



**CONSTRUCTION MANAGEMENT PLAN  
(CMP)**

**450 RICHMOND STREET WEST LIMITED**

APRIL 2020

PREPARED BY: CR-RE AND LEA CONSULTING LTD.

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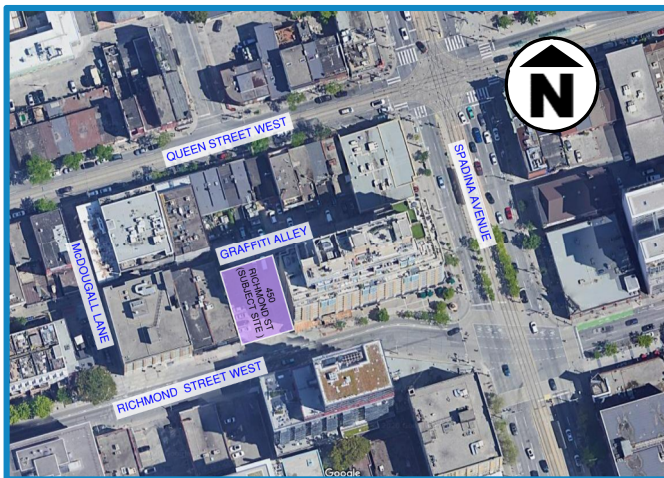
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## 1 Overview

# Introduction

This report outlines a construction management plan that will be in place for the duration of the construction of 450 Richmond. The approved redevelopment of 450 Richmond Street West consists of 19-storey mixed-use development which is located midblock on the north side of Richmond Street West between Spadina Avenue and McDougall Lane. The construction site is bounded by the following streets/properties:

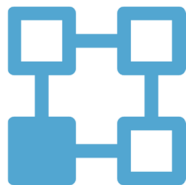


SUBJECT SITE

- North side: Graffiti Alley
- South side: Richmond Street West
- East side: Private – 438 Richmond St West
- West side: Private – 452 Richmond St West

# 1 Overview

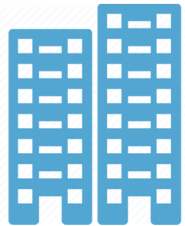
## Introduction



**111 Residential Units**



**1/2/3 Units Mix**



**19 Storey Tower**



**100 Bike Stalls**



## 1 Overview

# Notification of Area Residents

- General Contractor, will notify area residents via **letter distribution** of construction start, construction duration, working times ( as per City of Toronto applicable by-laws) and contact information for any noise and construction related inquiries;
- General Contractor will also **email all neighbouring property managers** and key stakeholders on a monthly basis to keep them aware of activities that may impact the community (See appendix A for example); and
- Site office **contact information** and general contractor's emergency (after-hours) line will be **posted on all site access gates** as well as site hoarding.
- A website will be created to provide post construction activity updates, advance road closure notices and revised schedules, etc.

**CONSTRUCTION PROJECT SITE**

AUTHORIZED PERSONNEL ONLY	PERSONAL PROTECTIVE EQUIPMENT
ALL PERSONS MUST CONTACT SITE SUPERVISOR BEFORE ENTERING	HARD HAT <input checked="" type="checkbox"/>
Prime Contractor/ Employer: <u>Your Company Name HERE</u>	SAFETY FOOTWEAR <input checked="" type="checkbox"/>
Site Supervisor: _____	HIGH VISIBILITY <input checked="" type="checkbox"/>
Contact: { } _____	EYE PROTECTION <input type="checkbox"/>
Committee/ Representative: _____	HEARING PROTECTION <input type="checkbox"/>
Contact: { } _____	OTHER: _____ <input type="checkbox"/>
First Aid: { } _____ or 911	
First Aid Kit: ON SITE or in Service Vehicle	
First Aiders: ON SITE	
Safety Rep: ON SITE or Contact Employer	

**Your Company Contact Information Here**

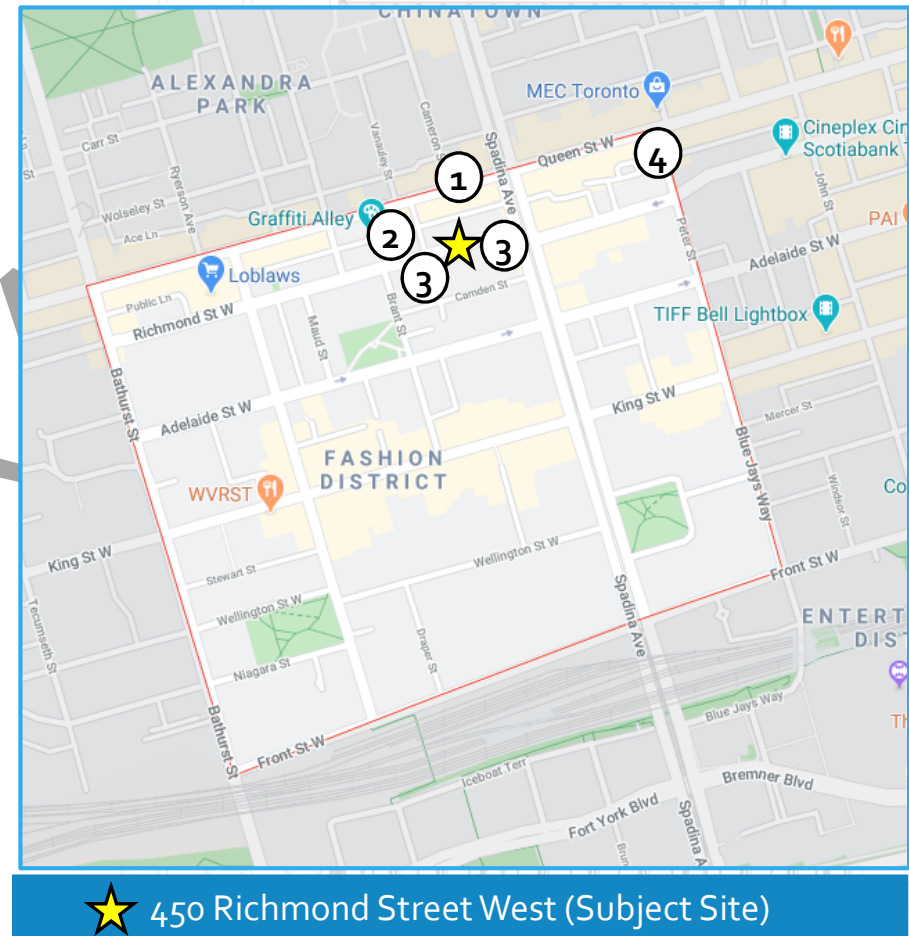
\*On Site look for personnel / location displaying these symbols

# 1 Overview

## Stakeholders to be notified

The following Neighborhood Stakeholders will be notified (list to be updated):

1. Queen Street West Business Improvement Area
2. The Laneway Project (Graffiti Alley)
3. Neighbouring Condominium Association
  - a) The Woodsworth Condos (452 Richmond Street West)
  - b) The Morgan Condos (438 Richmond Street West)
4. Garment District Neighborhood Association (Red Outline)
  - a) Queen West (Neighbors)



## Phase 1: Mobilization & Demolition

Under the existing conditions, there is no structure to demolish so demolition will be limited to break-up and removal of the existing ground (asphalt etc...). All anticipated demolition related activities will take place within the subject site boundaries and will conform to all City of Toronto applicable by-laws, Ministry of Environment standards and Ministry of Labour regulations. However, there is currently no structure on the 450 Richmond Street that needs to be demolished.



★ 450 Richmond St (Development Site)



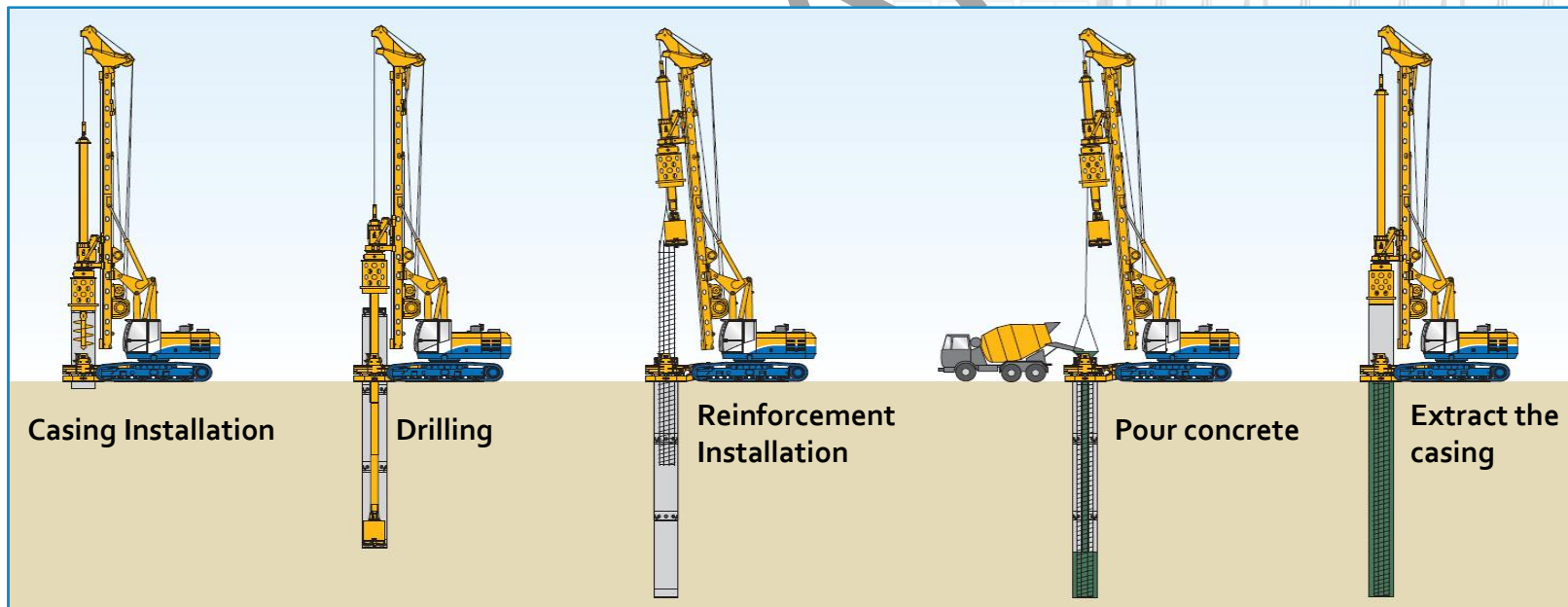
Existing Conditions

## 2 Construction Phases

# Phase 2: Shoring and Pile Drilling

### Activities

- ❑ Shoring and Pile Drilling activities will begin immediately after preparing the ground for drilling and upon fence installation.
- ❑ All truck traffic will enter from Richmond Street West
- ❑ The construction sequence for (shoring and pile drilling) as below:





## 2 Construction Phases

# Phase 3: Excavation and Foundation /Above Grade Building Construction Activities

### Activities

- Excavation will start immediately after shoring and pile drilling. A temporary excavation ramp will be placed within the site to excavate the material (location to be advised).
- Foundation concrete formwork will begin as soon as the site has been fully excavated and shored.
- Above grade building construction work will commence upon completion of the below grade structure.

### Hoarding and/or Security Fencing

- Team will complete the Street Occupancy Permit application for sidewalk closure/relocation along Richmond Street and Graffiti Alley Lane (if need be).

## Phase 3: Excavation and Foundation /Above Grade Building Construction Activities

### Hoarding and/or Security Fencing

- Team will also provide signage required to alert and advise pedestrian, bicycle and vehicular traffic.
- Team will utilize jersey barriers with plywood hoarding to delineate the traffic lane from the construction zone.
- Team will supply a combination of single face hoarding/modular fencing to secure the site perimeter.
- Construction and subject site traffic control measures will be in place and utilized at all times.
- All hoarding and fencing will be secured tightly to the ground and will be maintained by team in good conditions throughout construction duration.
- Note: Team have employed a traffic consultant to assist in preparing a construction management plan that will be used for the submission of the required laneway occupancy and sidewalk relocation permit.



## 2 Construction Phases

# Scheduling

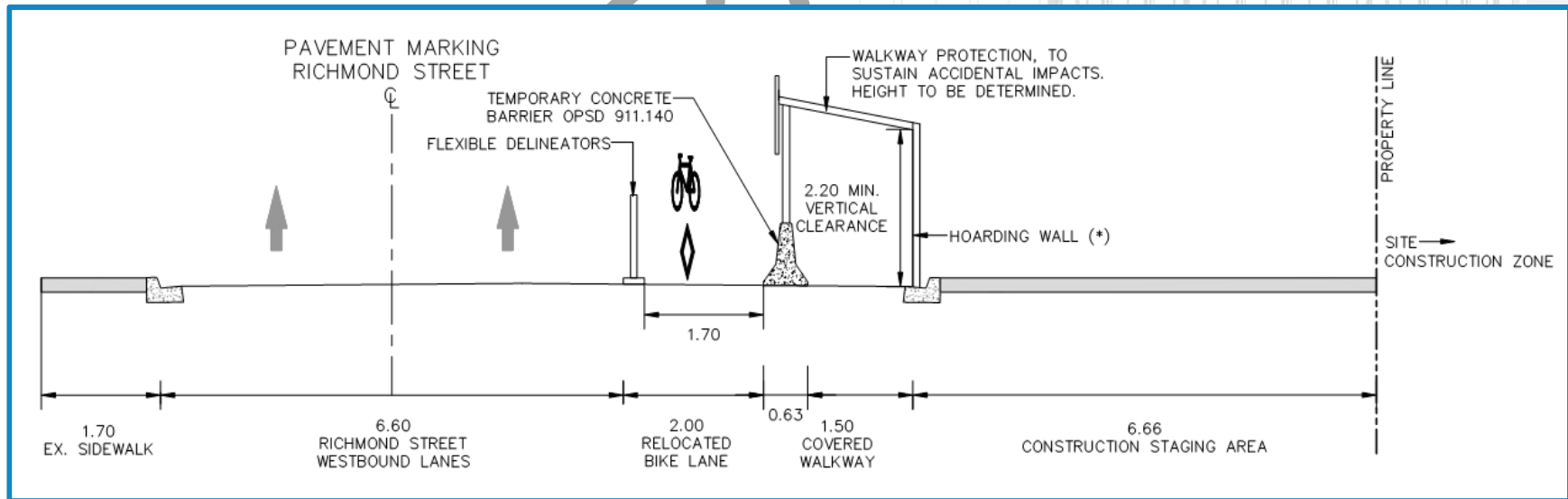
All construction activities will be subject to the City of Toronto noise by-laws and approved working hours. Scheduling is to be advised.

Demolition	Trips/day	Month – Month	Year –Year	Truck type
Shoring				Trailer
Excavation				Tri-axle dump truck
<b>Concrete Work Phase - Below Grade</b>				
Formwork				Tractor trailer
Concrete Supplies				Flat bed
Concrete Trucks Supply				Concrete Trucks
Reinforcing Supply				Tractor trailer
<b>Concrete Work Phase - Above Grade</b>				
Formwork				Tractor trailer
Concrete Supplies				Flat bed
Concrete Trucks Supply				Concrete Trucks
Reinforcing Supply				Tractor trailer
<b>Building Enclosure Phase</b>				
Roofing				Flat bed
Windows / Aluminium / Glass				Truck
<b>Interior Finishing Phase</b>				
Interior Masonry				Truck
Drywall				Truck
Applied Finishes				Truck
Stone Flooring & Ceramics				Truck
Interior Steel Stairs & Handrails				Truck

## Hoarding along Richmond Street West

### Cross Section – Richmond St West

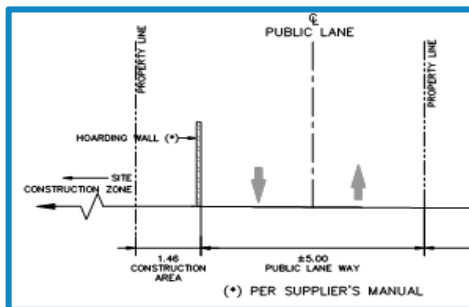
- Covered walkway as required per Ministry of Labour regulations
- Existing traffic lane and bike lane occupancy at the frontage of subject site
- Proposed re-aligned bike lane
- Existing westbound through lanes on Richmond St W to be reduced to 3.3m each and will be maintained through out construction duration.



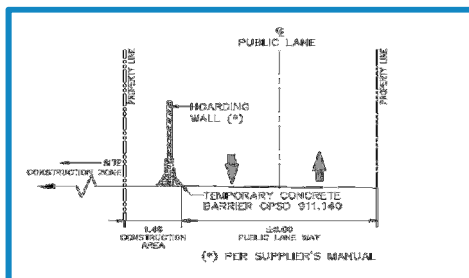
# Hoarding along Richmond Street West

## Cross Section – Richmond St West

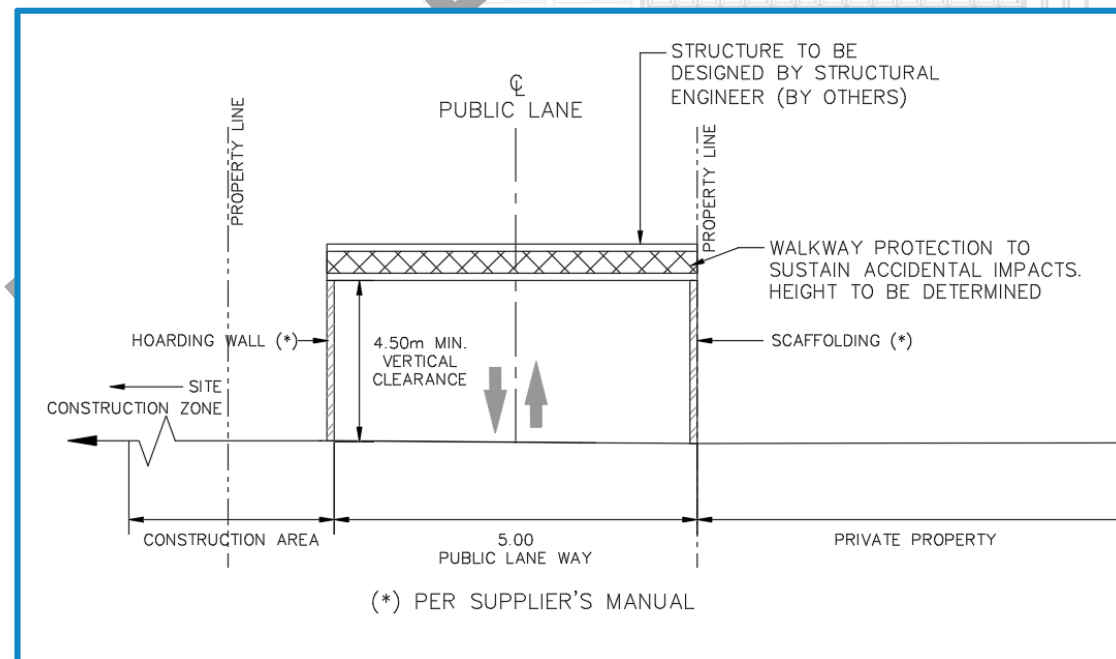
- Proposed to keep laneway open for public through out construction duration
- Covered walkway and laneway as required per Ministry of Labour regulations



HOARDING - PILE DRILLING STAGE



HOARDING - EXCAVATION STAGE



HOARDING AND COVERED LANEWAY – ABOVE GRADE STAGE

## 4

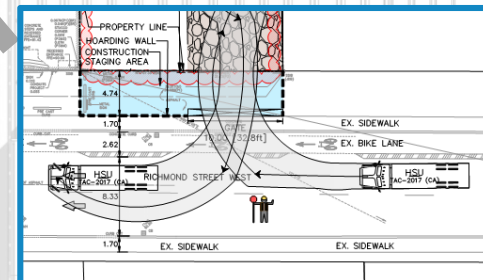
## Construction Access

## Construction Access

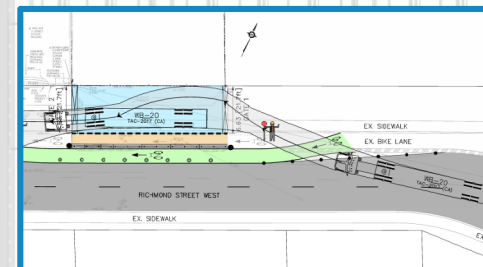
Team will ensure that all construction accesses to the subject site will be provided to sub-contractors and material suppliers. Traffic flow will be directed to the site gate on Richmond Street during Above grade construction.

### Gate location – Richmond St West

- Shall be located at the south end of the construction zone
- All construction truck access points are anticipated to be on Richmond Street West
- Vehicles and materials will be transferred in and out of the site during construction activities
- During the shoring and excavation stages, the dump trucks will exit through the south-east corner of the subject site. The temporary ramp extending from the hole will use the same gate
- Exact location of the gates to be advised



TRUCK ACCESS DURING SHORING AND EXCAVATION

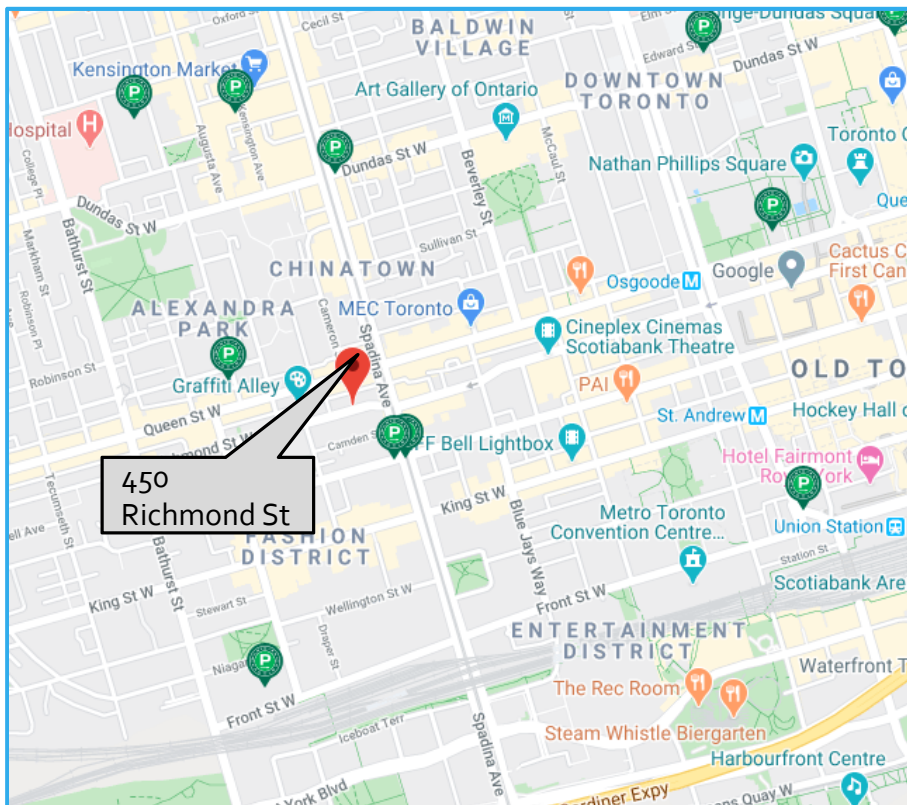


TRUCK ACCESS DURING ABOVE GRADE CONSTRUCTION

## 5

## Parking Management

## Parking Management Strategy



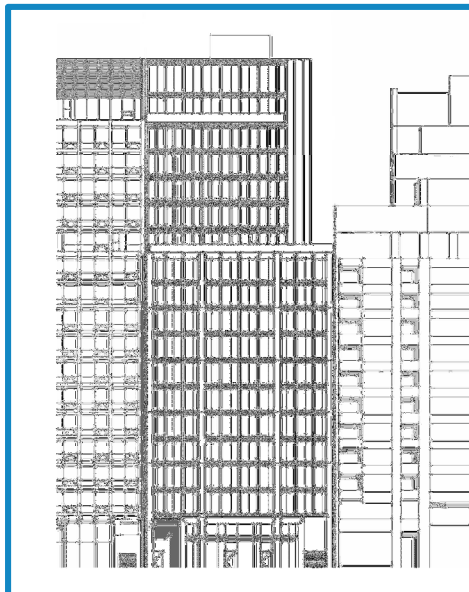
- Construction trades will not be allowed to bulk park on-site;
- As a way to avoid illegal parking and to bring attention to areas where parking is permitted, all contractors will be advised of the available parking areas close to the site; and
- To avoid improper parking of vehicles, the general contractor will take reasonable steps by reminding and providing monthly updates to on-site workers.

## 6 Staging

# Construction Staging Activities

Construction activities will take place Monday through Friday during the hours of 7:00 AM to 7:00 PM. Any after hours or weekend construction activity required will conform to all City of Toronto applicable by-laws.

## Construction Staging Activities and Duration



Demolition  
(to be determine)

Site Mobilization  
& Setup  
(to be determine)

Construction Start  
(to be determine)

Anticipated Finish  
(to be determine)

- Month /Year

- Month /Year

- Month /Year

- Month /Year




7

# Staffing

## Management Team (to be determined)


X1  **EMPLOYEE NAME**  
Briefcase Project Manager  
Phone +1 (123) 546-346  
Envelope Office@email.com

X1  **EMPLOYEE NAME**  
Briefcase Assistant Project Manager  
Phone +1 (123) 546-346  
Envelope Office@email.com

## Superintendents

X1  **EMPLOYEE NAME**  
Briefcase Senior Site Superintendent  
Phone +1 (123) 546-346  
Envelope Office@email.com

X1  **EMPLOYEE NAME**  
Briefcase Assistant Site Superintendent  
Phone +1 (123) 546-346  
Envelope Office@email.com

X1  **EMPLOYEE NAME**  
Briefcase Finishing Superintendent  
Phone +1 (123) 546-346  
Envelope Office@email.com

## Site Coordinator

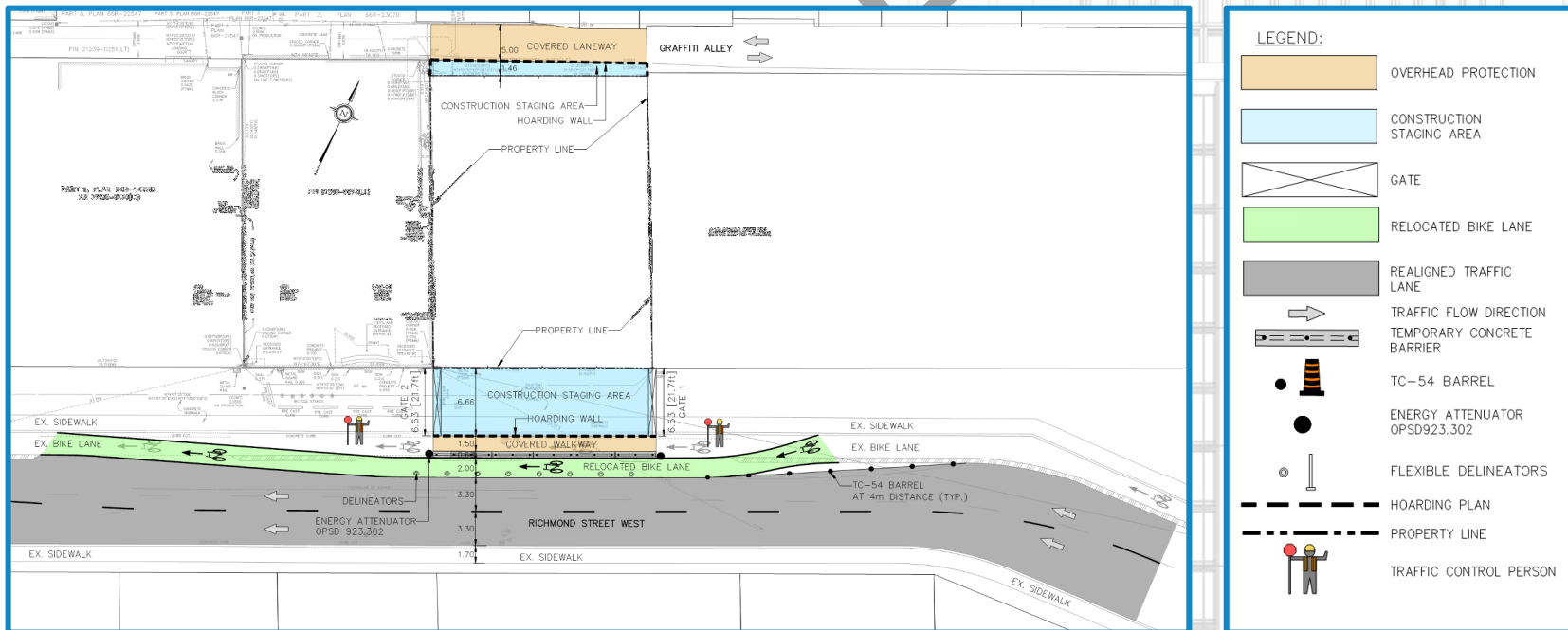
X1  **EMPLOYEE NAME**  
Briefcase Site Coordinator  
Phone +1 (123) 546-346  
Envelope Office@email.com

## Security

X1  **EMPLOYEE NAME**  
Briefcase Security  
Phone +1 (123) 546-346  
Envelope Office@email.com

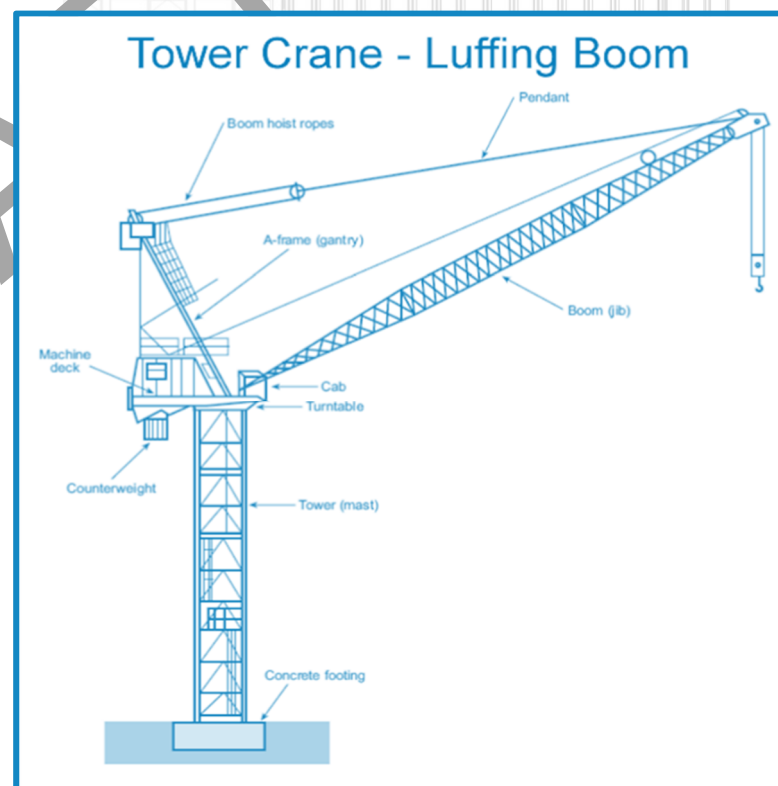
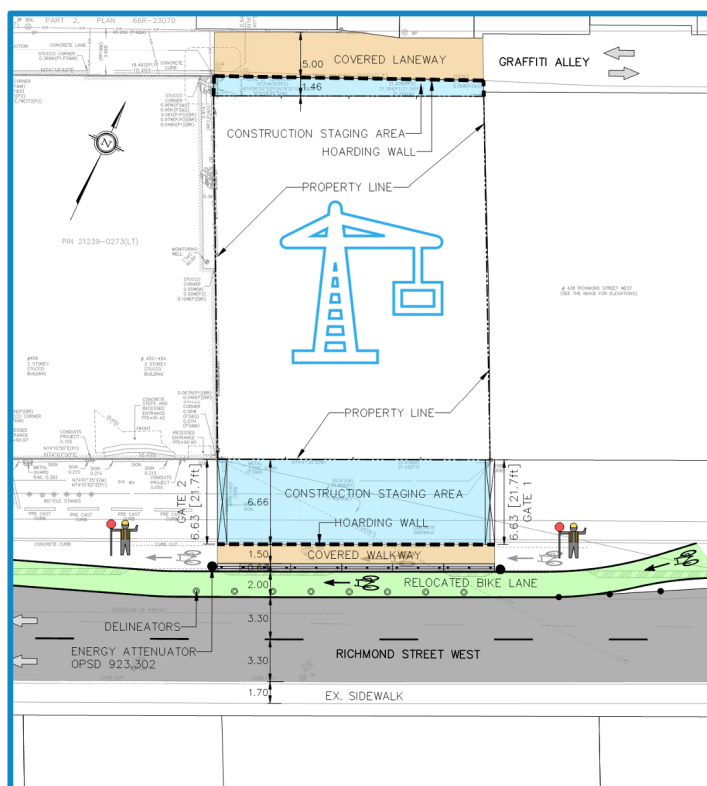
# Construction Management Plan

The site plan has been designed to not only ensure worker and public safety but also to minimize the impact to vehicular traffic.



## Crane Location & Radius Plan

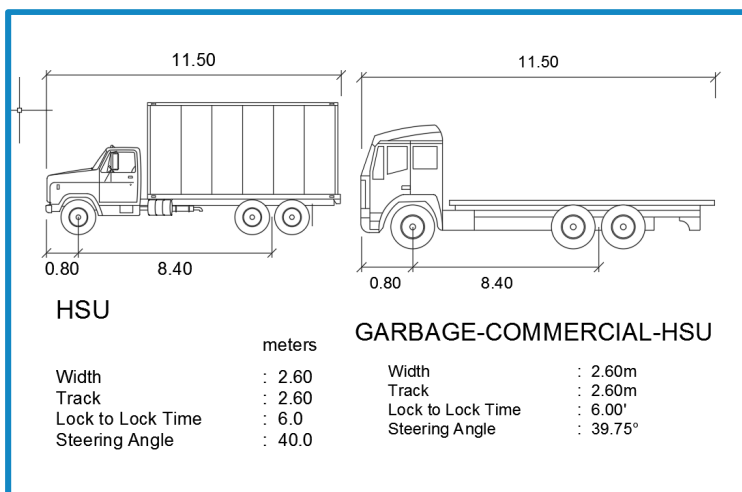
- A luffing crane is anticipated to be used at 450 Richmond Street
- The resting position radius and location of the crane to be advised.



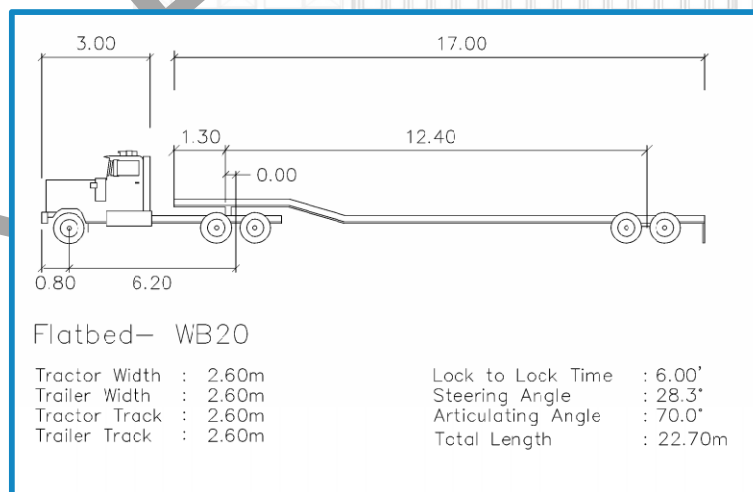
## Construction Vehicles

The following construction vehicles will be used:

- HSU vehicles (the Transportation Association Canada (TAC) design vehicle HSU represents the longer single unit vehicle like the "Dump" and "Concrete" trucks, etc....)
- 53 ft tractor trailers



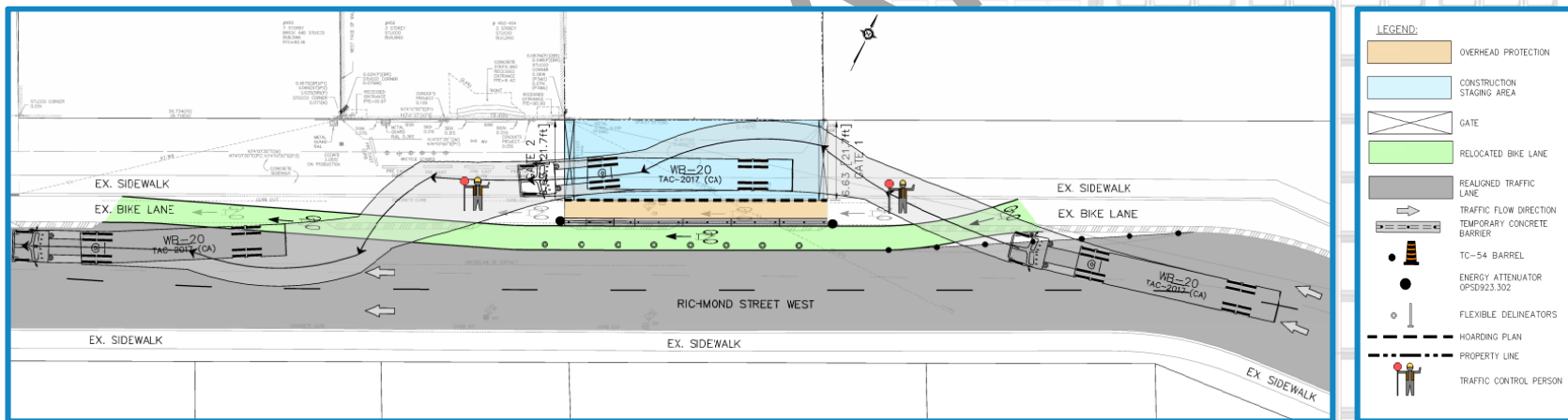
HSU (Dump/Delivery) Truck Profile



53ft Flat bed Truck Profile

# Tractor Trailer Inbound and Outbound Movement

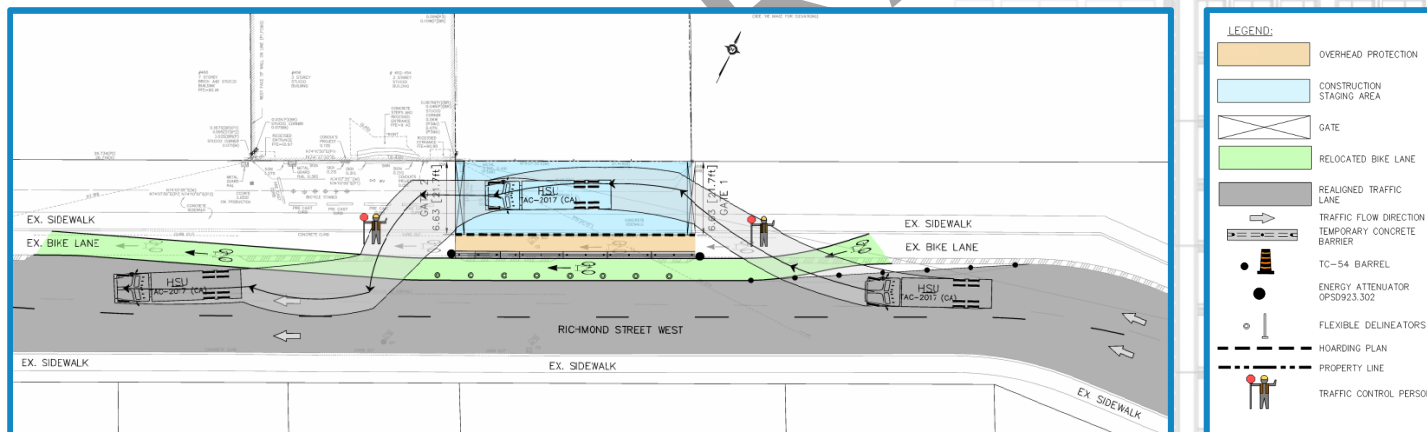
- 53 ft tractor trailers will travel westbound on Richmond Street West towards the staging area.
- Two (2) certified traffic control flagman will be present on site to regulate the traffic and pedestrians when the trucks are entering or exiting the site.



53ft Flat Bed Truck – Entry and Exit path

# Concrete and Dump Truck Inbound and Outbound Movement

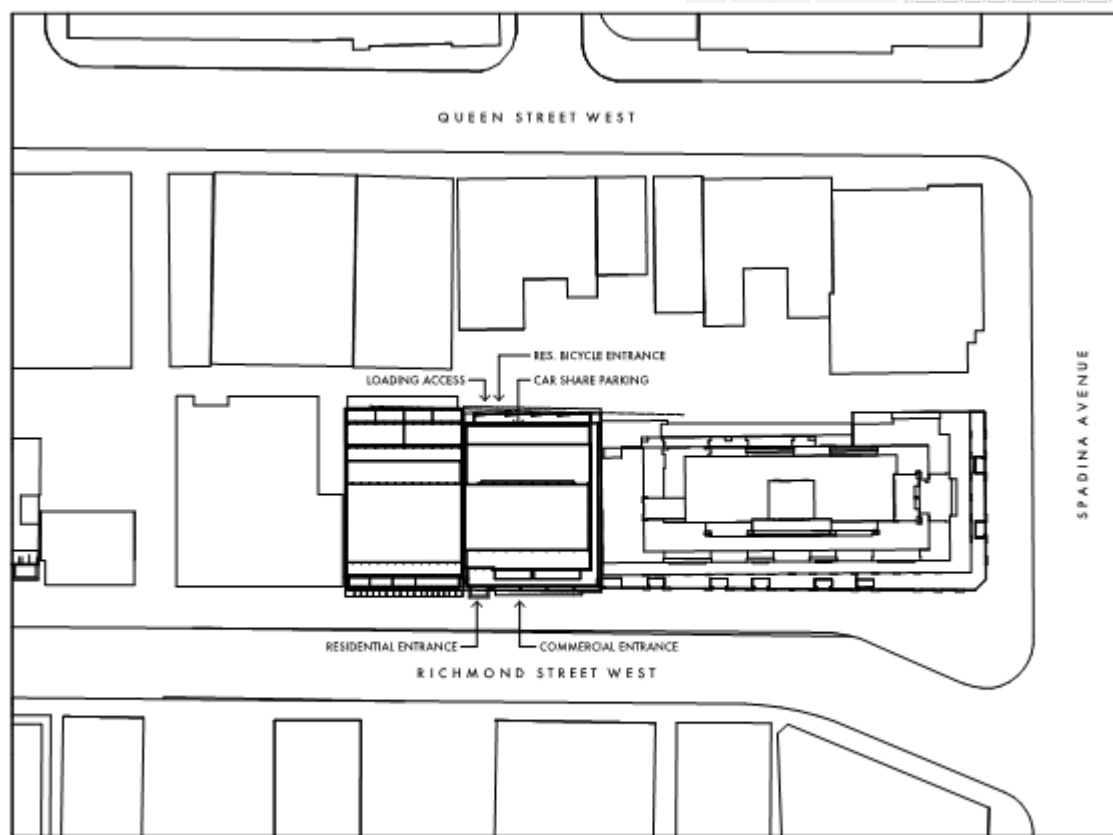
- The Transportation Association of Canada (TAC) design vehicle HSU represents the longer single unit vehicle like the “Dump” and “Concrete” trucks, etc.
- Concrete and Dump trucks will travel west bound on Richmond Street West towards the staging area
- Two (2) certified traffic control flagman will be present on site to regulate the traffic and pedestrians when the trucks are entering or exiting the site.



HSU (38ft Dump or Concrete) Truck – Entry and Exit path

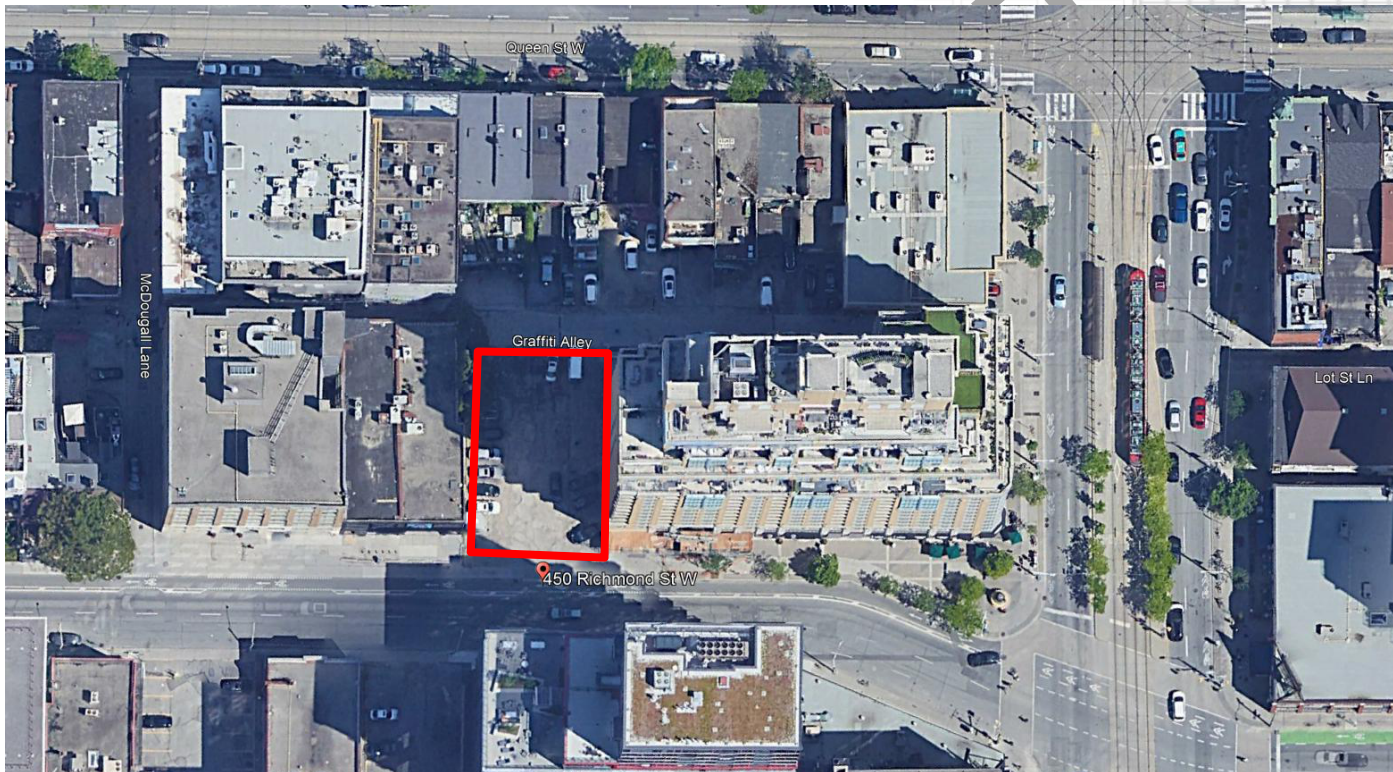


# Shoring Plan (to be advised)



1 Context Plan  
SCALE: 1:500

# Pest Control (to be advised)



## Additional Considerations

Construction  
Site Office

Text 1

Demolition

Text 1

Cranes

Text 1

Lighting

Text 1

Dust/Noise  
Control

Text 1

Security

Construction site will be monitored on a regular basis.

## Additional Considerations

Dirt & Mud  
Tracking

Text 1

Communication  
Strategy

Text 1

Site Constraints

Text 1

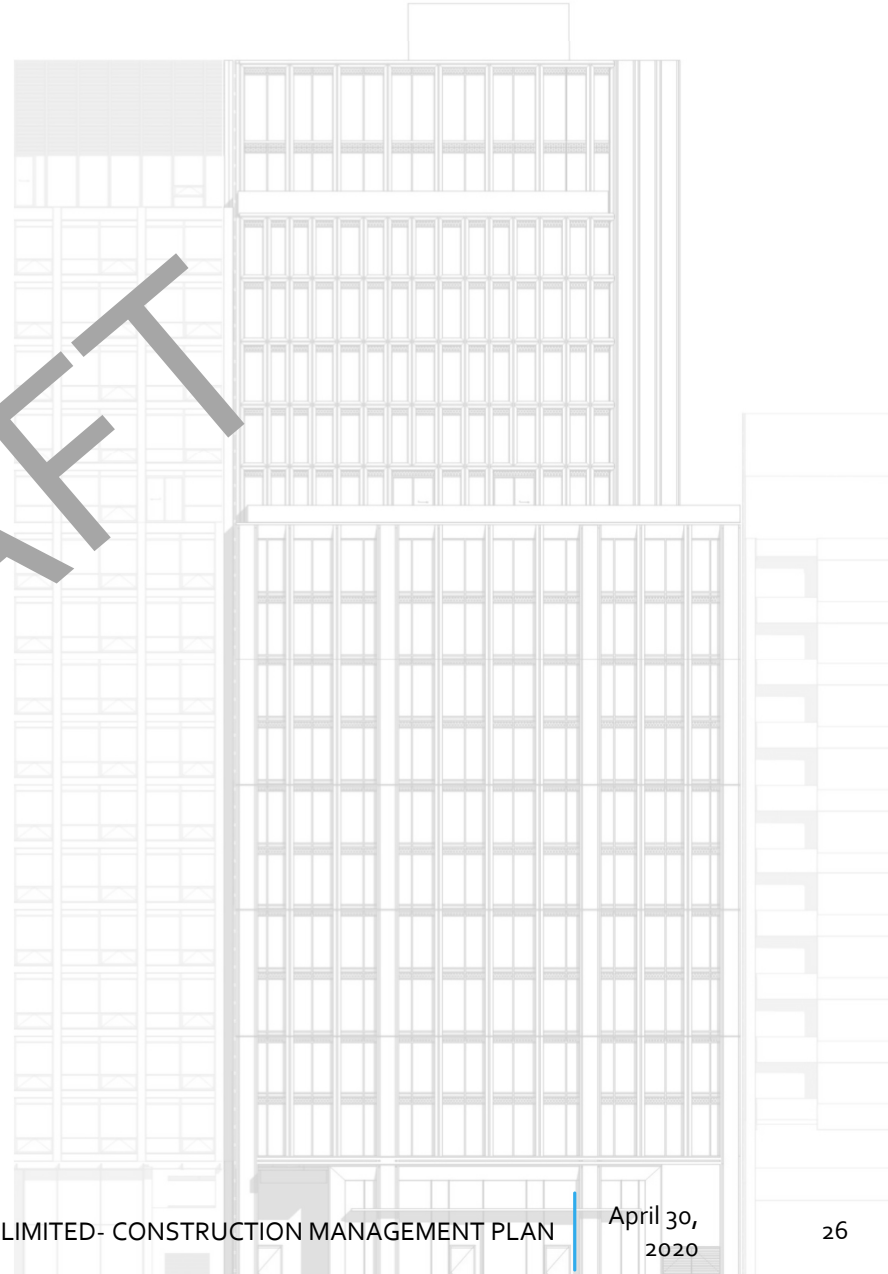
Safety

Text 1

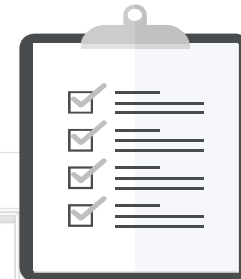
Storage,  
Removal and  
Disposal of  
Material

Text 1

DRAFT



## 10 CMP Check List



# Construction Management Plan Check List

- Dust and Mud control on and off-site
- Location and size of construction staging areas
- Site access and truck routing
- Location of truck loading points, trailer parking
- Provision of temporary hoarding, fencing, street signs, covered walkways, sidewalk diversions
- Information regarding the location and extent of operation of aerial cranes
- Details of piling and shoring activities
- Control of storm run-off, including any siltation control devices which may be required
- Location and timing of temporary street or laneway closures and alternative routes/detours
- A Plan of removal and disposal materials to the Ministry of Environment standards
- Parking Management plan for employee and construction vehicle parking
- Measures to ensure safety lighting does not negatively impact adjacent residences
- Dates and significant concrete pouring activities
- Site security and site supervisor contact information