needed, following the recommended maintenance and cleaning procedures.

3.02 CLEANING AND PROTECTING

A. Protect mats against damage during construction period to comply with manufacturer's specification.

B. Protect mats against damage from rolling loads following installation by covering with plywood.

C. Clean mats by method specified by the manufacturer. RediMat can be cleaned with a medium stiff brush and a diluted mild detergent/water cleaner. Due to the non-porous nature of the mat normal rainfall will keep the mat with a clean appearance.

-END OF SECTION-

detectable warning systems

RediMat™

Installation Instructions

Before you begin ...

General Conditions

Store mats at room temperature. Installation surface must be dry and clean from oils, contaminants, dust, dirt and debris. Temperature must be 50˚F and rising. To increase surface temperature, a hand torch may be used to heat the concrete surface. Best cold-weather application is achieved with surface temperature at 95˚F. New concrete is to cure for 28 days before mat installation. The RediMat is designed for pedestrian safe zones and as such is not designed for, or intended to be installed in vehicular traffic areas.

Cleaning

Prepare surface with a stiff broom to remove dust, dirt and debris from concrete surface. Sweep the area completely clean and use a blower if possible.

Required Materials

Stiff Broom	Eye Protection
Blower (optional)	Hammer Drill
Phillips Screwdriver	5/32" Masonry Bit(s)
Utility Knife	3/8" All Purpose
RediMat™ Roller	Drill Bit

After ensuring "General Conditions"(refer to box on left) have been met, and surface has been properly cleaned, place mat(s) in desired final position. ***If mats are placed side by side, leave a 1/8 in. gap between them.***

While standing on the mat to prevent movement, remove one section of the paper backing.

Roll and press the exposed portion onto the surface. While standing on the attached end, peel the remaining sections of the backing and press and roll onto the surface.

To insure a secure bond is achieved, roll the mat both lengthwise, widthwise and most importantly along the edges, with the handheld ***RediMat™ Roller.*** ***For mats with an offset pattern, hold the roller at a 45° angle and use the outer roller pad to roll between the domes diagonally from front to rear and along the edges.***

Using the drill and a 5/32 in. masonry bit, drill through the pre-drilled holes into the concrete to a depth of 1 1/4 in. If the mats are trimmed so a pre-drilled hole is removed, a new hole must be drilled in the mat using a 3/8 in. standard drill bit, 2 in. from the side edge and 1 in. from the beveled edge.

Be sure the screw and the matching washers are oriented so the neck of the screw falls into the inside taper of the washer. Using a phillips screwdriver, fasten the screws into the drilled holes. The proper screw tightness will allow a slight finger twist of the washer. ***Do not overtighten.***

Cut the nozzle of the sealant tube at the 1/4 in. mark. Apply a smooth, thin bead of sealer around the perimeter (sealer is not required between adjoining mats). Mats are ready for immediate use once installation is completed and edge sealant has dried to the touch. ***Tip: To make the edge sealer dry faster, mist with plain water.***

Appendix G – Hazard Assessment

Ocean Vista Building **Location:** 2215 Gottingen Street, Halifax **Date:** 1-Aug-22

Prepared By: New Piper Consulting & Engineering Inc.

No.	Hazard	Project Phase	Vehicular Impacts	Mitigation Methods	Pedestrian Impacts	Mitigation Methods
1	Excavation Activities	Excavation	Debris may fall off site, damaging vehicles.	Close sidewalks adjacent to site, moving vehicles farther away from potential debris.	Debris may fall off site, injuring pedestrians.	Close sidewalks adjacent to site, moving pedestrians to opposite side of street.
2	Rock Blasting	Excavation	Blasted rock projectiles may strike vehicles.	Close sidewalks adjacent to site, moving vehicles farther away from blasting rock.	Blasted rock projectiles may strike pedestrians.	Install solid plywood hoarding along rigid fence adjacent to blast zone. Close sidewalks adjacent to site, moving pedestrians to opposite side of street.
3	Snow & Ice Clearing	All Phases	Vehicles may become stuck in snow or slip on ice.	The contractor shall remove all snow on temporary sidewalks and within the loading area and will not sump onto public property (HRM right-of-way).	Pedestrians may become stuck in snow or slip on ice.	The contractor shall remove all snow on temporary sidewalks and shall salt sidewalks to prevent ice buildup.
4	Construction Waste	All Phases	Vehicles may strike or be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.	Pedestrians may walk into or be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.

Ocean Vista Building **Location:** 2215 Gottingen Street, Halifax **Date:** 1-Aug-22

Prepared By: New Piper Consulting & Engineering Inc.

No.	Hazard	Project Phase	Vehicular Impacts	Mitigation Methods	Pedestrian Impacts	Mitigation Methods
5	Vehicular and Pedestrian Activities	All Phases	Drivers and pedestrians may become confused or impatient with construction activities. Pedestrians may walk in unmarked crosswalks or in vehicular travel areas. Drivers may fail to obey traffic signage.	Vehicular and pedestrian signage will be posted prominently around the project site to facilitate pedestrian movement. Notification will be sent prior to all traffic interruptions.	Drivers and pedestrians may become confused or impatient with construction activities. Pedestrians may walk in unmarked crosswalks or in vehicular travel areas. Drivers may fail to obey traffic signage.	Vehicular and pedestrian signage will be posted prominently around the project site to facilitate pedestrian movement. Notification will be sent prior to all traffic interruptions.
6	Heavy Machinery Operation	All Phases	Heavy machinery or vehicles may break down or overturn, damaging other vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site. F-type concrete barriers will be installed to separate construction vehicles from public traffic.	Heavy machinery or vehicles may break down or overturn, injuring pedestrians.	The contractor shall maintain safe distances between pedestrians, vehicles and heavy machinery. Rigid fencing will be installed to separate construction vehicles from pedestrians.
			Heavy machinery or vehicles may overturn due to uneven terrain, damaging other vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site and ensure travel routes are kept flat.	Heavy machinery or vehicles may overturn due to uneven terrain, injuring pedestrians. Pedestrians may walk over uneven terrain causing them to twist their ankles or fall.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery and ensure travel routes are kept flat.
7	Project Sightlines	All Phases	Fences and signs may impact vehicular sightline visibility.	Fences will be curved such that vehicles can see around corners at intersections. Signs will be placed such that they do not extend into vehicle and pedestrian routes.	Fences and signs may impact vehicular sightline visibility causing drivers to be unaware of pedestrians.	Fences will be curved such that vehicles can see around corners at intersections. Signs will be placed such that they do not extend into vehicle and pedestrian routes.

Ocean Vista Building **Location:** 2215 Gottingen Street, Halifax **Date:** 1-Aug-22

Prepared By: New Piper Consulting & Engineering Inc.

No.	Hazard	Project Phase	Vehicular Impacts	Mitigation Methods	Pedestrian Impacts	Mitigation Methods
8	Construction Signage	All Phases	Construction signage may strike vehicular traffic.	Construction signage will be securely fixed to existing posts, temporary concrete sign bases, or rigid fences.	Pedestrians may walk into construction signage.	Signage will be angled in line with pedestrian routes and/or be placed at heights such that they do not pose a risk to pedestrians.
					Construction signage may strike pedestrians.	Construction signage will be securely fixed to existing posts, temporary concrete sign bases, or rigid fences.
9	Dangerous Materials	All Phases	Flammable, explosive, and hot materials may damage vehicles if not properly maintained and stored.	The contractor will use and store all dangerous materials properly as per their manufacturers' specifications.	Flammable, explosive, and hot materials may damage vehicles if not properly maintained and stored.	The contractor will use and store all dangerous materials properly as per their manufacturers' specifications.
10	Hoisting Operations	All Phases	Precast concrete panels and other items hoisted may fall from heights and damage vehicles.	Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights. F-type concrete barriers will be installed such that loads are never suspended above the public realm.	Precast concrete panels and other items hoisted may fall from heights and injure pedestrians.	Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights. F-type concrete barriers will be installed such that loads are never suspended above the public realm.

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11	Service Installation and Reinstatement of Public Infrastructure	Superstructure Levels 1-3 and 4+	Heavy equipment and hot concrete used during public infrastructure reinstatement and service installation may cause damage to vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on site. F-type concrete barriers will be installed to separate construction vehicles from public traffic during this work.	Heavy equipment and hot concrete used during public infrastructure reinstatement and service installation may injure pedestrians.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery. Sidewalks adjacent to this work will be closed.
12	Falling Debris	Superstructure Levels 1-3 and 4+	Debris may fall from upper levels of the new building causing damage to vehicles.	F-type concrete barriers will be installed such that a safe distance is maintained between the building envelope and vehicular traffic.	Debris may fall from upper levels of the new building, injuring pedestrians.	Close sidewalks and utilize temporary protected sidewalks such that a safe distance is maintained or overhead protection is provided between the building envelope and pedestrians.

Name	Organization	Signature	Date