Oxford & North Street
Excavation and Construction
Prepared by Geoff MacLean, P.Eng.
Job No. 35406

CONSTRUCTION MANAGEMENT PLAN

<table>
<thead>
<tr>
<th>REVISION #</th>
<th>DATE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>AUG 2021</td>
<td>REVISED AS PER HRM</td>
</tr>
<tr>
<td>0</td>
<td>FEB 2021</td>
<td>ISSUED FOR REVIEW</td>
</tr>
</tbody>
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Project Site

36 Oland Crescent
Bayers Lake Business Park
Halifax, Nova Scotia B3S 1C6
www.sdmm.ca

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Table of Contents

Section 1: Introduction ....................................................................................................................................................... 1
  1.1: Project Description and Objectives ......................................................................................................................... 1
  1.2: Project Contact Information .................................................................................................................................... 2

Section 2: Project Schedule and Logistics ........................................................................................................................... 2
  2.1: Schedule .................................................................................................................................................................. 2
  2.2: Key Dates ................................................................................................................................................................. 2
  2.3: Hours of Work ......................................................................................................................................................... 2

Section 3 – Relevant Regulations & Guidelines .................................................................................................................. 3
  3.1: Occupational Health & Safety Regulations .............................................................................................................. 3
  3.2: Municipal Regulations & Guidelines ........................................................................................................................ 3

Section 4: Vehicle Management ......................................................................................................................................... 3
  4.1: Vehicular Traffic Control .......................................................................................................................................... 3
  4.2: Haul Route and Staging Areas ................................................................................................................................. 4
  4.3: Vehicular Traffic Notifications .................................................................................................................................. 4
  4.4: Emergency Vehicles ................................................................................................................................................. 4
  4.5: Parking ..................................................................................................................................................................... 4
  4.6: Bus Stops ................................................................................................................................................................. 4
  4.7: Hazard Assessment .................................................................................................................................................. 4

Section 5: Pedestrian Management ................................................................................................................................... 5
  5.1: Pedestrian Protection .............................................................................................................................................. 5
  5.2: Pedestrian Safety ..................................................................................................................................................... 5
  5.3: Pedestrian Traffic Notifications ............................................................................................................................... 5
  5.4: Visually Impaired Persons ........................................................................................................................................ 5
  5.5: Accessibility ............................................................................................................................................................. 5
  5.6: Hazard Assessment .................................................................................................................................................. 6
  5.7: Pedestrian Management Plans Rendering (PMPR) Signage .................................................................................... 6
  5.8: Pedestrian Detour Wayfinding Signage ................................................................................................................... 6

Section 6: Encroachments & Disruptions ........................................................................................................................... 6
  6.1: Demolition ............................................................................................................................................................... 6
  6.2: Site Excavation .......................................................................................................................................................... 6
6.3: Site Services Connection
6.4: Construction Management Plan Element Inspection and Maintenance
6.5: Changes to the Construction Management Plan

Section 7: Environmental Factors
7.1: Damage to HRM Infrastructure
7.2: Protection of Trees
7.3: Line Painting and Temporary Crosswalks
7.4: Street and Right-of-Way Cleaning
7.5: Protection from Inclement Weather
7.6: Storm Water Management
7.7: Noise, Dust and Emission Control
7.8: Rodent Control

Section 8: Site Protection & Hoarding
8.1: Barriers, Fences, and Gates
8.2: Snow removal
8.3: Emergency Access & Egress
8.4: Hoarding Aesthetics
8.5: Sight Lines
8.6: Project Information and Contacts

Section 9: Lifting, Hoisting, and Crane Operations
9.1: Crane Use Overview
9.2: Transport Canada and Nav Canada Regulations
9.3: Aerodromes

Section 10: On-Site Safety and Security
10.1: Site Safety and Security Overview
10.2: Material Handling: Loading, Unloading, Delivery and Storage
10.3: Emergency Access & Egress
10.4: Security Site Lighting
10.5: Smoking Areas
10.6: Fire Suppression Systems

Section 11: Pre-Construction Consultation & Meeting
11.1: Pre-CMP Community Consultation
11.2: Project Information and Contacts ....................................................................................................................... 12
11.3: Preconstruction Meeting ..................................................................................................................................... 13
11.4: Construction Notification .................................................................................................................................... 13
Section 12: Summary ........................................................................................................................................................ 13
Appendix A – Encroachment Plan.................................................................................................................................. A
Appendix B – Traffic Control Plan (TCP) ....................................................................................................................... B
Appendix C – Haul Route Plan ........................................................................................................................................ C
Appendix D – Pedestrian Management Plan ................................................................................................................... D
Appendix E – HRM Tree Protection Detail ...................................................................................................................... E
Appendix F – Barrier, Fence & Gates Information ......................................................................................................... F
Appendix G – Hoarding Information .............................................................................................................................. G
Appendix H – Project Information Board ..................................................................................................................... H
Appendix I – Project Safety Signage ............................................................................................................................ I
Appendix J – Project Signage Specifications ................................................................................................................ J
Appendix K – Sample Traffic Notification Letter ......................................................................................................... K
Appendix L – Vehicular and Pedestrian Hazard Assessment ......................................................................................... L
Appendix M – Community Consultation Records ..................................................................................................... M
Appendix N – Rodent Control Plan ............................................................................................................................... N
Appendix O – CMP’s TCP & PMP Inspection Records ................................................................................................. O
Appendix P – Concrete Delivery Schematic ................................................................................................................ P
Appendix Q – Line Painting Plan .................................................................................................................................. Q
Appendix R – Crane Information ..................................................................................................................................... R
Appendix S – Temporary Crosswalk and Bus Stop Plan ................................................................................................. S

Prepared by
G.K. MacLean, P. Eng.
In consultation with the developer, contractor and traffic control company.
Section 1: Introduction

1.1: Project Description and Objectives

Ardmore Hall Limited are planning to redevelop the existing lands on the corner of Seaforth, Oxford and North Streets, Halifax, Nova Scotia. The planned building will be a 7 storey 128-unit multi residential building with 2 levels of underground parking accessed off Seaforth Street. The land (civic 6389, 6395 & 6399 North Street) previously housed three residential buildings, demolished in preparation for the new apartment building project. Where demolition of the existing buildings was addressed under a separate CMP, this CMP has been prepared to address excavation, services and building construction.

The building foundation is planned to be tight to the street line, with two levels of underground parking, deep excavations of +20ft are required that will infringe on the HRM right-of-way. For public safety during excavation and construction, we are proposing to hoard off the sidewalk and a portion of the street lanes directly adjacent to the project. This will result in unmetered parking to be closed on the project side of Seaforth Street, North and Oxford Streets as temporary altered centrelines are anticipated. Rerouted pedestrian routes along North Street are anticipated to remain, while the sidewalks along Oxford and Seaforth Streets will be closed with signage directing pedestrians to use sidewalks opposite the street accessed by a temporary crosswalk at the intersection of Summit Street. We are planning temporarily relocate the existing bus stop on Oxford Street to the front of civic 2663 Oxford, as required by the HRM while maintaining the bus stop on North Street, with protected scaffold to surround.

The development borders residential properties to the east which front on Seaforth and North Streets. To the north across Seaforth are residential properties. South of the property across North Street is the Oxford School and to the west of the site opposite Oxford Street are residential properties and the North Street Gospel Hall. All neighbouring properties will remain undisturbed throughout construction and all neighbours will be notified and updated on construction ahead of time.

This CMP document 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. SDMM, together with the developer, contractor, and traffic control company, have prepared this Construction Management Plan (CMP) following HRM’s CMP (2020) guidelines and administrative order (2018-005-ADM) in an effort to reduce potential negative impacts on the surrounding community, due to construction activities for this project.

The most up-to-date version of this document will be kept on-site at all times during construction. Should ownership or contracting services change throughout the course of this project, HRM will be notified immediately and new parties will be required to comply with the approved CMP in writing.
1.2: Project Contact Information
The project team for the proposed development consists of:

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Contact</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer</td>
<td>Ardmore Hall Limited</td>
<td>George Giannoulis</td>
<td>150 Solutions Drive, Suite 100, Halifax, NS B0S 0E5</td>
<td>(902) 802-6588 24 Hour Emergency Contact</td>
</tr>
<tr>
<td>Site Contractor</td>
<td>Atlantic Road Construction and Paving</td>
<td>Greg MacDonald</td>
<td>6 Belmont Avenue, P.O. Box 89 Eastern Passage, NS B3G 1M7</td>
<td>(902) 830-6411</td>
</tr>
<tr>
<td>Traffic Control Company</td>
<td>Frontline Traffic Services</td>
<td>Phil Pruneau</td>
<td>6 Belmont Avenue, P.O. Box 89 Eastern Passage, NS B3G 1M7</td>
<td>(902) 818-5548</td>
</tr>
<tr>
<td>Rodent Control Company</td>
<td>Rentokil Pest Control</td>
<td></td>
<td>51 Duke Street, Bedford, NS B4A 2Z2</td>
<td>(902) 835-2304</td>
</tr>
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</table>

Section 2: Project Schedule and Logistics
The following is a brief summary of anticipated major project milestones broken down by phase:

2.1: Schedule

<table>
<thead>
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<th>Project Phase</th>
<th>Start Date</th>
<th>End Date</th>
<th>Time Period</th>
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<tr>
<td>Rodent Control Program</td>
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<tr>
<td>Demolition</td>
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<td>Complete</td>
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<tr>
<td>Excavation</td>
<td>May 2021</td>
<td>Aug 1, 2021</td>
<td>3 Months</td>
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<tr>
<td>Substructure</td>
<td>Aug 1, 2021</td>
<td>Jul 1, 2021</td>
<td>2 Month</td>
</tr>
<tr>
<td>Superstructure</td>
<td>Jul 1, 2021</td>
<td>Dec 31, 2022</td>
<td>18 Months</td>
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<tr>
<td>Flat Works</td>
<td>Sep 1, 2022</td>
<td>Sep 30, 2022</td>
<td>1 Month</td>
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<tr>
<td>Service installs</td>
<td>Jul 1, 2021</td>
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<td>1 Month</td>
</tr>
<tr>
<td>Service Abandonments</td>
<td>Jul 1, 2021</td>
<td>Jul 31, 2021</td>
<td>1 Month</td>
</tr>
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2.2: Key Dates
- Take-over of encroachment: May 2021
- Finish encroachment: December 2022
- Duration of encroachment: September 2021
- Temporary Lane Closures:
  - Crane install: August 2021
  - Service work: July 2021
  - Crane removal: August 2022

2.3: Hours of Work
Work will generally take place during normal working hours as outlined in HRM’s Noise By-Law and Traffic Control Manual Supplement; these are noted below.

- Monday to Friday: 7:00 a.m. – 9:30 p.m.
- Saturdays: 8:00 a.m. – 7:00 p.m.
- Sundays & Statutory Holidays: 9:00 a.m. – 7:00 p.m.
- Servicing Work: Noted Above
Although work is not expected to be required outside of the times listed above, if, for any reason, work is anticipated to be required outside of these hours, the contractor will apply to HRM for approval 5 business days (minimum) in advance of such work and obtain approval prior to proceeding. It is noted that HRM’s Noise By-Law cannot be altered without HRM council approval; work must adhere to the Noise By-Law.

Section 3 – Relevant Regulations & Guidelines

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

a) National Building Code of Canada, as adopted and modified under the Building Code Act and the Nova Scotia Building Code Regulations made under that Act;
c) The Transportation Association of Canada (TAC)’s Manual of Uniform Traffic Control Devices for Canada (MUTCDC); and

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

a) HRM Design Guidelines;
b) HRM Standard Details;
c) S-300 Streets;
d) E-200 Encroachments;
e) B-201 Building;
f) N-200 Noise;
g) T-600 Trees;
h) S-900 Controlled Access Streets;
i) T-400 Truck Routes;
j) W-101 Discharge into Public Sewers;
k) B-600 Blasting;
l) HRM TCM Supplement;
m) G-200 Grade Alteration and Stormwater Management;
n) Admin Order 2018-005-ADM regarding encroachments; and
o) Admin Order 2020-010-OP regarding stormwater management standards for development activities.

Section 4: Vehicle Management

Prior to any construction activity, all temporary workplace traffic control devices and signage will be in place as per the Nova Scotia Temporary Workplace Traffic Control Manual (latest edition). The traffic control company will install the signage and ensure that they are maintained throughout the project. This project’s Traffic Control Plans (TCPs) are listed in the Appendix.

4.1: Vehicular Traffic Control
A Traffic Control Plan (TCP) has been prepared by the traffic control company and is provided in the Appendix.
Throughout all phases of construction two-way vehicular traffic will be maintained. Only during installation of the tower crane, service work and removal of the tower crane do we anticipate temporary lane closures to vehicles being required. We note 3.5m wide travel lane widths are required to accommodate bus traffic on North and Oxford Streets.

Spotters will be required on the ground to accommodate deliveries. Please refer to the appendices for required traffic control plans.

4.2: Haul Route and Staging Areas
The truck Haul Route Plan has been prepared by the traffic control company and is provided in the appendix. The selected route is intended to minimize traffic congestion and maximize pedestrian safety. During the excavation and construction phase vehicles will enter and exit the site at the gate location which will be clearly marked for function.

We anticipate material and concrete delivery trucks driving onto private property. These deliveries shall be contained within the encroachment area, refer to appendix for delivery schematic.

4.3: Vehicular Traffic Notifications
Should any traffic disruptions be required, notifications will be distributed to properties in the impacted area a minimum of five (5) days in advance of vehicular traffic closures.

4.4: Emergency Vehicles
In the event of unforeseen emergency situations, the site will remain accessible to emergency vehicles at all times.

4.5: Parking
Un-metered on street public parking adjacent to the project on Seaforth Street will be blocked off to protect the tree canopy from trucks accessing the site. This will close on street parking opposite of the site on Seaforth Street to maintain two-way traffic near the encroachment. On North Street adjacent to the project, an un-metered on street parking fronting civic 6389 will be closed to allow a temporary asphalt ramp to be installed for access to the on street pedestrian route around the encroachment and on Oxford in front of civic 2663, un-metered on street parking will be closed to provide room for the relocated bus stop required by the HRM.

It is noted that passenger vehicles are not permitted to park within any encroachment areas. To minimize parking requirements in adjacent neighbourhoods, on-site workers will rent parking spaces from adjacent parking structures and workers will be encouraged to carpool or rely on public transit.

Alternate public parking is not proposed as part of this project and as a result their will be a net loss of parking in the local area.

4.6: Bus Stops
There are two bus stops directly adjacent to the project, one on Oxford Street and the other on North Street. The Bus stop on North Street is planned to remain with covered scaffold protecting the current bus shelter. However, the bus stop on Oxford Street will need to be temporarily relocated to the front of civic 2663 Oxford and reinstated post construction in consultation with HRM transit. Refer to the appendix for the temporary crosswalk and bus stop plan.

4.7: Hazard Assessment
A vehicular and pedestrian hazard assessment is provided in the appendix. Any additional site hazards identified or encountered after work has commenced will be added to this list. All personnel on-site will be required to review this list and encouraged to identify additional potential hazards and hazard mitigation methods.
Section 5: Pedestrian Management

A Pedestrian Management Plan (PMP) has been prepared by the traffic control company and is provided in the appendix.

Throughout excavation and construction, the project will close the sidewalk, a portion of the street lane and on street parking in front of the development. This is to ensure that limits of excavation, building construction and deliveries are kept a safe distance from pedestrians. A temporary on street pedestrian route will be provided alongside the encroachment on North Street. While sidewalks on Oxford and Seaforth Streets will be closed with signage suggesting pedestrians use the alternate sidewalks across these streets.

The existing marked crosswalk at the North and Oxford intersection will encourage pedestrians to use the sidewalk opposite the site. While pedestrian on Oxford and Seaforth will be encouraged to cross Oxford Street at the Summit Street intersection temporary crosswalk as required by the HRM. Refer to the appendix for the temporary crosswalk and bus stop plan.

5.1: Pedestrian Protection
Pedestrians will be protected by physically distancing them from the project. A combination of rigid construction fencing, and F-type concrete barriers will delineate the encroachment area separating the project from pedestrians. Rigid fencing will be covered with translucent covering to block view of the site and will be anchored to the ground.

5.2: Pedestrian Safety
Pedestrian safety will be maintained by implementing appropriate signage as shown on the PMP. All navigation and safety signage indicating alternative sidewalks and potential hazards will be inspected and maintained regularly.

5.3: Pedestrian Traffic Notifications
Notifications will be distributed to properties in the impacted area a minimum of five (5) days in advance of pedestrian traffic impacts. A sample traffic notification letter can be found in the appendix. HRM must be notified prior to issuing the notification to neighbours.

5.4: Visually Impaired Persons
In keeping with Canadian National Institute for the Blind (CNIB) requirements and as outlined on their ‘Clearing Our Path’ website; various items will be incorporated into the pedestrian management signage and barriers. Such as, high visibility contrasting colours with appropriate font types (mix of upper and lower-case lettering), font sizes (between 16mm to 51mm) and sign colours (orange background with black lettering or white background with black lettering).

The contractor will use bright orange sawhorse barricades complete with bold-font signage to identify sidewalk termination points. Sawhorse barriers will incorporate lower cross members, painted and marked consistent with the rest of the sawhorse, these added cross members will be placed near the ground to aid visually impaired persons using a cane. Reflective tape will also be placed on the ends of fencing, hoarding, sawhorse barricades, and concrete barriers to help delineate pedestrian routes and disruptions. Signage and tape colours will vary but will comply with the colour/brightness contrast as outlined by the CNIB website; examples are black/white, orange/black or dark red/white combinations.

5.5: Accessibility
High visibility signage will be used to assist pedestrians to easily navigate around all project related blocked sidewalks.
5.6: Hazard Assessment
A vehicular and pedestrian hazard assessment is provided in the appendix. Any additional site hazards identified or encountered after work has commenced will be added to this list. All personnel on-site will be required to review this list and encouraged to identify additional potential hazards and hazard mitigation methods.

5.7: Pedestrian Management Plans Rendering (PMPR) Signage
The need for a rendered map displayed for pedestrians showing the detoured pedestrian routes are not anticipated for this project.

5.8: Pedestrian Detour Wayfinding Signage
The need for pedestrian wayfinding signage directing pedestrians to adjacent businesses is not anticipated for this project given the location.

Section 6: Encroachments & Disruptions

For public safety during construction, we are proposing that the project compound be limited to the encroachment area. This will incorporate the public sidewalk, a portion of the street lane and the unmetered on-street parking spaced adjacent to the project. This will move pedestrians to the temporary on street sidewalk around the encroachment on North Street and to the opposite sidewalk on Oxford and Seaforth Streets.

The encroachment is planned to be delineated by translucent rigid fencing on North Street with F-type concrete jersey barriers separating traffic from the temporary on street pedestrian route, while interlocking F-type concrete barriers complete with translucent rigid fencing will delineate the remainder of the encroachment. This encroachment is to keep the public away from the excavation zone of influence as well as provide additional room for form workers and deliveries within the encroachment.

The construction fencing with translucent covering will be anchored to the ground to prevent unintentional movement or overturning due to snow and wind loads.

It is noted that this fencing shall not be anchored to the sidewalk, nor shall the legs of the modular fencing extend onto the sidewalk as this creates an unacceptable tripping hazard which must be avoided. Throughout the project, fencing will be situated to not obstruct vehicle sight lines.

Should any utility or traffic disruptions be required, the contractor will first apply to HRM for approval, a minimum of five (5) business days in advance of such work and will then notify neighbours of these disruptions in a timely fashion.

6.1: Demolition
The demolition phase of this project was addressed under separate CMP document.

6.2: Site Excavation
This includes the excavation and removal of common site material. The building is planned to have two levels of underground parking. If bedrock is found, the contractor will apply for a blasting permit and adhere to the HRM blasting by-law and conditions of the blasting permit. Alternatively, if a blasting permit can not be obtained the site’s bedrock will be broken by a series of rock breakers to reach footing elevation.
6.3: Site Services Connection
This includes installation of new water and sewer laterals to their respective mains as well as decommissioning existing laterals which will be abandoned. The service installs will require modifications to the encroachment with temporary workplace signage incorporated (refer to the Service Installation Traffic Control Plans (TCP) in the appendix). HRM requires that this service work be limited to weekends only to minimize traffic disruptions. The target dates for this work are provided in the “Key Dates” section above with time of installations adhering to the Noise By-Laws noted above. The intent will be to complete this servicing work and reinstate the street as quickly as possible in order to minimize disruptions to the public.

Before scheduling site services connections, the contractor will notify all neighbouring properties, of the intended timeline for this work.

The contractor intends to reinstate the street cut during the season of work. It is noted that street cuts cannot be left gravel or open. HRM reinstatement specifications must be met and the travel way must be hard surfaced prior to reopening to the public. Asphalt, concrete curb and sidewalk reinstatement must be completed within 72 hours of disturbance and will be considered temporary if reinstated after October 31st or prior to May 1 in which case permanent reinstatement will be completed by June 15.

6.4: Construction Management Plan Element Inspection and Maintenance
Construction management plan elements will be inspected daily to ensure continued adherence to this CMP. Any deficiencies identified will be reinstated immediately. A CMP’s TCP & PMP inspection report summary will be completed for the project, including information on what maintenance activities were conducted. This report must be kept on site at all times and be available to HRM upon request.

6.5: Changes to the Construction Management Plan
All departures from the CMP regardless of the significance must be submitted to the Municipality 10 days in advance for review and approval. Any required changes or modifications to the approved CMP will be submitted to HRM for review and approval prior to implementation.

Section 7: Environmental Factors

7.1: Damage to HRM Infrastructure
Existing sidewalks within the encroachment area will be completely replaced. It is anticipated that sidewalks across the street will not be impacted by excavation or other construction activities. However, while efforts will be made to avoid damage, it is anticipated that some portions of existing curbs, gutters, and sidewalks may become damaged during the construction process which would require repairs or replacement. Pending HRM’s review prior to and after construction and subject to damage due to construction activities, the developer acknowledges that items may require to be fully replaced rather than repaired. The developer also acknowledges that any costs incurred to repair or replace this public infrastructure are the responsibility of the owner.

For reinstatement timeline requirements, it is noted that asphalt, concrete curb and sidewalk reinstatement must be completed within 72 hours of disturbance and will be considered temporary if reinstated after October 31st or prior to May 1 in which case permanent reinstatement will be completed by June 15 of the following construction season.
7.2: Protection of Trees
Trees on private property that will be removed to make way for the planned building. However, there are several HRM street trees within the public right-of-way directly adjacent to the project site that must be protected. On North Street there are two significant trees directly in front of the project with one small diameter tree at the eastern property corner and another significant tree adjacent, being in front of civic 6385. On Seaforth Street there are two significant trees in front of the project with a small diameter tree near the eastern property corner, adjacent to Civic 6385. It is noted that HRM street trees shall not be touched prior to approval and/or compensation agreements between the developer and HRM Urban Forestry are in place. Adjacent street trees are to be protected during construction in accordance with the HRM Tree Bylaw (T-600), which defines the required Tree Protection Zone (TPZ) that must be delineated with snow fencing and protected from construction activities. Refer to HRM tree protection detail in the appendix.

We note that the project driveway will require that the small diameter tree on Seaforth Street be removed as the driveway crosses the existing tree lawn in close proximity to the tree trunk. This driveway also crosses the TPZ of the closest significant tree west of the planned driveway.

The developer met with HRM Urban Forestry and Development Engineering on site to review these various street trees and discussed plans for construction. Based on this site meeting we understand HRM prefers that the significant trees remain with TPZ respected however tree pruning will be permitted. As discussed on site the TPZ limits will be fenced on site and along Seaforth the curb will be lined with barriers to keep delivery trucks away from these trees and prevent deliveries taking place between the trees. Additionally, we understand that a pedestrian access deck spanning between the existing sidewalk and curb on North Street is required to protect the existing tree lawn from anticipated pedestrian traffic as they access the relocated pedestrian route.

At this time, a tree compensation agreement has not been established.

7.3: Line Painting and Temporary Crosswalks
A temporary crosswalk and altered centrelines are planned for this project. Oxford and North Streets will require temporary line painting. Please refer to the appendix for the required plans.

7.4: Street and Right-of-Way Cleaning
The portion of public street adjacent to the project will be cleaned daily of any debris from trucks and silt, dirt, or rock that migrates beyond the encroachments. A sweeper truck will be utilized as required. Rock pads will be installed and maintained at all entrances to trap sediment. Where the developer plans to utilize the roadway for their encroachment the developer is responsible to clear snow from the street side of the jersey barriers.

7.5: Protection from Inclement Weather
To protect the public from construction debris during inclement weather, the project site will be enclosed by fencing complete with dust control covering, the site will be regularly reviewed and cleaned, with loose items secured when not in use.

7.6: Storm Water Management
During construction, nearby catch basins may be fitted with filter fabric to prevent debris from entering the storm system. The contractor will be responsible for maintaining these silt traps and cleaning them as required. Storm water collected inside the project site will be directed into temporary stormwater settling ponds situated within private property to allow clean water to be pumped into the existing public storm water systems in accordance with HRM By-law W-101 complete with appropriate fees to Halifax Water (HW). Sediment ponds may be shifted and
positioned as desired by the site contractor during mass excavation however will generally be placed in localized low points within the site excavation.

7.7: Noise, Dust and Emission Control
Dust mitigation for this project will be achieved using rock pads for trucks exiting the site. A water truck and sweeper truck will also be utilized to help prevent dust from becoming airborne and, when required, calcium may need to be used to mitigate dust migration. Additionally, mesh on the inside of the fencing will help to contain any airborne dust inside the site.

Breaking of rock may occur and rock faces cleared to form a wall. Mesh will be used on the inside of all construction fencing to mitigate dust control.

All construction vehicles will be required to use the loading area for parking and idling to keep exhaust emissions within the construction zone. Vehicles will be staged so that idling will not occur for more than 3 minutes at a time.

As indicated above, all work shall be completed in accordance with the HRM Noise By-Law.

7.8: Rodent Control
Rodent movement increases during construction activities. The owner has engaged a rodent control company, who has established a Rodent Control Plan (RCP) to help mitigate rodent movement prior to and during construction. The RCP applies to all project phases with the goal of preventing movement of rodents off-site to find safe refuge in adjacent areas. The RCP will consist of a baiting and monitoring program. Bait stations (traps) will be placed as outlined in the NPMA Pest Management Standards for Food Processing & Handling Facilities.

The RCP will help to lower the number of active rodents in the project area. Bait stations are set along the edges of the project and secured in place using wooden stakes (for open sodded and dirt locations), weighted patio stones (behind walls and on paved areas), and zip-ties (fixed to fences) as per typical industry standards.

Refer to the appendix for a copy of the Rodent Control Plan.

Section 8: Site Protection & Hoarding

8.1: Barriers, Fences, and Gates
The encroachment will be delineated using rigid chain link fencing and concrete F-type jersey barriers which may be complete with rigid fencing secured to the jersey barriers, total height of stand alone fencing or concrete barrier with fencing will be 1.8m or 6ft as per the noted administrative order. This fencing will be covered with a translucent dust control mesh of high quality which will extend a minimum 3m from the public right-of-way. This screening is described in the appendix and will block passersby or tourists view of the construction site. Construction traffic will utilize the proposed gates, gate will not be screened for safety reasons.

Along the private sidelines where non-vehicular traffic is present, the hoarding will be delineated by weighted modular 1.5m (5ft) high fencing or existing fencing where it is at least 1.5m tall. All fencing will have dust control mesh and must be anchored down to prevent unintentional movement or overturning due to snow or wind loads. It is noted that this fencing shall not be anchored to the sidewalk, nor shall the legs of the modular fencing extend onto the sidewalk as this creates an unacceptable tripping hazard which must be avoided.
Throughout the project, fencing will be situated to not obstruct vehicle sight lines. Gates are to swing open away from the street into site. Gates may be sliding, swing gates or removable fence panels, however, must remain closed when not in use.

Installation of F-Type concrete barriers, fencing and covering will take place during regular working hours as noted above. This work will be scheduled by the contractor after the HRM’s pre-construction meeting has been held. HRM will coordinate this pre-construction meeting; the developer, contractor and traffic control company will attend this site meeting. During the process of erecting and tearing down the traffic barriers, fencing and opaque covering defining the encroachment, traffic control elements will be implemented as per the Traffic Control Plan in the appendix. All work and any traffic interruptions will be coordinated by the contractor who will notify HRM a minimum of five (5) business days before work is scheduled to begin.

8.2: Snow removal
The developer will be responsible to remove snow and ice as required to ensure that emergency access is maintain to the project site, this includes temporary on street sidewalk and communications boxes. The contractor will not dump snow or ice onto adjacent property and will truck snow off site as required to prevent the unsafe build-up of snow piles. The developer will clear snow from outside the jersey barriers to keep the edge of the vehicle travel lane free and clear of snow and ice build up. The developer will clear snow along the altered pedestrian route on north Street, maintaining 1.5m clear space for pedestrians, this includes the pedestrian route access ramp and deck spanning the tree lawn on North Street.

8.3: Emergency Access & Egress
The site will be accessible through 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 in case of emergency allowing unrestricted emergency response units access to the site.

Any existing fire hydrants located adjacent will remain protected from construction activities. These fire hydrants, along with the existing and proposed fire department connections (Siamese connections) will be accessible to firefighters throughout all phases of the project. Adjacent existing hydrants and fire department connections are not anticipated to be affected by construction.

8.4: Hoarding Aesthetics
The site hoarding will resemble that shown in the appendix; encroachment fee reductions are not anticipated.

8.5: Sight Lines
Fencing and signage will be installed as per the CMP drawings such that vehicle sight lines are maintained around corners.

8.6: Project Information and Contacts
To encourage communication between the project team and the public, contact information will be provided on Project Information Boards; these will be posted prominently around the project site on the fencing; refer to the appendix for a copy of the Project Information Board and the Encroachment Plan for the planned locations. Refer to the signage specification within the appendix describing the required size, materials, mounting hardware, etc. of these signs.
Section 9: Lifting, Hoisting, and Crane Operations

9.1: Crane Use Overview
This project will incorporate a tower crane, this crane will be stationed within the project site and will be operated under the direct supervision of a licensed crane operator employed by the formwork contractor. The approximate location of the crane tower is shown in the appendix.

It is anticipated that the crane will be assembled and disassembled from within a temporary road closure as per the TCP found in the appendix.

The crane swing will extend over neighbouring properties as shown in the Crane Swing Diagram included in the appendix. The developer will notify these property owners prior to extending the crane over their properties. Refer to the appendix for crane information.

Concrete pump trucks, boom trucks and/or mobile crane trucks will be brought to site to accommodate lifting and hosting materials to upper levels. These trucks will be stationed within the encroachment (see concrete delivery schematic within the appendix) and will be operated under the direct supervision of a licensed crane operator.

If lifting operations are required over the public realm, this area will be closed to access. In all cases of lifting, extreme care will be used to ensure public and worker safety.

9.2: Transport Canada and Nav Canada Regulations
There are two registered aerodromes in the Halifax region; Halifax International Airport and Canadian Forces Base Shearwater Airfield. According to Transport Canada regulations, the project site is outside of the lands to which regulations for these two aerodromes apply.

9.3: Aerodromes
There are several heliport approaches in the Halifax region; both Emergency Hospitals (QEII and IWK) as well as Point Pleasant Park. Given the location of the project site relative to these various approaches we understand Transport Canada notice does not apply.

Section 10: On-Site Safety and Security

10.1: Site Safety and Security Overview
The contractor will adhere to all Occupational Health & Safety requirements throughout the completion of this project. At a minimum, the following safety protocols will be utilized to further enhance site safety and security:

a) All workers will be required to have proof of up-to-date safety training;

b) Personal protective equipment (PPE) will be required for all personnel on site;

c) Adequate signage will be placed outside the hoarding, which will warn of hazards that may exist;

d) Gates will be locked and the perimeter fencing secured to provide security against public access during off work hours and will be monitored during operation;

e) Hoarding will clearly state “No Trespassing – Construction Personnel Only” & PPE requirements will be clearly identified (e.g., “Hard Hats and Safety Footwear Must Be Worn Beyond This Point”);

f) Regular safety inspections will be conducted to ensure suitability of hoarding and other safety devices;

f) Emergency contact information to be prominently posted as per the Project Information Board.
10.2: Material Handling: Loading, Unloading, Delivery and Storage
The contractor will adhere to the procedures stipulated in the Haul Route Plan for delivery of materials. Delivery vehicles will use the designated gates for entry and exit. Timing of deliveries will be coordinated to have the least possible negative impact on regular traffic. The staging and delivery area will be housed on private property within the hoarding limits.

10.3: Emergency Access & Egress
The site will be accessible through gates stationed at an existing driveway and an additional gate at the intersection of Oxford and Seaforth Streets to facilitate construction vehicle access. These gates are the only locations that will receive equipment/materials during construction. This gate will be clearly marked for function. In cases of emergencies, on-site workers will exit the project site through this gate. This gate will remain unlocked at all times when workers are on site in case of emergency allowing unrestricted emergency response units access to the site. Gates will be locked and secured afterhours to provide security against public access during off work hour. Emergency contact information will be posted on project information boards surrounding the site, refer to the CMP plan for details.

10.4: Security Site Lighting
Security site lighting is not anticipated for this project.

10.5: Smoking Areas
On site smoking areas will not be provided as this will be a smoke-free site.

10.6: Fire Suppression Systems
There are no adjacent existing fire hydrants and as such they will remain outside the project area and will be protected from construction activities. These fire hydrants, along with any existing adjacent fire department connections (Siamese connections) will be accessible to firefighters throughout all phases of the project.

There are no proposed fire department connections at this stage of the project. These are not available for fire department use until after the building’s water supply lines have been installed, tested and commissioned by the water commission, similar with the fire suppression system. This system will not be active until after the building is near complete and the encroachment fencing has been removed.

Section 11: Pre-Construction Consultation & Meeting

11.1: Pre-CMP Community Consultation
Due to the current pandemic, the developer will forego the community consultation meeting. A construction notification letter will be delivered to the properties neighbouring the construction site as well as HRM staff, notifying them of the expected work with contract information for questions and feedback. As part of this notification the surrounding community and businesses will be offered to sign up for a monthly construction project notification from the development. It is understood, HRM requires a confirmation letter from the applicant confirming delivery of notification letters to affected residents. A map indicating these properties has been included in the appendix.

11.2: Project Information and Contacts
To encourage communication between the project team and the public, contact information will be provided on Project Information Boards; these will be posted prominently around the project site on the fencing; refer to the
appendix for a copy of the Project Information Board and the CMP Plan for the planned locations. Information on signage size and materials is outlined in the appendix.

11.3: Preconstruction Meeting
Prior to construction the developer, contractor and traffic control company will attend a pre-construction meeting with HRM staff to review the CMP document on site. HRM’s engineering technician will confirm the date and time of this meeting; and may wise to waive the requirement.

11.4: Construction Notification
Approximately five (5) business days prior to the encroachment, an additional notification will be circulated to the neighbouring properties, notifying them that work is starting on site.

Section 12: Summary
This construction management plan was prepared with the goal to minimize negative impacts to the community, pedestrians, and traffic throughout the scope of this project. This plan 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 work as necessary.

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

Regards,

Servant, Dunbrack, McKenzie & MacDonald Ltd.

Geoff MacLean, P.Eng.
Project Engineer

Z:\SDMM\35000-35999\35400\35406\CMP\35406 Construction (Rev 1)\Oxford and North St. - CMP (Rev 1) - 35406.docx
APPENDIX
Appendix B – Traffic Control Plan (TCP)

1 - Encroachment Signage Plan - TCP
2 - Paint Line Marking Plan - TCP
3 - Barrier Install - TCP
4 - Service Lateral - TCP
5 - Crane install & removal - TCP
Appendix B - 1

Encroachment Signage Plan

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St
Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:
Not to Scale
Application Guide C22
See Pedestrian Management Plan for Sidewalk Closure Details

Legend
- F-Type Barrier
- Gate
- Perimeter Fencing
- Rigid Fencing with opaque hoarding

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Dublin St
North St
3.5m travel lanes
3.5m barrier to Centreline
5.5m curb to Centreline

Additional notes:
## Barrier Installation Plan

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St Contract: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:
- Not to Scale
- Application Guide C112
- Traffic Light at North and Oxford to be turned off
- See Pedestrian Management Plan 2 for Sidewalk Closure Details

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### Legend
- Cone
- Work Area

---

Appendix B - 3

---

[Map of the installation plan with various signs and symbols indicating traffic control measures.]
Service Laterals Installation Plan

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St
Contractor: SDM Contact: Geoff MacLean, 902-789-6374
Comments:
Not to Scale
Application Guide C122
See Pedestrian Management Plan 2 for Sidewalk Closure Details

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Legend

- Barrel
- Cone
- F-Type Barrier
- Gate
- Perimeter Fencing
- Rigid Fencing with opaque hoarding
- Safety Zone
- Work Area

Appendix B - 4
Appendix B - 5

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St
Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:
Not to Scale
Application Guide C114
Road Closure Plan for installation and removal of tower crane
See Pedestrian Management Plan for Sidewalk Closure Details

Crane Installation and Removal Plan

Legend
- Barrel
- Barricade Supervisor
- F-Type Barrier
- Gate
- Perimeter Fencing
- Rigid Fencing with opaque hoarding
- Work Area

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Appendix C – Haul Route Plan

1 - General Haul Route Plan
2 - Concrete Delivery Haul Route Plan
Haul Route Plan

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St
Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:
Not to Scale
Haul Route Plan
Inbound Route via Connaught Ave to Chebucto Rd to Oxford St
Outbound Route Via Oxford St to Bayers Rd to Connaught Ave

Legend
- Dedicated Spotter
- Haul Route Inbound
- Haul Route Outbound
## Concrete Delivery Haul Route Plan

**Date:** 2021-02-08  
**Author:** Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364  
**Project:** 6389,6395 and 6399 North St  
**Contractor:** SDMM  
**Contact:** Geoff MacLean, 902-789-6374

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<td>Application Guide C33</td>
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<tr>
<td>TCP to stop and hold traffic on Oxford Street when mixer trucks exit from site</td>
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<tr>
<td>TC-21 to be added to encroachment signage</td>
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<tr>
<td>Dedicated spotters to be used on Seaforth St to back mixers into site, and to back pump truck out.</td>
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<tr>
<td>Inbound for Seaforth St via Windsor St to Seaforth St</td>
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<tr>
<td>Outbound from Seaforth via Oxford St to Bayers Rd to Oxford St</td>
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<tr>
<td>Outbound from Oxford St to North St to Chebucto Rd to Connaught Ave</td>
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</tbody>
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### Legend

- Inbound route for Oxford St
- Inbound Route for Seaforth St
- Outbound Route from Oxford St
- Outbound route from Seaforth
- Reversing Trucks

---

[Map Diagram of Haul Route Plan]
Appendix D – Pedestrian Management Plan

1 - Oxford and Seaforth Sidewalks Closed - PMP 1
2 - North, Oxford and Seaforth Sidewalks Closed - PMP 2
Pedestrian Management Plan

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St
Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:
Not to Scale
Pedestrian Management Plan
Long duration closure of sidewalks on Oxford St and Seaforth St.

Legend

↑ Pedestrian Route
Pedestrian Management Plan 2

Date: 2021-02-08 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: 6389,6395 and 6399 North St
Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:
Not to Scale
Pedestrian Management Plan 2
This Plan to be used for Barrier Installation Plan
For Closure of sidewalks on North St, Oxford St and Seaforth St

Legend
Pedestrian Route
Sidewalk closure area
**Tree Protection Zone Calculation Table**

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<td>41 - 50 CM</td>
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<td>&gt;80 CM</td>
<td>9.0 Meters</td>
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**Notes:**
1. Wood post: (Min. 76mm width) installed to a depth of 500mm (underground locates required).
2. Top and bottom rail: (Min. 38x89mm construction, max. span 2.5m), cross bracing as required.
3. Height of the fence: min 1.2 meters.
4. No ground disturbance within 1.2 meter of the tree trunk (i.e. post installation).
5. Posts set back from sidewalk and curb: min 300mm.
6. Fence material: minimum orange barrier fence or metal chain link fence.
7. Attach a sign on two sides of the tree "protection zone do not remove fence during construction."

**Sign, on two (2) sides, to read:**
Tree Protection Zone do not remove fence during construction.

**Top and bottom rail min.**
28mm x 89mm.

**Wooden post min.**
76mm x 76mm, brace as required.

**Orange barrier fence**
Along perimeter.

**Wood or metal post below grade. If metal is specified the wood post must be bolted to the metal post.**

---

**Halifax Standard Detail**

**Tree Protection Zone & Barrier**

**Date:** 2019

**Reference:**

**Approved:**

**Scale:** NTS

**Figure No:**
Sample Barrier & Fence Details

F-shape Barrier

Approved Barrier Designs

The only pre-approved portable anti-intrusion barrier in Nova Scotia is the Portland Cement Concrete F-shape Barrier. F-shape Barriers with designs approved before 2011.01.01 must be constructed and installed copying a design certified as meeting Test Level 3 of the NCHRP Report 356 (NCHRP 356), or if the design was approved after 2011.01.01, Test Level 3 standards of the American Association of State Highway and Transportation Officials (AASHTO) Manual for Assessing Safety Hardware (MASH).

Dimensions are in mm

Chain link fence mounted on top of F-type interlocking concrete jersey barrier

Note: All F-type concrete barriers within the street shall have reflective tape on them.
Fence mounted to curb with interlocking F-type concrete jersey barriers set beside.

Note: All F-type concrete barriers within the street shall have reflective tape on them.
Appendix G – Hoarding Information
Opaque construction hoarding material shall covering and be adequately secured to the rigid fencing that outlines the encroachment area. This covering shall be continuous such that it prevents passersby or tourist from seeing through the fencing and gates to the active construction site.

UltraMesh® Eclipse® if a 7.96 oz. which is a polyester, black-backed mesh that is used where complete opacity is required.

UltraMesh Eclipse is UV printable for project renderings and is typically used for building and fence graphic wraps. The product is available in widths of 126” and 196”.

Product example is shown below with the technical data sheet on the following page.

Tarp Option
Print Banner Option
UltraMesh Eclipse is a 7.96 oz. polyester, black-backed mesh. The material is ideal for applications where complete opacity is required. UltraMesh Eclipse is UV printable and may be used for building wraps and fence graphics. Available in widths of 126 and 196.

### Material Details

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</tbody>
</table>

The information on physical and chemical characteristics is based upon tests believed to be reliable. The values are intended only as a source of information. A legally binding guarantee of specific properties is not to be inferred from our specifications. They are given without guaranty and do not constitute a warranty. A weight variance of +/-2% is acceptable. The purchaser should independently determine, prior to use, the suitability of this material for hisher specific purpose. (Data represents averages and is not intended for use as a specification.)
PROPOSED MULTI – UNIT RESIDENTIAL BUILDING

Oxford and North Street
128 Residential Units
2 levels Underground Parking

May 2021 – December 2022

Owner:
Ardmore Hall Limited
150 Solutions Drive, Suite 100
Halifax, NS, B0S 0E5

Contact:
George Giannoulis – (902) 802-6588 (24hr contact)

Contractor:
Atlantic Road Construction and Paving
6 Belmont Avenue, P.O. Box 89
Eastern Passage, NS
B3G 1M7

Contact:
Greg MacDonald - (902) 830-6411

Traffic Control:
Frontline Traffic Services
6 Belmont Avenue, P.O. Box 89, Eastern Passage, NS, B3G 1M7

Contact:
Phil Pruneau – (902) 818-5548

Rodent Control Company:
Rentokil Pest Control
51 Duke Street, Bedford, Bedford, NS

Contact:
902-835-2304
Appendix I – Project Safety Signage
Sample Safety Signage

NO TRESPASSING

WARNING

CONSTRUCTION SITE

To reduce risk of injury,
• Hard Hat
• Safety Shoes
MUST be worn on this site.
Signage Specifications: Project Signage shall;

- Be constructed of weatherproof material (corrugated plastic)
- Have high visibility contrasting colours (dark letters on white background)
- Incorporate appropriate font types (mix of upper and lower-case lettering)
- Incorporate appropriate font sizes (16mm – 51mm) such that the signage is readable from a distance (16-20m)
- Size of signage will be poster size (600mm x 900mm) or larger; to allow community members to see and read the information from a distance
- Signage may incorporate plastic grommets positioned every 300mm around the perimeter of the signage to ensure a secure signage installation
- Signage will be installed/anchored to project fencing using plastic zip-ties
- Signage will be positioned along the project site as per the encroachment plan
- Signage shall not impede traffic of pedestrian sight lines
- **Signage shall be placed on site 10 days prior to the start of the noted construction activity to ensure the passing public has had adequate time to review, adjust their travel patterns, usage of streets and or can be considered ‘informed’**.

Samples

![Sample Signage](image1)

![Sample Signage](image2)
Appendix K – Sample Traffic Notification Letter
DRAFT NOTIFICATION LETTER

TO WHOM IT MAY CONCERN

Date

NOTIFICATION OF TRAFFIC DISRUPTION: STREET NAME, HALIFAX, NOVA SCOTIA

This is to inform you that to facilitate operations in association with the Multi-Unit Residential building construction work, traffic disruptions will occur on or about DATE with an anticipated duration of approximately TIME. The street will be reduced to one lane of vehicular traffic during this time.

Should you have any questions or concerns please feel free to contact the below:

CONTACT INFORMATION

General Contractor:

Atlantic Road Construction and Paving
6 Belmont Avenue, P.O. Box 89
Eastern Passage, NS, B3G 1M7
Phone: (902) 830-6411

Should any questions arise, please feel free to contact the undersigned.

Yours Truly,

Greg MacDonald

Atlantic Road Construction and Paving
<table>
<thead>
<tr>
<th>No.</th>
<th>Hazard</th>
<th>Project Phase</th>
<th>Vehicular Impacts:</th>
<th>Mitigation Methods:</th>
<th>Pedestrian Impacts:</th>
<th>Mitigation Methods:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Excavation</td>
<td>Excavation</td>
<td>Vehicles may enter project site and fall down excavation.</td>
<td>Place concrete barriers along travel ways. Concrete barriers and existing curbs to prevent vehicle entry.</td>
<td>Pedestrians may enter project site and fall down excavation.</td>
<td>Place concrete barriers/rigid fencing around entire project site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vehicle weight may surcharge excavation, causing excavation wall failure.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rock Blasting</td>
<td>Excavation</td>
<td>Blasted rock projectiles may strike vehicles.</td>
<td></td>
<td>Blasted rock projectiles may strike pedestrians.</td>
<td>Install solid plywood hoarding along rigid fence adjacent to blasting zone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Construction Waste</td>
<td>All Phases</td>
<td>Vehicles may be struck by construction waste.</td>
<td>The contractor shall keep the project site and surrounding areas clean and free of construction debris.</td>
<td>Pedestrians may be struck by construction waste.</td>
<td>The contractor shall keep the project site and surrounding areas clean and free of construction debris.</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>4</td>
<td>Vehicular &amp; Pedestrian Activities</td>
<td>All Phases</td>
<td>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.</td>
<td>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.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Heavy Machinery Operation</td>
<td>All Phases</td>
<td>Heavy machinery or vehicles may break down or overturn, damaging other vehicles.</td>
<td>The contractor shall maintain safe distances between vehicles and heavy machinery on-site. Concrete barriers will be installed to separate construction vehicles from public traffic.</td>
<td>Heavy machinery or vehicles may break down or overturn, injuring pedestrians.</td>
<td>The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery. Rigid fences will be installed to separate construction vehicles from pedestrians.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Construction Signage</td>
<td>All Phases</td>
<td>Construction signage may strike vehicular traffic.</td>
<td>Construction signage will be securely fixed to existing poles, temporary concrete sign bases, or rigid fences.</td>
<td>Pedestrians may walk into construction signage, including traffic signage, wayfinding signs, etc. may.</td>
<td>Construction signage may strike pedestrians.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Dangerous Materials</td>
<td>All Phases</td>
<td>Flammable, explosive, &amp; hot materials may damage vehicles if not properly maintained &amp; stored.</td>
<td>The contractor will use and store dangerous materials properly as per manufacturers’ specifications.</td>
<td>Flammable, explosive, &amp; hot materials may injure pedestrians if not properly maintained &amp; stored.</td>
<td>The contractor will use and store dangerous materials properly as per manufacturers’ specifications.</td>
</tr>
<tr>
<td>8</td>
<td>Hoisting Operations</td>
<td>Superstructure</td>
<td>Precast concrete panels and other items hoisted may fall from heights and damage vehicles.</td>
<td>Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights.</td>
<td>Precast concrete panels and other items hoisted may fall from heights and injure pedestrians.</td>
<td>Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights. Pedestrians will be moved to opposite sides of street from the project site or onto temporary sidewalks such that loads are never suspended above the public realm.</td>
</tr>
<tr>
<td>9</td>
<td>Reinstate Public Infrastructure &amp; Service Installation</td>
<td>Superstructure</td>
<td>Heavy equipment and hot concrete used during public infrastructure reinstatement and service installation may cause damage to vehicles.</td>
<td>The contractor shall maintain safe distances between vehicles and heavy machinery on-site. Concrete barriers will be installed to separate construction vehicles from public traffic during public infrastructure reinstatement and service installation.</td>
<td>Heavy equipment and hot concrete used during public infrastructure reinstatement may injure pedestrians.</td>
<td>The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery.</td>
</tr>
<tr>
<td>10</td>
<td>Fallen debris</td>
<td>Superstructure</td>
<td>Debris may fall from upper stories of the new building causing damage to vehicles.</td>
<td>F-Type concrete barriers will be installed such that a safe distance is maintained between the building envelope and vehicular traffic.</td>
<td>Debris may fall from upper stories of the new building injuring pedestrians.</td>
<td>Construction of upper building levels will be set back from the property line/rigid fencing, this separating pedestrians from potential fallen debris.</td>
</tr>
</tbody>
</table>
COMMUNITY CONSULTATION MAP OVERVIEW

Project – Oxford & North Street
Notification Letter

Date: ******

Ardmore Hall Limited – Building Construction Information Meeting

Dear Neighbour,

As you may be aware, we are planning an apartment building construction project located on the corner of Oxford and North Streets.

If you are interested in receiving more information about our construction plans, practices, schedule and to go over any questions you may have regarding construction of our new project please contact us to discuss. We would be happy to meet with you to discuss.

Thank you.

George Giannoulis

Cell: 902-802-6588

Email: george@mosaikproperties.ca
Appendix N – Rodent Control Plan
THE MOST ADVANCED LOW-PROFILE BAIT STATION

PRODUCT FEATURES:

- Single locking mechanism for quick servicing
- Removable tray for easy cleaning
- Locking bait rods won’t fall out during cleaning
- Dog & child tamper-resistant
- Can hold:
  - 4 - 1 oz. bait BLOX on 4 vertical rods
  - or -
  - T-Rex™ rat trap or Mini-Rex™ mouse trap
- Compatible with Sidekick® Load-N-Lock™ system

PRODUCT CODE DIMENSIONS (in) CASE QTY

Protecta Evo Ambush EA2000 8 1/2 x 10 1/4 x 4 1/4 6 Stations

More Than Meets The Eye

Madison, Wisconsin 53704 USA | Ph: (608) 241-0202 | Fax: (608) 241-9631

www.belllabs.com
ALL-WEATHER BLOX™

Kills Rats, Mice & Meadow Voles*

Kills Warfarin Resistant Norway Rats

KEEP OUT OF REACH OF CHILDREN

CAUTION

See back panels for First Aid and additional precautionary statements.

ACTIVE INGREDIENT:
Bromadiolone (CAS #28772-56-7): 0.005%

OTHER INGREDIENTS†: 99.995%

†Contains Denatonium Benzoate

TOTAL 100.000%

*Not permitted for use against the following species in California: Cotton rat, Eastern harvest mouse, Golden mouse, Polynesian rat, Meadow vole, White-throated woodrat, Southern plains woodrat, and Mexican woodrat.
**CONTRAC® ALL-WEATHER BLOX®**

**KILLS RATS, MICE, AND MEADOW VOLEs**

Norway rats, roof rats, and house mice may consume a lethal dose in one night's feeding with first dead rodents appearing four or five days after feeding begins.

**ACTIVE INGREDIENT:**
Bromadiolone (CAS #28772-56-7) .......................... 0.005%

**OTHER INGREDIENTS**: .................................. 99.995%

**CONTAINS Denatonium Benzoate** ........................ TOTAL 100.000%

**KEEP OUT OF REACH OF CHILDREN CAUTION**

See side panels for First Aid and additional precautionary statements.

**STORAGE AND DISPOSAL**
Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE**
Store only in original container in a cool, dry place inaccessible to children and pets. Keep out of reach of children and pets before eating, drinking, chewing gum, using tobacco or using the toilet and change into clean clothing.

**ENVIROMENTAL HAZARDS**
This product is extremely toxic to fish, birds and other wildlife. Dogs and predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. Do not apply this product directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff also may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash water or mire.

**USER SAFETY REQUIREMENTS**
Follow manufacturer’s instruction for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash hands thoroughly after applying PPE and before eating, drinking, chewing gum, using tobacco or using the toilet and change into clean clothing.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**
CAUTION: Harmful if swallowed or absorbed through the skin. Keep away from children, domestic animals and pets. Do not get in eyes, on skin or on clothing.

**ENVIRONMENTAL HAZARDS**
This product is extremely toxic to fish, birds and other wildlife. Dogs and predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. Do not apply this product directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff also may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash water or mire.

**NOT FOR USE FOR USE AGAINST THE FOLLOWING SPECIES IN CALIFORNIA:**


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**NOT FOR USE FOR USE AGAINST THE FOLLOWING SPECIES IN CALIFORNIA:**


**FIRST AID**

**HAVE LABEL WITH YOU WHEN OBTAINING TREATMENT ADVICE**

- Call a poison control center, doctor, or 1-877-854-2494, or 1-800-659-7379 immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.

**IF SKIN OR CLOTHING:**
- Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**IF IN EYES:**
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

**IF ON SKIN:**
- Remove contaminated clothing. Wash skin immediately with plenty of water for 15-20 minutes.
- Wash hands thoroughly after applying bait.

**NOTE TO PHYSICIAN**
- If swallowed or absorbed through the skin, this material may reduce the clotting ability of the blood and cause bleeding. If ingested, administer Vitamin K₁ intramuscularly or orally. Read as necessary based on monitoring of prothrombin times.

**TREATMENT FOR PET POISONING**
If animal eats bait, call veterinarian at once.

**TREATMENT FOR PET POISONING**
- If animal eats bait, call veterinarian at once.

**PRECAUTIONS**
- Store unused product out of reach of children and pets.
- To prevent reinfestation, limit sources of rodent food, water, and harborage as much as possible. If reinfestation does occur, repeat this product in sewers.

**DIRECTIONS FOR USE**

**WARNING:** To the extent consistent with applicable law, seller makes no warranty, expressed or implied, with respect to the quality, performance, or fitness of the product for any particular purpose.

**STORAGE AND DISPOSAL**
Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE**
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**CONTRACTION® ALL-WEATHER BLOX®**

**KILLS RATS, MICE, AND MEADOW VOLEs**

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See side panels for First Aid and additional precautionary statements.

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**NOT FOR USE FOR USE AGAINST THE FOLLOWING SPECIES IN CALIFORNIA:**


**PRECAUTIONS**
- Store unused product out of reach of children and pets.
- To prevent reinfestation, limit sources of rodent food, water, and harborage as much as possible. If reinfestation does occur, repeat this product in sewers.
SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: DETEX® BLOX with LUMITRACK

EPA Registration Number: NA

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Activity Monitoring - Ready to use
Uses advised against: Use only for the purpose described above

MANUFACTURER/SUPPLIER:
Bell Laboratories, Inc.
3699 Kinsman Blvd.
Madison, WI 53704, USA
Email: sds@belllabs.com
Phone: 608-241-0202

Medical or Vet Emergency: 877-854-2494 or 952-852-4636
Spill or Transportation Emergency: 800-424-9300 (CHEMTREC)

SECTION 2. HAZARDS IDENTIFICATION

Classification according to Regulation OSHA 1910.1200(d): Not classified

Signal Word: None

See Section 15 for information on FIFRA applicable safety, health, and environmental classifications.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>% By weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inert and Non-Hazardous Ingredients</td>
<td>Proprietary</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

(Unlisted components are non-hazardous)

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Ingestion: Non-Toxic
Inhalation: Not applicable.
Eye contact: Non-Toxic
Skin contact: Non-Toxic

Most important symptoms and effects, both acute and delayed
Non-Toxic

Advice to physician: Non-Toxic
Advice to Veterinarian: Non-Toxic

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media: water, foam or inert gas.
Unsuitable Extinguishing Media: None known.

Special hazards arising from the mixture: High temperature decomposition or burning in air can result in the formation of toxic gases, which may include carbon monoxide.

Advice for firefighters: Wear protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: None. Non-Toxic

Environmental precautions: None. Non-Toxic

Methods and materials for containment and cleaning up

For Containment: None. Non-Toxic
For Cleaning Up: None. Non-Toxic

Reference to other sections: Refer to Sections 7, 8 & 13 for further details of personal precautions, personal protective equipment and disposal considerations.
SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Do not use near heat sources, open flame, or hot surfaces. Non-Toxic.
Conditions for safe storage, including any incompatibilities: None. Non-Toxic

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Established Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls: None. Non-Toxic
Occupational exposure limits: None. Non-Toxic
Personal Protective Equipment:
Respiratory protection: Not required
Eye protection: Not required
Skin protection: None. Non-Toxic
Hygiene recommendations: None. Non-Toxic

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- Appearance/Color: Tan wax block
- Odor: Sweet grain-like
- Odor Threshold: Not applicable, odor not associated with a hazardous material.
- pH: Not applicable, is not dispersible with water.
- Melting point: Not applicable
- Boiling point: Not applicable
- Flash point: Not applicable, does not contain components classified as flammable.
- Evaporation rate: Not applicable, is a solid.
- Flammability: Not applicable, is a solid.
- Upper/lower flammability or explosive limits: Not applicable, does not contain components classified as flammable or explosive.
- Vapor Pressure: Not applicable
- Vapor Density: Not applicable, is a solid
- Relative Density: 1.13 g/mL @ 20°C
- Solubility (water): Not water soluble
- Solubility (solvents): Not applicable
- Partition coefficient: n-octanol/water: Not applicable
- Auto-ignition temperature: Not applicable, does not contain components classified as flammable.
- Decomposition temperature: Not applicable
- Viscosity: Not applicable, is not a liquid.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not Applicable
Chemical stability: Not Applicable
Possibility of hazardous reactions: Refer to Hazardous decomposition products
Conditions to avoid: Avoid extreme temperatures (below 0°C or above 40°C).
Incompatible materials: Not Applicable
Hazardous decomposition products: Not Applicable

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity
- LD50, oral (ingestion): Not Toxic
- LD50, dermal (skin contact): Not Toxic
- LC50, inhalation: Not Toxic
Skin corrosion/irritation: Not Toxic
Serious eye damage/Irritation: Not Toxic
Respiratory or skin sensitization: Not Toxic
Germ cell mutagenicity: Not Toxic
Carcinogenicity: Not Toxic
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Effects: Not Toxic
Persistence and degradability: Not Toxic
Bioaccumulative potential: Not Toxic
Mobility in Soil: Not Toxic.
Other adverse effects: None.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal: Wastes resulting from the use of this product may be placed in trash, on-site, or at an approved waste disposal facility. Dispose of all wastes in accordance with all Federal, state and local regulations.

SECTION 14. TRANSPORT INFORMATION

UN number: Not regulated
UN proper shipping name: Not regulated
Transport hazard class(es): Not regulated
Packing group : Not regulated
Environmental Hazards
DOT Road/Rail: Not considered hazardous for transportation via road/rail.
DOT Maritime: Not considered hazardous for transportation by vessel.
DOT Air: Not considered hazardous for transportation by air.
Freight Classification: LTL Class 60
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable
Special precautions for user: None

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture: Not applicable
Signal Word: None
Precautionary Statements: None
Potential Health Effects:
Eye Contact: May cause irritation
Skin Contact: Non-irritating to the skin
Ingestion: Not harmful if swallowed

TSCA: All components are listed on the TSCA Inventory or are not subject to TSCA requirements
CERCLA/SARA 313: Not Toxic
CERCLA/SARA 302: Not Toxic

SECTION 16. OTHER INFORMATION

For additional information, please contact the manufacturer noted in Section 1.

NFPA
<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Specific Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (Not Toxic)</td>
<td>1 (slight)</td>
<td>0 (stable)</td>
<td>None</td>
</tr>
</tbody>
</table>

HMIS
<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (Not Toxic)</td>
<td>1 (slight)</td>
<td>0 (minimal)</td>
<td>None</td>
</tr>
</tbody>
</table>

Disclaimer: The information provided in this Safety Data Sheet has been obtained from sources believed to be reliable. Bell Laboratories, Inc. provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your consideration and investigation. The user is responsible to ensure that they have all current data, including the approved product label, relevant to their particular use.
Rentokil
Ehrlich | Western | Presto-X
Your Local Pest Control Experts

PestNetOnline

The complete online pest management and reporting solution

Randy Hobbs
Account Executive
What is PestNetOnline?

Online reporting and analysis of all pest activity

- Intuitive and easy to use
- Complete visibility to minimize risks
- Increased efficiency with information at your fingertips
- Minimize exposure with all your pest control records and data in one place
- Stay in control with a smartphone app
Who is PestNetOnline for?

For Food and Beverage, Pharmaceutical, Logistics, Healthcare, Commercial/Residential Property, and Retail… any business that needs online pest management and reporting

Offering:

- Personalized Dashboard
- Multiple and Single Site Locations
- Trend Analysis
- Detailed Service Reports
- Recommendation System
- Interactive Site Maps
- Documentation Availability
- Material Usage Reports
- Proof of Service
How PestNetOnline works...

1. Pest devices and inspection points are barcoded
2. Devices are scanned and information entered into a handheld device
3. Data is immediately transmitted at the end of the service
4. Data reaches the PestNetOnline servers
5. Service email notifications are sent to customer

Information is displayed in PestNetOnline and mobile applications
PestNetOnline

Single site locations

- Provides a comprehensive review of all visit details
- Pest Activity and Recommendation charts summarizing at a high level all issues
- Visit Filters allowing you to quickly locate series of visit and types of visits
- Review and reprint any Proof of Service
- Navigation tabs take you directly to Tasks, Recommendations, Pest Activity and Material Usage detail screen – quickly and easily
For multi site locations

- A dashboard that summarizes all activity
- My Sites allows you to see an overview of your locations
- Navigation shortcuts allowing you to quickly and effortlessly research visit activity
- Link to all related information
- Export data for custom analysis
PestNetOnline

Analysis and reports

• Provides quick, ad-hoc snapshot analysis reporting on all pest and device type activity

• Reports can be created to document Pest Activity, Recommendations, Visit Performance, Task Performance and Material Usage

• Reports are distributed to you via email

• Can be created and ran once, or proactively scheduled on a Daily, Week, Monthly or Quarterly based upon your needs

• Many options available to customize a snapshot view of Pest Activity
PestNetOnline

- Options to review an entire worksite, or specific Buildings / Floor / Zones within your worksite
- Feature rich with multiple date range options
- Provides quick, ad-hoc snapshot analysis on all pest activity
- Add commentary to charts
For high dependency customers

- A dedicated Audit Checklist page
- For AIB, BRC, and other 3rd Party Auditors, a single page that brings together all necessary visit details and links to related information
PestNetOnline

Site plans for high dependency and commercial customers

- Provide an interactive, graphic representation of device location
- Filters allow you to locate specific types (Mechanical Rodent Traps, Pheromone, etc.) quickly and easily
- Site Maps may also be printed if desired
Site Documents, available to all users of PestNetOnline compliments all printed log book information electronically.
PestNetOnline Smartphone App

- **Home Screen**
  - Open recommendations
  - Instances of activity (last 90 days)

- **Recommendations**
  - Open recommendations total and by site
  - Open recommendations within a single site
  - Individual recommendation detail
    - Update the recommendation on the spot!

- **Activity**
  - Overall activity and activity instances by site
  - Last 90 days activity within a single site
  - Activity details and materials used

- **Site list and recommendation and activity indicators**

- **Email alerts creation**
PestNetOnline offers three levels of functionality

- Whether you are a homeowner, local retailer, business with multiple branches or manufacturer, PestNetOnline will meet all of your business needs

<table>
<thead>
<tr>
<th>Level</th>
<th>Residential</th>
<th>Commercial</th>
<th>High Dependency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functionality</td>
<td>Privately owned residences, condos, and townhouses</td>
<td>Commercial organizations that do not require third party audit support</td>
<td>Businesses and organizations who utilize any third party audit group</td>
</tr>
<tr>
<td>Barcode Structure</td>
<td>One barcode is required</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Materials Usage</td>
<td>Only through reporting</td>
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<td>✓</td>
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<tr>
<td>Pest Activity</td>
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<tr>
<td>Updating Recommendations</td>
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<td>Visit Details</td>
<td>✓</td>
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<tr>
<td>Single Site Reporting</td>
<td>✓</td>
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<td>Documents</td>
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<tr>
<td>Reports</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Smartphone app (lite version)</td>
<td>✓</td>
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<tr>
<td>Alerts</td>
<td>X</td>
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<tr>
<td>Multi-Site Reporting</td>
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<tr>
<td>Detector History</td>
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<tr>
<td>Trends Analysis</td>
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<tr>
<td>Tasks</td>
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<td>✓</td>
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<tr>
<td>Site Plans</td>
<td>X</td>
<td>X</td>
<td>✓</td>
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<tr>
<td>Audit Compliance</td>
<td>X</td>
<td>X</td>
<td>✓</td>
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For more information visit pnol.rentokilna.com
# CONSTRUCTION MANAGEMENT PLAN - INSPECTION CHECKLIST

<table>
<thead>
<tr>
<th>CMP Element</th>
<th>Set-up per PMP?</th>
<th>Condition?</th>
<th>Action Required</th>
<th>Action Completed</th>
<th>Comments</th>
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<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Good</td>
<td>Bad</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Appendix P – Concrete Delivery Schematic
Appendix R – Crane Information
Boom Elevation +/- 91.0m

Top of Roof Elevation +/- 81.0m

level 1 Elevation +/- 61.1m

P1 Parking Level

P2 Parking Level
**PEINER**

**SK 315**

Hammerhead Tower Crane

17,600-35,300 lbs. (8-16 mt)

Lifting Capacity

---

**SPECIFICATIONS**

- **Lifting Capacity**
  - 17,600 lbs (8 mt)
  - 23,000 lbs (10.5 mt)
  - 31,000 lbs (14.5 mt)
  - 35,300 lbs (16 mt)

- **Base Section**
  - 29'-6" (9.64 m)

- **Slewing Section**
  - 6'-0" (1.83 m)

- **Overall Dimensions**
  - 12'-0" (3.66 m)
  - 12'-0" (3.66 m)
  - 22'-9" (7.00 m)

- **Rated Load Capacities**
  - L7 = 35,300 lbs (16 mt)
  - L5 = 16'-0" (4.88 m)
  - L6 = 21'-3" (6.50 m)
  - L4 = 18'-5" (5.60 m)
  - L3 = 16'-1" (4.90 m)

---

**Machines shown may have optional equipment.**
PEINER SK 315

Combinations of tower section, hook heights, forces acting per corner, base ballast

Version: A

U 821

UF 821

Ground support

Version: A

F

F / SP

E

This information is for reference use only. Operators manual should be consulted and adhered to.
Please contact Bigge Crane and Rigging Co. at 888-337-BIGGE or email towers@bigge.com for further information.
# PEINER SK 315 Tower TS 211

<table>
<thead>
<tr>
<th>Tower</th>
<th>HH (ft)</th>
<th>Tower</th>
<th>HH (m)</th>
<th>BZ + BF (kips / t)</th>
<th>in service (kips / kN)</th>
<th>out of service (kips / kN)</th>
<th>BZ (kips / t)</th>
<th>in service (kips / kN)</th>
<th>out of service (kips / kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 212.1</td>
<td>246.9'</td>
<td>TSV 212.1</td>
<td>75.2 m</td>
<td>212.0</td>
<td>204</td>
<td>279</td>
<td>98</td>
<td>909</td>
<td>1243</td>
</tr>
<tr>
<td>12 x TS 212.1</td>
<td>237.4'</td>
<td>1 x TSV 212</td>
<td>72.5 m</td>
<td>168.0</td>
<td>186</td>
<td>240</td>
<td>75</td>
<td>826</td>
<td>1066</td>
</tr>
<tr>
<td>10 x TS 212.1</td>
<td>198.6'</td>
<td>1 x TSV 212</td>
<td>66.3 m</td>
<td>146.0</td>
<td>173</td>
<td>263</td>
<td>56</td>
<td>770</td>
<td>901</td>
</tr>
<tr>
<td>9 x TS 212.1</td>
<td>169.4'</td>
<td>1 x TSV 212</td>
<td>60.4 m</td>
<td>124.0</td>
<td>161</td>
<td>169</td>
<td>56</td>
<td>715</td>
<td>751</td>
</tr>
<tr>
<td>8 x TS 212.1</td>
<td>149.1'</td>
<td>1 x TSV 212</td>
<td>54.5 m</td>
<td>101.0</td>
<td>149</td>
<td>145</td>
<td>45</td>
<td>661</td>
<td>645</td>
</tr>
<tr>
<td>7 x TS 212.1</td>
<td>130.7'</td>
<td>1 x TSV 212</td>
<td>48.6 m</td>
<td>101.0</td>
<td>142</td>
<td>128</td>
<td>45</td>
<td>633</td>
<td>609</td>
</tr>
<tr>
<td>6 x TS 212.1</td>
<td>111.3'</td>
<td>1 x TSV 212</td>
<td>42.7 m</td>
<td>101.0</td>
<td>136</td>
<td>112</td>
<td>30</td>
<td>607</td>
<td>499</td>
</tr>
<tr>
<td>5 x TS 212.1</td>
<td>91.0'</td>
<td>1 x TSV 212</td>
<td>36.8 m</td>
<td>101.0</td>
<td>131</td>
<td>98</td>
<td>30</td>
<td>582</td>
<td>435</td>
</tr>
<tr>
<td>4 x TS 212.1</td>
<td>72.6'</td>
<td>1 x TSV 212</td>
<td>30.9 m</td>
<td>101.0</td>
<td>126</td>
<td>85</td>
<td>30</td>
<td>559</td>
<td>376</td>
</tr>
<tr>
<td>3 x TS 212.1</td>
<td>53.2'</td>
<td>1 x TSV 212</td>
<td>25.0 m</td>
<td>101.0</td>
<td>120</td>
<td>80</td>
<td>30</td>
<td>536</td>
<td>356</td>
</tr>
<tr>
<td>2 x TS 212.1</td>
<td>33.9'</td>
<td>1 x TSV 212</td>
<td>19.1 m</td>
<td>101.0</td>
<td>116</td>
<td>80</td>
<td>30</td>
<td>515</td>
<td>356</td>
</tr>
</tbody>
</table>

**Version A**

**Version F**

**Version E**

---

**Foundation**

- 25'-7" x 25'-7" x 6'-7"
- Width 7.8 x 7.8 x 1.7 m

**Anchor stools**

- BF: 4 x 8.82 kips
- BZ: 4 x 4.0 t

**Stationary base**

- U 821

**Travelling base**

- Curve F 500

---

Tel: (888) 337-BIGGE or (510) 639-8100 • Fax: (510) 639-4053 • Email: towers@bigge.com

This information is for reference use only. Operators manual should be consulted and adhered to. Please contact Bigge Crane and Rigging Co. at 888-337-BIGGE or email towers@bigge.com for further information.
PEINER SK 315  Radius and Capacity

<table>
<thead>
<tr>
<th>Jib</th>
<th>Max. capacity max. 17,600 lbs. 8.0 t</th>
<th>Radius – ft/m</th>
<th>Capacity – lbs./int.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4-Part Line  max. 35,300 lbs</td>
<td>2-Part Line</td>
<td>max. 17,600 lbs</td>
</tr>
<tr>
<td>a</td>
<td>E</td>
<td>max. 8.0 t</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------</td>
<td>----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>L7</td>
<td>229°-8'</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td></td>
<td>9°-4' – 96°-8'</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td></td>
<td>70.0</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td>L6</td>
<td>213°-3'</td>
<td>17600</td>
<td>16700</td>
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<tr>
<td></td>
<td>9°-4' – 105°-4'</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td></td>
<td>65.0</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td>L5</td>
<td>196°-10'</td>
<td>17600</td>
<td>16700</td>
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<td></td>
<td>9°-4' – 117°-9'</td>
<td>17600</td>
<td>16700</td>
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<tr>
<td></td>
<td>60.0</td>
<td>17600</td>
<td>16700</td>
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<tr>
<td>L4</td>
<td>180°-5'</td>
<td>17600</td>
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<td>9°-4' – 124°-8'</td>
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<tr>
<td></td>
<td>55.0</td>
<td>17600</td>
<td>16700</td>
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<tr>
<td>L3</td>
<td>164°-1'</td>
<td>17600</td>
<td>16700</td>
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<td></td>
<td>9°-4' – 130°-11'</td>
<td>17600</td>
<td>16700</td>
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<tr>
<td></td>
<td>50.0</td>
<td>17600</td>
<td>16700</td>
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<tr>
<td>L2</td>
<td>147°-8'</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td></td>
<td>9°-4' – 131°-11'</td>
<td>17600</td>
<td>16700</td>
</tr>
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<td></td>
<td>45.0</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td>L1</td>
<td>131°-3'</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td></td>
<td>9°-4' – 131°-13'</td>
<td>17600</td>
<td>16700</td>
</tr>
<tr>
<td></td>
<td>40.0</td>
<td>17600</td>
<td>16700</td>
</tr>
</tbody>
</table>

**Speeds**

- **FU 8-160/4**
  - $v = 0 \rightarrow -290$ fpm (88 m./min.)
  - 10.2 HP
  - 7.5 kW

- **SR 10-190/3**
  - $v = 0 \rightarrow -96$ fpm (30 m./min.)
  - 2 x 16.3 HP
  - 2 x 12.0 kW

- **K WB 120/4**
  - $v = 0 \rightarrow 0.9$ rpm (min$^{-1}$)
  - 2 x 11.4 HP
  - 2 x 8.4 kW

HK max. = 705' (215 m)  6 - layers

480 V / 60 Hz / 3 ph

Type WB 66-80/4F

**Counterweight**

<table>
<thead>
<tr>
<th>Jib</th>
<th>L1</th>
<th>L2</th>
<th>L3</th>
<th>L4</th>
<th>L5</th>
<th>L6</th>
<th>L7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BG</td>
<td>30000 lbs</td>
<td>32000 lbs</td>
<td>36000 lbs</td>
<td>39150 lbs</td>
<td>43550 lbs</td>
<td>41350 lbs</td>
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<td>[lbs]</td>
<td>13600 kg</td>
<td>14600 kg</td>
<td>18600 kg</td>
<td>19750 kg</td>
<td>20850 kg</td>
<td>19750 kg</td>
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<td>3 x 6950 1 x 9150</td>
<td>2 x 6950 1 x 9150</td>
<td>3 x 6950 2 x 9150</td>
<td>3 x 6950 2 x 9150</td>
<td>2 x 6950 3 x 9150</td>
<td>5 x 9150</td>
</tr>
<tr>
<td>[lbs]</td>
<td></td>
<td>3 x 3.15 1 x 4.15</td>
<td>2 x 3.15 1 x 4.15</td>
<td>3 x 3.15 1 x 4.15</td>
<td>3 x 3.15 1 x 4.15</td>
<td>2 x 3.15 3 x 4.15</td>
<td>5 x 4.15</td>
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</table>
# PEINER SK 315 Dimensions and transport weights

See operating manual for mounting weights.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Dimensions (ft / m)</th>
<th>Weight lbs / t</th>
<th>Volume ft³ / m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jib Section III</td>
<td>l 39.01 b 4.99 h 7.09</td>
<td>4 200</td>
<td>1 386</td>
</tr>
<tr>
<td>2 Jib Section I</td>
<td>l 39.01 b 4.99 h 5.84</td>
<td>3 790</td>
<td>1 137</td>
</tr>
<tr>
<td></td>
<td>l 11.89 b 1.52 h 1.78</td>
<td>1 72</td>
<td>32.2</td>
</tr>
<tr>
<td></td>
<td>l 38.65 b 4.99 h 6.17</td>
<td>4 320</td>
<td>1 190</td>
</tr>
<tr>
<td></td>
<td>l 11.78 b 1.52 h 1.88</td>
<td>1 96</td>
<td>33.7</td>
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<td>l 35.34 b 4.99 h 5.45</td>
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<td>l 0.95 b 1.53 h 0.50</td>
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<td>Turntable with slewing ring</td>
<td>l 36.35 b 7.64 h 7.81</td>
<td>25 350</td>
<td>2 169</td>
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<td>and cabin</td>
<td>l 11.08 b 2.33 h 2.38</td>
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<td>3 Turntable with slewing</td>
<td>l 31.99 b 7.64 h 7.81</td>
<td>24 030</td>
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<td>ring support</td>
<td>l 9.75 b 2.33 h 2.38</td>
<td>10.90</td>
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<td>Cabin with support and</td>
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<td>railing</td>
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<td>4 Hoist winch</td>
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<td>l 7.51 b 5.45 h 3.28</td>
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<td>BG</td>
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<td>6 Tower section</td>
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<td>UF 821</td>
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<td>20 330</td>
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<td>9.22</td>
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We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty applicable to the particular product and sale. We make no other warranty, expressed or implied.

For more information, product demonstration, or details on lease and rental plans, please contact your local Terex Towers Distributor.

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Web site: www.biggetowercrane.com
Appendix S – Temporary Crosswalk and Bus Stop Plan