# MU2-MU5 Residential Apartments Faulker Street & Dawson Street

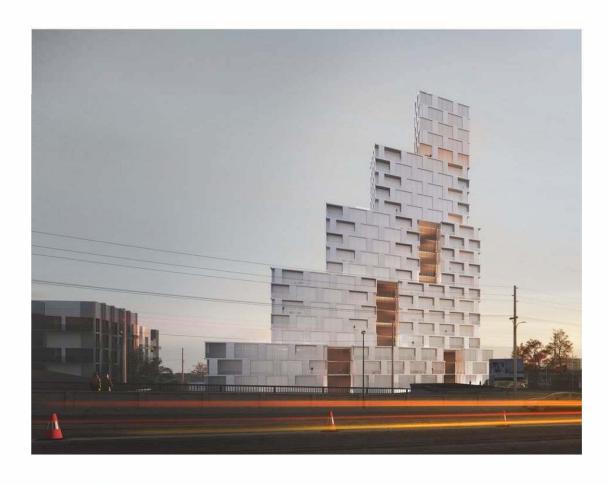
Excavation & Building Construction

Prepared by Geoff MacLean, P.Eng.

Job No. 39128

### CONSTRUCTION MANAGEMENT PLAN

0	MAR 2025	ISSUED FOR PERMIT
REVISION #	DATE	DESCRIPTION





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In consultation with the developer, contractor, traffic control company and HRM.



#### **Section 1: Introduction**

#### 1.1: Project Description and Objectives

The developer is planning to construct an apartment building within their lands between Faulkner Street and Dawson Street in Dartmouth. In preparation for this development, the existing vacant lots were consolidated forming one parcel. The planned development will include +/-230 residential units within a 23-storey building having 2 levels of underground parking accessed from Faulker Street. This CMP has been prepared to address excavation, services and building construction.

The new residential building is planned to have 2 levels of underground parking, deep excavations (+/-20ft) fronting the HRM Right of Way (ROW) along both streets will be required for the project. Where the building foundation will be setback varies from +/-1.60m-3.00m (5.2-10ft) from ROW, for public safety from excavation limits and construction activities the project is planned to be phased while utilizing the adjacent land owned by the developer. This will be hoarded off to accommodate the construction staging area reducing impacts to the surrounding community. A ROW encroachment is not planned for the initial stages of the project, leaving the sidewalk open to the public. However with building construction (stage 2) we anticipate the need to close the HRM sidewalk adjacent to the project on both streets and close on street parking on the opposite side of Faulkner Street. Where the project is surrounded by existing construction sites with street, sidewalk closures or detours; with stage 2 we plan to provide a temporary crosswalk on both Dawson and Falkner Streets to maintain pedestrian access by the site. With temporary on-street pedestrian route supplied on Faulkner which will require an altered street center line.

A row of rigid construction fencing will be installed along the street line in front of the project with stage 1. While with stage 2, the fencing will be replaced with interlocking concrete barriers with chain link fencing on top positioned along the curb on both streets. Concrete and other deliveries will be stationed off street on private property within the hoarded areas. Two-way vehicle traffic will be maintained on both street throughout construction, with the exception being for service work and driveway installations. Tower crane assembly and disassembly will be stationed within the private property.

The project borders active construction sites along its western property line, vacant land along its eastern property line (owned by the developer), active construction site across Dawson and an active construction site and commercial property that houses HRM Bridge Commission across Faulkner. 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.

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### 1.2: Project Contact Information

The project team for the proposed development consists of:

Role	Name	Contact	Address	Phone
Owner/	Ghosn Group	Robert Ghosn	6156 Quinpool Road, Sutie 102,	
Developer	Developments Ltd.		Halifax, NS, B3L 1A3	
Construction	North Branch	Nick Tingley	6156 Quinpool Road, Sutie 102,	(902) 817-0844
Manager	Construction Ltd.		Halifax, NS, B3L 1A3	24 Hour Emergency
				Contact
Site Contractor	Atlantic Road	Greg	6 Belmont Avenue, P.O. Box 89	(902) 835-8205
	Construction and	MacDonald	Eastern Passage, NS, B3G 1M7	
	Paving			
Traffic Control	Frontline Traffic	Tyler Hayman	6 Belmont Avenue, P.O. Box 89	(902) 818-5548
Company	Services		Eastern Passage, NS, B3G 1M7	
Rodent Control	Rentokil Pest	Main Office	11 Glendale Avenue, Unit #5, (902) 812-0375	
Company	Control		Lower Sackville, NS, B4C 3P2	

# **Section 2: Project Schedule and Logistics**

The following is a brief summary of anticipated major project milestones broken down by phase:

#### 2.1: Schedule

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Project Phase	Start Date		End Date	Time Period
<b>Rodent Control Program</b>	Feb 15, 2025	-	May 31, 2025	3.5 months
Site Excavation	Apr 1, 2025	-	Sep 30, 2025	6 months
Substructure	Sep 1, 2025	-	Jan 31, 2026	5 Months
Superstructure	Feb 1, 2026	-	Mar 31, 2028	26 Months
Service Abandonments	n/a	-	n/a	n/a
Service installs	Jul 2026	II -	Jul 2026	3 weekends
HRM Right of Way Flat Works	Sep 1, 2027	-	Sep 30, 2027	1 month
Site Flat Works	Sep 1, 2027	-	Oct 31, 2027	2 months

# 2.2: Key Dates

2: K	ey Date	es establishment of the second			
•	Phase	1 – Setup safety fencing	April 1, 2025		
Phase 2 - Install encroachment			August 1, 2025		
	0	Sidewalk closure (Dawson Street & Faulkner Street)			
	0	Street lane closure (Faulkner Street)			
•	Finish (	encroachment	March 31, 2028		
•	Duratio	on of encroachment	32 months		
•	Temporary lane/road closures:				
	0	Faulkner Street sewer service install	July 4-5, 2026		
	0	Dawson Street sewer service install	July 11-12, 2026		
	0	Dawson Street water service install	July 18-19, 2026		

The encroachment areas are shown in the appendix for reference.

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#### 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. – 8:00 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. Note that construction noise exemptions may be granted where construction noise is planned to take place during prohibited hours of the N-200 By-law. The developer to apply for this separately under the Construction Noise Exemption process.

### **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;
- b) Nova Scotia Occupational Health and Safety Act, and the Nova Scotia Occupational Safety General Regulations made under that Act;
- The Transportation Association of Canada (TAC)'s Manual of Uniform Traffic Control Devices for Canada (MUTCDC);
   and
- d) Nova Scotia Temporary Workplace Traffic Control Manual (NSTCM).

#### 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) B-600 Blasting;
- k) HRM TCM Supplement;
- G-200 Grade Alteration and Stormwater management;
- m) Admin Order 2018-005-ADM regarding encroachments; and
- n) 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.

We are proposing an on-street pedestrian route in front of the project site, that will alter the street centerline and close parking on the opposite side of Faulkner Street, aligned with the neighboring construction site proposed on street sidewalk and altered center line. Two-way vehicle traffic will be maintained on Faulkner with 3.5m to 4.32m wide travel lanes to accommodate local traffic. Only during service work and driveway installation do we anticipate short term temporary lane closures. It is anticipated that tower crane assembly and disassembly will be stationed within the private property. Please refer to the appendices for required encroachment plan and 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 all construction phases vehicles will enter and exit the site at the gate location(s) which will be clearly marked for function. During construction activities concrete and material deliveries shall be contained within private property and hoarded area. We anticipate these deliveries entering and exiting the gates stationed off Faulkner Street. Refer to appendix for concrete 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. Refer to sample notification letter in the appendix.

#### 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 parking along Faulkner will be closed in front of the project on the opposite side of the street to accommodate the on-street pedestrian route. On street parking will be affected by this project. It is noted that passenger vehicles are not permitted to park within any encroachment areas. To minimize parking requirements in adjacent neighbourhoods, site workers will utilize private property, and workers will be encouraged to carpool or rely on public transit.

#### 4.6: Bus Stops

Bus service should not be affected by this project.

#### 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.

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### **Section 5: Pedestrian Management**

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

Throughout (phase 2) construction, the project will close the sidewalk in front of the development on Dawson and Faulkner streets. This is to ensure construction and deliveries are kept a safe distance from pedestrians. Pedestrian traffic will be maintained with use of two (2) new temporary marked crosswalks, one (1) on the northeast corner of Dawon at George Street and one (1) on the southwest corner of Faulkner Street at Dickson Street providing access to the on-street sidewalk on the opposite side of the street.

#### 5.1: Pedestrian Protection

Pedestrians will be protected by physically distancing them from the project. A combination of chain link fencing anchored to the ground and F-type concrete barriers will delineate the encroachment. All fencing will be covered with opaque covering and will extend a minimum 3m from the public right-of-way, to block view of the site. Refer to the appendix for examples of the barriers and fencing.

#### **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 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.

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#### 5.7: Pedestrian Management Plans Rendering (PMPR) Signage

The need for a rendered map displayed for pedestrians showing the detoured pedestrian routes is not anticipated.

#### **5.8: Pedestrian Detour Wayfinding Signage**

The need for pedestrian wayfinding signage directing pedestrians to adjacent businesses is not anticipated.

### **Section 6: Encroachments & Disruptions**

During construction, we are anticipating the project encroachment area will incorporate the public sidewalk on Dawson and Faulkner streets. The street width will be narrowed, altering the street centerline to accommodate a temporary 1.5m on-street pedestrian route on Faulkner that will close parking in front of the project. This will reroute pedestrian traffic to the opposite side of the street with use of new temporary crosswalks on both streets. This encroachment is to keep the public away from the excavation zone of influence as well as provide additional space for site workers and deliveries within the encroachment area.

To keep the public away from potential hazards a row of interlocking F-type concrete barriers complete with chain link fencing with opaque coverings and interlocking F-type concrete barriers on the street side of the protected on-street sidewalk route.

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

Demolition is not required for this project.

#### 6.2: Site Excavation

This includes deep excavation and removal of common site material. The development is planned to have 2 levels of underground parking below street grade on both streets. 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. 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. A sample notification letter is included in the appendix.

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 31<sup>st</sup> or prior to May 1 in which case permanent reinstatement will be completed by June 15.

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#### 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 HRM infrastructure will be reinstated within the encroachment area and/or be completely replaced. This includes reinstatement of the HRM sidewalk, curb and gutter and topsoil and sod post construction. 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 additional 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

There are no HRM street trees within the Right-of-Way fronting the project site. 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). Refer to HRM tree protection detail in the appendix.

#### 7.3: Line Painting and Temporary Crosswalks

An altered centreline and two temporary crosswalks are proposed for this project.

#### 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 site entrances behind the curb line to knock dirt free from truck tires with aim to reduce off tracking of site soils.

Where the developer plans to utilize the public sidewalk for their encroachment the developer is responsible to clear snow from the street side of these jersey barriers, gates on Faulkner and along the on-street sidewalk.

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#### 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 silt bags and/or filter fabric to prevent debris from entering the storm system and maintained until final reinstatement is complete. Stormwater collected inside the project site will be directed to temporary stormwater settling ponds situated within the building footprint to allow clean water to be pumped into the existing public sewer systems. Excavation dewatering to municipal systems requires a permit, obtained from Halifax Water via p2@halifaxwater.ca, and follow the strict adherence to Halifax Water regulations. The contractor must prevent erosion or siltation of surface runoff from leaving the construction site through the use of erosion and sedimentation controls (See NSECC Erosion and sedimentation control handbook for construction sites). 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 building excavation.

#### 7.7: Noise, Dust and Emission Control

The contractor will at all times adhere to the HRM Noise Bylaw (N-200). unless approved under HRM exemption process No work will take place on the project site outside those hours identified in section 2 of this report, unless HRM grants an exception.

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, to utilize the established Rodent Control Plan (RCP) to help mitigate rodent movement prior to and during site excavation and building construction. The RCP applies to all project phases with the goal of preventing movement of rodents off-site. 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 was engaged two weeks prior to the commencement of site excavation help to lower the number of active rodents in the project area. Bait stations positioned along existing buildings and fence lines prior to excavation. Bait stations positioned 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.

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

### **Section 8: Site Protection & Hoarding**

#### 8.1: Barriers & Fences

Throughout the phases of construction activities, the project compound or encroachment will be delineated using a combination of rigid construction fencing, chain link fencing, interlocking F-type concrete jersey barriers complete with chain link fencing with a total height (fencing and concrete barrier and fencing structure) shall be 1.8m or 6ft as per the noted administrative order and interlocking F-type concrete jersey barriers demarking the on-street pedestrian route. This fencing will be open chain link fence or covered with an opaque 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. Throughout the project, fencing will be situated to not obstruct vehicle sight lines.

Along the private sidelines where non-vehicular traffic is present, the hoarding will be delineated by weighted modular 1.8m (6ft) high fencing or existing fencing where it is at least 1.8m tall. All fencing will have opaque dust control mesh and must be anchored down to prevent unintentional movement or overturning due to snow or wind loads.

The F-type barriers and fencing that define the encroachment will adhere to the Encroachment Plan which is to scale includes dimensions and can be found in the appendix. These areas can be measured for the administering of applicable fees. Encroachment areas and fees will be based on the areas within the public right-of-way enclosed by the barriers and fencing.

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(s) in the appendix. All work and any traffic interruptions will be coordinated by the contractor who will notify HRM a minimum of 5 business days before work is scheduled to begin.

It is noted that surplus fencing must be stored and installed from private property when relocated for deliveries and be routinely re-established to keep the site secure. Surplus fencing cannot be stored within HRM's right-of-way.

#### 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 fire hydrants. 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 and onstreet sidewalk, and gates clear of snow and ice build up on Dawson and Faulkner.

#### 8.3: Gate Access and Egress

The site will be accessible through gates. These gates are the only locations that will receive equipment/materials during construction, gates will remain closed 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.

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Construction traffic will utilize the two (2) proposed access gates stationed along the street line at the proposed hoarded area (private property) on Faulkner Street to facilitate deliveries. Gates are to swing into site, remain closed when not in use and locked after hours.

Any existing fire hydrants located adjacent to the site will remain protected from construction activities. These fire hydrants, along with the existing fire department 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

Rigid fencing and signage will be installed as per the CMP drawings such that vehicle sight lines are maintained around corners, particularly at driveway access points and existing intersections.

#### **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, the 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 site's tower crane is shown in the appendix.

It is anticipated that the crane assembly and disassembly will be stationed on the adjacent private property owned by the developer.

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

During construction concrete trucks will be stationed within the private property during concrete operations and material deliveries will be stationed within private property. (See concrete delivery schematic within the appendix).

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.

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#### 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;
- a) Personal protective equipment (PPE) will be required for all personnel on site;
- b) Adequate signage will be placed outside the hoarding, which will warn of hazards that may exist;
- c) 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;
- d) 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");
- e) 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 coordinated by the delivery companies and site personnel, concrete and material delivery trucks will be housed within private property accessed from Faulkner Street.

#### 10.3: Emergency Access & Egress

The site will be accessible through gates to facilitate construction vehicle access. In cases of emergencies, on-site workers will exit the project site through these gates. These gates will remain closed but 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.

Gates are to remain closed at all times unless being used for deliveries to maintain a controlled access site preventing access by the general public to the construction site.

#### 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.

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#### **10.6: Fire Suppression Systems**

There are two (2) existing fire hydrants near the project site. One (1) in front of civic 37 Dawson Street and one (1) in front of the existing construction site on the opposite side of the Faulkner Street, that remain outside the project area and will be protected from construction activities. These fire hydrants, along with any existing fire department connections will be accessible to firefighters throughout all phases of the project.

The proposed fire department connection and fire hydrant are not available for fire department use until after the 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 contact 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.

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### **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\39000-39999\39100\39128\CMP\IFP\MU2-MU5 - CMP (IFP) - 39128.docx

Page | 13 Job No. 39128



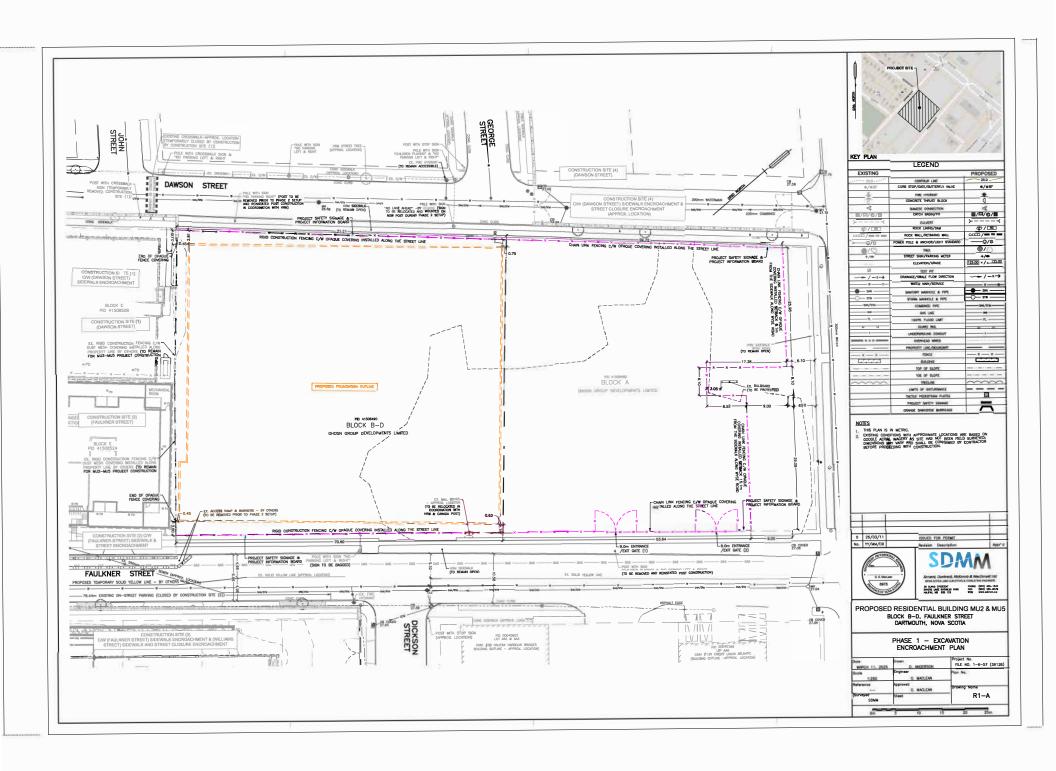
# **APPENDIX**

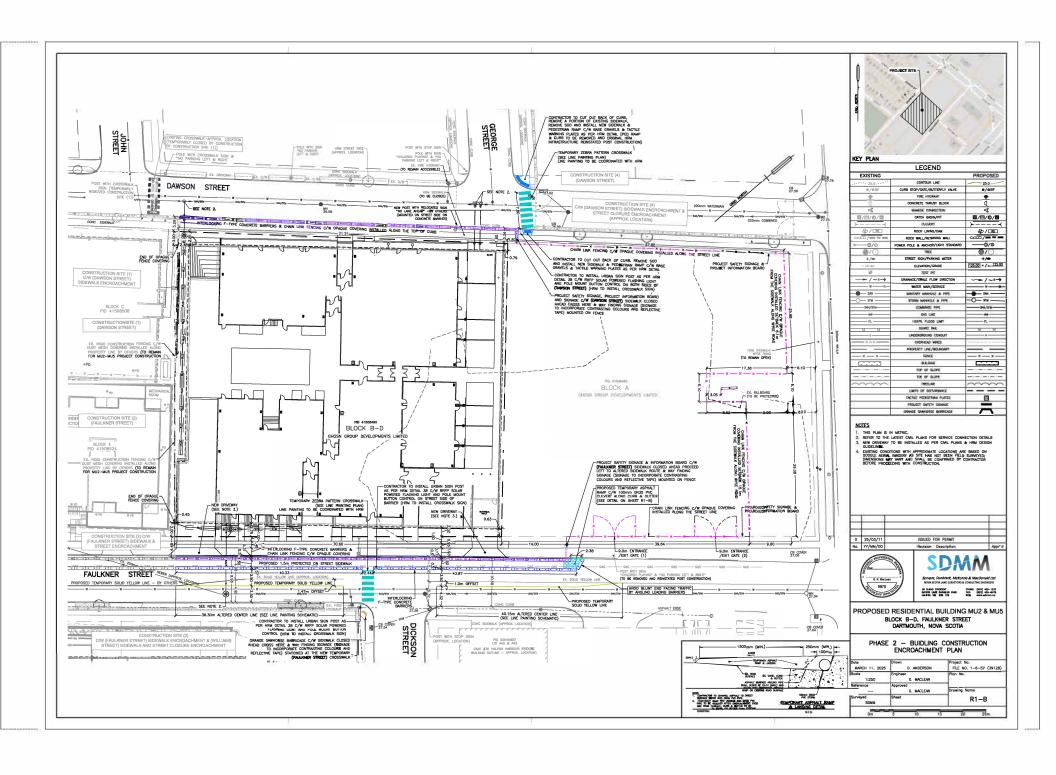
Page | 14 Job No. 39128



# Appendix A – Encroachment Plan

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# **Appendix B – Traffic Control Plans TCP**

Page | B Job No. 39128

# **Phase 1 Encroachment Plan**

NB TS

Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

**Comments:** 

**Not to Scale** 

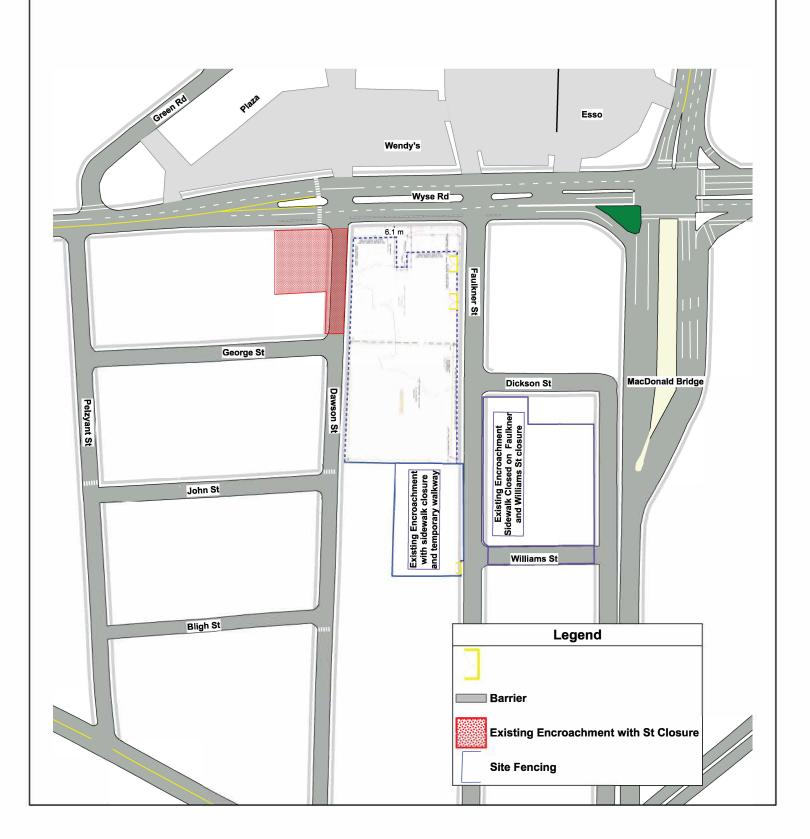
**Phase 1 Encroachment Plan** 

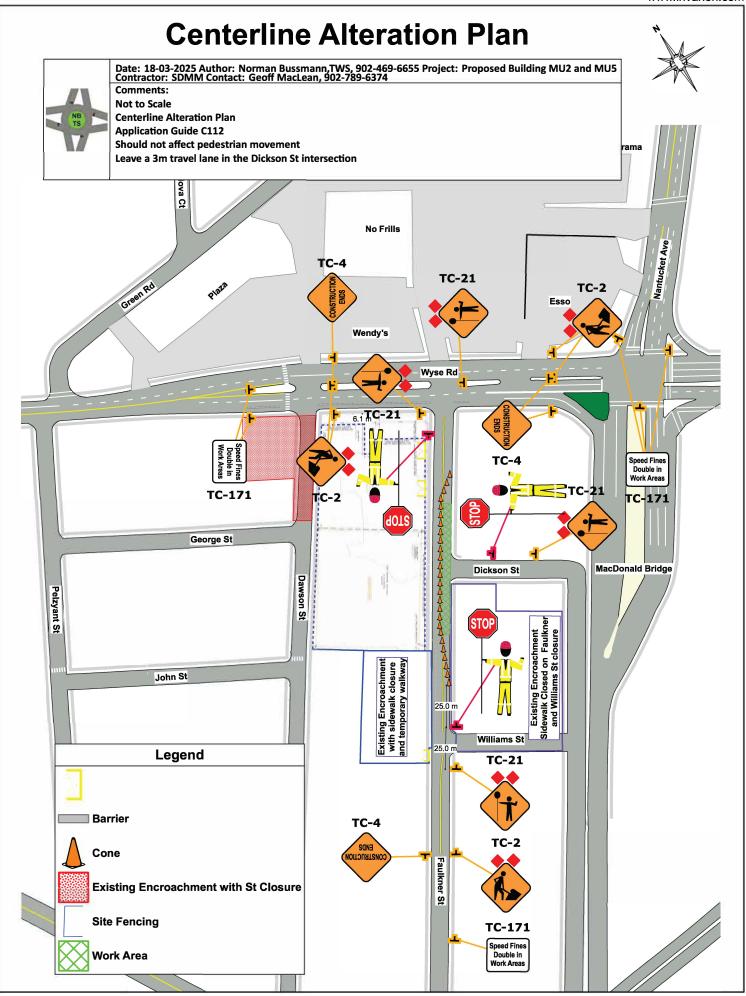
No additional signage required

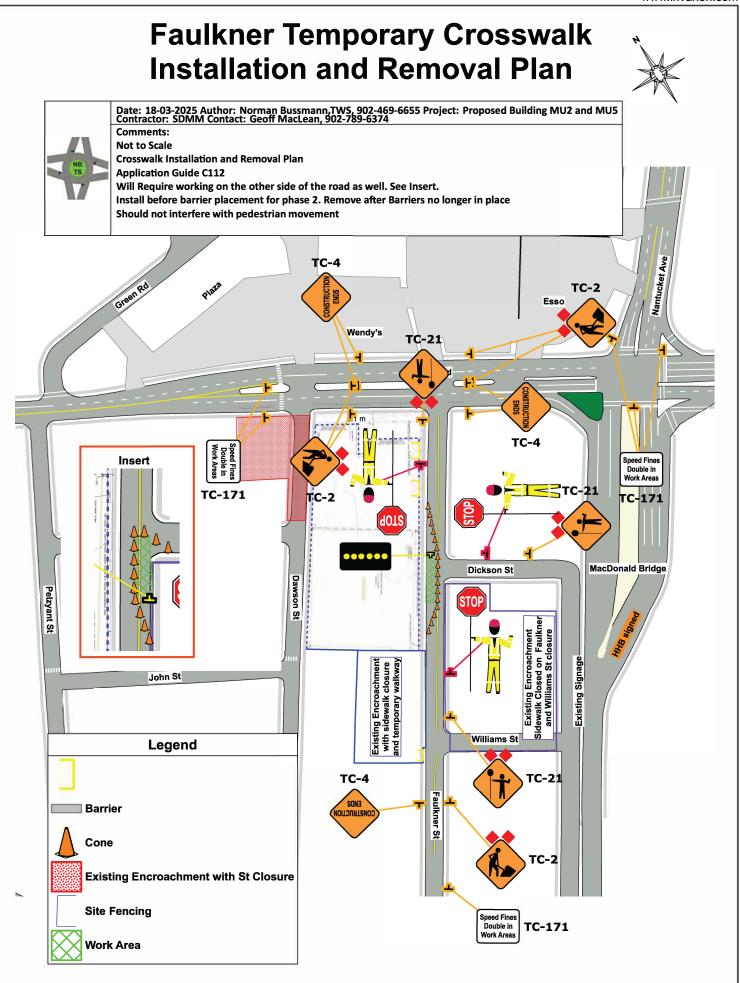
 $\label{eq:continuous} \textbf{Setup can take place from within so no street work required for barrier and fencing installation}$ 

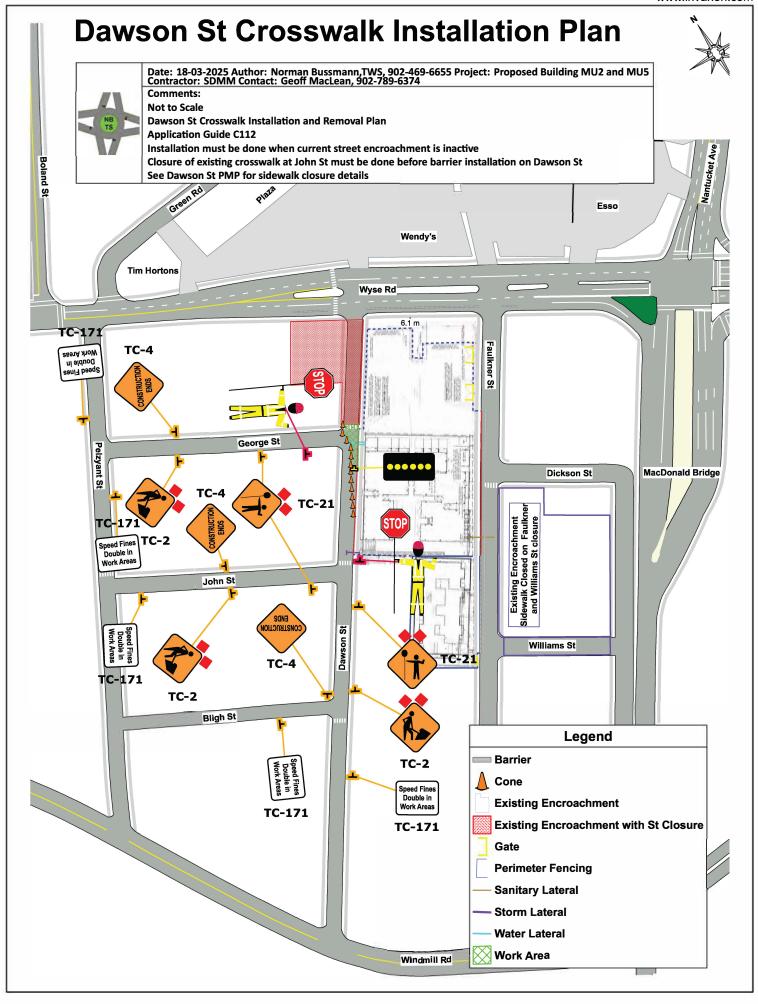
See Dawson St PMP for sidewalk closure details

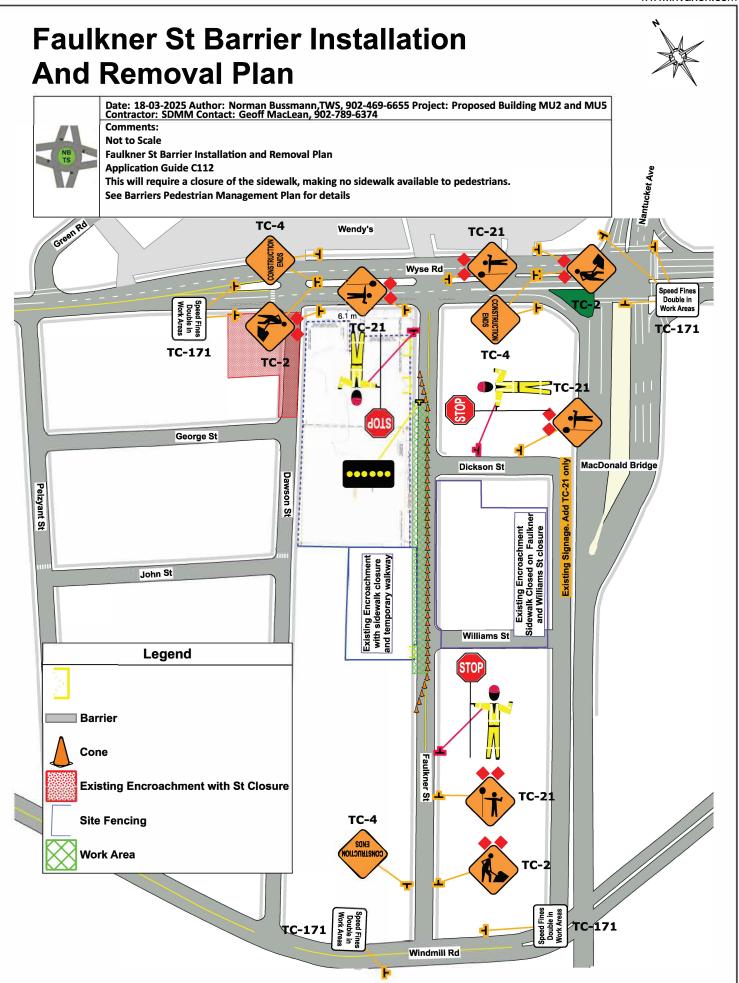


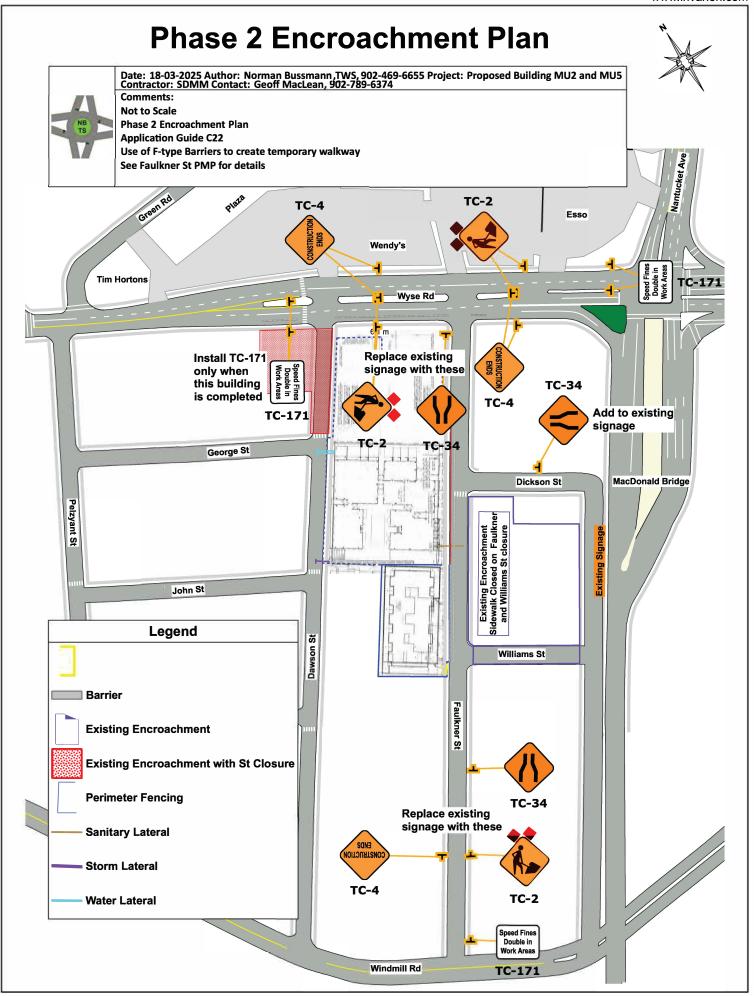


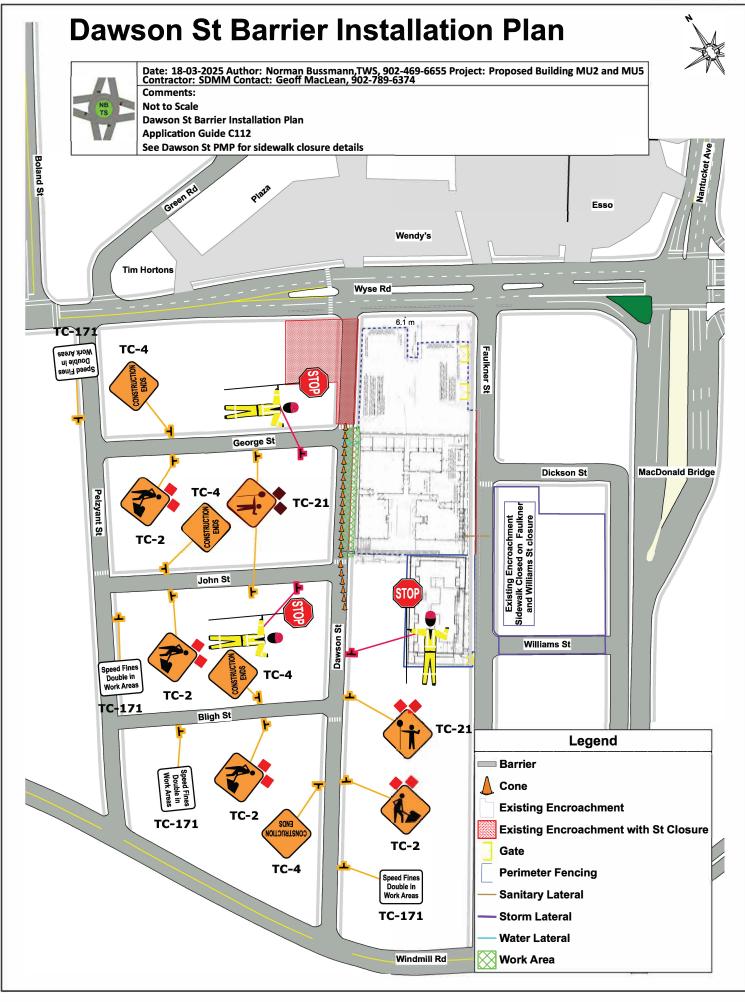














# **Sanitary Lateral Installation Plan**





Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:

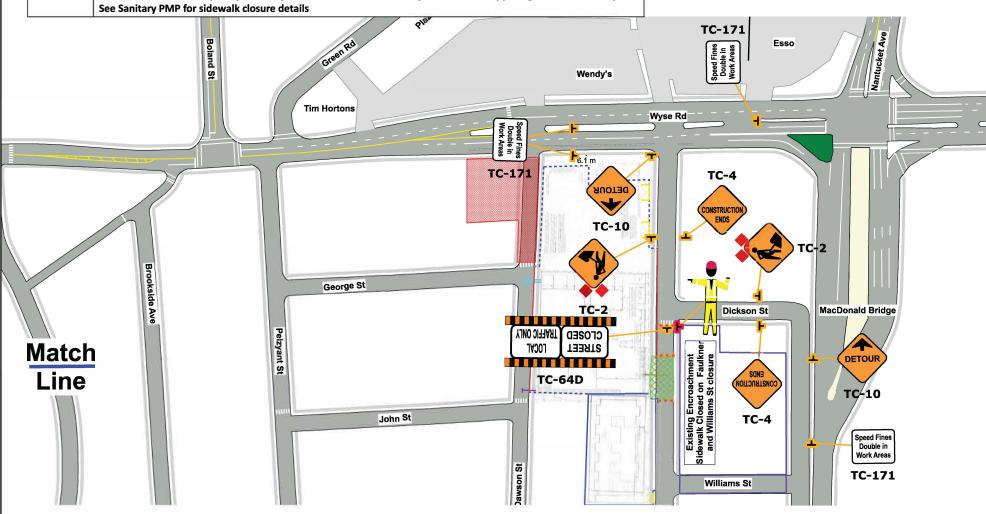
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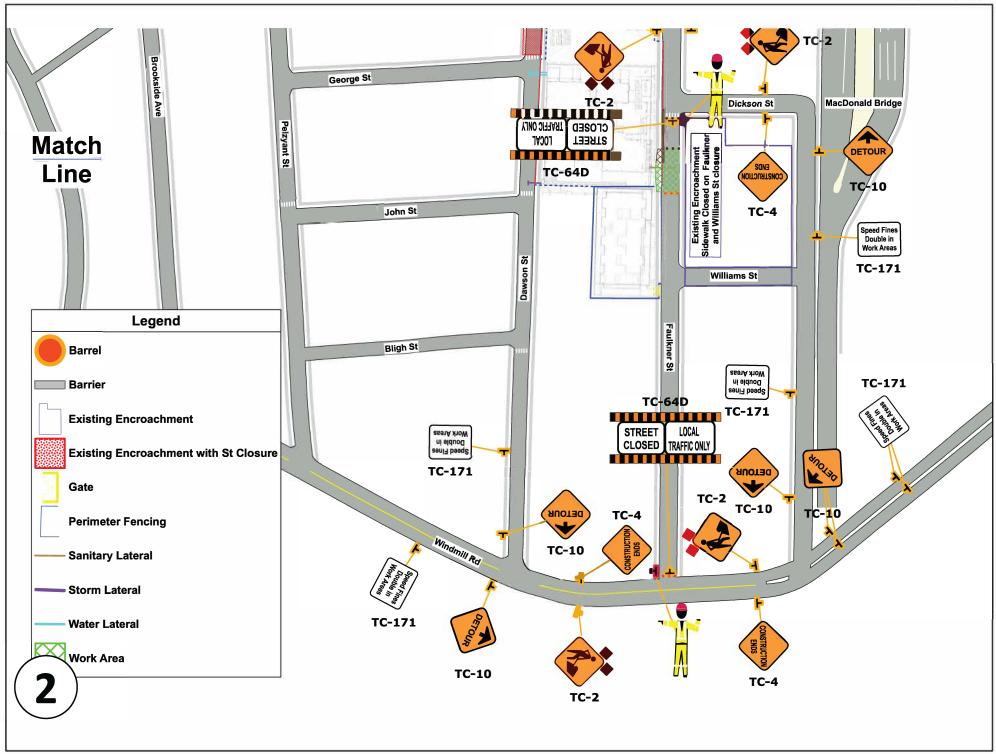
**Sanitary Lateral Installation Plan** 

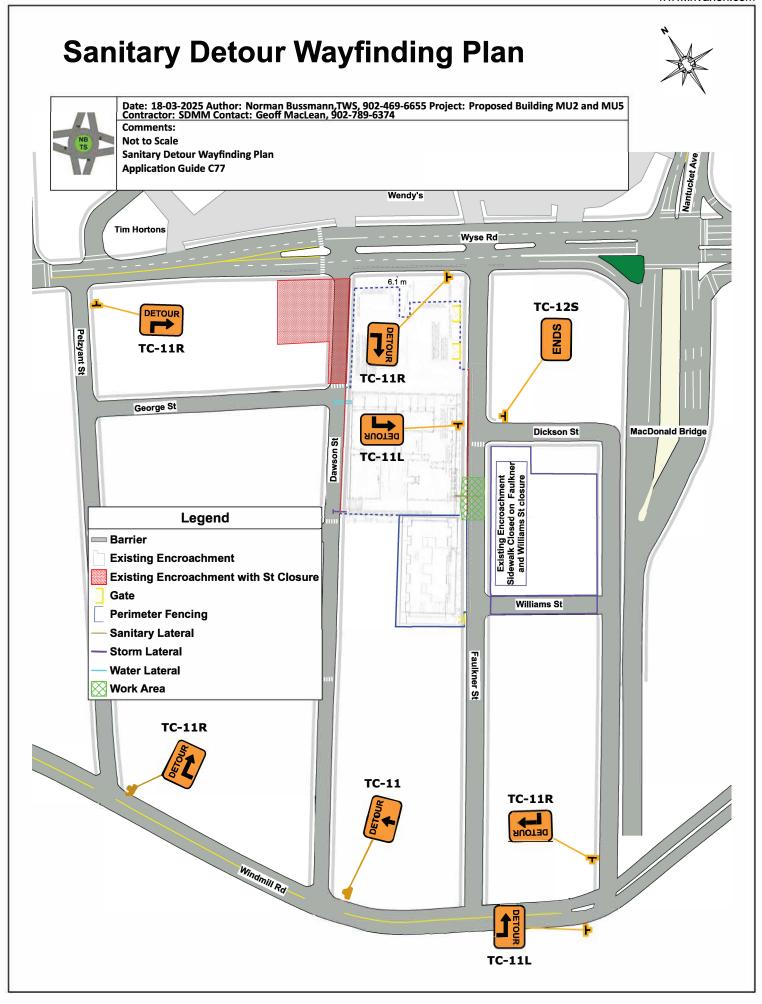
**Application Guide C112** 

See Sanitary Detour Wayfinding Plan for detour route and tab placement

Work area includes Temporary Walkway zone, thus this work can only be done after opposing sidewalk has reopened







# **Storm Lateral Installation Plan**





Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:

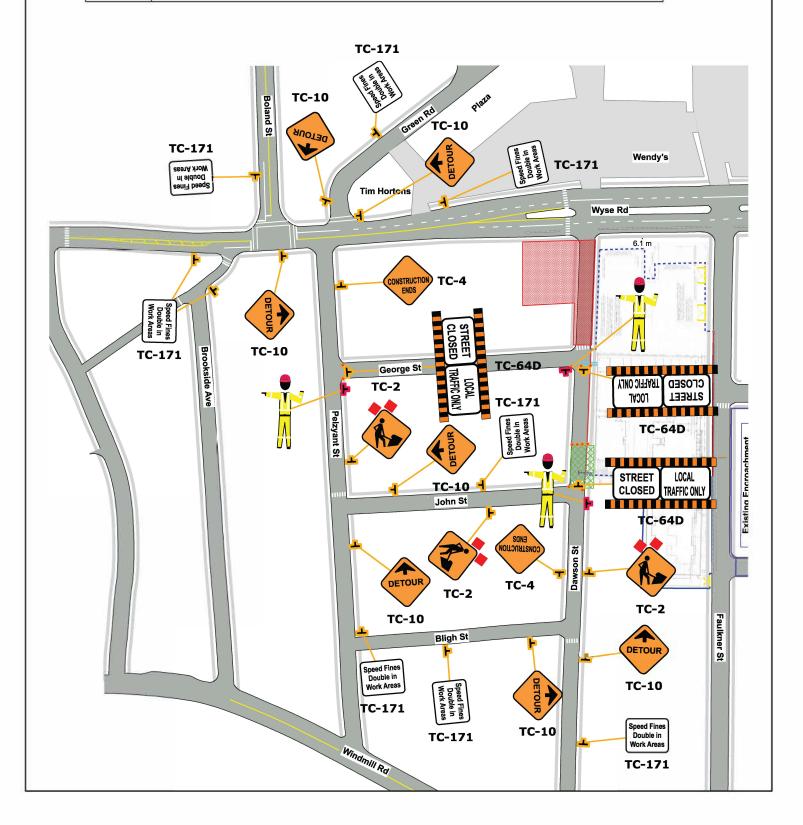
**Not to Scale** 

**Storm Lateral Installation Plan** 

**Application Guide C112** 

See Storm Detour Wayfinding Plan for detour route and tab placement

Work area includes sidewalk already closed. See PMP for details



# **Storm Detour Wayfinding Plan**





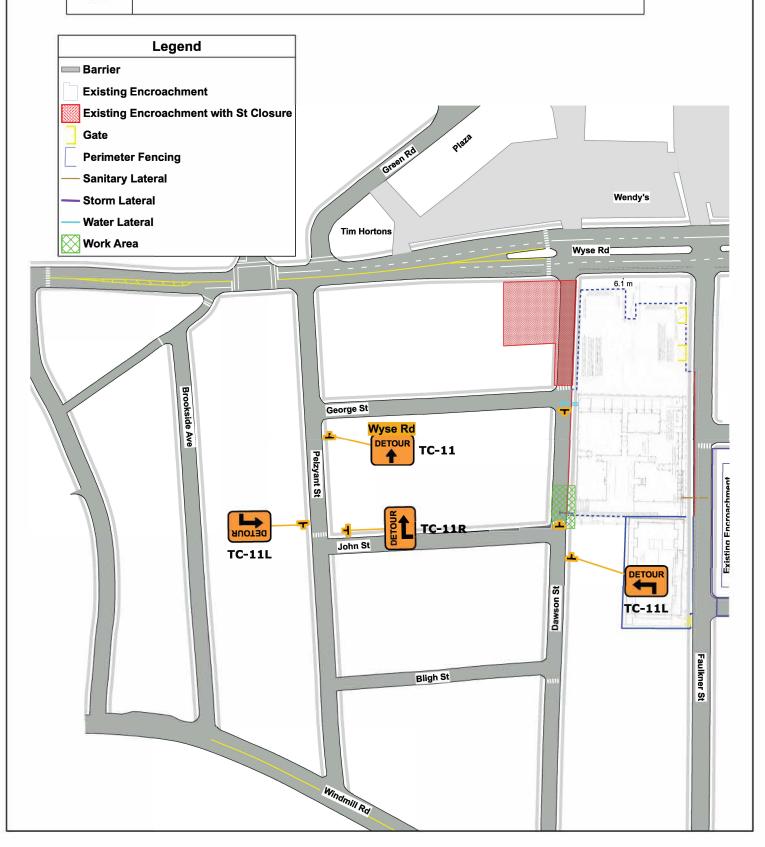
Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:

**Not to Scale** 

Storm Detour Wayfinding Plan

**Application Guide C77** 



# **Water Lateral Installation Plan**



Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

**Comments:** 

Not to Scale

**Water Lateral Installation Plan** 

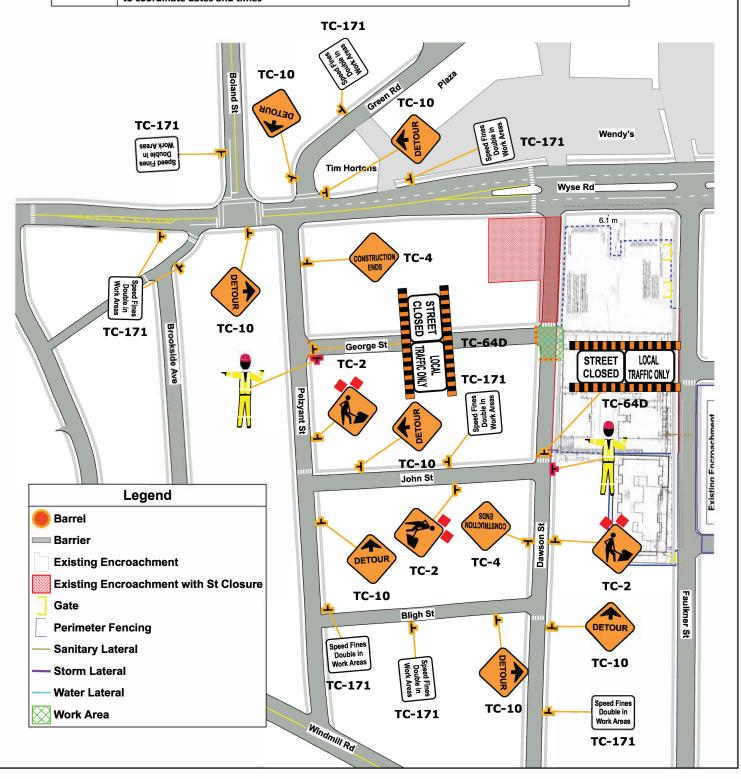
**Application Guide C112** 

See Water Detour Wayfinding Plan for detour route and tab placement

Work area includes sidewalk already closed. See PMP for details

NOTE:

This work must only be conducted when Red Encroachment is gone or work area inactive. Contractors to coordinate dates and times



# **Water Detour Wayfinding Plan**



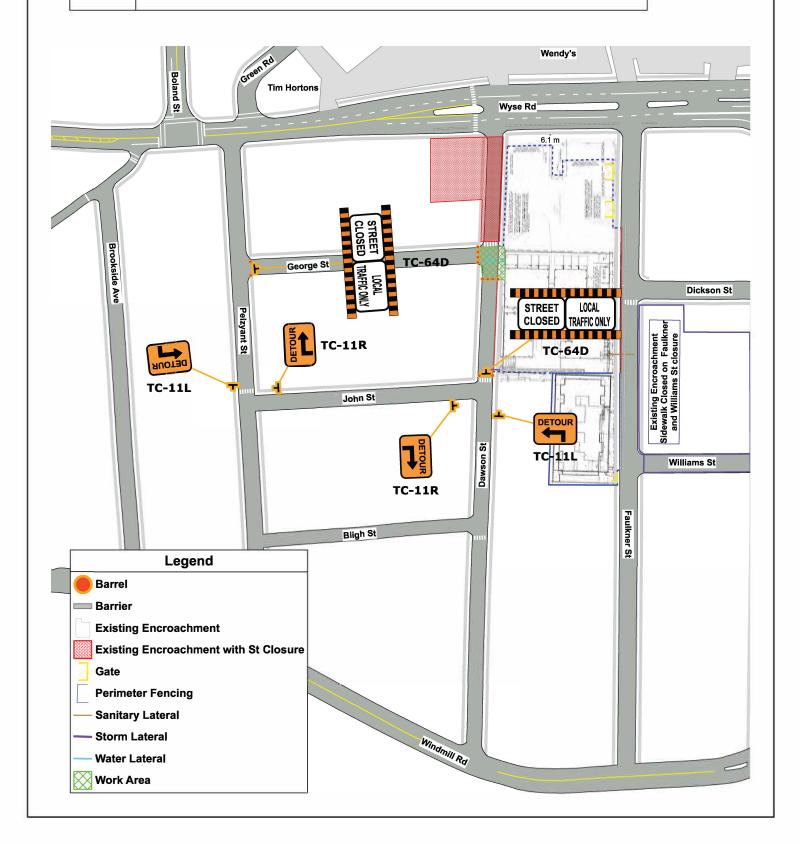


Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments: **Not to Scale** 

**Water Detour Wayfinding Plan** 

**Application Guide C77** 





#### Appendix C – Haul Route Plan

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#### **Haul Route Plan**

Barrier

Gate

Haul Route Inbound

Perimeter Fencing

Sanitary Lateral Storm Lateral Water Lateral

Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

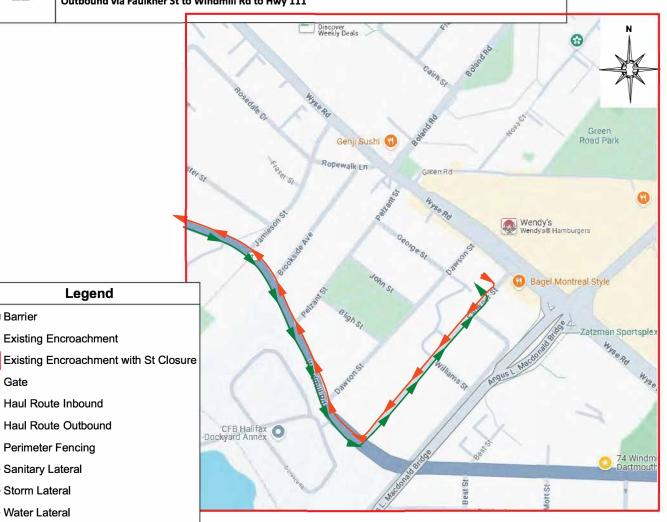
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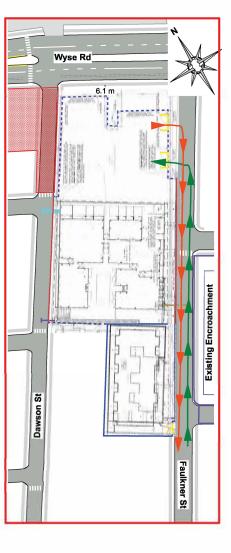
**Not to Scale** 

**Haul Route Plan** 

Inbound via Windmill Rd to Faulkner St to Site

Outbound via Faulkner St to Windmill Rd to Hwy 111







#### Appendix D – Pedestrian Management Plan (PMP)

Page | D Job No. 39128

#### **Barrier Pedestrian Management Plan**



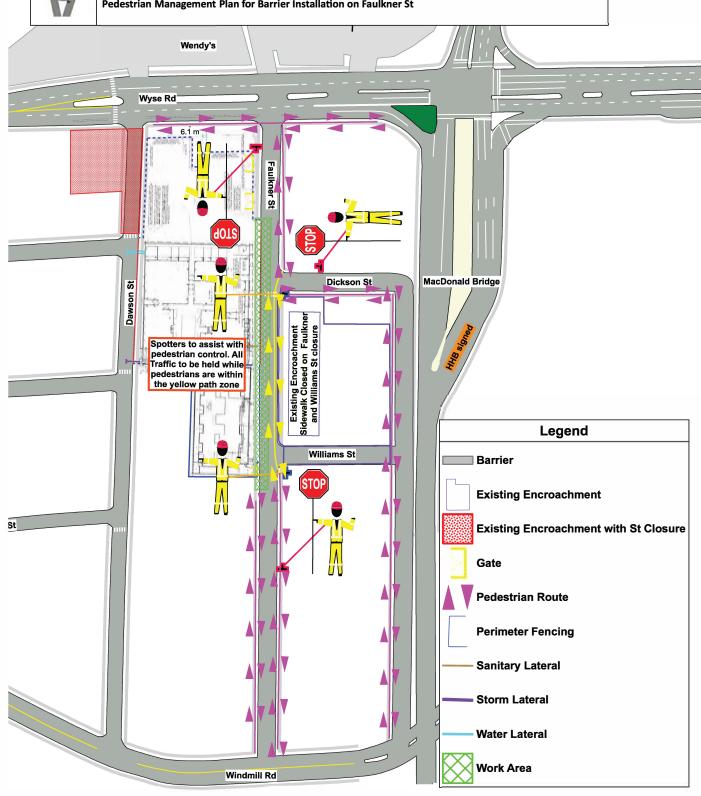


Date: 18-03-2025 Author: Norman Bussmann,TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

**Comments:** 

Not to Scale

Pedestrian Management Plan for Barrier Installation on Faulkner St



#### **Faulkner St PMP**



NB TS

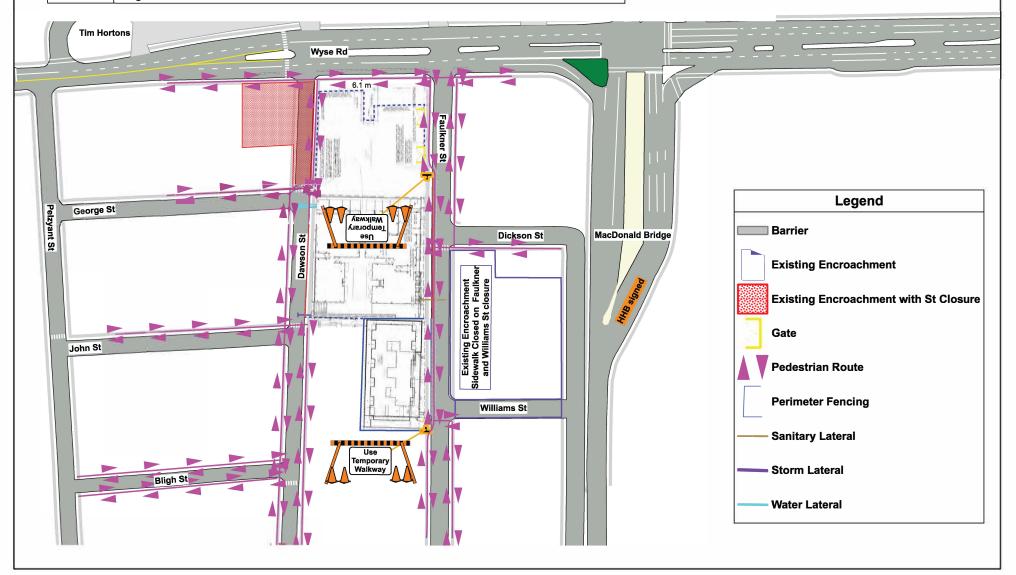
Date: 18-03-2025 Author: Norman Bussmann, TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:

Not to Scale

Pedestrian Management Plan for Faulkner St.

**Long Duration Closure** 



#### **Dawson St PMP**



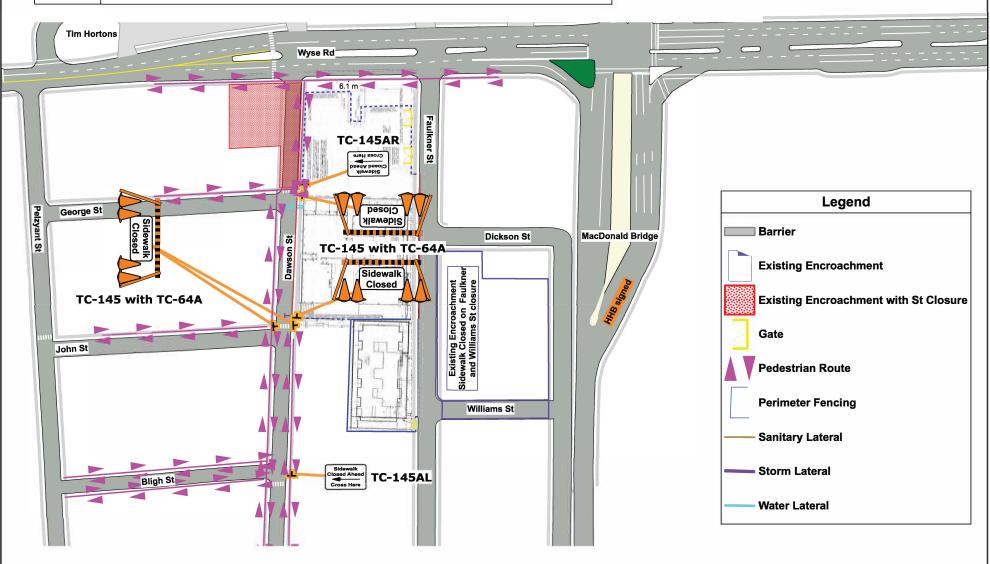


Date: 18-03-2025 Author: Norman Bussmann, TWS, 902-469-6655 Project: Proposed Building MU2 and MU5 Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:

Not to Scale

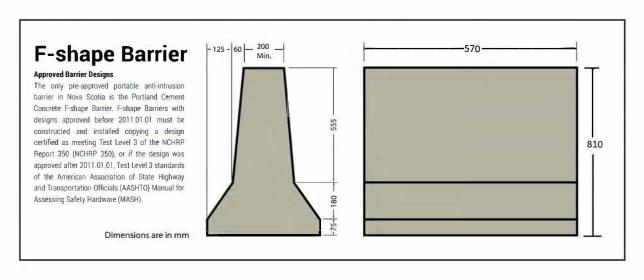
Pedestrian Management Plan for Dawson St.

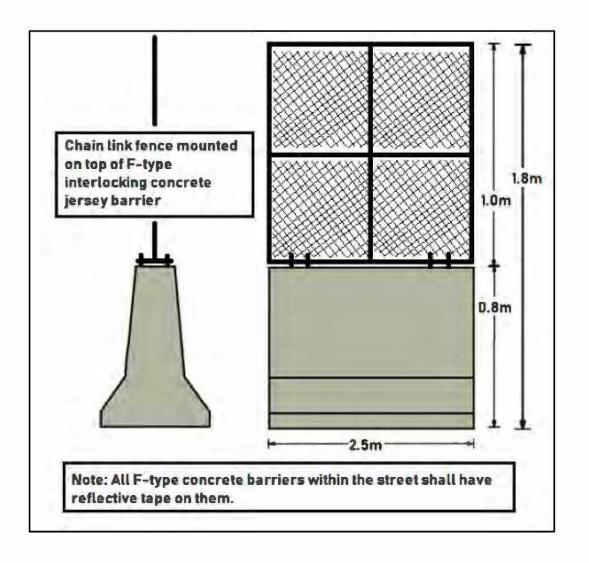


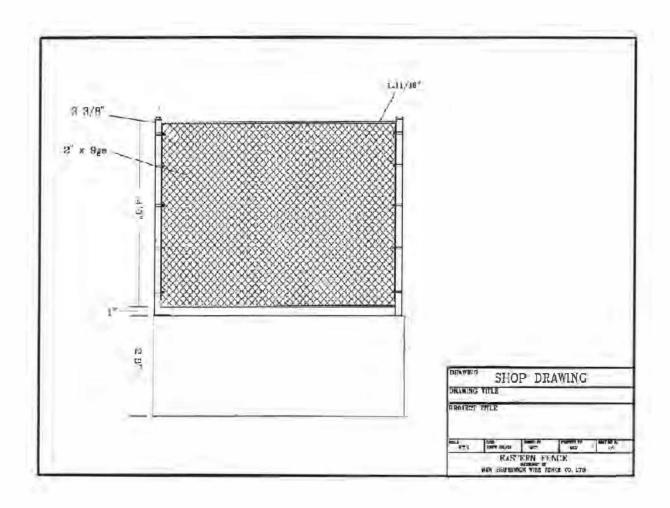


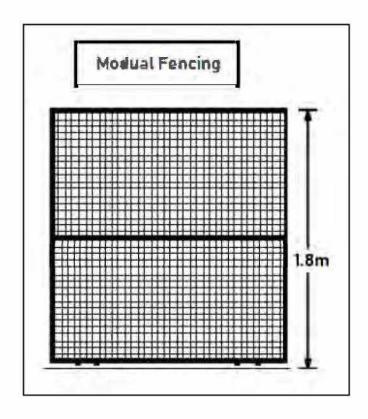
#### **Appendix E – Barrier, Fence & Gates Information**

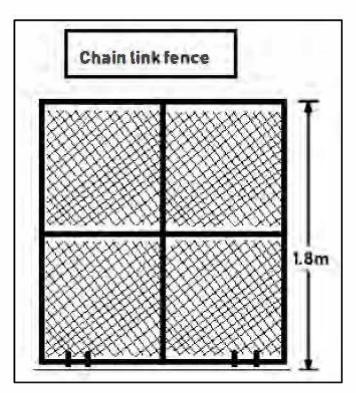
Page | E Job No. 39128

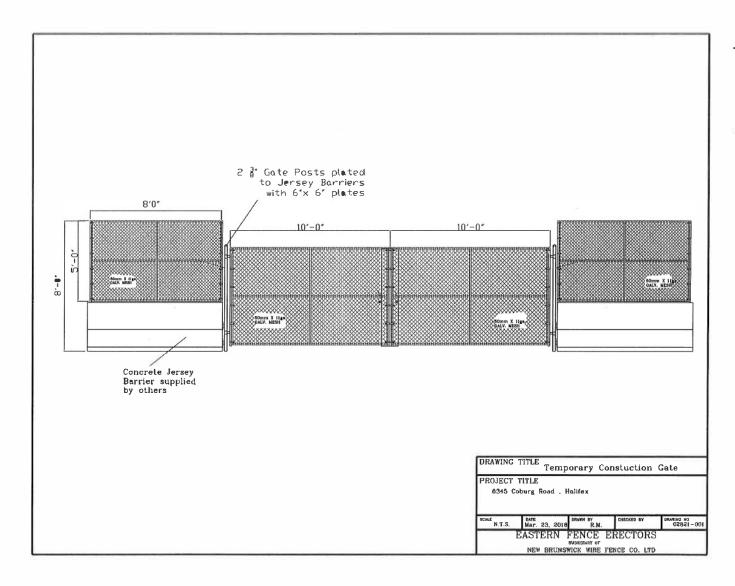














#### Appendix F – Hoarding Information

Page | F Job No. 39128

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**





#### **Technical Data Sheet**

#### UltraMesh® Eclipse®

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**

CHARACTERISTICS	TEST METHOD	METRIC	ENGLISH	
Base Fabric	100% PES	1000D×1000D		
Construction		j	2×12	
Total Weight	BIN53352 BS3424 Method5A	270 +/- 20 gam/m²	7.96 az/yd²	
Width		Up to 500cm		
Tensile Strength	DIN53352 BS3424	Warp 1250 n/5cm Welt 1100 n/5cm	142.75 x 130.19 lb/in	
Tear Strength	DIN53356 BS3424	Warp 235 N Weft 225 N	52.8 x 50.5 lbf	
Air Permeability	GB/T 2410-2008	2649 mm/s		
Light Transmission	GB/T-5453-1987	37%		
Temperature Resistance	DIN53357 BS3425 Method 10	-20°G :70°C		

#### Applications

	Back-lit	Banner	Billboard	Block-out	Building Wrap	Fence Graphics	Truckside
Applications			- 44				

#### Ink Printability

Solvent	Ecn Solvent	ΠΛ	Latex	Screen Printing	Dye Transfer	Dys Direct

#### **Available Sizes**

Metric (m)	English (inches)		
3.20, 5.00	126 , 196		

The information on physical and chemical characteristics is based upon tests believed to be reliable. The volues are intended only as a source of information. A legally kinding guarantee of specific properties is not to be intered from our specifications. They are given without guaranty and do not considute a warranty. A weight variance of +1/-2 is acceptable. The purchases should independently determine, prior to use, the suitability of this material for his/her specific purpose. (Outa represents averages and is not intended for use as a specification.)

ULTRAFLEX WANTED

Fischipurian Pischipurian 201 Halony Lupa Sain E Tanta, PL 236 IS P. STEAT-SEEL

Charles Speless Inc. 1979 Sauces TumpRe Ddg: 4 Ravelogh, NJ 1979 P. 1973/627-8008 PROPERTIES

United Strope Unit 1 Perobeich Road Instantial Park Game Grandon Bedfordahen England SG 10 1862 Phone (44) 707-077-100

Ultim Res Maries
Acatrin No. 112. Cor Granges Messon
Del Lescostro C.P. 00400 Microsc D.F.
Tel: 7050 9400 30 3157 3000 S1 800 EZZ 52 31

Urrushea Guardatajura Av. Patria No. 2804 Lane Donne Ser. Japanen, Jalines-CP45080 Minstein Tel: (\$1503/17-049-817



#### **Appendix G – Project Information Board**

Page | G Job No. 39128



#### PROPOSED MULTI-UNIT BUILDING MU2-MU5 Apartments

23 Storey – Building
230 Residential Units on 23 Levels
1-2 Bedroom Units
2 Levels of Underground Parking

**April 2025 - March 2028** 

#### **Developer:**

Ghosn Group Developments Limited 6156 Quinpool Road, Sutie 102, Halifax, NS, B3L 1A3

#### **Construction Manager:**

North Branch Construction Limited 6156 Quinpool Road, Sutie 102, Halifax, NS, B3L 1A3

#### **24 Hour Emergency Contact:**

Nick Tingley - (902) 817-0844

#### **Site 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:**

Tyler Hayman - (902) 818-5548

#### **Rodent Control Company:**

Rentokil Pest Control

11 Glendale Avenue, Unit #5, Lower Sackville, NS, B4C 3P2

#### **Contact:**

Main Office – (902) 812-0375



#### Appendix H – Project Safety Signage

Page | H Job No. 39128

## NO TRESPASSING

# CONSTRUCTION SITE To reduce risk of injury, • Hard Hat • Safety Shoes MUST be worn on this site.

### 

# CONSTRUCTION WORK IN PROGRESS



#### Appendix I – Project Signage Specifications

Page | I Job No. 39128

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 10days 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 cab be considered 'informed'.

#### Samples







#### Appendix J – Sample Traffic Notification Letter

Page | J Job No. 39128



#### **Proposed Multi-Unit Residential Building**

#### **DRAFT NOTIFICATION LETTER**

TO WHOM IT MAY CONCERN

**Date** 

NOTIFICATION OF TRAFFIC DISRUPTION: Street Name, DARTMOUTH, NOVA SCOTIA

This is to inform you that the 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** 



#### **Appendix K – Vehicular and Pedestrian Hazard Assessment**

Page | K Job No. 39128

#### Project Date: Location: VEHICULAR & PEDESTRIAN HAZARD ASSESSMENT VEHICULAR & PEDESTRIAN HAZARD ASSESSMENT

No	VEHICULAR & PEDESTRIAN HAZARD ASSESSMENT  No.   Hazard:   Project Phase:   Vehicular impacts:   Mitigation Methods:   Pedestrian Impacts:   Pedestrian Imp							
NO.	nazalu:	riojett riiase:	veniculai impacts:		reuestrian impacts:	Initigation methods:		
1			Vehicles may enter project site and fall down excavation.	Place concrete barriers along travel ways. Concrete barriers and existing curbs to prevent vehicle entry.	Pedestrians may enter project site and fall down excavation.	Place concrete barriers/rigid fencing around entire project site.		
1	Excavation	Excavation	Vehicle weight may surcharge excavation, causing excavation wall failure.	Close sidewalks & driveways adjacent to project site, moving vehicles farther away from excavation.	redestrians may enter project site and fail down excavation.	race concrete barriersyrigid rending around entire project site.		
2	Rock Blasting	Excavation	Blasted rock projectiles may strike vehicles.	Close sidewalks & driveways adjacent to site, moving vehicles farther away from blasted rock.	Blasted rock projectiles may strike pedestrians.	Install solid plywood hoarding along rigid fence adjacent to blasting zone.		
3	Construction Waste	All Phases	Vehicles may be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.	Pedestrians may be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.		
4	Vehicular & Pedestrian Activities	All Phases	Drivers and pedestrians may become confused or impatient with construction activities. Pedestrians may walk in unmarked crosswalks or in vehicular travel areas. Drivers may fail to obey traffic signage.	Vehicular and pedestrian signage will be posted prominently around the project site to facilitate pedestrian movement. Notification will be sent prior to all traffic interruptions.	Drivers and pedestrians may become confused or impatient with construction activities. Pedestrians may walk in unmarked crosswalks or in vehicular travel areas. Drivers may fail to obey traffic signage.	Vehicular and pedestrian signage will be posted prominently around the project site to facilitate pedestrian movement. Notification will be sent prior to all traffic interruptions.		
5	Heavy Machinery Operation	All Phases	Heavy machinery or vehicles may break down or overturn, damaging other vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site.Concrete barriers will be installed to separate construction vehicles from public traffic.		The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery. Rigid fences will be installed to separate construction vehicles from pedestrians.		
5			Heavy machinery or vehicles may overturn due to uneven terrain, damaging other vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site and ensure travel routes are kept flat.	Heavy machinery or vehicles may overturn due to uneven terrain, injuring pedestrians. Pedestrians may walk on uneven terrain causing them to twist their ankles or fall.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery and ensure travel routes are kept flat.		
6	Construction Signage	All Phases	Construction signage may strike vehicular traffic	Construction signage will be securely fixed to existing poles, temporary concrete sign bases, or rigid fences.	,	Signage will be angled in line with pedestrian routes and/or be placed at heights such that they do not pose a risk to pedestrians.		
					Construction signage may strike pedestrians.	Construction signage will be securely fixed to existing poles, temporary concrete sign bases, or rigid fences.		
7	Dangerous Materials	All Phases	Flammable, explosive, & hot materials may damage vehicles if not properly maintained & stored.	The contractor will use and store dangerous materials properly as per manufacturers' specifications.	Flammable, explosive, & hot materials may injure pedestrians if not properly maintained & stored.	The contractor will use and store dangerous materials properly as per manufacturers' specifications.		
8	Hoisting Operations	Superstructure	Precast concrete panels and other items hoisted may fall from heights and damage vehicles.	Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights. F-Type concrete barriers will be installed such that loads are never suspended above the public realm.	heights and injure pedestrians.	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.		
9	Reinstatement of Public Infrastructure & Service Installation	Superstructure	Heavy equipment and hot concrete used during public infrastructure reinstatement and service installation may cause damage to vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site. Concrete barriers will be installed to separate construction vehicles from public traffic during public infrastructure reinstatement and service installation.	Heavy equipment and hot concrete used during public infrastructure reinstatement may injure pedestrians.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery.		
10	Fallen debris	Superstructure	Debris may fall from upper stories of the new building causing damage to vehicles.	F-Type concrete barriers will be installed such that a safe distance is maintained between the building envelope and vehicular traffic.	Debris may fall from upper stories of the new building injuring pedestrians.	Construction of upper building levels will be set back from the property line/rigid fencing, this separating pedestrians from potential fallen debris.		



#### **Appendix L – Community Consultation Records**

Page | L Job No. 39128

#### **COMMUNITY CONSULTATION MAP OVERVIEW**

#### **Project – MU2-MU5 Apartments**



#### **Notification Letter**

Date: \*\*\*\*\*\*

Ghosn Group Developments Ltd. - Building Construction Information Meeting

Dear Neighbour,

As you may be aware, we are planning an apartment building construction project located on Faulkner Street, Dartmouth NS.

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.

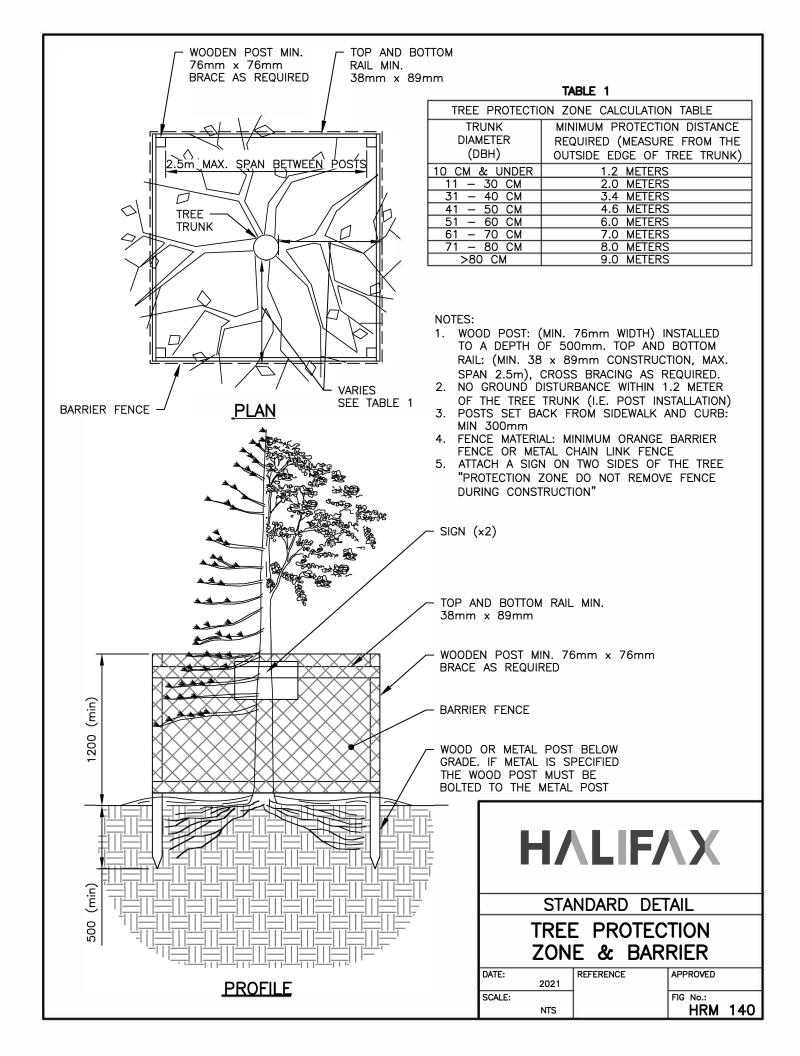
Nick Tingley (Construction Manager, North Branch Construction Limited)

Cell: (902) 817-0844



#### Appendix M – HRM Tree Detail

Page | M Job No. 39128





#### Appendix N – Rodent Control Plan

Page | N Job No. 39128





#### 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<sup>™</sup> rat trap or Mini-Rex<sup>™</sup> mouse trap

Compatible with Sidekick® Load-N-Lock™ system





More Than Meets The Eye

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

www.belllabs.com

# ALL-WEATHER BLOX TM









#### **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.

#### FIRST AID

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

#### IF SWALLOWED:

- Call a poison control center, doctor, or 1-877-854-2494, or 1-800-858-7378\*\* 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 ON SKIN OR CLOTHING:

- . Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
- · Call a poison control center or doctor for treatment advice.

#### IF IN EYES:

587CB-9

- 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 eve.
- · Call a poison control center, doctor, or 1-877-854-2494 immediately for treatment advice.
- \* Also call this number for information on health concerns and pesticide incidents.

#### NOTE TO PHYSICIAN

If swallowed or absorbed through the skin, this material may reduce the dotting ability of the blood and cause bleeding. If ingested, administer Vitemin K<sub>1</sub> intramuscularly or orally. Repeat as necessary based on monitoring of prothrombin times.

#### TREATMENT FOR PET POISONING

If animal eats bait, call veterinarian at once.

#### NOTETO VETERINARIAN

Anticoagulant Bromadiolone: For animals ingesting bait and/or showing poisoning signs (bleeding or elevated prothrombin times), give Vitamin K<sub>1</sub>. If needed, check prothrombin times every 3 days until values return to norma (up to 30 days). In severe cases blood translusions may be needed.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ THIS LABEL: Read this entire label and follow all use directions and use precautions. Use only for sites, pests, and application methods described on this label.

IMPORTANT: Do not expose children, pets, or nontarget animals to rodenticides. To help to prevent exposure:

- 1. Store unused product out of reach of children and pets.
- 2. Apply bait in locations out of reach of children, pets, domestic animals and nontarget wildlife, or in tamper-resistant bait stations. These stations must be resistant to destruction by dogs and by children under six years of age, and must be used in a manner that prevents such children from reaching into bait compartments and obtaining bait. If bait can be shaken from bait stations when they are lifted, units must be secured or otherwise immobilized. Stronger bait stations are needed in areas open to hoofed livestock, raccoons, bears, or other potentially destructive animals, or in areas prone to vandalism.
- 3. Dispose of product container and unused, spoiled, or unconsumed bait as specified on this label.

Bait stations are mandatory for outdoor, above-ground use. Tamper-resistant bait stations must be used wherever children, pets, non-target mammals, or birds may have access to the bait placement location.

USE RESTRICTIONS: This product may only be used to control the following rodent pests in and around man-made structures: House mouse (Mus musculus), Norway rat (Raftus norvegicus), Roof rat (Raftus raftus), Cotton mouse (Peromyscus gossypinus), Cotton rat" (Sigmodon hispidus), Deer mouse (Peromyscus maniculaus), Eastern harvest mouse" (Reithrodontomys humul), Golden mouse" (Odinctomys nuttalii), Polynesian rat" (Raftus exulans), Meadow vole" (Microtus pennsylvanicus), White-footed mouse (Peromyscus leucopus), White-throated woodrat" (Neotoma aibiguia), Southern plains woodrat" (Neotoma micropus), and Mexican woodrat" (Neotoma mexicana), This product must be used in and within 100 feet of man-made structures constructed in a manner so as to be vulnerable to commensal rodent invasions and/or to harboring or attracting rodent infestations. Examples of such structures include homes and other permanent or temporary residences, food processing facilities, industrial and commercial buildings, trash receptacles, agricultural and public buildings, trashport vehicles (ships, trains, aircraft), docks and port or terminal buildings and related structures around and associated with these sites. Fence and perimeter baiting, beyond 100 feet from a structure as defined above, is prohibited. This product must not be applied directly to food or feed crops.



#### **KILLS RATS, MICE, AND MEADOW VOLES\***

#### **Kills Warfarin Resistant Norway Rats**

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:

#### 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 containers closed and away from other chemicals.

Pesticide Disposal: Wasfes resulting from the use of this product may be placed in trash or delivered to an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. [Plastic:] Offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill; or by incineration. In most states, burning is not allowed.

WARRANTY: To the extent consistent with applicable law, seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

#### NET WEIGHT: 18 lbs (8.2 kg)

EPA REG. NO. 12455-79 EPA EST. NO. 12455-WI-1

Manufactured by:

BELL

AG99 Kinsman Blvd.

Madison, Wi 53704 U.S.A.

www.belllabs.com

DIRECTIONS FOR USE (Continued from other panel)

Burrow baiting with Contrac All-Weather Blox is prohibited.

Do not place near or inside ventilation duct openings. Do not contaminate water, food, feedstuffs, food or feed handling equipment, or milk or meat handling equipment or surfaces that come into direct contact with food. When used in USDA inspected facilities, this product must be applied in tamper-resistant bait stations. Do not broadcast bait. Do not use this product in sewers.

Do not sell this product in individual containers holding less than 16 pounds of bait.

SELECTION OF TREATMENT AREAS: Determine areas where rats, mice, or meadow voles\* will most likely find and consume the bait. Generally, these areas are along walls, by gnawed openings, in corners and concealed places, between floors and walls, or in locations where rats, mice, or meadow voles\*, or their signs have been seen. Protect bait from rain and snow. Remove as much alternative flood as possible.

#### APPLICATION DIRECTIONS:

RATS: Place 3 to 16 bait blocks (at intervals of 15 to 30 feet) per placement in infested areas. Maintain an uninterrupted supply of fresh bait for at least 10 days or until signs of rat activity cease.

MICE AND MEADOW VOLES\*: Place 1 block per placement. Space placements at 8- to 12-foot intervals in infested areas. Two blocks may be needed at points of very high activity. Maintain

areas. Two blocks may be needed at points of very high activity. Maintain an uninterrupted supply of fresh bait for at least 15 days or until signs of mouse or meadow vole\* activity cease.

FOLLOW-UP: Replace contaminated or spoiled bait immediately. Wearing gloves, collect and dispose of all dead, exposed animals and leftover bait. To prevent reinfestation, limit sources of rodent food, water, and harborage as much as possible. If reinfestation does occur, repeat treatment. Where a continuous source of infestation is present, establish permanent bait stations and replenish as needed.

#### PRECAUTIONARY STATEMENTS HAZARDSTO 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.

All handlers (including applicators) must wear: shoes plus socks, and waterproof gloves. Any person who retrieves carcasses or unused bait following application of this product must wear gloves.



#### 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 this product. Wash the outside of gloves before removing. As soon as possible, wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco or using the toilet and change into clean 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 rinsate.

\*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.

MADE IN USA Product Code: CB4051 09415(09-15



## DETEX®BLOX with LUMITRACK

SAFETY DATA SHEET

**ACCORDING TO REGULATION: OSHA** 

Hazard Communication Standard 29 CFR 1910.1200

DATE OF ISSUE:

January 2016

PREPARED BY:

CAR

#### 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

Component	CAS No.	% By weight
Inert and Non-Hazardous Ingredients	Proprietary	100.00%
(Unlisted components are non-hazardous)		

#### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

**Ingestion:** Non-Toxic Inhalation: Not applicable. **Eve 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.

Trade Name: Detex Blox with Lumitrack Date Created: January 2016 Supplier: Bell Laboratories, Inc.

Page 1 of 3

#### **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**

l	Component	OSHA	ACGIH	Other Limits
	None	Not Established	Not Established	Not Established

**Appropriate Engineering Controls:** None. Non-Toxic Occupational exposure limits: None. Non-Toxic

**Personal Protective Equipment:** Respiratory protection: Not required Eve 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 Sweet grain-like Odor:

**Odor Threshold:** Not applicable, odor not associated with a hazardous material.

pH: Not applicable, is not dispersible with water.

Not applicable **Melting point: 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 Not water soluble Solubility (water): 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

Not applicable, is not a liquid. Viscosity:

#### **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 eve damage/Irritation: Not Toxic. Respiratory or skin sensitization: Not Toxic

Germ cell mutagenicity: Not Toxic Carcinogenicity: Not Toxic

Trade Name: Detex Blox with Lumitrack Date Created: January 2016 Supplier: Bell Laboratories, Inc.

Page 2 of 3

Components	NTP	IARC	OSHA
None	NA	NA	NA

Reproductive Toxicity: Not Toxic **Aspiration Hazard: Not Toxic** Target Organ Effects: 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:** 

Eve 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	Health: 0 (Not Toxic)	Flammability: 1 (slight)	Reactivity: 0 (stable)	Specific Hazard: None
HMIS	Health: 0 (Not Toxic)	Flammability: 1 (slight)	Reactivity: 0 (minimal)	Protective Equipment: None

**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.

Trade Name: Detex Blox with Lumitrack Date Created: January 2016 Supplier: Bell Laboratories, Inc.

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## Appendix O – CMP's TCP & PMP Inspection Records

Page | O Job No. 39128

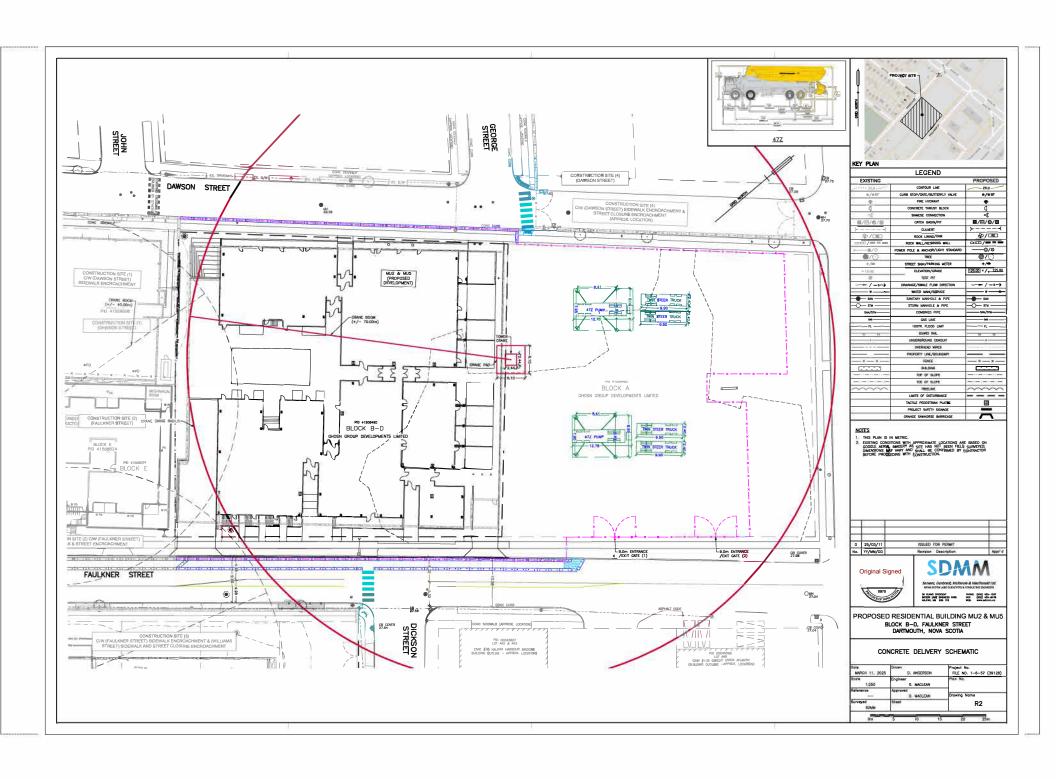
Project:	Location:	Phase:	Date:	Inspector:

	1.0-1					AGEMENT PLAN - INSPECT	ION CHECKLIST									
<b>CMP Element</b>			PMP?	Condition?		Condition?		Condition?		Condition?		Condition?		Action Required	Action Completed	Comments
	Yes	No	N/A	Good	Bad	,										
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# **Appendix P – Concrete Delivery Schematic**

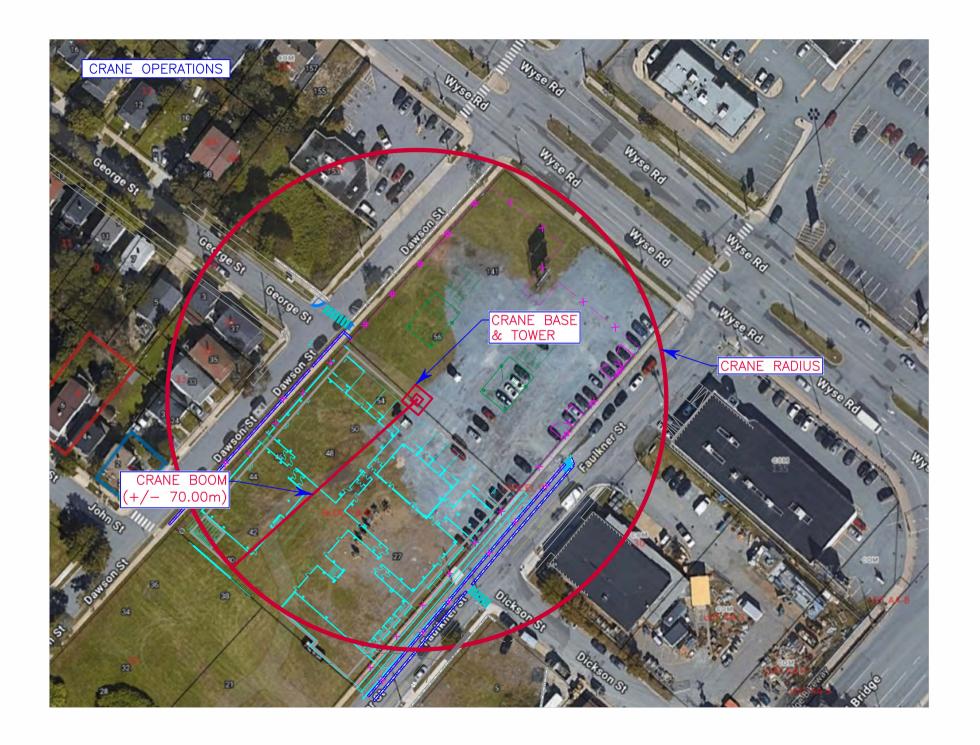
Page | P Job No. 39128

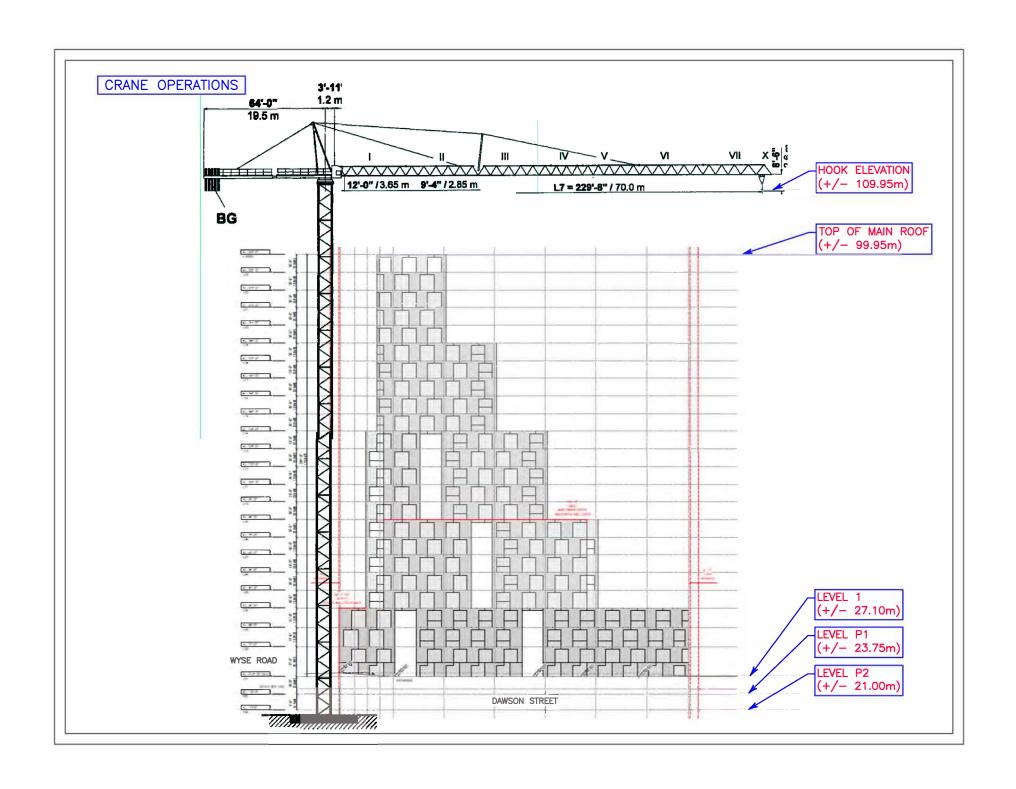




## **Appendix Q – Crane Information**

Page | Q Job No. 39128



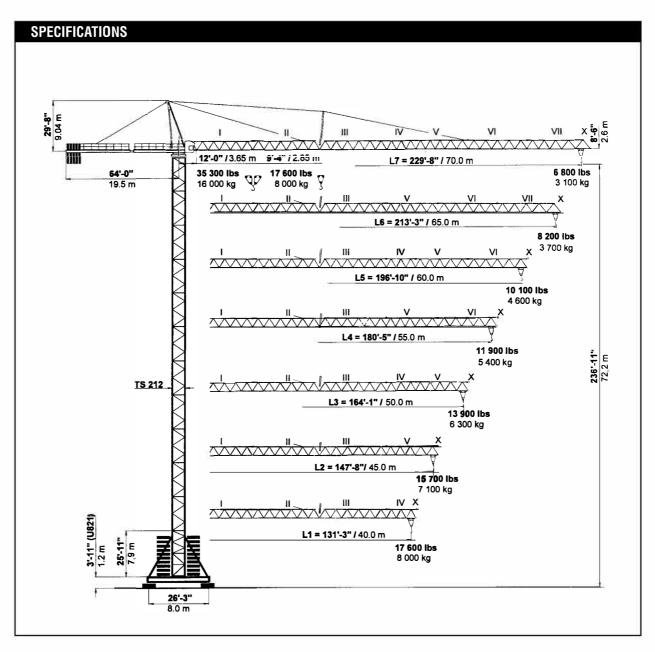


Tel: 1 (888) 337-BIGGE or (510) 638-8100 Web: www.biggetowercrane.com



# PEINER SK 315

Hammerhead Tower Crane 17,600-35,300 lbs. (8-16 mt) Lifting Capacity

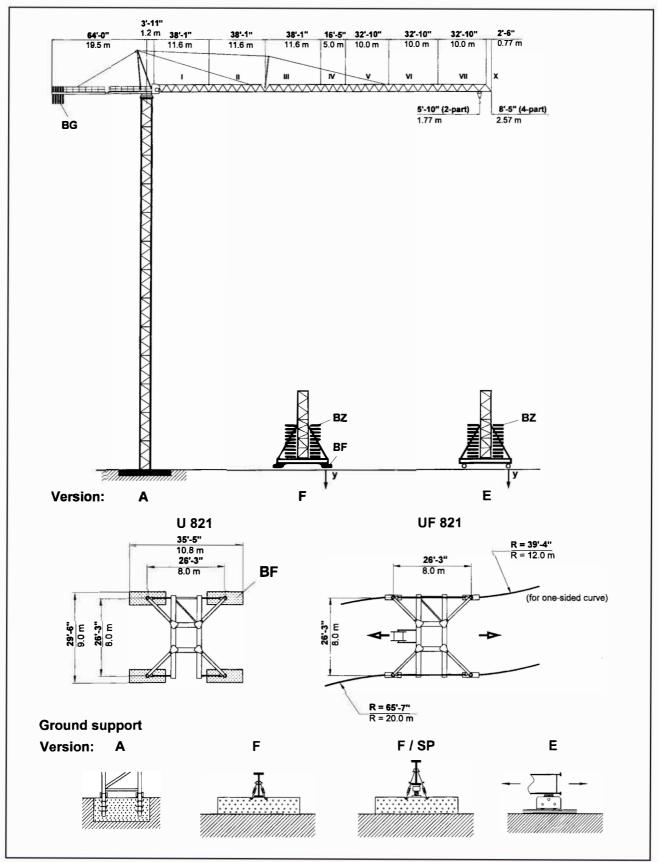


simple, available and cost effective™

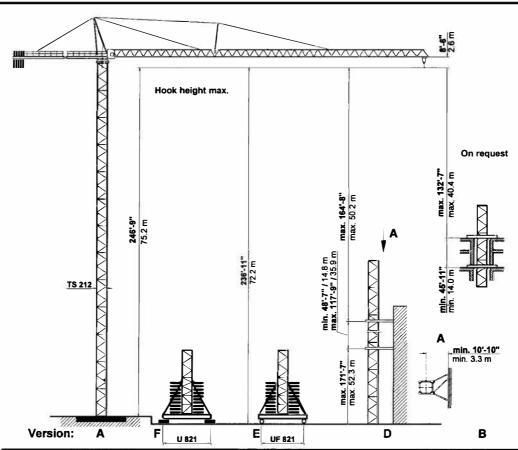
Machines shown may have optional equipment.



PEINER SK 315
Combinations of tower section, hook heights, forces acting per corner, base ballast



#### **PEINER SK 315** Tower TS 211



TS 212	Version A				Version F			Version E	
Tower	нн	Tower	НН	BZ + BF	in service	y out of	BZ	in service	out of
TS 212.1	ft m	TSV 212 TS 212.1	ft m	kips / t	kips / kN	service kips / kN	kips / t	kips / kN	service kips / kN
13 x TS 212.1	<b>246'-9"*</b> 75.2*								
12 x TS 212.1	<b>227'-4"*</b>	1 x TSV 212	<b>236'-11"*</b>	<b>212.0</b>	<b>204</b>	279	<b>198.0</b>	<b>212</b>	282
	69.3*	11 x TS 212.1	72.2*	96	909	1243	90	942	1253
11 x TS 212.1	<b>208'-0"*</b>	1 x TSV 212	<b>217'-6</b> "*	<b>168.0</b>	186	<b>240</b>	<b>154.0</b>	192	<b>242</b>
	63.4*	10 x TS 212.1	66.3*	76	826	1066	70	856	1075
10 x TS 212.1	<b>188'-8"*</b>	1 x TSV 212	<b>198'-2"</b>	1 <b>46.0</b>	1 <b>73</b>	<b>203</b>	<b>132.0</b>	1 <b>79</b>	<b>204</b>
	57.5*	9 x TS 212.1	60.4	66	770	901	60	797	909
9 x TS 212.1	<b>169'4"</b>	1 x TSV 212	178'-10"	<b>124.0</b>	<b>161</b>	<b>169</b>	<b>88.0</b>	<b>161</b>	1 <b>69</b>
	51.6	8 x TS 212.1	54.5	56	715	751	40	715	754
8 x TS 212.1	149'-11"	1 x TSV 212	<b>159'-5"</b>	101.0	149	<b>145</b>	<b>88.0</b>	1 <b>54</b>	170
	45.7	7 x TS 212.1	48.6	46	661	645	40	683	654
7 x TS 212.1	1 <b>30'-7"</b>	1 x TSV 212	140'-1"	101.0	142	<b>128</b>	<b>66.0</b>	141	124
	39.8	6 x TS 212.1	42.7	46	633	569	30	629	553
6 x TS 212.1	<b>111'-3"</b>	1 x TSV 212	120'-9"	101.0	136	112	<b>66.0</b>	135	108
	33.9	5 x TS 212.1	36.8	46	607	499	30	600	482
5 x TS 212.1	<b>91'-10"</b>	1 x TSV 212	<b>101'-5"</b>	<b>101.0</b>	131	98	<b>66.0</b>	129	<b>94</b>
	28.0	4 x TS 212.1	30.9	46	582	435	30	573	418
4 x TS 212.1	<b>72'-6"</b>	1 x TSV 212	<b>82'-0"</b>	101.0	<b>126</b>	85	<b>66.0</b>	123	<b>81</b>
	22.1	3 x TS 212.1	25.0	46	559	376	30	548	359
3 x TS 212.1	<b>53'-2"</b>	1 x TSV 212	<b>62'-8"</b>	101.0	120	<b>80</b>	<b>66.0</b>	118	<b>75</b>
	16.2	2 x TS 212.1	19.1	46	536	356	30	523	335
2 x TS 212.1	<b>33'-9"</b>	1 x TSV 212	43'-4"	101.0	116	80	<b>66.0</b>	112	75
	10.3	1 x TS 212.1	13.2	46	515	356	30	500	335
Founda	tion				Stationary bas			Travelling bas	
25'-7" x 25'-7 7.8 x 7.8x					IJ 821			UF 821	
Anchor s	tools			BF 4 x 8.82 l 4 x 4.0		BZ k 11.02 kips lock 5.0 t	Bogie Curve F 500		

If TSK 212 section is used the hook height is increased by 6'-7" (2 m).

\* Lower climbing section after erection.

TS 212.1 = 19'-4 1/4" / 5.9 m

TSV 212 = 2

TSV 212 = 25'-11" / 7.9 m

TSK 212 = 6'-7" / 2.0 m

## PEINER SK 315 Radius and Capacity

Г			Radi	ius – ft	t./m														
ı	Jib	Max.	Cap	acity –	lbs./m	ıt						0 II							
ı		capacity	l				2-Pa	rt Line	$\mathbf{v}$		,	o ibs							
ı		max.							5 m	1ax. 8	.0 t								
ı		17,600 lbs				-10	ξņ	5	- <b>φ</b>	iφ	÷	+	ΐς	<u>.</u>	-10	ထု	<u>.</u>	-	<u>φ</u>
L	<b>≠</b> E	8.0 t	φ	÷	iç.	4	¥ .	₹ .			1.5	, m	0	<b>190'-3"</b> 58	9-1	9	in .		<u>6</u>
			<b>75.</b> 23	<b>82</b> .	<b>.</b> ස	<b>114</b>	1 <b>31</b>	4 4 4 4	147 45	157 48	<b>164</b> ' 50	1 <b>73</b> '	1 <b>80</b> .	<b>25</b> 88	<b>196</b> .	<b>206</b> .	<b>213</b> '	223. 68	<b>22</b> 5
L7	229'-8"	9'-4" - 96'-9"	17600	17600	17400	14800	12800	11900	11200	10600	10100	9500	9000	8600	8200	7700	7500	7100	6800
		2.85 - 29.5 m	8.0	8.0	7.9	6.7	5.8	5.4	5.1	4.8	4.6	4.3	4.1	3.9	3.7	3.5	3.4	3.2	3.1
L6	213'-3"	9'-4" - 105'-0"		17600		16100	13900		12300		11000	10400	9900	9300	8800	8600	8200		
		2.85 - 32.0 m	8.0	8.0	8.0	7.3	6.3	5.9	5.6	5.2	5.0	4.7	4.5	4.2	4.0	3.9	3.7		
L5		9'-4" -117'-9"		17600	L.	17600	15700	14600		13000			11200	10600	10100				
L		2.85 - 35.9 m	8.0	8.0	8.0	8.0	7.1	6.6	6.3	5.9	5.6	5.3	5.1	4.8	4.6				
L4		9'-4" - 124'-8"	17600	17600	ı		16800	15400		1	13200	1	11900					(	
ᆫ		2.85 - 38.0 m	8.0	8.0	8.0	8.0	7.6	7:0	6.7	6.3	6.0	5.6	5.4		d enga	Legisla			
L3		9'-4" - 130'-11''		17600	1		17600		15400	14600	13900								
ᆫ	50.0	2.85 - 39.9 m	8.0	8.0	8.0	8.0	8.0	7.4	7.0	6.6	6.3					ceum:			
L2		9'-4" - 131'-11"			17600	17600	17600		15700					l		ļ			
┖		2.85 - 40.2 m	8.0	8.0	8.0	8.0	8.0	7.5	7.1										
L1		9'-4" - 131'-3"			17600	17600	17600												
┕	40.0	2.85 - 40.0 m	8.0	8.0	8.0	8.0	8.0												
	ft	35,300 lbs				4	-Part I	ine 🔨	17 m	nax. 3	5.300	) lbs			R	adius -	2'-7"	(- 0.8	m)
ı	m	16.0 t				•				nax. 10								( 0.0	,
L7			21800	19600	16100	13200	11200	10400	9700	9000	8600	7900	7500	7100	6600	6200	6000	5500	5300
ľ		3.65 - 14.8 m	9.9	8.9	7.3	6.0	5.1	4.7	4.4	4.1	3.9	3.6	3.4	3.2	3.0	2.8	2.7	2.5	2.4
L6		12'-0" - 52'-2"		21600		14600		-	10800	9900	9500	8800	8400	7700	7500	6800	6600	1.0	
ľ		3.65 - 15.9 m	10.8	9.8	7.9	6.6	5.7	5.2	4.9	4.5	4.3	4.0	3.8	3.5	3.4	3.1	3.0		
L5		12'-0" - 57'-9"		_	19800		14300		12300		10800	10100	9700	9000	8600	-			
		3.65 - 17.6 m	12.2	11.1	9.0	7.6	6.5	5.9	5.6	5.2	4.9	4.6	4.4	4.1	3.9				
L4		12'-0" - 61'-0"	28700	26000	21200	17900	15200	14100	13200	12300	11700	10800	10400	C P C DU				1	
	54.2	3.65 - 18.6 m	13.0	11.8	9.6	8.1	6.9	6.4	6.0	5.6	5.3	4.9	4.7						
L3	161'-5"	12'-0" - 63'-8"	30200	27300	22300	18700	16100	14800	14100	12800	12300								
		3.65 - 19.4 m	13.7	12.4	10.1	8.5	7.3	6.7	6.4	5.8	5.6	Constant Constant					5 8==50.57577		
L2	145'-0"	12'-0" - 64'-0"	30400	27600	22500	19000	16300	15000	14100										
	44.2	3.65 - 19.5 m	13.8	12.5	10.2	8.6	7.4	6.8	6.4										
L1	128'-7"	12'-0" - 66'-3"	31700	28700	23600	19800	17000			=									
	39.2	3.65 - 20.2 m	14.4	13.0	10.7	9.0	7.7												

#### **Speeds**

FU 8-160/4	U 8-160/4																
SR 10-190/3	v = 0 → ~96 fpm (30 m / min.)																
K WB 120/4	2 x 12.0 kW 2 x 11.4 HP 2 x 8.4 kW																
	₩ ні	K max. = 705	' (215 m)	6 - layers	5		es i	480 V / 60 Hz /	3 ph								
		2-Part Line	◆ 444 fpm 134 m/min	<b>5 500 lbs</b> 2 500 kg	4-Part Line	<b>→ 222 fpm</b> 67 m/min	<b>11 000 lbs</b> 5 000 kg	Total motor output	~14								
Type SR WB 66-	台上	△↓↑	台」	△ 11	△↓↑	台[1	△↓↑	△↓↑	ἀ∬	<b>→</b> 💆	<b>→ 276 fpm</b> 84 m/min	<b>9 300 lbs</b> 4 200 kg		◆ 138 fpm 42 m/min	<b>18 600 lbs</b> 8 400 kg	SR 10-190/3	<b>HP</b> ∼10
80/4F	<b>''</b>	~	→ 180 fpm 54 m/min	<b>13 900 lbs</b> 6 300 kg		◆ 90 fpm 27 m/min	<b>27 800 lbs</b> 12 600 kg		kW								
[108 HP] [79 kW]			◆ 108 fpm 34 m/min	<b>17 600 lbs</b> 8 000 kg		54 fpm 17 m/min	35 300 lbs 16 000 kg	Connected power	170 kVA								

#### Counterweight

Jib		L1	L2	L 3	L4	L 5	L6	L 7
	BG	30 000 lbs	32 200 lbs	36 600 lbs	39 150 lbs	43 550 lbs	41 350 lbs	45 750 lbs
		13 600 kg	14 600 kg	16 600 kg	17 750 kg	19 750 kg	18 750 kg	20 750 kg
Counterweight	[lbs]	3 x 6 950	2 x 6 950		3 x 6 950	1 x 6 950	2 x 6 950	
	20.00	1 x 9 150	2 x 9 150	4 x 9 150	2 x 9 150	4 x 9 150	3 x 9 150	5 x 9 150
	[t]	3 x 3.15	2 x 3.15		3 x 3.15	1 x 3.15	2 x 3.15	
		1 x 4.15	2 x 4.15	4 x 4.15	2 x 4.15	4 x 4.15	3 x 4.15	5 x 4.15

## **PEINER SK 315** Dimensions and transport weights

See operating manual for mounting weights

	Designation		Dime	ensions (	ft / m)	Weight	Volume
			1		2		2
1	Jib Section III		39.01 11.94	4.99 1.52	7.09 2.16	4 200 1.92	ft <sup>3</sup> / m <sup>3</sup> 1 386 39.2
2	Jib Section I Section II Section IV Section V Section VI Section VII Jib tip X		39.01 11.89 38.65 11.78 19.19 5.85 35.34 10.77 36.03 10.98 33.33 10.16 3.12 0.95	4.99 1.52 4.99 1.52 4.99 1.52 4.99 1.52 4.99 1.52 4.99 1.52 5.02	5.84 1.78 6.17 1.88 5.41 1.65 5.45 1.66 5.48 1.67 5.32 1.62 1.64 0.50	3 790 1.72 4 320 1.96 1 760 0.80 3 090 1.40 2 470 1.12 1 570 0.71 310 0.14	1 137 32.2 1 190 33.7 519 14.7 961 27.2 985 27.9 853 25.0 25
	Turntable with slewing ring support		<b>36.35</b> 11.08	<b>7.64</b> 2.33	<b>7.81</b> 2.38	<b>25 350</b> 11.50	<b>2 169</b> 61.4
3	Turntable with slewing ring supp	ort	31.99 9.75 10.17	7.64 2.33 4.92	7.81 2.38 7.25	24 030 10.90 1 320	1 911 54.1 364
	Counter jib with hoist winch		3.10 38.13 11.62	1.50 5.91 1.80	2.21 6.00 1.83	0.60 <b>14 550</b> 6.60	10.3 1 353 38.3
4	Hoist winch	66 WB	<b>7.51</b> 2.29	<b>5.45</b> 1.66	<b>3.28</b> 1.00	<b>5 400</b> 2.45	1 <b>34</b> 8.4
5	Counterweight	BG	3.94 1.20 3.94 1.20	1.64 0.50 1.64 0.50	9.32 2.84 12.11 3.69	6 950 3.15 9 150 4.15	60 1.4 78 1.7
	33.7	TS 212.1	<b>19.52</b> 5.95	<b>7.78</b> 2.37	8.01 2.45	9 130 4.14	<b>1 216</b> 34.4
6	Tower section	TSV 212 with struts	<b>31.17</b> 9.50	<b>9.84</b> 3.00	<b>10.00</b> 3.05	<b>20 330</b> 9.22	<b>3 067</b> 86.9
		TSK 212	<b>6.63</b> 2.02	<b>7.87</b> 2.40	<b>9.84</b> 3.00	<b>6 170</b> 2.80	<b>513</b> 14.5
7	Travelling base, folded	UF 821	<b>41.01</b> 12.5	<b>9.74</b> 2.97	<b>7.05</b> 2.15	<b>35 050</b> 15.90	<b>2 816</b> 79.8
8	Stationary base, folded	U 821	<b>34.55</b> 10.53	<b>9.06</b> 2.76	<b>2.79</b> 0.85	17 130 7.77	<b>873</b> 24.7
9	Central ballast block	BZ	11.48 3.50 9.19	4.92 1.50	2.20 0.67	11 020 5.00 8 820	124 3.5 57
10	Foundation pad  Accessories	BF	2.80	1.00	0.57	4.00 4.00	1.6
11	ACCE3301103					2.17	

BİGGE

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

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.

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# **Appendix R – Line Painting Schematic**

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