CONSTRUCTION and MOBILITY MANAGEMENT PLAN

for

Mixed Use Development

2020 Lakeshore Road,
Burlington, Ontario

Prepared for:

Burlington 2020 Lakeshore Inc.

Prepared by:

LANHACK CONSULTANTS INC.
1709 Upper James Street
Hamilton, ON L9B 1K7

Project No. 21126

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1.0 Purpose

The following plan shall act as the program for the planning, organization, and construction activity for the proposed Mixed-Use Development. The project is situated at 2020 Lakeshore Road. Lakeshore Road is a minor arterial road as per the City of Burlington Official Plan. The development is located south of Lakeshore Road between Brant Street and Elizabeth Street. Open space abuts the property to the west and south. The Bridgewater Condominium is to the east and mixed used residential & commercial to the north. The proposed Mixed-Use Development will consist of two (2) towers, one 35 storeys and one 30 storeys on a parking garage podium. The development is proposed to be constructed in 1 Phase.

Based on the pre-mentioned, we will mitigate unnecessary risk and interference to the public. The Construction and Traffic Management Guidelines will address the following items:

- Traffic and pedestrian control measures,
- Hours of Operation
- Noise Control
- Haulage route of construction vehicles
- Air and Dust Management
- Stormwater and Sediment Control
- Tower Cranes
- Trade parking
- Waste Management
- Staging of construction vehicles
- Vehicle wash-down
- Site setup, including sanitary facilities, site offices, material storage, and staging
- Emergency contact information
- Public Communication
- Servicing

Please note: Pest Control, Hydrogeological Investigation, Dewatering, Dust Mitigation, Shoring, including vibration analysis and post-condition inspections will be prepared and addressed by others and submitted under a separate cover.

At all times, these construction management guidelines will recognize the immediate and overall surroundings and shall be sensitive to the neighbourhood to minimize any impact to local businesses and residents. As such, this plan shall utilize Truck Routes for construction vehicle routing. An on-location review and meeting of this plan with the relevant City personnel will be held to make necessary revisions, if any, and finalize this plan. The City Engineer may revise this plan during construction as required.

2.0 Prior to Commencement of Construction

Prior to the start of construction, including site works, the contractor is to provide photographs of all City of Burlington infrastructure along the perimeter of the development including sidewalk, boulevards, roadways, streetlights, etc. Once the project has been completed, all City infrastructure is to be returned to its original condition by the City of Burlington at the expense of the applicant (unless an agreement is in place with the Development Planning/Construction).

The contractor also must implement the Construction and Mobility Management Plan prepared Lanhack Consultants Inc. and the Erosion & Sediment Control Plan prepared by S. Llewellyn and Associates (SLA). The site contractor must also remove all temporary protection measures at the end of construction mentioned in the Construction Management Plan and the Erosion & Sediment Control Plans. This CMMP should not be used as the final Traffic Control Plan (TCP) for the actual works. If the applicant/contractor does not have OTM Book 7 qualifications, they should retain a third-party contractor to prepare the TCP for setup and takedown of any lane and/or sidewalk temporary warning /directional signage.

3.0 Vehicle and Pedestrian Movements

To ensure safety for pedestrians and vehicle movements around the site, all traffic movements on Lakeshore Road will be maintained except for the west bound left turning lane into the site. The driveway into the site is being removed for the development therefore the left turn lane signage and lane painting markings need to be removed. The east bound left turn lane length will now be longer.

The developer will be constructing a protected pedestrian route on the south side of the south lane on Lakeshore Road. A staging area will be located south of the protected pedestrian route in the existing boulevard. The staging area and protected pedestrian route will extend across the entire site frontage without removing the existing streetlights. The protected pedestrian route will be 2.0m wide with two rows of continuous jersey barriers. Once the construction of the buildings is above one storey, the covered walkway system will be installed between the jersey barriers. See Appendix F for example of the covered walkway system.

Once the buildings have been constructed and the cranes / staging areas are no longer required, the protective pedestrian route and staging areas will be removed.

The ultimate boulevard layout on Lakeshore Road will be modified to show the new sidewalk and include nine (9) lay-by parking spaces. See Appendix C for Site Plan.

4.0 Traffic and Pedestrian Control

Recognizing the importance of vehicle and pedestrian traffic to the direct success and vitality of neighbourhood businesses and the vehicular and pedestrian routing, drawing CM1-2 and CM1-3 prepared by Lanhack, denotes pedestrian and vehicular traffic movement during the approximate 43 months of construction.

Traffic Control: Motorist will be provided with adequate signage to ensure advance notice and will caution the operator of the upcoming development project and the associated construction works. Two-way traffic will be maintained on all roads at all times except during servicing. Lane closures and detours will be required, with the aid of two (2) qualified traffic control persons (with Book 7 training) where permittable, for the installation of services. See drawings prepared by SLA.

Pedestrian Control: Maintaining the pedestrian movement along the existing streets and pathways is essential in maintaining the current balance in the surrounding neighbourhood. The public sidewalk along Lakeshore Road will be directed into a covered protected walkway with jersey barriers on both sides. The

walkways along the sides of the development will also be equipped with covered protected walkways as required.
Qualified traffic control person(s) (with Book 7 training) will control pedestrian and bicycle traffic for all vehicles leaving the site.

5.0 Public Parking

The proposed development does not remove or effect any public parking. Ultimately, nine (9) new layby parking spaces are proposed.

6.0 Trade Parking

No parking will occur on the adjacent streets or boulevards by trades/labourers. The trades/labourers will park at 2076 and 2093 Old Lakeshore Road which are both owned by developer until the underground parking garage is operational. Labours will be encouraged to carpool to the site.

Summary of trade personnel as follows:

- **Excavation Phase:** 10 Tradespersons
- **Foundation and Framing Phase:** 20 Tradespersons
- **Finishing Phase:** 50 Tradespersons

7.0 Shoring and Encroachments

The CMMP shall be reviewed in conjunction with the shoring plans and subject to the Shoring Agreement and the Encroachment Agreement(s) (both above and below ground), as between the City of Burlington and the proponent. Structural details for the building foundation (including shoring plans) will be developed as part of the detailed design for the building and submitted to the City for approval. Please note that a preliminary shoring concept has been prepared by HCM Group and included at the this time for discussion purposes only in Appendix E – Preliminary Shoring Concept.

There are four (4) trees to be protected located just off the south-west corner of the site. See Appendix D for tree protection drawings.

8.0 Stationary Crane

Once the site has been excavated and the pedestrian route and Staging Area 2 have been constructed, the stationary crane will be installed. See Appendix A drawing CM1-2 and CM1-3.

9.0 Site Servicing

Site servicing across Lakeshore Road will occur in two (2) phases for the installation of the water and sanitary services. The contractor will need to have Book 7 certified staff on-site during the installation of the services. The storm services are located on east and west side of the site which will not impact traffic. Road closures are not expected. Two-way traffic will be maintained all times. No Left turn signage will be installed as noted on the CMMP. See Appendix A drawing CM1-4 and Appendix B.

10.0 Site Drainage During Construction

Storm and ground water will be addressed by pumping the water to a suitable outlet approved by the City and Conservation Authority. Only clean water will be pumped from excavation. The contractor will need to construct a sump pit to address sediment.

11.0 Haulage Routes

For the purposes of this plan, the developer has investigated area suppliers and trade contractors to predict relevant origin and destination points. Origin points include Concrete batching plants, excavation dump sites, aggregate suppliers, reinforcing steel suppliers, and building material suppliers. With the source and destination points established, it can be confirmed that the haulage routes will utilize approved truck routes to mitigate disturbance to area residents and businesses, as well as ensure sufficient road allowances for larger construction vehicles. Haulage routes are identified on Appendix A drawing CM2-1

As detailed in the summary chart Table 1. During the total construction period of approximately 43 months there will be an expected average of 50 vehicles per day. As such, greater emphasis will be placed on traffic management. During these periods two full time competent (possess formal training and Book 7 certification) traffic control persons will be present to safely monitor and guide vehicular and pedestrian activity. A sharp reduction of construction traffic will be seen during the Finishing Phases and anticipate 5 - 10 construction vehicles per day for the Finishing Phase and Site Work Phases. Traffic control personnel will remain available for the duration of the project.

Nature of Construction Traffic – Table 1

Description	Frequency	Timing	Method of Delivery
Construction Debris Containers	Daily	Months 1 to 43	Tri-Axle Truck
Site Washrooms	3x Weekly	Months 1 to 43	Van – Mounted Pump
Construction Tools and Supplies	Daily	Months 1 to 43	Van
Document Couriers	3x Weekly	Months 1 to 43	Car
Mechanical and Electrical Supplies	Weekly	Months 4 to 43	5-ton Truck
Construction Schedule Related Traffic	3x Weekly		
Demolition	Daily	Month 1	Tractor Trailer
Shoring Phase	Daily	Month 1 to 10	
Excavation	50 trips Daily	Months 4 to 18	Tri-Axle Dump Truck
Shoring	Daily	See Shoring Report	--
Structural Phase			

Formwork	2x Weekly	Month 4 to 18	Tractor Trailer
Concrete Supplies	2x Weekly	Month 4 to 36	Flat Bed Truck
Concrete Ready-mix Supply	15 loads daily	Month 4 to 36	Concrete Truck
Rebar and Rebar Accessories Supply	2 x month	Month 4 to 36	Tractor Trailer
Windows	Weekly	Month 13 to 36	Truck
Brick or Siding	2x Weekly	Month 13to 36	Flat Bed Truck
Roofing	Weekly	Month 24 to 36	Flat Bed Truck
Finishing Phase			
Interior Masonry	2x Weekly	Month 12 to 36	Flat Bed Truck
Wall Partitions (drywall)	2x Weekly	Month 13 to 43	Flat Bed Truck
Applied Finishes	2x daily	Month 13 to 43	Truck
Stone Flooring and tops	Weekly	Month 13 to 43	Truck
Misc. Metals	2x Weekly	Month 13 to 43	Truck

12.0 Hours of Operation

The hours of operation will be from 7am to 6pm, five (5) days a week (Monday to Friday)

13.0 Existing Utilities

All utilities including existing light standards on the south side Lakeshore Road will remain. The existing light standards will be partially protected by jersey barriers. Two utility boxes will need to be relocated south for the proposed Staging Area #2.

14.0 Dust, Air, and Noise Management

Temporary Construction Fencing (1.8m high) will be erected prior to the start of construction. The pre-mentioned fencing will be draped with dust control fabric. The dust control fabric will be inspected daily and repaired as required.

The development covers the majority of the site. There will not be any earth stockpiles on site to generate dust. If dust during construction becomes a concern, water trucks and sweeper trucks will be on call to deal with the dust the same day. The contractor will have full time staff available to ensure the site is kept clean and swept daily. Environmentally friendly dust suppressant agents will be used where possible.

At no time will equipment/trucks be idling except by concrete trucks and concrete pumps. The idling from the pre-mentioned trucks will be kept to an absolute minimum.

The proposed development will be constructed with pre-cast panels and floors with minimal forming.

15.0 Demolition

Demolition of the existing structure will occur prior to any site excavation. The demolition will take approx. 3-4 weeks. All vehicles will be utilizing Staging Area # 1 for access, queuing, and exiting. Excavation for the underground parking garage will commence immediately after the existing structure and foundation is removed offsite. See Appendix A drawing CM1-1.

The four (4) trees that area located just off the south-west corner of the site are to be protected prior to the commencement of demolition. See Appendix D for tree protection drawings.

16.0 Waste Collection

No open waste storage will occur on site. All waste will be directly placed into bins which are placed on site. All bins are to be tarped when they are not being used. Waste will be removed off site on a regular basis by a private waste hauler.

17.0 Cranes

One tower crane will be required to construct the two towers. The Crane will be a Jaso J300 unit with a 76.7m long jib.

18.0 Queuing and Staging of Construction Vehicles

Dump trucks and equipment for the excavation stage will utilize Staging Area #1. The setup of the stationary crane and building material deliveries during construction will utilize Staging Area #2. All construction vehicles and equipment will be coordinated to ensure that there is no queuing on municipal roads.

Construction vehicles will be required to pull into the staging areas, as shown on drawings in Appendix A drawings CM1-1, CM1-2 and CM1-3 The trucks will be guided out of the site by the aid of Book 7 trained traffic control persons.

At no time will equipment/trucks be idling except by concrete trucks and concrete pumps and shall be kept to an absolute minimum.

19.0 Vehicle Wash Down and Dust Control

During the Excavation and Shoring Phase all construction vehicles shall utilize the construction Staging Area 1. Truck wash down will occur prior to the vehicle travelling on public roadways. The wash down area on the mud-mat will be conducted on the development site, not on the road. If for whatever reason the wash down proved to be inadequate, a road washing program will be in place to wash the roadway of any debris. This will be done by both the general contractor and third-party services. As a safeguard, silt sacks will be installed and maintained on all near by storm catch basins/manholes to prevent any debris from entering the City sanitary or storm sewers.
Concrete trucks will be equipped with self-cleaning chutes to negate the need for on-site concrete wash down.

20.0 Site Setup

Sanitary Facilities: Sanitary facilities will initially be available near Staging Area #1. Additional sanitary units will be added as required per ministry guidelines.

Site Offices: Due to limited space, one site trailer will be set up at the end of Elizabeth Street. See Appendix A drawings CM1-1, CM1-2 and CM1-3 which will accommodate the necessary management personnel as well as house adequate meeting spaces for a Joint Health and Safety Committee (JHSC), Worker Trade Committee (WTC), worker orientations, and space to administer proper first aid treatments. Dedicated routes to the office will be clearly identified and maintained at all times. Another trailer will be setup at 2093 Old Lakeshore Road which is owned by developer, if required.

Material Storage and Unloading Zones: Generally, material storage for all phases of construction will be received and stored on site only. As the project advances, materials will be off-loaded on to the superstructure. Flammable and combustible materials will be identified, protected, and stored in designated "compounds" as prescribed by the Ministry of Labour and TSSA guidelines.

Perimeter Construction Fencing: The perimeter construction fencing to be used as per ministry guidelines or as required. The construction fencing will be extended to the existing walkways on the east, south and west sides of the development for pedestrian safety and site security.

Unloading and temporary storage will only occur within the approved staging area. There will not be any stockpiling of any material on-site.

21.0 Emergency Contact Info

In the event of an emergency, the City and the general public may contact project personnel responsible for the orderly conduct of the construction at all times. Contact information of persons provided will possess the authority to attend and act, as necessary. Contact information will be provided once the General Contractor has been selected, as follows:

Contact #1:
Contact Name: TBD
Cell Number: TBD
Email Address: TBD

Contact #2:
Contact Name: TBD
Cell Number: TBD
Email Address: TBD

Note: *Should the Site Superintendent change during construction, Burlington 2020 Lakeshore Inc. will assign a new contact name(s) and phone number(s).*

22.0 Public Communication

All project information (phone numbers, email address, fax, website, etc.) shall be included on all signage surrounding the site. Public communications for the job site shall also include:

- 48-hour notice shall be provided to adjacent properties should any construction operations produce impacts beyond the normal day-to-day operations of the site.
- A pre-construction notice shall be sent out to adjacent properties and along the construction access route

- Signs around the site shall include project working hours, a project website to provide construction updates, and emergency contact information
- Inform the ward councilor, public transit, business community and residents of the start of the construction
- Communication with Corridor Management is required prior to the distributing any notices or contact to the Ward Councilor, public, etc.

On-site emergency protocols:

- Reporting the emergency to the required chain of command (emergency contacts)
- Establishing communication and alerting all parties involved
- Ordering evacuation, if necessary
- Alerting external agencies, if necessary
- Alerting outside population of possible risk, if necessary
- Requesting external aid, if necessary
- Providing medical aid, if necessary
- Ensuring emergency shut offs are closed, if necessary
- Sounding the all-clear
- Advising media, if necessary

(Website Reference: https://www.ccohs.ca/oshanswers/hsprograms/planning.html)

These on-site emergency protocols are needed for handling unexpected situations. The objective is to be prepared to prevent fatalities and injuries, reduce damage to buildings and equipment, protect the environment and the community, and accelerate the resumption of normal operations.

Respectfully submitted,



Steve Pongracz C.E.T.
Lanhack Consultants Inc.

Appendix A: Construction/Traffic Management Plan(s)

LEGEND

- TRUCK MOVEMENT ARROW
- TRAFFIC MOVEMENT ARROW
- PEDESTRIAN MOVEMENT ARROW
- PROPOSED TEMPORARY 1.8m HIGH CHAIN LINK CONSTRUCTION FENCE
- STAGING AREAS — PLACE TEMP. ASPHALT AS FOLLOWS: 300mm OF GRANULAR 'B', 150mm OF GRANULAR 'A' AND 65mm OF HL8 FOR THE DURATION OF CONSTRUCTION.
- U — EXISTING HYDRO/UTILITY LINE
- G — EXISTING GAS LINE
- S — EXISTING SANITARY SEWER
- ST — EXISTING STORM SEWER
- W — EXISTING WATERLINE

APPROX.	APPROXIMATE
CB	CATCH BASIN
CBMH	CATCH BASIN MANHOLE
CRW	CONCRETE RETAINING WALL
EB	ELECTRICAL BOX
EX.	EXISTING
FH	FIRE HYDRANT
GV	GAS VALVE
HP	HYDRO POLE
LP	LIGHT POLE
MH	MANHOLE
PROP.	PROPOSED
SAN	SANITARY
STM	STORM
TBOX	TELEPHONE BOX
TL	TRAFFIC LIGHT
UBOX	UTILITY BOX
WV	WATER VALVE

GENERAL CONSTRUCTION NOTES

1. DURING ALL DELIVERIES AND LANE DISRUPTIONS, THE CONTRACTOR WILL ENSURE THAT FLAG PERSONS WILL BE EMPLOYED TO PROVIDE TRAFFIC MANAGEMENT. THE CONTRACTOR WILL PROVIDE TEMPORARY INFORMATION SIGNAGE NOTING TRAFFIC DISRUPTION DURING THE HOURS BETWEEN 7AM AND 6PM FOR A PERIOD OF 43 MONTHS.
2. DELIVERY OF CONSTRUCTION MATERIAL WILL BE SCHEDULED TO MINIMIZE TRAFFIC DISRUPTION.
3. SPACING OF TRUCKS WILL BE ORGANIZED, DISPATCHED, IN SUCH A WAY THAT NO VEHICLES WILL BE IN A STAGING SITUATION ON MUNICIPAL STREETS. WE HAVE PROVIDED 2 STAGING AREAS, ONE IN THE LAKESHORE ROAD RIGHT-OF-WAY AND ONE OFF OF ELIZABETH STREET.
4. LANES OR ROAD CLOSURES ARE NOT ANTICIPATED EXCEPT FOR SERVICING.
5. THE LOCATION OF ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE ONTARIO TRAFFIC MANUAL (OTM) BOOK 7. SEE THIS PLAN FOR RECOMMENDED SIGN LOCATIONS.
6. ALL SIGNAGE TO BE INSPECTED DAILY BY THE DEVELOPER'S SUPERINTENDENT AND IMMEDIATE MAINTENANCE WILL BE PERFORMED IF REQUIRED.
7. LOADING AND UNLOADING WILL OCCUR IN DESIGNATED STAGING AREAS AS NOTED ON THIS PLAN.
8. NO PARKING WILL OCCUR ON THE STREET OR BOULEVARD BY LABOURERS/ CONTRACTORS. LABOURERS WILL BE SHUTTLED TO THE SITE.
9. CONTRACTOR TO NOTIFY ABUTTING LAND OWNERS/TENANTS 48 HRS IN ADVANCE TO ANY DISRUPTIONS TO ACCESS TO THEIR PROPERTIES OR SERVICES.
10. ALL BOULEVARDS OUTSIDE OF THE SITES CONSTRUCTION FENCE TO BE KEPT FREE FROM BUILDING MATERIALS AND DEBRIS AT ALL TIMES UNLESS OTHERWISE NOTED. MATERIAL STORAGE TO BE WITHIN THE SITE.
11. BOOK 7 TRAINED CONTRACTOR AND COMPETENT FLAG PERSONS WILL BE ON SITE DURING CONSTRUCTION TO CONTROL VEHICULAR, PEDESTRIAN AND CYCLIST TRAFFIC IN ALL DIRECTIONS. FLAG PERSONS WILL BE REMINDED THAT NO FLAGGING OF TRAFFIC TO OCCUR WITHIN 30M OF THE SIGNALIZED INTERSECTION.
12. ALL SIDEWALKS AND LANES WILL BE OPEN TO THE PUBLIC EXCEPT FOR THE STAGING AREA, SIDEWALK DIVERSION AND ASSOCIATED LANE TAPERS. FLAG PERSONS WILL CONTROL THE MOVEMENT OF PEDESTRIANS AND VEHICLES AS REQUIRED FOR TRUCKS ENTERING THE STAGING AREA.
13. FIRE HYDRANTS ARE TO BE ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES.
14. THIS CONSTRUCTION / MOBILITY MANAGEMENT PLAN (C/MMP) HAS BEEN PREPARED AS A GENERAL GUIDELINE FOR ITEMS SUCH AS LOCATING THE STAGING AREAS, WASHROOMS, SITE TRAILER, CRANE, TEMPORARY HYDRO FOR CRANE, TRUCK HAUL ROUTE, GENERAL NOTES AND CONSTRUCTION SEQUENCE. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY MEASURES OUTLINED BY THE MINISTRY OF LABOUR ON AND ABUTTING THE DEVELOPMENT AT ALL TIMES.
15. THE DEVELOPER/CONTRACTOR WILL MONITOR THE SITE AT ALL TIMES TO ENSURE THE SITE AND ABUTTING LANDS ARE SAFE AND SECURE. LANHACK CONSULTANTS INC. WAS RETAINED TO ONLY PREPARE THE CMP AND HAS NOT BEEN RETAINED TO MONITOR THE SITE DURING CONSTRUCTION.
16. IF OVERHEAD SAFETY BECOMES A CONCERN A COVERED WALKWAY WILL BE CONSTRUCTED OVER THE SIDEWALK DIVERSION AND PATHWAYS.
17. THE DEVELOPER IS TO RESTORE ANY PORTION OF THE RIGHT-OF-WAY (I.E. SIDEWALK, BOULEVARD, ROADWAY) BACK TO ITS ORIGINAL OR BETTER CONDITION. PRE AND POST PHOTOS SHOULD BE TAKEN BY THE DEVELOPER.
18. ANY CHANGE TO THE ACCESSES EITHER TEMPORARY OR PERMANENT REQUIRE AN ACCESS PERMIT FROM THE CITY.
19. FOR ALL SILT SAC LOCATIONS AND DETAILS REFER TO DRAWINGS PREPARED BY S. LLEWELLYN AND ASSOCIATES LIMITED.
20. THIS CMMP SHOULD NOT BE USED AS THE FINAL MOBILITY CONTROL PLAN (MCP) FOR THE ACTUAL WORKS. IF THE APPLICANT/CONTRACTOR DOES NOT HAVE OTM BOOK 7 QUALIFICATIONS, THEY SHOULD RETAIN A THIRD PARTY CONTRACTOR TO PREPARE THE TCP FOR SETUP AND TAKEDOWN OF ANY LANE AND/OR SIDEWALK TEMPORARY WARNING /DIRECTIONAL SIGNAGE.

CONSTRUCTION SEQUENCE NOTES:

1. CONTRACTOR TO INSTALL ALL CONSTRUCTION SIGNAGE PER THE ONTARIO TRAFFIC MANUAL – TEMPORARY CONDITIONS – BOOK 7.
2. CONTRACTOR TO INSTALL GATES AND ALL CONSTRUCTION FENCE WITH SILT FENCE AS SHOWN ON THIS PLAN.
3. CONSTRUCTION HOURS 7:00AM TO 6:00PM DAILY.
4. DUE TO THE SIZE OF THE DEVELOPMENT, WE EXPECT:
   – 10 TRADES PERSONS DURING INITIAL EXCAVATION PHASE
   – 20 TRADES PERSONS DURING STRUCTURAL PHASE, AND
   – 50 TRADES PERSONS DURING FINISHING PHASE
5. REFER TO SHORING PLANS PREPARED BY OTHERS FOR LOCATION AND LENGTH OF TIEBACKS.
6. EXCAVATION PHASE WILL TAKE APPROXIMATELY 1–12 MONTHS TO COMPLETE. TRUCKS WILL ENTER AND EXIT SITE FROM ELIZABETH STREET CONSTRUCTION ACCESS (MUD–MAT). THE DISPOSAL SITE FOR THE EARTH MATERIAL HAS NOT YET BEEN DETERMINED, THE CONTRACTOR WILL ADVISE THE CITY OF DISPOSAL SITE ONCE CONFIRMED.
7. ONCE SITE IS EXCAVATED, THE CRANE WILL BE ERECTED. SEE PLAN FOR CRANE LOCATION. CRANE ASSEMBLY WILL BE APPROXIMATELY 1 DAY FROM STAGING AREA #2.
8. ALL TRUCKS, IF REQUIRED, TO BE WASHED DOWN PRIOR TO EXITING THE SITE ON THE MUD MAT.
9. THE STAGING AREA AND ASSOCIATED LINE PAINTING AND SIGNAGE WILL NEED TO BE INSTALLED FOR THE FINAL STAGE OF THE EXCAVATION
10. FROM FOOTING TO GRADE WILL TAKE 14–18 MONTHS. CONCRETE TRUCKS WILL BE UNLOADED FROM STAGING AREA #2.
11. THE MAIN STRUCTURE WILL TAKE APPROXIMATELY MONTH 18 TO MONTH 36 TO CONSTRUCT. ALL DELIVERIES WILL USE STAGING AREA #2.
12. SIDEWALK, CURBS, AND BOULEVARD RESTORATION TO BE REINSTALLED ONCE THE MAJORITY OF CONSTRUCTION HAS BEEN COMPLETED..
13. REFER TO CIVIL CONSULTANT PLANS FOR GRADING, SERVICING AND EROSION & SEDIMENT CONTROL.
14. REFER TO SITE PLAN FOR EXACT LIMITS OF THE UNDERGROUND PARKING GARAGE.
15. REFER TO CONSTRUCTION/TRAFFIC MANAGEMENT REPORT PREPARED LANHACK.
16. **NOTE:** PRIOR TO ANY OCCUPANCY OR CHANGES TO THE RIGHT-OF-WAY, THE CONTRACTOR MUST CONTACT CORRIDOR MANAGEMENT AND APPLY FOR ANY PERMIT REQUIRED.

PUBLIC COMMUNICATION:

ALL PROJECT INFORMATION (PHONE NUMBERS, EMAIL ADDRESS, FAX, WEBSITE, ETC.) SHALL BE INCLUDED ON ALL SIGNAGE SURROUNDING THE SITE. PUBLIC COMMUNICATIONS FOR THE JOB SITE SHALL ALSO INCLUDE:

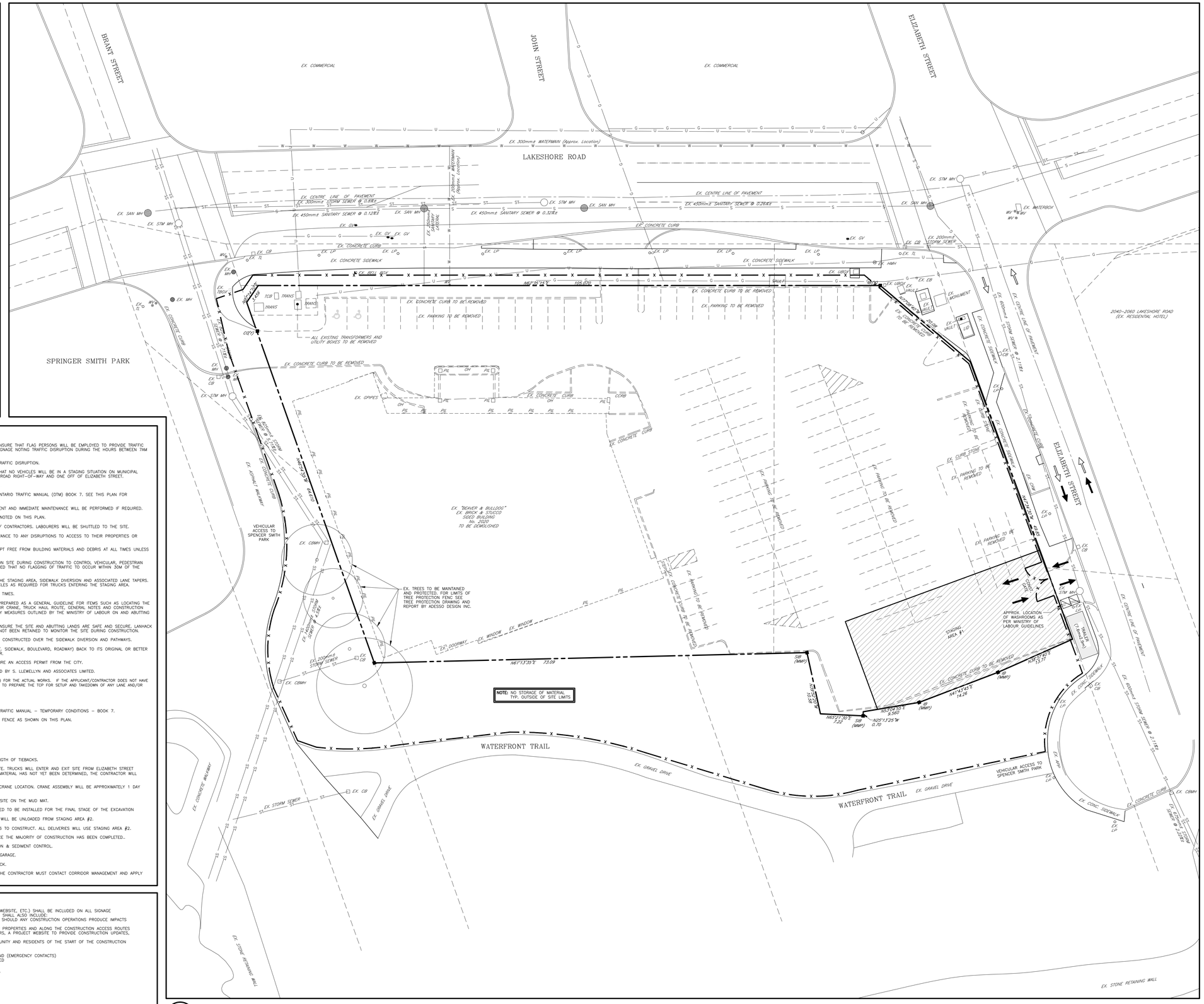
- 48–HOUR NOTICE SHALL BE PROVIDED TO ADJACENT PROPERTIES SHOULD ANY CONSTRUCTION OPERATIONS PRODUCE IMPACTS BEYOND THE NORMAL DAY–TO–DAY OPERATIONS OF THE SITE
- A PRE–CONSTRUCTION NOTICE SHALL BE SENT OUT TO ADJACENT PROPERTIES AND ALONG THE CONSTRUCTION ACCESS ROUTES
- SIGNS AROUND THE SITE SHALL INCLUDE PROJECT WORKING HOURS, A PROJECT WEBSITE TO PROVIDE CONSTRUCTION UPDATES, AND EMERGENCY CONTACT INFORMATION
- INFORM THE WARD COUNCILOR, PUBLIC TRANSIT, BUSINESS COMMUNITY AND RESIDENTS OF THE START OF THE CONSTRUCTION

ON–SITE EMERGENCY PROTOCOLS:

- REPORTING THE EMERGENCY TO THE REQUIRED CHAIN OF COMMAND (EMERGENCY CONTACTS)
- ESTABLISHING COMMUNICATION AND ALERTING ALL PARTIES INVOLVED
- ORDERING EVACUATION, IF NECESSARY
- ALERTING EXTERNAL AGENCIES, IF NECESSARY
- ALERTING OUTSIDE POPULATION OF POSSIBLE RISK, IF NECESSARY
- REQUESTING EXTERNAL AID, IF NECESSARY
- PROVIDING MEDICAL AID, IF NECESSARY
- ENSURING EMERGENCY SHUT OFFS ARE CLOSED, IF NECESSARY
- SOUNDING THE ALL–CLEAR
- ADVISING MEDIA, IF NECESSARY

WEBSITE REFERENCE:
HTTPS://WWW.CCOHS.CA/OSHANSWERS/HSPROGRAMS/PLANNING.HTML

THESE ON–SITE EMERGENCY PROTOCOLS ARE NEEDED FOR HANDLING UNEXPECTED SITUATIONS. THE OBJECTIVE IS TO BE PREPARED TO PREVENT FATALITIES AND INJURIES, REDUCE DAMAGE TO BUILDINGS AND EQUIPMENT, PROTECT THE ENVIRONMENT AND THE COMMUNITY, AND ACCELERATE THE RESUMPTION OF NORMAL OPERATIONS.



1 / CM1-1 — **Stage 1 – Demolition and Removal of Existing Building and Parking Lot in Preparation for Site Development – Construction + Mobility Management Plan**

1 : 300

CONSTRUCTION NORTH

Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM CLIENT ON OCTOBER 1, 2021

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)
B	ISSUED FOR CITY SUBMISSION	10/18/21
A	ISSUED FOR CLIENT REVIEW	10/14/21
No.	Description	Date (m/d/y)

Issue Record

LANHACK Consultants Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

Burlington 2020 Lakeshore Inc.

2020 LAKESHORE ROAD
BURLINGTON, ON

Date:	OCTOBER 2021
Drawn By:	GRW
Chkd By:	SMP
Scale:	1 : 300

Stage 1 Construction + Mobility Management Plan

Project No.:	Drawing No.:	Rev.:
21126	CM1-1	B

Plot Date: 10/18/21
M:\2021\21126 – 2020 Lakeshore road CMP\CM\CM01 – CMP Plan.dwg

LEGEND

- TRUCK MOVEMENT ARROW
- TRAFFIC MOVEMENT ARROW
- PEDESTRIAN MOVEMENT ARROW
- PROPOSED TEMPORARY 1.8M HIGH CHAIN LINK CONSTRUCTION FENCE
- STAGING AREAS PLACE TEMP. ASPHALT AS FOLLOWS: 300MM OF GRANULAR 'B', 150MM OF GRANULAR 'A' AND 65MM OF HL8 FOR THE DURATION OF CONSTRUCTION.
- HATCH DENOTES APPROX. EXTENT OF EXISTING CURB AND SIDEWALK TO BE REMOVED AS REQUIRED FOR CONSTRUCTION VEHICLE ACCESS AND PEDESTRIAN MOVEMENT
- U — EXISTING HYDRO/UTILITY LINE
- G — EXISTING GAS LINE
- S — EXISTING SANITARY SEWER
- ST — EXISTING STORM SEWER
- W — EXISTING WATERLINE
- APPROX. — APPROXIMATE
- CB — CATCH BASIN
- CBMH — CATCH BASIN MANHOLE
- CRW — CONCRETE RETAINING WALL
- EB — ELECTRICAL BOX
- EX. — EXISTING
- FH — FIRE HYDRANT
- GV — GAS VALVE
- HP — HYDRO POLE
- LP — LIGHT POLE
- MH — MANHOLE
- PROP. — PROPOSED
- SAN — SANITARY
- STM — STORM
- TBOX — TELEPHONE BOX
- TL — TRAFFIC LIGHT
- UBOX — UTILITY BOX
- WV — WATER VALVE
- RA 2 — YIELD SIGN
- RA 5B — STOP FOR PEDESTRIAN SIGN
- Wa 33L — WARNING SIGN

GENERAL CONSTRUCTION NOTES

1. DURING ALL DELIVERIES AND LANE DISRUPTIONS, THE CONTRACTOR WILL ENSURE THAT FLAG PERSONS WILL BE EMPLOYED TO PROVIDE TRAFFIC MANAGEMENT. THE CONTRACTOR WILL PROVIDE TEMPORARY INFORMATION SIGNAGE NOTING TRAFFIC DISRUPTION DURING THE HOURS BETWEEN 7AM AND 6PM FOR A PERIOD OF 43 MONTHS.
2. DELIVERY OF CONSTRUCTION MATERIAL WILL BE SCHEDULED TO MINIMIZE TRAFFIC DISRUPTION.
3. SPACING OF TRUCKS WILL BE ORGANIZED, DISPATCHED, IN SUCH A WAY THAT NO VEHICLES WILL BE IN A STAGING SITUATION ON MUNICIPAL STREETS. WE HAVE PROVIDED 2 STAGING AREAS, ONE IN THE LAKESHORE ROAD RIGHT-OF-WAY AND ONE OFF OF ELIZABETH STREET.
4. LANES OR ROAD CLOSURES ARE NOT ANTICIPATED EXCEPT FOR SERVICING.
5. THE LOCATION OF ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE ONTARIO TRAFFIC MANUAL (OTM) BOOK 7. SEE THIS PLAN FOR RECOMMENDED SIGN LOCATIONS.
6. ALL SIGNAGE TO BE INSPECTED DAILY BY THE DEVELOPER'S SUPERINTENDENT AND IMMEDIATE MAINTENANCE WILL BE PERFORMED IF REQUIRED.
7. LOADING AND UNLOADING WILL OCCUR IN DESIGNATED STAGING AREAS AS NOTED ON THIS PLAN.
8. NO PARKING WILL OCCUR ON THE STREET OR BOULEVARD BY LABOURERS/ CONTRACTORS. LABOURERS WILL BE SHUTTLED TO THE SITE.
9. CONTRACTOR TO NOTIFY ABUTTING LAND OWNERS/TENANTS 48 HRS IN ADVANCE TO ANY DISRUPTIONS TO ACCESS TO THEIR PROPERTIES OR SERVICES.
10. ALL BOULEVARDS OUTSIDE OF THE SITES CONSTRUCTION FENCE TO BE KEPT FREE FROM BUILDING MATERIALS AND DEBRIS AT ALL TIMES UNLESS OTHERWISE NOTED. MATERIAL STORAGE TO BE WITHIN THE SITE.
11. BOOK 7 TRAINED CONTRACTOR AND COMPETENT FLAG PERSONS WILL BE ON SITE DURING CONSTRUCTION TO CONTROL VEHICULAR, PEDESTRIAN AND CYCLIST TRAFFIC IN ALL DIRECTIONS. FLAG PERSONS WILL BE REMINDED THAT NO FLAGGING OF TRAFFIC TO OCCUR WITHIN 30M OF THE SIGNALIZED INTERSECTION.
12. ALL SIDEWALKS AND LANES WILL BE OPEN TO THE PUBLIC EXCEPT FOR THE STAGING AREA, SIDEWALK DIVERSION AND ASSOCIATED LANE TAPERS. FLAG PERSONS WILL CONTROL THE MOVEMENT OF PEDESTRIANS AND VEHICLES AS REQUIRED FOR TRUCKS ENTERING THE STAGING AREA.
13. FIRE HYDRANTS ARE TO BE ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES.
14. THIS CONSTRUCTION / MOBILITY MANAGEMENT PLAN (C/MMP) HAS BEEN PREPARED AS A GENERAL GUIDELINE FOR ITEMS SUCH AS LOCATING THE STAGING AREAS, WASHROOMS, SITE TRAILER, CRANE, TEMPORARY HYDRO FOR CRANE, TRUCK HAUL ROUTE, GENERAL NOTES AND CONSTRUCTION SEQUENCE. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY MEASURES OUTLINED BY THE MINISTRY OF LABOUR ON AND ABUTTING THE DEVELOPMENT AT ALL TIMES.
15. THE DEVELOPER/CONTRACTOR WILL MONITOR THE SITE AT ALL TIMES TO ENSURE THE SITE AND ABUTTING LANDS ARE SAFE AND SECURE. LANHACK CONSULTANTS INC. WAS RETAINED TO ONLY PREPARE THE CMP AND HAS NOT BEEN RETAINED TO MONITOR THE SITE DURING CONSTRUCTION.
16. IF OVERHEAD SAFETY BECOMES A CONCERN A COVERED WALKWAY WILL BE CONSTRUCTED OVER THE SIDEWALK DIVERSION AND PATHWAYS.
17. THE DEVELOPER IS TO RESTORE ANY PORTION OF THE RIGHT-OF-WAY (I.E. SIDEWALK, BOULEVARD, ROADWAY) BACK TO ITS ORIGINAL OR BETTER CONDITION. PRE AND POST PHOTOS SHOULD BE TAKEN BY THE DEVELOPER.
18. ANY CHANGE TO THE ACCESSES EITHER TEMPORARY OR PERMANENT REQUIRE AN ACCESS PERMIT FROM THE CITY.
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   – 20 TRADES PERSONS DURING STRUCTURAL PHASE, AND
   – 50 TRADES PERSONS DURING FINISHING PHASE
5. REFER TO SHORING PLANS PREPARED BY OTHERS FOR LOCATION AND LENGTH OF TIEBACKS.
6. EXCAVATION PHASE WILL TAKE APPROXIMATELY 1-12 MONTHS TO COMPLETE. TRUCKS WILL ENTER AND EXIT SITE FROM ELIZABETH STREET CONSTRUCTION ACCESS (MUD-MAT). THE DISPOSAL SITE FOR THE EARTH MATERIAL HAS NOT YET BEEN DETERMINED, THE CONTRACTOR WILL ADVISE THE CITY OF DISPOSAL SITE ONCE CONFIRMED.
7. ONCE SITE IS EXCAVATED, THE CRANE WILL BE ERECTED. SEE PLAN FOR CRANE LOCATION. CRANE ASSEMBLY WILL BE APPROXIMATELY 1 DAY FROM STAGING AREA #2.
8. ALL TRUCKS, IF REQUIRED, TO BE WASHED DOWN PRIOR TO EXITING THE SITE ON THE MUD MAT.
9. THE STAGING AREA AND ASSOCIATED LINE PAINTING AND SIGNAGE WILL NEED TO BE INSTALLED FOR THE FINAL STAGE OF THE EXCAVATION
10. FROM FOOTING TO GRADE WILL TAKE 14-18 MONTHS. CONCRETE TRUCKS WILL BE UNLOADED FROM STAGING AREA #2.
11. THE MAIN STRUCTURE WILL TAKE APPROXIMATELY MONTH 18 TO MONTH 36 TO CONSTRUCT. ALL DELIVERIES WILL USE STAGING AREA #2.
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13. REFER TO CIVIL CONSULTANT PLANS FOR GRADING, SERVICING AND EROSION & SEDIMENT CONTROL.
14. REFER TO SITE PLAN FOR EXACT LIMITS OF THE UNDERGROUND PARKING GARAGE.
15. REFER TO CONSTRUCTION/TRAFFIC MANAGEMENT REPORT PREPARED LANHACK.
16. **NOTE:** PRIOR TO ANY OCCUPANCY OR CHANGES TO THE RIGHT-OF-WAY, THE CONTRACTOR MUST CONTACT CORRIDOR MANAGEMENT AND APPLY FOR ANY PERMIT REQUIRED.

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ALL PROJECT INFORMATION (PHONE NUMBERS, EMAIL ADDRESS, FAX, WEBSITE, ETC.) SHALL BE INCLUDED ON ALL SIGNAGE SURROUNDING THE SITE. PUBLIC COMMUNICATIONS FOR THE JOB SITE SHALL ALSO INCLUDE:

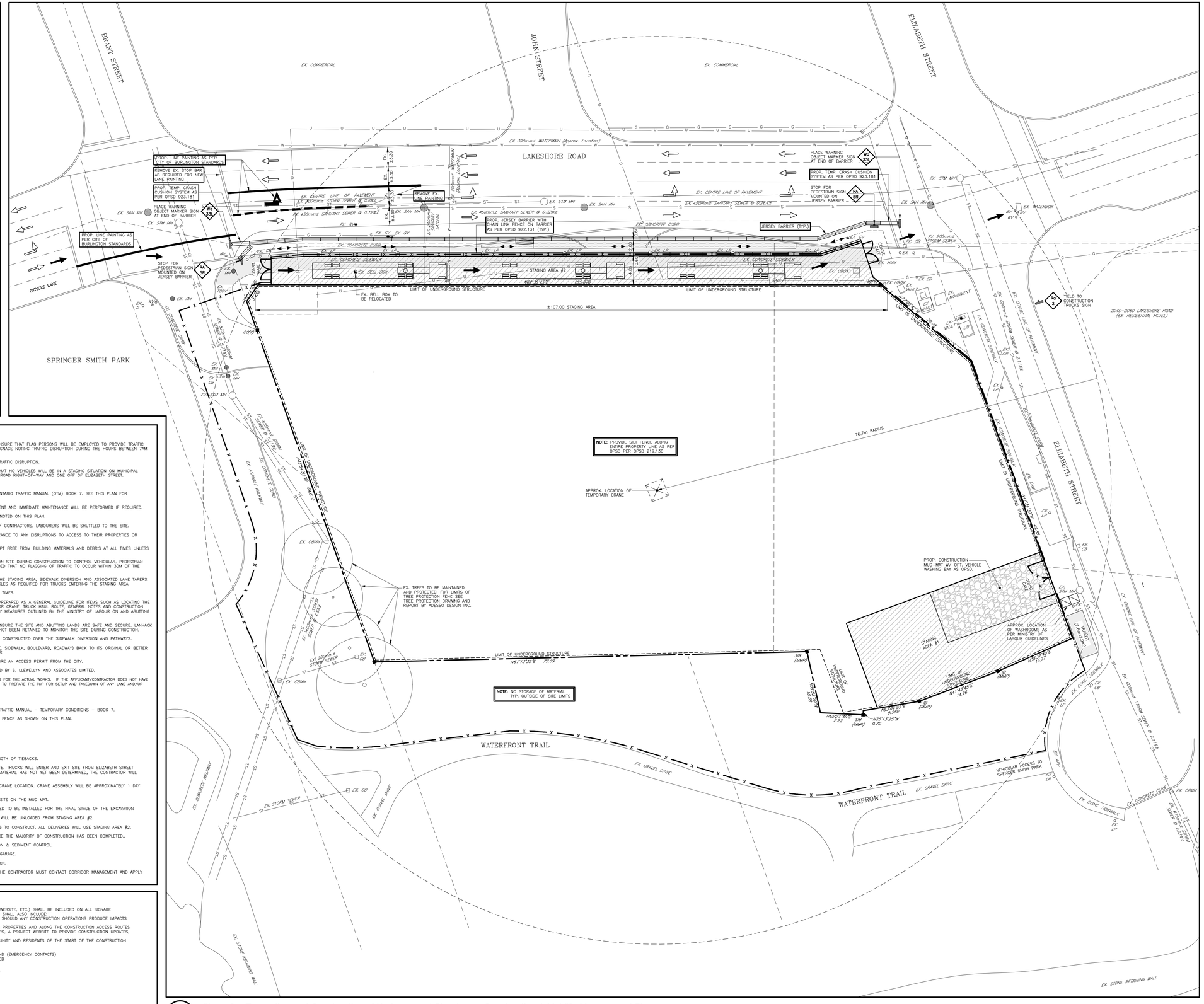
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ON-SITE EMERGENCY PROTOCOLS:

- REPORTING THE EMERGENCY TO THE REQUIRED CHAIN OF COMMAND (EMERGENCY CONTACTS)
- ESTABLISHING COMMUNICATION AND ALERTING ALL PARTIES INVOLVED
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THESE ON-SITE EMERGENCY PROTOCOLS ARE NEEDED FOR HANDLING UNEXPECTED SITUATIONS. THE OBJECTIVE IS TO BE PREPARED TO PREVENT FATALITIES AND INJURIES, REDUCE DAMAGE TO BUILDINGS AND EQUIPMENT, PROTECT THE ENVIRONMENT AND THE COMMUNITY, AND ACCELERATE THE RESUMPTION OF NORMAL OPERATIONS.



1 CM1-2 **Stage 2 - Excavation and Construction of Underground Structure - Construction + Mobility Management Plan**

1 : 300

CONSTRUCTION NORTH

Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM CLIENT ON OCTOBER 1, 2021

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)
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A	ISSUED FOR CLIENT REVIEW	10/14/21
No.	Description	Date (m/d/y)

Issue Record

LANHACK Consultants Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
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2020 LAKESHORE ROAD
BURLINGTON, ON

Date:	OCTOBER 2021
Drawn By:	GRW
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Stage 2 Construction + Mobility Management Plan

Project No.:	Drawing No.:	Rev.:
21126	CM1-2	B

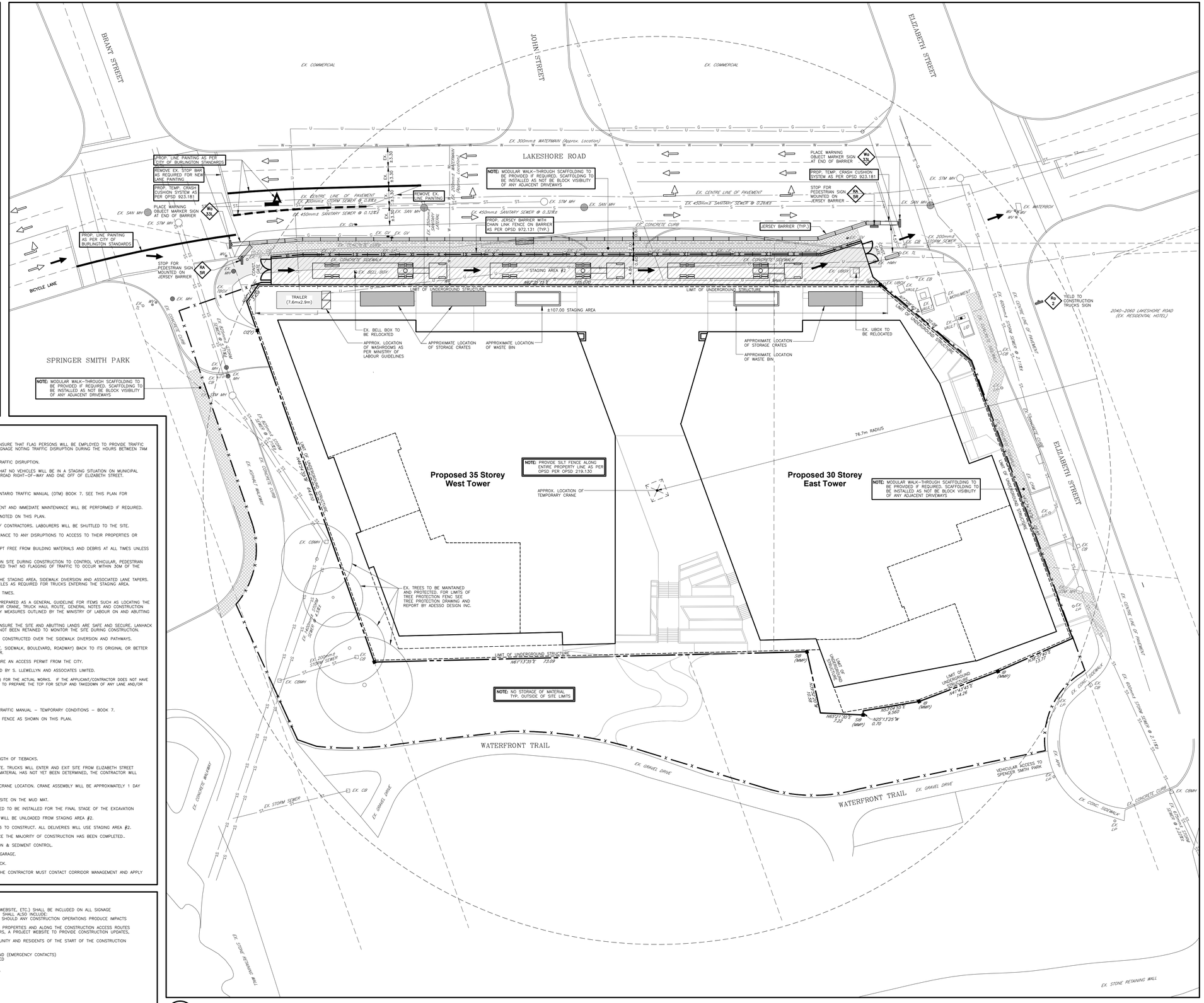
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1 / CMI-3 — Stage 3 – Construction of Above Ground Structure – Construction + Mobility Management Plan

1 : 300

CONSTRUCTION NORTH

Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

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Burlington 2020 Lakeshore Inc.

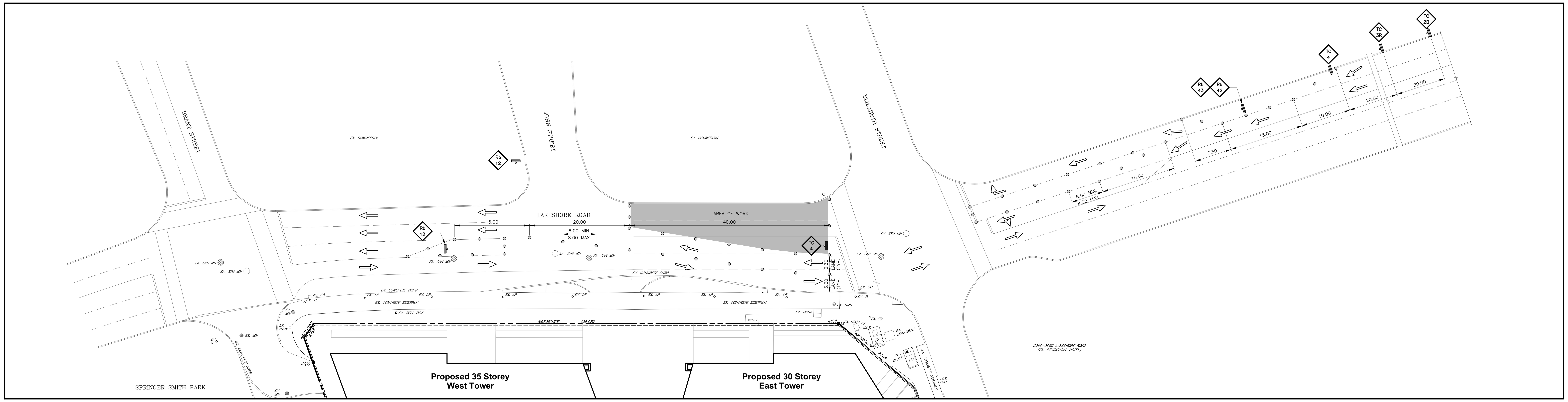
2020 LAKESHORE ROAD
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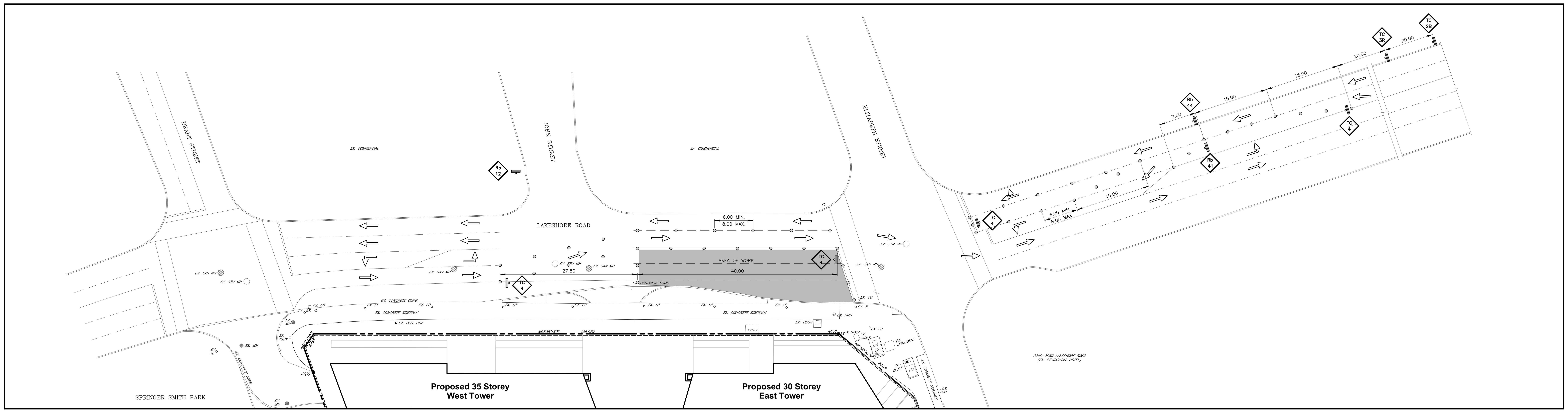
Stage 3 Construction + Mobility Management Plan

Project No.:	Drawing No.:	Rev.:
21126	CMI-2	B

Plot Date: 10/18/21
M:\2021\21128 – 2020 Lakeshore road CMP\CM\CMI - CMI Plan.dwg



1 CM1-4 **Phase 1 - Servicing Installation - Construction + Mobility Management Plan** 1 : 400



2 CM1-4 **Phase 2 - Servicing Installation - Construction + Mobility Management Plan** 1 : 400

GENERAL CONSTRUCTION NOTES

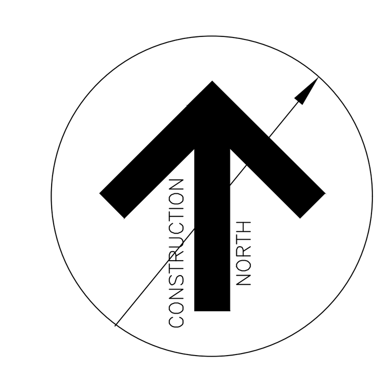
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3. SPACING OF TRUCKS WILL BE ORGANIZED, DISPATCHED, IN SUCH A WAY THAT NO VEHICLES WILL BE IN A STAGING SITUATION ON MUNICIPAL STREETS. WE HAVE PROVIDED 2 STAGING AREAS, ONE IN THE LAKESHORE ROAD RIGHT-OF-WAY AND ONE OFF OF ELIZABETH STREET.
4. LANES OR ROAD CLOSURES ARE NOT ANTICIPATED EXCEPT FOR SERVICING.
5. THE LOCATION OF ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE ONTARIO TRAFFIC MANUAL (OTM) BOOK 7. SEE THIS PLAN FOR RECOMMENDED SIGN LOCATIONS.
6. ALL SIGNAGE TO BE INSPECTED DAILY BY THE DEVELOPER'S SUPERINTENDENT AND IMMEDIATE MAINTENANCE WILL BE PERFORMED IF REQUIRED.
7. LOADING AND UNLOADING WILL OCCUR IN DESIGNATED STAGING AREAS AS NOTED ON THIS PLAN.
8. NO PARKING WILL OCCUR ON THE STREET OR BOULEVARD BY LABOURERS/ CONTRACTORS. LABOURERS WILL BE SHUTTLED TO THE SITE.
9. CONTRACTOR TO NOTIFY ABUTTING LAND OWNERS/TENANTS 48 HRS IN ADVANCE TO ANY DISRUPTIONS TO ACCESS TO THEIR PROPERTIES OR SERVICES.
10. ALL BOULEVARDS OUTSIDE OF THE SITES CONSTRUCTION FENCE TO BE KEPT FREE FROM BUILDING MATERIALS AND DEBRIS AT ALL TIMES UNLESS OTHERWISE NOTED. MATERIAL STORAGE TO BE WITHIN THE SITE.
11. BOOK 7 TRAINED CONTRACTOR AND COMPETENT FLAG PERSONS WILL BE ON SITE DURING CONSTRUCTION TO CONTROL VEHICULAR, PEDESTRIAN AND CYCLIST TRAFFIC IN ALL DIRECTIONS. FLAG PERSONS WILL BE REMINDED THAT NO FLAGGING OF TRAFFIC TO OCCUR WITHIN 30M OF THE SIGNALIZED INTERSECTION.
12. ALL SIDEWALKS AND LANES WILL BE OPEN TO THE PUBLIC EXCEPT FOR THE STAGING AREA, SIDEWALK DIVERSION AND ASSOCIATED LANE TAPERS. FLAG PERSONS WILL CONTROL THE MOVEMENT OF PEDESTRIANS AND VEHICLES AS REQUIRED FOR TRUCKS ENTERING THE STAGING AREA.
13. FIRE HYDRANTS ARE TO BE ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES.
14. THIS CONSTRUCTION / MOBILITY MANAGEMENT PLAN (C/MMP) HAS BEEN PREPARED AS A GENERAL GUIDELINE FOR ITEMS SUCH AS LOCATING THE STAGING AREAS, WASHROOMS, SITE TRAILER, CRANE, TEMPORARY HYDRO FOR CRANE, TRUCK HAUL ROUTE, GENERAL NOTES AND CONSTRUCTION SEQUENCE. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY MEASURES OUTLINED BY THE MINISTRY OF LABOUR ON AND ABUTTING THE DEVELOPMENT AT ALL TIMES.
15. THE DEVELOPER/CONTRACTOR WILL MONITOR THE SITE AT ALL TIMES TO ENSURE THE SITE AND ABUTTING LANDS ARE SAFE AND SECURE. LANHACK CONSULTANTS INC. WAS RETAINED TO ONLY PREPARE THE CMP AND HAS NOT BEEN RETAINED TO MONITOR THE SITE DURING CONSTRUCTION.
16. IF OVERHEAD SAFETY BECOMES A CONCERN A COVERED WALKWAY WILL BE CONSTRUCTED OVER THE SIDEWALK DIVERSION AND PATHWAYS.
17. THE DEVELOPER IS TO RESTORE ANY PORTION OF THE RIGHT-OF-WAY (I.E. SIDEWALK, BOULEVARD, ROADWAY) BACK TO ITS ORIGINAL OR BETTER CONDITION. PRE AND POST PHOTOS SHOULD BE TAKEN BY THE DEVELOPER.
18. ANY CHANGE TO THE ACCESSES EITHER TEMPORARY OR PERMANENT REQUIRE AN ACCESS PERMIT FROM THE CITY.
19. FOR ALL SILT SAC LOCATIONS AND DETAILS REFER TO DRAWINGS PREPARED BY S. LLEWELLYN AND ASSOCIATES LIMITED.
20. THIS CMMP SHOULD NOT BE USED AS THE FINAL MOBILITY CONTROL PLAN (MCP) FOR THE ACTUAL WORKS. IF THE APPLICANT/CONTRACTOR DOES NOT HAVE OTM BOOK 7 QUALIFICATIONS, THEY SHOULD RETAIN A THIRD PARTY CONTRACTOR TO PREPARE THE TCP FOR SETUP AND TAKEDOWN OF ANY LANE AND/OR SIDEWALK TEMPORARY WARNING /DIRECTIONAL SIGNAGE.

CONSTRUCTION SEQUENCE NOTES:

1. CONTRACTOR TO INSTALL ALL CONSTRUCTION SIGNAGE PER THE ONTARIO TRAFFIC MANUAL – TEMPORARY CONDITIONS – BOOK 7.
2. CONTRACTOR TO INSTALL GATES AND ALL CONSTRUCTION FENCE WITH SILT FENCE AS SHOWN ON THIS PLAN.
3. CONSTRUCTION HOURS 7:00AM TO 6:00PM DAILY.
4. DUE TO THE SIZE OF THE DEVELOPMENT, WE EXPECT:
   - 10 TRADES PERSONS DURING INITIAL EXCAVATION PHASE
   - 20 TRADES PERSONS DURING STRUCTURAL PHASE, AND
   - 50 TRADES PERSONS DURING FINISHING PHASE
5. REFER TO SHORING PLANS PREPARED BY OTHERS FOR LOCATION AND LENGTH OF TIEBACKS.
6. EXCAVATION PHASE WILL TAKE APPROXIMATELY 1–12 MONTHS TO COMPLETE. TRUCKS WILL ENTER AND EXIT SITE FROM ELIZABETH STREET CONSTRUCTION ACCESS (MUD-MAT). THE DISPOSAL SITE FOR THE EARTH MATERIAL HAS NOT YET BEEN DETERMINED, THE CONTRACTOR WILL ADVISE THE CITY OF DISPOSAL SITE ONCE CONFIRMED.
7. ONCE SITE IS EXCAVATED, THE CRANE WILL BE ERECTED. SEE PLAN FOR CRANE LOCATION. CRANE ASSEMBLY WILL BE APPROXIMATELY 1 DAY FROM STAGING AREA #2.
8. ALL TRUCKS, IF REQUIRED, TO BE WASHED DOWN PRIOR TO EXITING THE SITE ON THE MUD MAT.
9. THE STAGING AREA AND ASSOCIATED LINE PAINTING AND SIGNAGE WILL NEED TO BE INSTALLED FOR THE FINAL STAGE OF THE EXCAVATION
10. FROM FOOTING TO GRADE WILL TAKE 14–18 MONTHS. CONCRETE TRUCKS WILL BE UNLOADED FROM STAGING AREA #2.
11. THE MAIN STRUCTURE WILL TAKE APPROXIMATELY MONTH 18 TO MONTH 36 TO CONSTRUCT. ALL DELIVERIES WILL USE STAGING AREA #2.
12. SIDEWALK, CURBS, AND BOULEVARD RESTORATION TO BE REINSTALLED ONCE THE MAJORITY OF CONSTRUCTION HAS BEEN COMPLETED..
13. REFER TO CIVIL CONSULTANT PLANS FOR GRADING, SERVICING AND EROSION & SEDIMENT CONTROL.
14. REFER TO SITE PLAN FOR EXACT LIMITS OF THE UNDERGROUND PARKING GARAGE.
15. REFER TO CONSTRUCTION/TRAFFIC MANAGEMENT REPORT PREPARED LANHACK.
16. **NOTE:** PRIOR TO ANY OCCUPANCY OR CHANGES TO THE RIGHT-OF-WAY, THE CONTRACTOR MUST CONTACT CORRIDOR MANAGEMENT AND APPLY FOR ANY PERMIT REQUIRED.

LEGEND

Symbol	Description
⇨	TRAFFIC MOVEMENT ARROW
○	TRAFFIC CONES
Rb 12	NO LEFT TURN SIGN
Rb 41	LEFT TURN ONLY SIGN
Rb 42	RIGHT TURN ONLY SIGN
Rb 43	STRAIGHT THRU/LEFT TURN ONLY SIGN
Rb 44	STRAIGHT THRU/RIGHT TURN ONLY SIGN
TC 2B	RIGHT/LEFT LANE CLOSED AHEAD SIGN
TC 3R	LANE CLOSURE ARROW SIGN
TC 4	KEEP RIGHT/LEFT ARROW SIGN



Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
EXISTING BOUNDARY SURVEY AND TOPOGRAPHICAL INFORMATION OBTAINED FROM CLIENT ON OCTOBER 1, 2021

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

Revision Record

No.	Description	Date (m/d/y)

Issue Record

No.	Description	Date (m/d/y)
B	ISSUED FOR CITY SUBMISSION	10/18/21
A	ISSUED FOR CLIENT REVIEW	10/14/21

LANHACK Consultants Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

Burlington 2020 Lakeshore Inc.

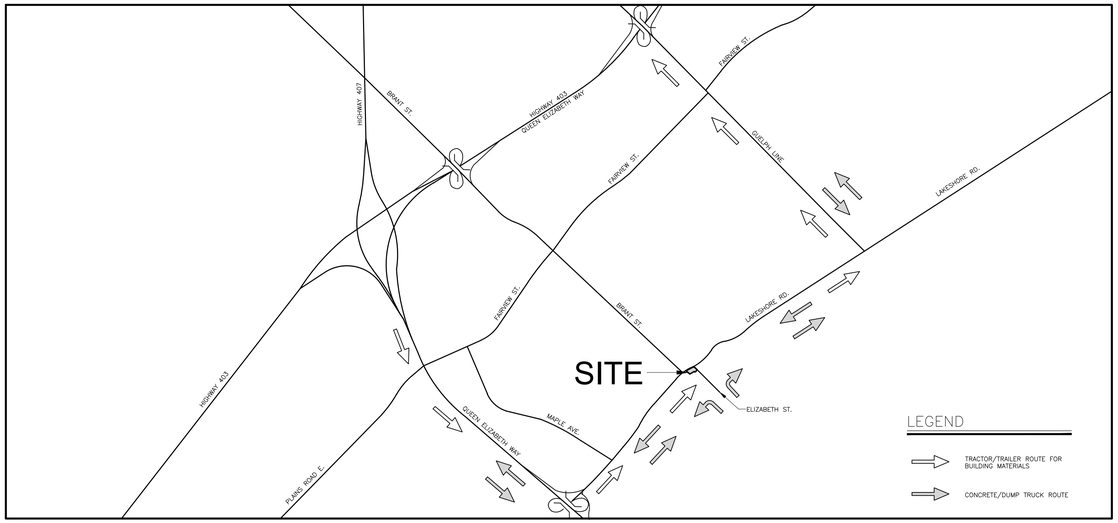
2020 LAKESHORE ROAD
BURLINGTON, ON

Date:	OCTOBER 2021
Drawn By:	GRW
Chkd By:	SMP
Scale:	1 : 400

Servicing Ph. 1 + 2 Construction + Mobility Management Plan

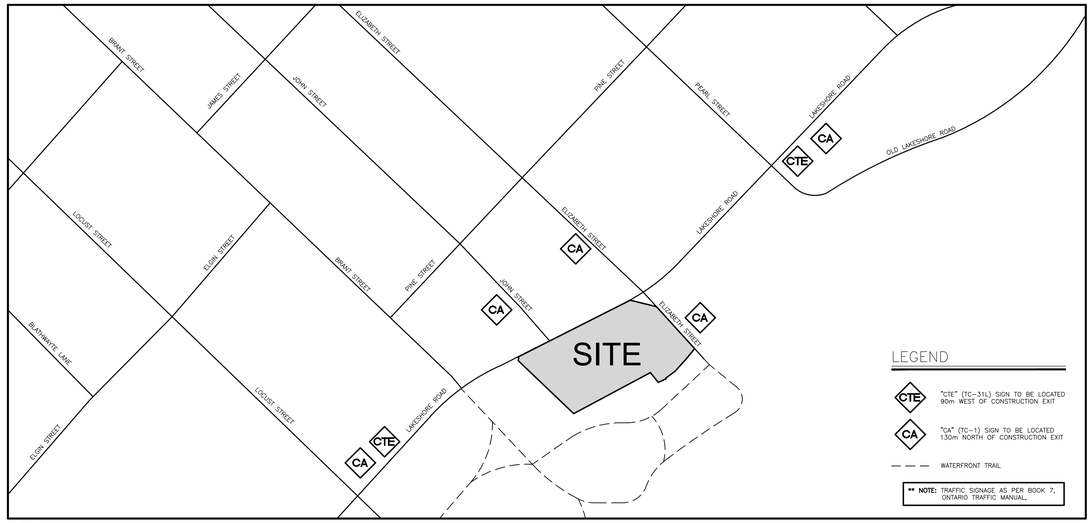
Project No.:	Drawing No.:	Rev.:
21126	CM1-4	B

Plot Date: 10/18/21
M:\2021\21126 – 2020 Lakeshore road CMP\Civil\CM01 – CMT Plan.dwg



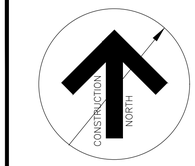
1 CM2-1 **Construction Route Key Map**

N.T.S



2 CM2-1 **Construction Signage Map**

N.T.S



Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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SOURCE
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Issue Record

LANHACK Consultants Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

Burlington 2020 Lakeshore Inc.

2020 LAKESHORE ROAD
BURLINGTON, ON

Date:	OCTOBER 2021
Drawn By:	GRW
Chkd By:	SMP
Scale:	N.T.S.

Construction Route and Signage Map

Project No.:	Drawing No.:	Rev.:
21126	CM2-1	B

Plot Date: 10/18/21
M:\2021\21126 - 2020 Lakeshore road CMP\CMP\CM01 - CMT Plan.dwg

Appendix B: Drawing(s) Prepared by S. Llewellyn & Associates Limited

DWG No.: 21082 –C101

PRELIMINARY GRADING & SEDIMENT AND EROSION CONTROL PLAN

S:\21082\current\working\21082-grading and servicing.dwg

GENERAL NOTES:

1. CONSTRUCTION OF SEWERS, AND RELATED APPURTENANCES SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE CURRENT STANDARD DRAWINGS OF THE CITY OF BURLINGTON, THE REGIONAL MUNICIPALITY OF HALTON AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD). THE TOWN AND THE REGION'S DRAWINGS SHALL TAKE PRECEDENCE OVER THE OPSD DRAWINGS.
2. ONTARIO PROVINCIAL STANDARD DRAWINGS TO BE READ IN CONJUNCTION WITH THE REGION OF HALTON REVISIONS.
3. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE CONSTRUCTED AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR CONSTRUCTION.
5. FOR ALL SEWERS AND WATERMAIN IN FILL SECTIONS, THE COMPACTION SHALL BE VERIFIED PRIOR TO LAYING OF PIPE.
6. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE REGIONAL ENGINEER, CITY OF BURLINGTON OR THE ENGINEER.
7. ALL EXCAVATIONS TO BE BACKFILLED WITH SELECT NATIVE MATERIAL, APPROVED BY THE ENGINEER, TO 95% SPD.
8. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING SILT CONTROL DEVICES AS SHOWN ON THE DRAWINGS AND AS DIRECTED BT THE ENGINEER.
9. TREE PROTECTION PROCEDURES TO BE IMPLEMENTED IN ACCORDANCE WITH CITY OF BURLINGTON STANDARDS.
10. THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTION UNTIL SEALED BY THE ENGINEER AND INDICATED ISSUED FOR CONSTRUCTION ON THE DRAWING.
11. THIS/THESE PLAN(S) IS/ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF S. LLEWELLYN AND ASSOCIATES LIMITED.
12. INFORMATION REGARDING ANY EXISTING SERVICES AND/OR UTILITIES SHOWN ON THE APPROVED SET OF CONSTRUCTION DRAWINGS ARE FURNISHED AS THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE SEES FIT WITH THE UNDERSTANDING THAT THE OWNER AND HIS AGENTS DISCLAIM ALL RESPONSIBILITY FOR ITS ACCURACY AND /OR SUFFICIENCY. THE CONTRACTOR SHALL ASSUME LIABILITY FOR ANY DAMAGE TO EXISTING WORKS.
13. EXISTING TOPOGRAPHIC AND LEGAL INFORMATION TAKEN FROM PLANS PREPARED BY A. T. McLAREN LTD., DATED DEC. 22, 2020.
14. SITE PLAN INFORMATION TAKEN FROM PLANS PREPARED BY NEUF ARCHITECTS CANADA INC., DATED FEB. 26, 2021.
15. THIS/THESE PLAN(S) TO BE READ IN CONJUNCTION WITH THE STORM WATER MANAGEMENT (SWM) REPORT PREPARED BY S. LLEWELLYN AND ASSOCIATES LIMITED, DATED_____.
16. THIS PLAN TO BE USED FOR SERVICING AND GRADING ONLY, FOR BUILDING LOCATION REFER TO TO THE SITE PLAN.
17. MUNICIPAL APPROVAL OF THESE DRAWINGS IS FOR MATERIAL AND COMPLIANCE WITH CITY OF BURLINGTON AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION OF THE WORKS BY THE CITY OF BURLINGTON STAFF DOES NOT CERTIFIY THE LINE AND GRADE OF THE WORKS NOR RELIEVE THE CONTRACTOR OF CERTIFICATION OF ALL WORKS BY THE OWNER'S ENGINEER.
18. ALTERNATE MATERIALS MAY BE ACCEPTABLE PROVIDED WRITTEN APPROVAL HAS FIRST BEEN OBTAINED FROM THE CITY OF BURLINGTON AND THE THE ENGINEER.
19. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING:
    - ROAD CUT PERMITS
    - SEWER PERMITS
    - APPROACH APPROVAL PERMITS
    - RELOCATION OF SERVICES
    - COMMITTEE OF ADJUSTMENT
    - ENCROACHMENT AGREEMENTS
22. PRIOR TO CONSTRUCTION THE CONTRACTOR MUST:
    - i. CHECK AND VERIFY ALL DIMENSIONS AND EXISTING ELEVATIONS WHICH INCLUDE BUT ARE NOT LIMITED TO THE BENCHMARK ELEVATIONS, EXISTING SERVICE CONNECTIONS, EXISTING INVERTS AND REPORT FINDING IN WRITING TO THE ENGINEER.
    - ii. OBTAIN ALL UTILITY LOCATES AND REQUIRED PERMITS AND LICENSES.
    - iii. VERIFY ALL FINISHED FLOOR ELEVATIONS AND BASEMENT FLOOR ELEVATIONS WHICH MY APPEAR ON THESE PLANS COMPLY WITH THE FINAL ARCHITECTURAL DRAWINGS.
    - iv. CONFIRM ALL DRAWINGS USED FOR CONSTRUCTION ARE OF THE MOST RECENT REVISION.
    - v. NOTIFY THE ENGINEER OF THE PROPOSED CONSTRUCTION SCHEDULE FOR COORDINATION OF NECESSARY INSPECTIONS.
23. **THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEER 48 HOURS PRIOR TO THE COMMENCING SITE WORKS TO ARRANGE FOR INSPECTION. THE ENGINEER SHALL DETERMINE THE EXTENT OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF THE UNDERGROUND SERVICE INSTALLATION AS MANDATED BY THE ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO MAKE SUITABLE ARRANGEMENTS FOR INSPECTION WILL LEAD TO POST CONSTRUCTION TESTING AND INSPECTION AS DETERMINED BY THE ENGINEER, THE COSTS OF WHICH INCLUDING ANY DELAYS IN CONSTRUCTION SHALL BE BOURNE BY THE CONTRACTOR. FULL PAYMENT FOR UN-INSPECTED WORKS MAY BE WITHHELD UNTIL THE COMPLETION OF THE POST CONSTRUCTION INSPECTION AND TESTING TO THE SATISFACTION OF THE ENGINEER.**
24. INSPECTION BY THE OWNER'S ENGINEER IS FOR CERTIFICATION AND GENERAL CONFORMANCE PURPOSES AND DOES NOT CERTIFY LINE AND GRADE OR IMPLY AN ASSURANCE OF QUALITY CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THE INSTALLATION OF THE WORKS TO PROPER LINE, GRADE AND QUALITY TO CURRENT INDUSTRY STANDARDS.
25. ANY UTILITY RELOCATIONS AND RESTORATIONS DUE TO THE DEVELOPMENT TO BE UNDERTAKEN AT THE EXPENSE OF THE OWNER/DEVELOPER AND SHALL BE COORDINATED BY THE CONTRACTOR.
26. ALL RESTORATIONS AND RECONSTRUCTIONS SHALL BE TO COMPLETED TO MATCH EXISTING CONDITIONS OR BETTER AND ARE TO BE PERFORMED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF BURLINGTON.
27. SERVICING CONTRACTOR TO MAINTAIN A "CONFINED TRENCH CONDITION" IN ALL SEWER AND WATERMAIN INSTALLATION TRENCHES.
28. THE SITE SERVICING CONTRACTOR SHALL TERMINATE ALL SERVICES 1.0m FROM THE BUILDING FACE.
29. NO BLASTING WILL BE PERMITTED.

ROADWORKS:

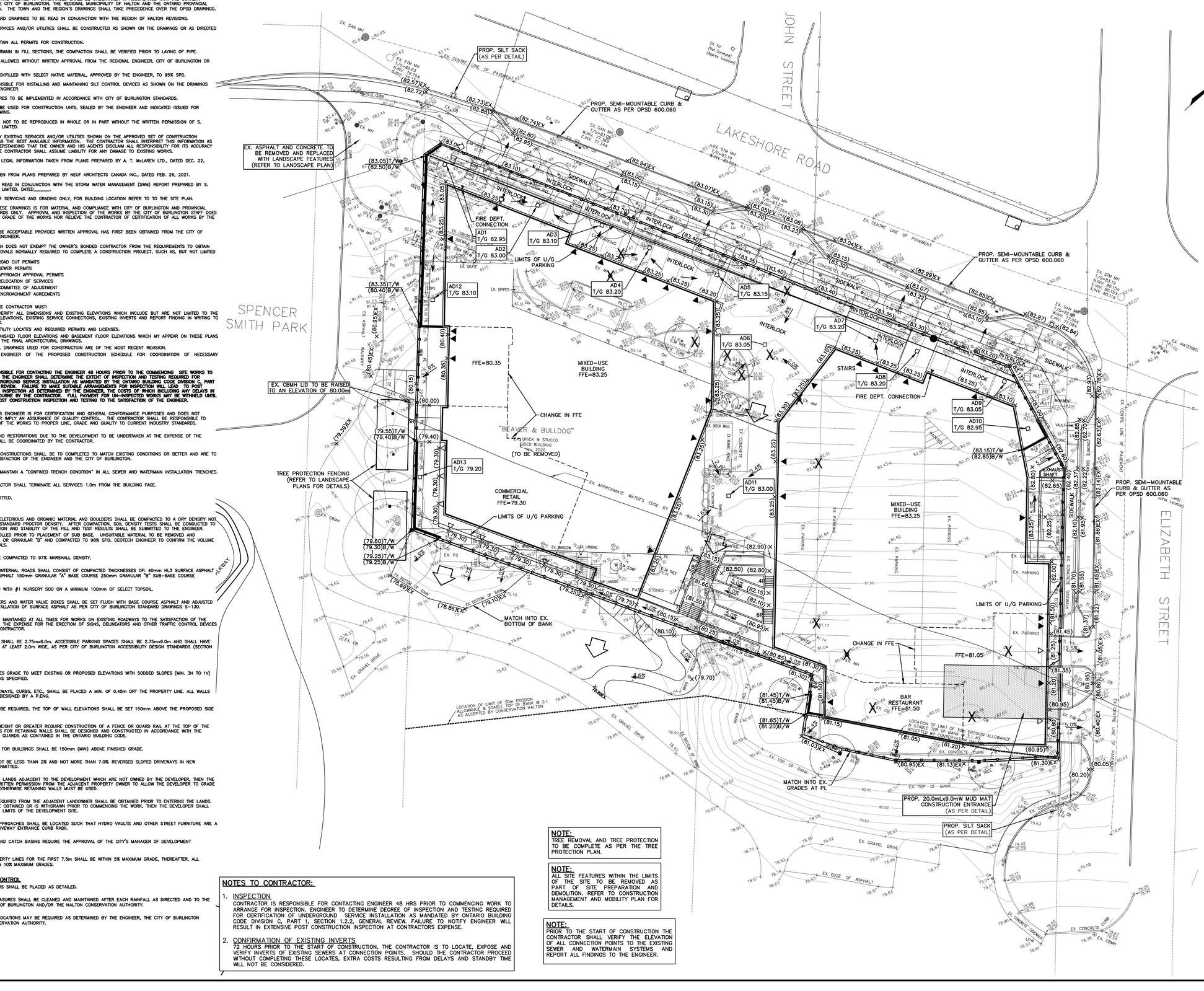
1. APPROVED FILL, FREE OF DELETERIOUS AND ORGANIC MATERIAL AND BOULDERS SHALL BE COMPACTED TO A DRY DENSITY NOT LESS THAN 95% THAN THE STANDARD PROCTOR DENSITY. AFTER COMPACTION, SOIL DENSITY TESTS SHALL BE CONDUCTED TO ENSURE ADEQUATE COMPACTION AND STABILITY OF THE FILL AND TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER.
2. SUBGRADE TO BE PROOF ROLLED PRIOR TO PLACEMENT OF SUB BASE. UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED WITH SELECT FILL OR GRANULAR "B" AND COMPACTED TO 98% SPD. GEOTECH ENGINEER TO CONFIRM THE VOLUME OF THE UNSUITABLE MATERIALS.
3. ASPHALTIC CONCRETE TO BE COMPACTED TO 97% MARSHALL DENSITY.
4. PAVEMENT STRUCTURE FOR INTERNAL ROADS SHALL CONSIST OF COMPACTED THICKNESSES OF: 40mm HL3 SURFACE ASPHALT 60mm HL8 BASE BINDER ASPHALT 150mm GRANULAR "A" BASE COURSE 250mm GRANULAR "B" SUB-BASE COURSE
5. BOULEVARDS TO BE SODDED WITH #1 NURSERY SOD ON A MINIMUM 100mm OF SELECT TOPSOIL.
6. MANHOLE FRAMES AND COVERS AND WATER VALVE BOXES SHALL BE SET FLUSH WITH BASE COURSE ASPHALT AND ADJUSTED TO FINAL GRADE AFTER INSTALLATION OF SURFACE ASPHALT AS PER CITY OF BURLINGTON STANDARD DRAWINGS S-130.
7. TRAFFIC CONTROL SHALL BE MAINTAINED AT ALL TIMES FOR WORKS ON EXISTING ROADWAYS TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING. THE EXPENSE FOR THE ERECTION OF SIGNS, DELINEATORS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE BORNE BY THE CONTRACTOR.
8. STANDARD PARKING SPACES SHALL BE 2.75mx6.0m. ACCESSIBLE PARKING SPACES SHALL BE 2.75mx6.0m AND SHALL HAVE AN ADJACENT ACCESS AISLE AT LEAST 2.0m WIDE, AS PER CITY OF BURLINGTON ACCESSIBILITY DESIGN STANDARDS (SECTION 4.3.12).

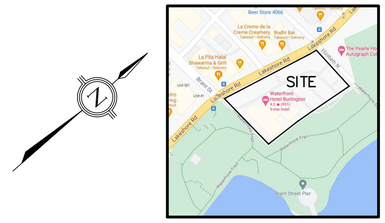
GRADING NOTES

1. ALONG ADJOINING PROPERTIES GRADE TO MEET EXISTING OR PROPOSED ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED.
2. ALL RETAINING WALLS, WALKWAYS, CURBS, ETC., SHALL BE PLACED A MIN. OF 0.45m OFF THE PROPERTY LINE. ALL WALLS 1.0M OR HIGHER SHALL BE DESIGNED BY A P.ENG.
3. SHOULD A RETAINING WALL BE REQUIRED, THE TOP OF WALL ELEVATIONS SHALL BE SET 150mm ABOVE THE PROPOSED SIDE YARD SWALES.
4. RETAINING WALLS 0.6m IN HEIGHT OR GREATER REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL GUARDS FOR RETAINING WALLS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF EXTERIOR GUARDS AS CONTAINED IN THE ONTARIO BUILDING CODE.
5. TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE 150mm (MIN) ABOVE FINISHED GRADE.
6. DRIVEWAY SLOPES SHALL NOT BE LESS THAN 2% AND NOT MORE THAN 7.0% REVERSED SLOPED DRIVEWAYS IN NEW DEVELOPMENTS ARE NOT PERMITTED.
7. IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED.
8. THE WRITTEN PERMISSION REQUIRED FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. SHOULD PERMISSION NOT BE OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE WORK, THEN THE DEVELOPER SHALL LIMIT HIS ACTIVITIES TO THE LIMITS OF THE DEVELOPMENT SITE.
9. DRIVEWAY AND DRIVEWAY APPROACHES SHALL BE LOCATED SUCH THAT HYDRO VAULTS AND OTHER STREET FURNITURE ARE A MIN. OF 1.2m FROM THE DRIVEWAY ENTRANCE CURB RADII.
10. ANY CHANGES IN GRADES AND CATCH BASINS REQUIRE THE APPROVAL OF THE CITY'S MANAGER OF DEVELOPMENT ENGINEERING.
11. ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADES.

SILTATION AND EROSION CONTROL

1. SILTATION CONTROL BARRIERS SHALL BE PLACED AS DETAILED.
2. ALL SILTATION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED AFTER EACH RAINFALL AS DIRECTED AND TO THE SATISFACTION OF THE CITY OF BURLINGTON AND/OR THE HALTON CONSERVATION AUTHORITY.
3. ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE ENGINEER, THE CITY OF BURLINGTON AND/OR THE HALTON CONSERVATION AUTHORITY.





KEY MAP
N.T.S.

LEGEND:

- EXISTING GROUND ELEVATION
- PROPOSED GROUND ELEVATION
- PROPOSED DIRECTION OF SHEET FLOW
- EXISTING CATCHBASIN
- EXISTING STORM/SANITARY MANHOLE
- PROPOSED AREA DRAIN
- PROPOSED CATCHBASIN SILT SACK
- PROPOSED SILTATION CONTROL FENCE
- PROPOSED MUD MAT (CONSTRUCTION ACCESS)
- EMERGENCY OVERLAND FLOW ROUTE
- PROPOSED CURB STOP/GATE VALVE

NO.	DATE	BY	REVISIONS

NOTES TO CONTRACTOR:

1. CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS.
4. THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVER-GROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
5. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED, REUSED, OR REVISED WITHOUT THE WRITTEN CONSENT OF S. LLEWELLYN AND ASSOCIATES LIMITED.

DESIGN	SF	CHK'D	SF	DATE Oct. 18, 21
DRAWN	SD	CHK'D	SF	

SCALE 1:300 (0 5 10 20 30)

APPROVALS

STAMP

S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS
Tel. (905) 631-6978
Website: www.sla.on.ca
email: info@sla.on.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENT

BURLINGTON 2020 LAKESHORE INC.

PROJECT NAME

BURLINGTON WATERFRONT
2020 LAKESHORE ROAD, BURLINGTON, ON

TITLE

PRELIMINARY GRADING & SEDIMENT AND EROSION CONTROL PLAN

PROJECT No. 21082

DRAWING No. C101

NOTES TO CONTRACTOR:

1. INSPECTION
CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
2. CONFIRMATION OF EXISTING INVERTS
72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.

NOTE:
TREE REMOVAL AND TREE PROTECTION TO BE COMPLETE AS PER THE TREE PROTECTION PLAN.

NOTE:
ALL SITE FEATURES WITHIN THE LIMITS OF THE SITE TO BE REMOVED AS PART OF SITE PREPARATION AND DEMOLITION. REFER TO CONSTRUCTION MANAGEMENT AND MOBILITY PLAN FOR DETAILS.

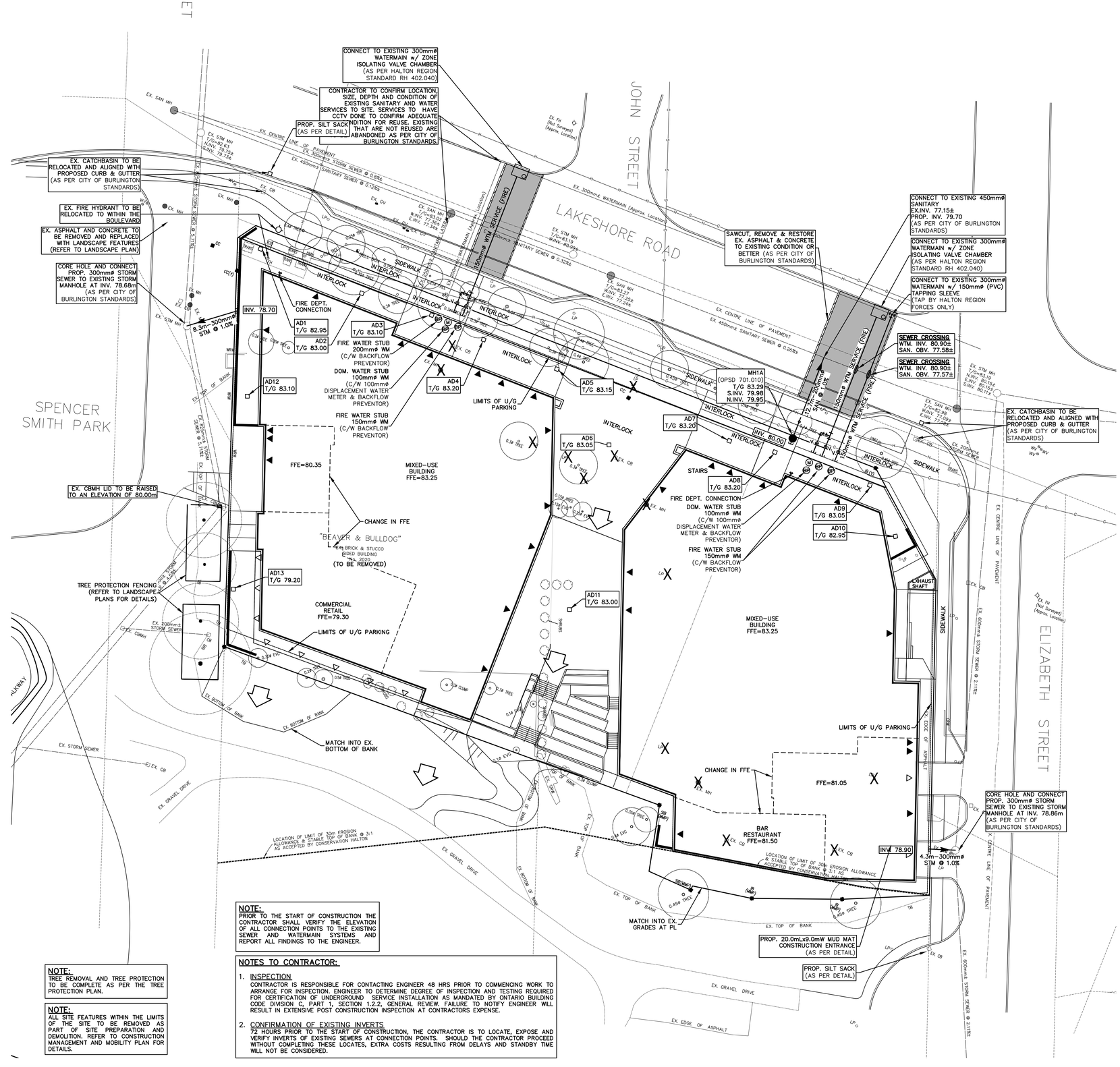
NOTE:
PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE ELEVATION OF ALL CONNECTION POINTS TO THE EXISTING SEWER AND WATERMAIN SYSTEMS AND REPORT ALL FINDINGS TO THE ENGINEER.

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DWG No.: 21082-C102

PRELIMINARY SERVICING PLAN

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NOTE:
TREE REMOVAL AND TREE PROTECTION TO BE COMPLETE AS PER THE TREE PROTECTION PLAN.

NOTE:
ALL SITE FEATURES WITHIN THE LIMITS OF THE SITE TO BE REMOVED AS PART OF SITE PREPARATION AND DEMOLITION. REFER TO CONSTRUCTION MANAGEMENT AND MOBILITY PLAN FOR DETAILS.

NOTE:
PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE ELEVATION OF ALL CONNECTION POINTS TO THE EXISTING SEWER AND WATERMAIN SYSTEMS AND REPORT ALL FINDINGS TO THE ENGINEER.

NOTES TO CONTRACTOR:

1. INSPECTION
   CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
2. CONFIRMATION OF EXISTING INVERTS
   72 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS TO LOCATE, EXPOSE AND VERIFY INVERTS OF EXISTING SEWERS AT CONNECTION POINTS. SHOULD THE CONTRACTOR PROCEED WITHOUT COMPLETING THESE LOCATES, EXTRA COSTS RESULTING FROM DELAYS AND STANDBY TIME WILL NOT BE CONSIDERED.



KEY MAP
N.T.S.

LEGEND:

- EXISTING CATCHBASIN
- EXISTING STORM/SANITARY MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED STORM/SANITARY MANHOLE
- PROPOSED CURB STOP/GATE VALVE
- (M) PROPOSED WATER METER
- (BP) PROPOSED BACKFLOW PREVENTOR
- SEWER CROSSING
- PROPOSED SEWER INSULATION

NO.	DATE	BY	REVISIONS

NOTES TO CONTRACTOR:

1. CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS.
4. THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVER-GROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
5. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED, REUSED, OR REVISED WITHOUT THE WRITTEN CONSENT OF S. LLEWELLYN AND ASSOCIATES LIMITED.

DESIGN	SF	CHK'D	SF
DRAWN	SD	CHK'D	SF

DATE: Oct. 18, 21

SCALE 1:300 (0, 5, 10, 20, 30)

APPROVALS

STAMP

S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS
Tel. (905) 631-6978
Website: www.sla.on.ca
email: info@sla.on.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENT
BURLINGTON 2020 LAKESHORE INC.

PROJECT NAME
BURLINGTON WATERFRONT
2020 LAKESHORE ROAD, BURLINGTON, ON

TITLE
PRELIMINARY SERVICING PLAN

PROJECT No. 21082

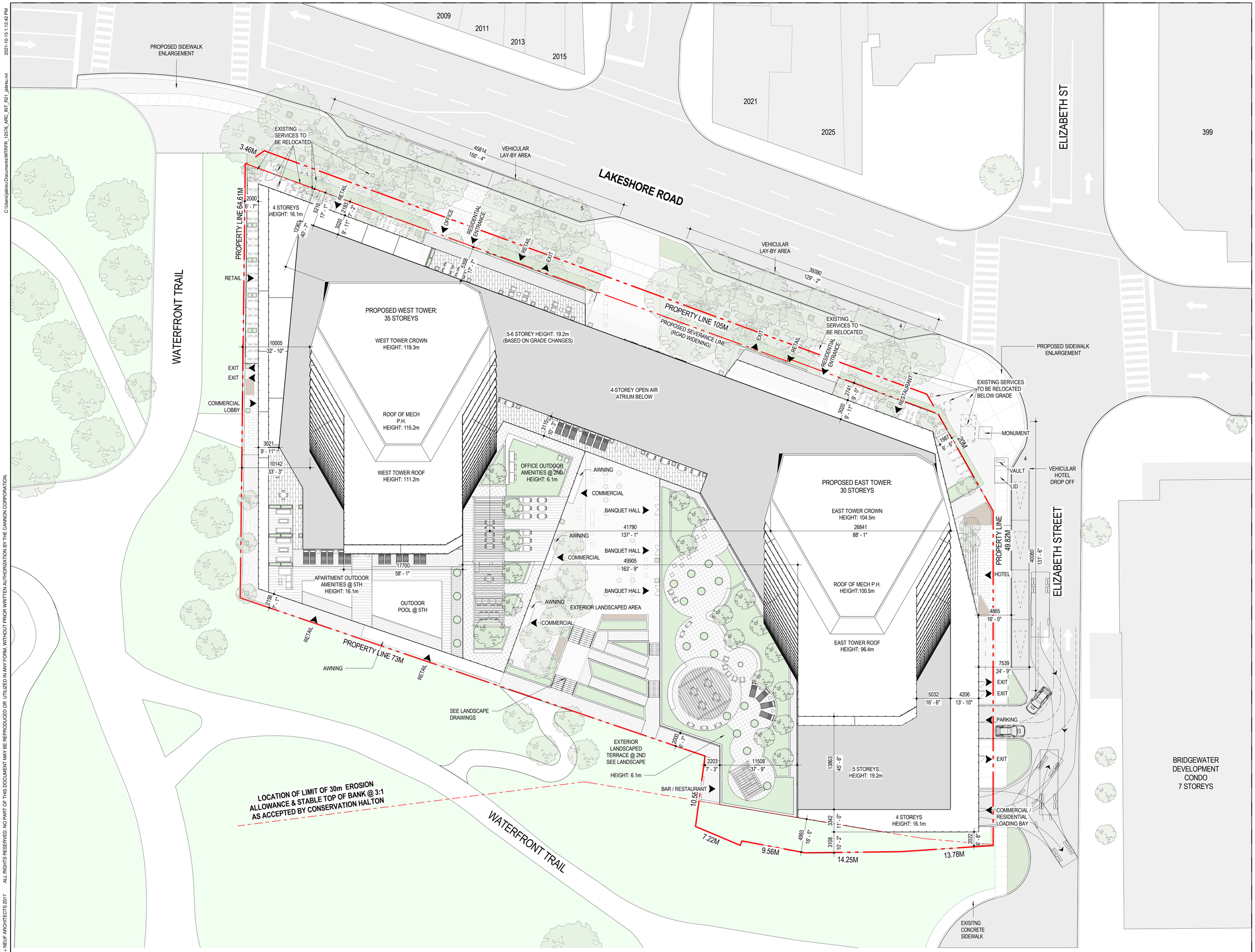
DRAWING No. C102

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Appendix C: Site Plan Prepared by Neuf Architects

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SITE PLAN
1 : 200
1 / A100



PROJECT
2020 LAKESHORE

LOCATION
2020 LAKESHORE ROAD, BURLINGTON ON

PROJET NO.
12576.00

CLIENT
BURLINGTON 2020 LAKESHORE INC.
366 King Street West
Hamilton ON L8P 1B3

CIVIL ENGINEERING
S. Llewellyn & Associates
1028 South Service Road, Suite 105, East Wing
Burlington ON L7N 3H8

TRAFFIC ENGINEERING
Paradigm
5A - 150 Pinebush Road
Cambridge ON N1R 8J8

PLANNING CONSULTANT
Bousfields Inc.
1 Main Street East, Suite 200
Hamilton ON L8N 1E7

LANDSCAPE ARCHITECT
adesso design inc.
216 Locke Street South, 2nd Floor
Hamilton ON L8P 4B4

PROJECT MANAGER
Horn Design & Consulting Inc.
1827 Will Scarlett Dr
Mississauga, ON L5K 1J6

ARCHITECT
NEUF architect(e)s CANADA INC.
8 Market Street Suite 600
Toronto, ON M5E 1M6

NEUF ARCHITECTE(S)

PROJECT NORTH / TRUE NORTH

SHEET STATUS
FOR REFERENCE ONLY

NO	REVISION	DATE (yyyy-mm-dd)
0	ISSUED FOR PRE-APPLICATION CONSULTATION	2021-02-26
1	BURLINGTON URBAN DESIGN REVIEW	2021-08-19
2	COMMUNITY CONSULTATION	2021-09-08
3	ISSUED FOR OPA ZBA APPLICATION	2021-10-15

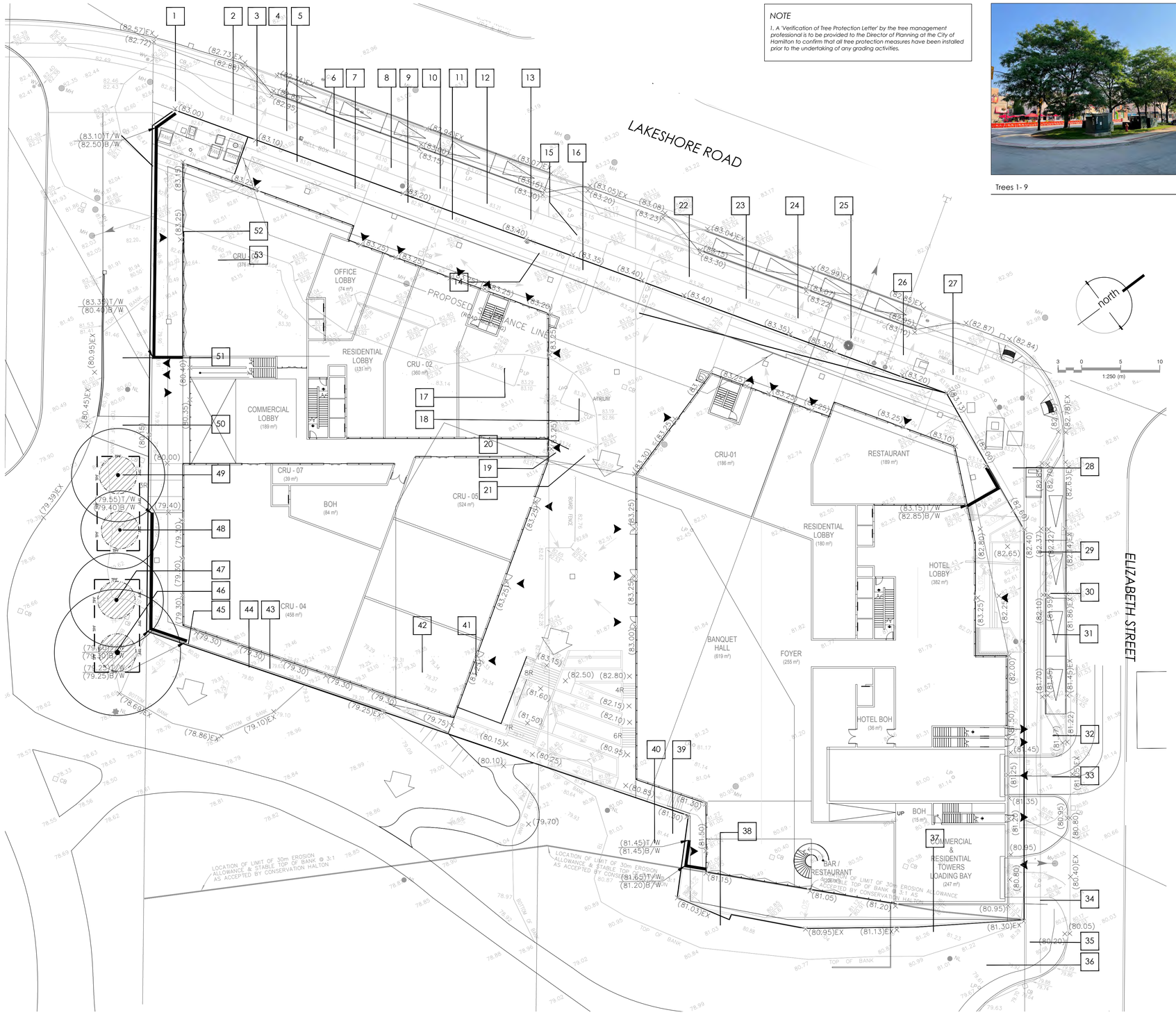
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CHECKED BY: Checker
yyyy-mm-dd: 2021-10-15
SCALE: 1 : 200
FORMAT: 30" x 42" (Full scale)

DRAWING TITLE
SITE PLAN

REVISION: 3
DRAWING NUMBER: A100

Appendix D: Tree Protection Plan(s) Prepared by Adesso Design Inc.

project #: 21-160



NOTE

1. A 'Verification of Tree Protection Letter' by the tree management professional is to be provided to the Director of Planning at the City of Hamilton to confirm that all tree protection measures have been installed prior to the undertaking of any grading activities.

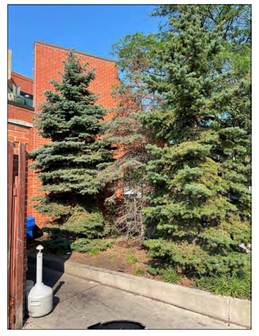
Trees 1- 9



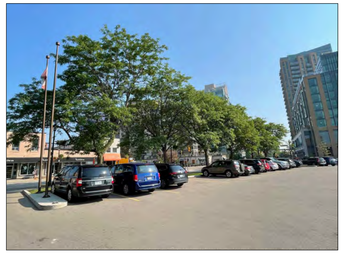
Trees 9 - 16



Trees 9 - Root Rot



Trees 19-21

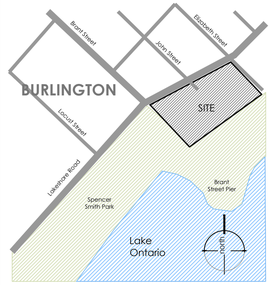


Trees 22-27



Trees 30-31

KEY MAP - N.T.S.



LEGEND

- property line
- UNIT 2 — vegetation unit (refer to chart)
- 2 — existing tree number (refer to chart)
- existing vegetation to remain
- existing vegetation to be removed
- existing elevations
- tree protection fence (with silt fence) - see detail D1, L-2
- minimum tree protection zone

NOT FOR CONSTRUCTION
ISSUED FOR REVIEW & COMMENTS ONLY

NOTE:
Vegetation inventory undertaken *by Jackson Arboriculture Inc., Jeremy Jackson, ISA Certified Arborist (ON-1089A)* on July, 26, 2021.

REVISIONS/ SUBMISSIONS

#	DATE	DESCRIPTION
1	2021-10-14	Issued ZBA

STAMP

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS — GERMAIN D. TAYLOR — OALA — MEMBER

CLIENT
Burlington 2020 Lakeshore Inc.

MUNICIPALITY
City of Burlington

PROJECT
Burlington Waterfront
2020 Lakeshore Road
Burlington, ON

MUNICIPAL FILE NUMBER

SHEET
Tree Protection Plan — L-1

adesso design inc.
landscape architecture

218 Locke Street South, 2nd Floor
Hamilton, ON L8P 4B4
t. 905.526.8876
www.adessodesigninc.ca

I:\21-160\Project Files\Drawings\21-160 - 2020 Lakeshore Rd, Burlington\01 Current Drawings\01 CAD\L-1 TREE PROTECTION PLAN.dwg, Oct 14, 2021 - 1:54:31 PM

project #: 21-160

EXISTING VEGETATION IDENTIFICATION TABLE

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	mTPZ	CC	Comments	Potential Impacts from Construction	Recommendation
1	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	38	G	G	G	7	2.4	CD		Conflicts with proposed hardscape	Remove
2	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	36	FG	G	G	8	2.4	CD	Swollen flare - likely lawn mower/whipper snipper damage	Conflicts with proposed hardscape	Remove
3	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	27	FG	G	G	7	2.4	CD	Exposed roots - planted too high, structural root growing over curb	Conflicts with proposed hardscape	Remove
4	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	23	G	G	G	6	2.4	CD		Conflicts with proposed hardscape	Remove
5	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	32	G	G	G	8	2.4	CD	Union at 3 m	Conflicts with proposed hardscape	Remove
6	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	21	G	G	G	6	2.4	CD	Union at 2.5 m	Conflicts with proposed hardscape	Remove
7	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	33	G	G	G	7	2.4	CD		Conflicts with proposed hardscape	Remove
8	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	24	FG	G	G	5	2.4	CD	Seam	Conflicts with proposed hardscape	Remove
9	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	26	P	P	P	3	2.4	CD	Sign screwed to trunk, 70% dieback, root rot with ganoderma fruiting bodies -> REMOVE	Conflicts with proposed hardscape	Remove
10	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	26	FG	G	FG	5	2.4	CD	Seam	Conflicts with proposed hardscape	Remove
11	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	24	G	G	G	5	2.4	CD	Union at 2 m	Conflicts with proposed hardscape	Remove
12	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	23	G	G	G	5	2.4	CD	Union at 2 m	Conflicts with proposed hardscape	Remove
13	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	5	FG	PF	PF	1	2.4	I	Stem wound, 40% dieback	Conflicts with proposed hardscape	Remove
14	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	25	G	G	G	5	2.4	CD	Union at 3 m	Conflicts with proposed hardscape	Remove
15	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	37	FG	G	G	7	2.4	CD	Union at 3 m, seam, broken branches	Conflicts with proposed hardscape	Remove
16	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	37	G	G	G	6	2.4	CD		Conflicts with proposed hardscape	Remove
17	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	22	G	G	G	5	2.4	D		Conflicts with proposed hardscape	Remove
18	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	36	G	G	G	6	2.4	D	Union at 3 m	Conflicts with proposed hardscape	Remove
19	Blue Spruce	*Picea pungens*	13	G	G	G	1.5	2.4	CD		Conflicts with proposed hardscape	Remove
20	Blue Spruce	*Picea pungens*	13	P	P	P	1	2.4	CD	90% dieback	Conflicts with proposed hardscape	Remove
21	Blue Spruce	*Picea pungens*	11	G	G	FG	1.5	2.4	CD	10% dieback	Conflicts with proposed hardscape	Remove
22	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	43	FG	G	G	7	3.0	CD	Union at 3 m, seam	Conflicts with proposed hardscape	Remove
23	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	35	G	G	G	7	2.4	CD	Union at 3.5m	Conflicts with proposed hardscape	Remove
24	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	35	FG	G	G	7	2.4	CD	Union at 2.5 m, girdling root	Conflicts with proposed hardscape	Remove
25	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	32	F	G	G	6	2.4	CD	Swollen flare - likely lawn mower/whipper snipper damage	Conflicts with proposed hardscape	Remove
26	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	29	G	G	G	5	2.4	CD		Conflicts with proposed hardscape	Remove
27	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	38	G	G	FG	8	2.4	CD	Union at 2.5 m, seam	Conflicts with proposed hardscape	Remove
28	Red Oak	*Quercus rubra*	5	G	G	G	1	1.8	D	Light crook in crown	Conflicts with proposed hardscape	Remove
29	Red Oak	*Quercus rubra*	4	G	G	G	1	1.8	D		Conflicts with proposed hardscape	Remove
30	Red Oak	*Quercus rubra*	5	G	G	G	1	1.8	D		Conflicts with proposed hardscape	Remove
31	Red Oak	*Quercus rubra*	5	G	G	G	1	1.8	D		Conflicts with proposed hardscape	Remove
32	Red Oak	*Quercus rubra*	6	G	G	FG	1	1.8	D		Conflicts with proposed hardscape	Remove
33	Red Oak	*Quercus rubra*	5	G	G	G	1	1.8	D		Conflicts with proposed hardscape	Remove
34	Red Maple	*Acer rubrum*	7	G	G	G	1.5	1.8	D		Conflicts with proposed hardscape	Remove
35	Red Maple	*Acer rubrum*	7	G	G	G	1.5	1.8	D		Conflicts with proposed hardscape	Remove
36	Red Maple	*Acer rubrum*	7	G	G	G	1.5	1.8	CD			Remove
37	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	44	G	G	G	7	3.0	D		Conflicts with proposed patio	Remove
38	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	52	G	G	G	9	3.6	D	Union at 3 m	Conflicts with proposed building	Remove
39	Manitoba Maple	*Acer negundo*	32	FG	G	G	6	2.4	CD	Unions at 1.6 m and 3 m	Conflicts with proposed building	Remove
40	Austrian Pine	*Pinus nigra*	23, 34	F	F	FG	5	2.4	CD	Union at 1 m with 1 dead stem, poor form	Conflicts with proposed building	Remove
41	Red Maple	*Acer rubrum*	15, 16	FG	F	F	2	2.4	D	Union at ground, chlorotic, 20% dieback	Conflicts with proposed building	Remove
42	Red Maple	*Acer rubrum*	13, 10, 7, 8, 8	FG	F	F	2	2.4	D	Union at ground, chlorotic	Conflicts with proposed building	Remove
43	Apple species	*Malus sp.*	16	G	G	G	2	2.4	CD	Pruning wounds, epicormic branching	Conflicts with proposed building	Remove
44	Apple species	*Malus sp.*	13, 10	F	G	G	2	2.4	CD	Stem wound with heart rot, pruning wounds, epicormic branching	Conflicts with proposed building	Remove
45	Austrian Pine	*Pinus nigra*	30	G	G	G	3	2.4	D		Conflicts with proposed building	Remove
46	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	33	G	G	G	8	2.4	D			Save
47	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	26	G	G	G	6	2.4	CD			Save
48	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	24	G	G	G	5	2.4	CD			Save
49	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	32	G	G	G	6	2.4	CD	Union at 2.5 m		Save
50	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	27	G	G	G	6	2.4	CD		Conflicts with proposed hardscape	Remove
51	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	36	G	G	FG	9	2.4	CD	Union at 2 m	Conflicts with proposed building	Remove
52	Serviceberry species	*Amelanchier sp.*	15, 9	FG	G	G	4	2.4	CD	Union at 0.4 m with included bark	Conflicts with proposed building	Remove
53	Columnar English Oak	*Quercus robur 'fastigiata'*	25	G	G	G	2	2.4	CD		Conflicts with proposed building	Remove

** CROWN CLASS*
Dominant- (D) Emergent canopy (receives full sunlight)
Co-dominant - (C) Not fully emergent (top of canopy receives sunlight)
Intermediate - (I) Sub-canopy tree (receives partial sunlight)

*** CONDITION - consideration of trunk integrity, crown structure and crown vigor*
Good - few or no issues related to trunk integrity, crown structure or crown vigor
Fair - minor issues related to trunk integrity, crown structure (form, some dead or damaged branches) or crown vigor (20-80% healthy foliage)
Poor - issues with trunk integrity such as cavities or exposed dead wood, poor crown structure (poor form, no clear leader, significant dead or damaged branches) or poor crown vigor (<20% healthy foliage)

CONDITION OF TREES
The decision to remove or retain a tree is subject to the forecasted development impacts, the structural condition of the tree (e.g. cracks, cavities, decay, weak branching, leaning, hazard potential), the biological condition of the tree (e.g. pest or disease concerns, overall health) and the suitability of the tree in its location (e.g. hardiness, soil conditions, salt tolerance, visual obstruction, available soil volume)

MIGRATORY BIRDS AND NESTS:

1. *The Owner and Contractor must be aware of the Migratory Birds Convention Act, 1994 - specifically:*
   - *No tree removal or construction activity shall contravene the Act.*
   - *Construction activities with the potential to harm migratory birds or their nest should be restricted from March 15 to August 31.*
   - *If work must occur during the migratory bird breeding season, a nest survey should be taken by a qualified avian biologist.*
   - *A mitigation plan (showing active nests and appropriate buffers) may be required for review and approval by the Canadian Wildlife Services.*

NOTES:

1. *The area within the dripline of all existing trees shall be properly protected with temporary fencing.*
2. *The area within the protective fencing shall remain undisturbed with no construction activity, grade changes, surface treatment, compaction, or excavation. Area shall not be used for the storage of building materials or equipment access/storage or project related garbage.*
3. *Tree protection measures shall be installed prior to any demolition, tree removal or construction and shall remain until the completion of fine grading and sodding or seeding.*
4. *Prune all trees for dead, diseased, weak or hazardous branches only, also trim back branches which will interfere with construction, prune for structural restoration where necessary.*
5. *No stockpiles and/or excavated material shall be placed within the tree preservation area.*
6. *No rigging cable shall be wrapped around or installed to trees.*
7. *Where root systems of protected trees are exposed directly adjacent to or damaged by construction work they are to be root pruned and the area back filled with topsoil to prevent root desiccation.*
8. *Any fine grading within the preservation area is to be done by hand, no heavy equipment is permitted within the preservation zone.*
9. *Sediment accumulations to be removed by subdivider/builder when sediment deposits reach within 150mm of top of filter fabric barrier.*
10. *A copy of the approved and signed Vegetation Management Plan will be on site for the duration of construction and available upon request.*
11. *This detail does not represent any particular tree species.*

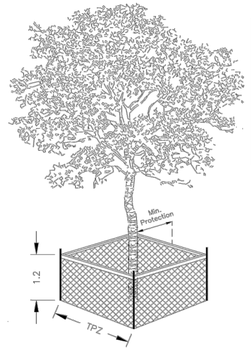
TREE REMOVAL:

1. *No trees shall be removed prior to municipal approvals of the Tree Management/Tree Preservation Plan.*

BOUNDARY TREES:

2. *Note that boundary trees are protected under the Ontario Forestry Act. Boundary trees are defined in the Forestry Act (Section 10.2) and are considered shared or co-owned property. The Forestry Act indicates that it is a prosecutable offense for one co-owner to injure or cut down a boundary tree without the other co-owner's permission.*
3. *Written permission from the neighbouring property owner is required prior to removal or injury of any boundary tree(shared ownership) or any tree that is not fully on the subject property.*
4. *An ISA certified Arborist should be on site prior to any work being performed within the rootzone of a boundary or neighbouring tree to perform root pruning as required.*

REVIT Design files/Projects 2021/21-160 SS01 Lakeshore Rd Burlington/L2 Current Drawing/21-160 dwg LAYOUT2.Chart
LAST SAVED BY: thielvoldt On: October 14, 2021 4:41:12 PM PLOTTED BY: thielvoldt October 14, 2021 10:03:23 PM



Detail TP-1 – Tree Protection Detail.

Trunk Diameter (DBH) [2]	Minimum Tree Protection Zone (MTPZ) Distances Required [3]	Critical Root Zone (CRZ) Distances Required [3&4]
< 10 cm	1.8 m	1.8 m
11 - 40 cm	2.4 m	4.0 m
41 - 50 cm	3.0 m	5.0 m
51 - 60 cm	3.6 m	6.0 m
61 - 70 cm	4.2 m	7.0 m
71 - 80 cm	4.8 m	8.0 m
81 - 90 cm	5.4 m	9.0 m
91 - 100+ cm	6.0 m	10.0 m

NOTES:
[1] The roots of a tree can extend from the trunk to approximately 2-3 times the distance of the drip line.
[2] Diameter at breast height (DBH) is the measurement of tree trunk taken at 1.4 metres above ground.
[3] Minimum Tree Protection Zone and Critical Root Zone distances are to be measured from the outside edge of the tree base towards the drip line and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work and is subject to Section 6 of this specification.
[4] Where work is being performed beyond the Minimum Tree Protection Zone but within the Critical Root Zone the works are subject to Section 8 of this specification.

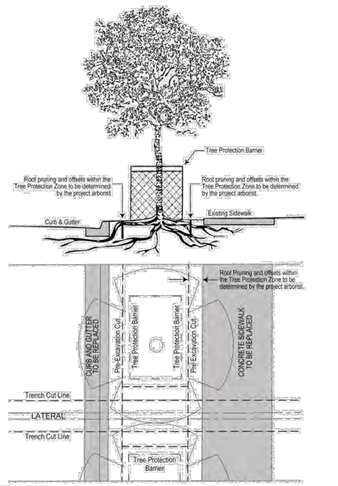
TREE PROTECTION BARRIER

1. The required barrier is a 1.2 metre (4 ft) high orange plastic web snow fencing on 2" x 4" frame. Where orange plastic web snow fencing creates a restriction to sightlines, page wire fencing with reflective tape can be used.
2. Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place throughout the entire duration of the project. The barriers shall be maintained erect and in good repair throughout the duration of construction operations with breaks and unsupported sections repaired immediately. Tree protection may be not be removed prior to the completion of construction without written authorization from the City Arborist.
3. All supports and bracing used to safely secure the barrier should be located outside the MTPZ. All supports and bracing should minimize damage to roots.
4. Where some fill or excavated material must be temporarily located near a MTPZ, a wooden barrier with silt fencing must be used to ensure no material enters the MTPZ.
5. No materials or fill may be stored within the MTPZ.
6. Equipment or vehicles shall not be operated, parked, repaired, or refueled within the MTPZ.
7. No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the MTPZ without written authorization from the City Arborist.
8. A laminated Minimum Tree Protection Zone sign (See Detail TP-3 – Minimum Tree Protection Zone Sign) must be attached to the side of the Tree Protection where it will be visible by persons entering the site. Minimum size must be 10"x14".

City of Burlington Tree Protection Barrier - No. SS12 | 1 / L-2

SCALE: NTS

Detail TP-2 – Root Pruning Detail



NOTE:
For excavations perpendicular to to the curbing (ie. sidewalk, curbing, water or sewer laterals renewal)

(a) The contractor is to use a trench box to minimize the width of the open cut.
(b) When the lateral replacement is within the Tree Protection Zone of a tree, the contractor is to complete the works using trenchless technologies.

City of Burlington Root Pruning - No. SS12A | 2 / L-2

SCALE: NTS

Burlington

TREE PROTECTION ZONE (TPZ)

No equipment or vehicles shall be operated, parked, repaired or refueled within the Tree Protection Zone.

No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

No materials or fill may be stored within the Tree Protection Zone.

This tree protection barrier must not be removed prior to the completion of construction without written authorization from the City of Burlington, Urban Forestry Department.

For information, contact:
City of Burlington, Development and Infrastructure Division,
905-335-7642.

City of Burlington Minimum Tree Protection Zone Sign | 3 / L-2

SCALE: NTS

Table 1 – Minimum Tree Protection Zones

Trunk Diameter (DBH) [2]	Minimum Tree Protection Zone (MTPZ) Distances Required [3]	Critical Root Zone (CRZ) Distances Required [3&4]
< 10 cm	1.8 m	1.8 m
11 - 40 cm	2.4 m	4.0 m
41 - 50 cm	3.0 m	5.0 m
51 - 60 cm	3.6 m	6.0 m
61 - 70 cm	4.2 m	7.0 m
71 - 80 cm	4.8 m	8.0 m
81 - 90 cm	5.4 m	9.0 m
91 - 100+ cm	6.0 m	10.0 m

NOT FOR CONSTRUCTION
ISSUED FOR REVIEW & COMMENTS ONLY

NOTE:
Vegetation inventory undertaken *by Jackson Arboriculture Inc., Jeremy Jackson, ISA Certified Arborist (ON-1089A)* on July, 26, 2021.

REVISIONS/ SUBMISSIONS

#	DATE	DESCRIPTION
1	2021-10-14	Issued ZBA

STAMP

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS
GRAHAM D. TAYLOR
MEMBER

CLIENT
Burlington 2020 Lakeshore Inc.

MUNICIPALITY
City of Burlington

PROJECT
Burlington Waterfront
2020 Lakeshore Road
Burlington, ON

MUNICIPAL FILE NUMBER

SHEET
Tree Protection Plan
L-2

adesso design inc.
landscape architecture

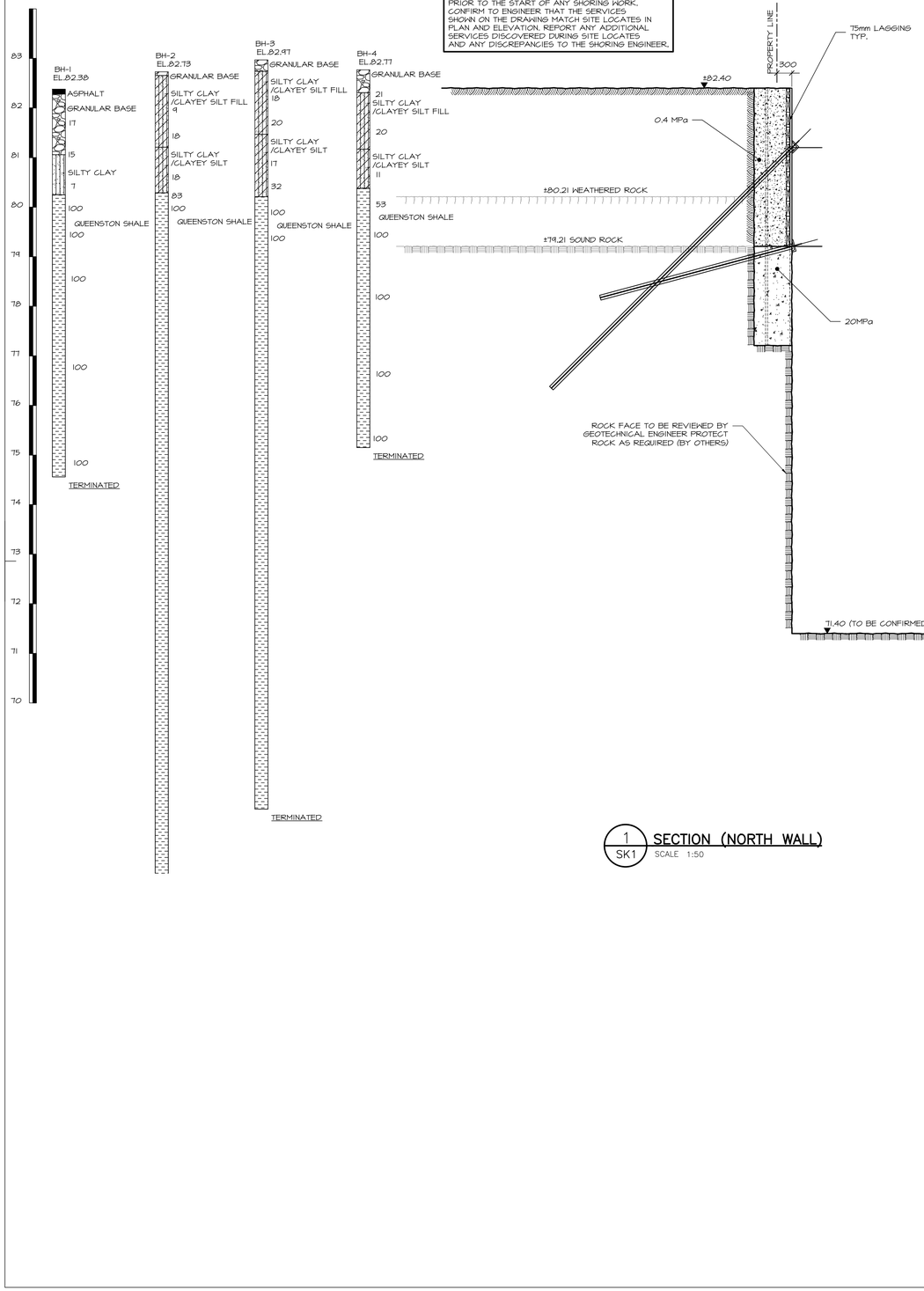
218 Locke Street South, 2nd Floor
Hamilton, ON L8P 4B4
t. 905.526.8876
www.adessodesigninc.ca

Appendix E: Preliminary Shoring Concept

Tuesday, October 5, 2021 2:14:06 PM

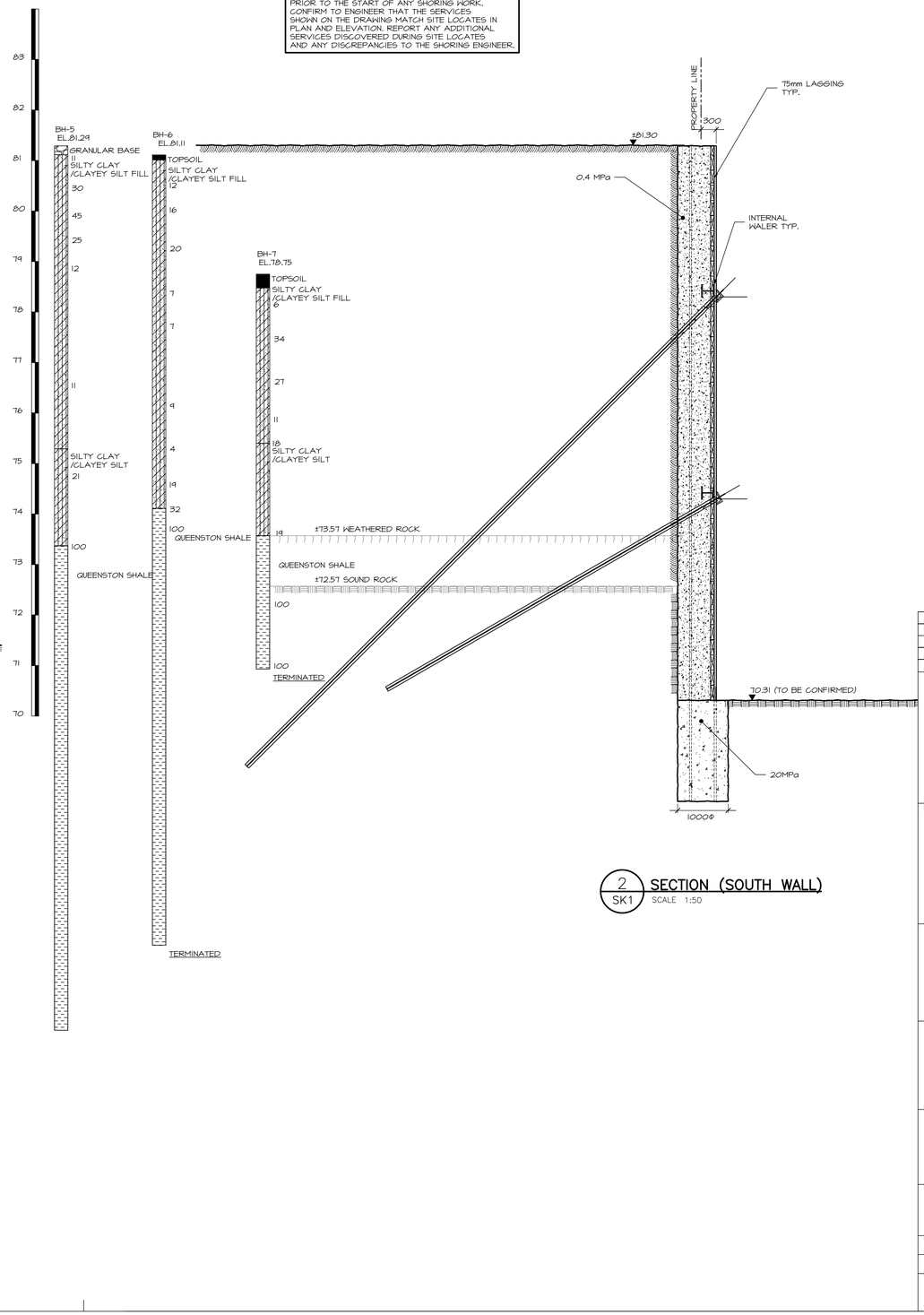
D:\PJR\HCM\2021\2021-09-29 2020 LAKESHORE, BURLINGTON\2020 LAKESHORE.DWG

NOTE:
ALL SERVICES ARE TO BE LOCATED IN BOTH PLAN AND ELEVATION BY GENERAL CONTRACTOR PRIOR TO THE START OF ANY SHORING WORK. CONFIRM TO ENGINEER THAT THE SERVICES SHOWN ON THE DRAWING MATCH SITE LOCATES IN PLAN AND ELEVATION. REPORT ANY ADDITIONAL SERVICES DISCOVERED DURING SITE LOCATES AND ANY DISCREPANCIES TO THE SHORING ENGINEER.



1 SK1 SECTION (NORTH WALL)
SCALE 1:50

NOTE:
ALL SERVICES ARE TO BE LOCATED IN BOTH PLAN AND ELEVATION BY GENERAL CONTRACTOR PRIOR TO THE START OF ANY SHORING WORK. CONFIRM TO ENGINEER THAT THE SERVICES SHOWN ON THE DRAWING MATCH SITE LOCATES IN PLAN AND ELEVATION. REPORT ANY ADDITIONAL SERVICES DISCOVERED DURING SITE LOCATES AND ANY DISCREPANCIES TO THE SHORING ENGINEER.



2 SK1 SECTION (SOUTH WALL)
SCALE 1:50

No.	Description	Date
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REVISION

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Client

HCM
TORONTO: (519) 623-6454
CALGARY: (403) 248-4884
OTTAWA: (613) 241-5551
www.hcgroup.ca
"Innovation in Foundations"

Consultant

RWH ENGINEERING INC
1238 MAIN STREET E. MILTON, ON L9T 8M7
PHONE 905-876-1444

Project

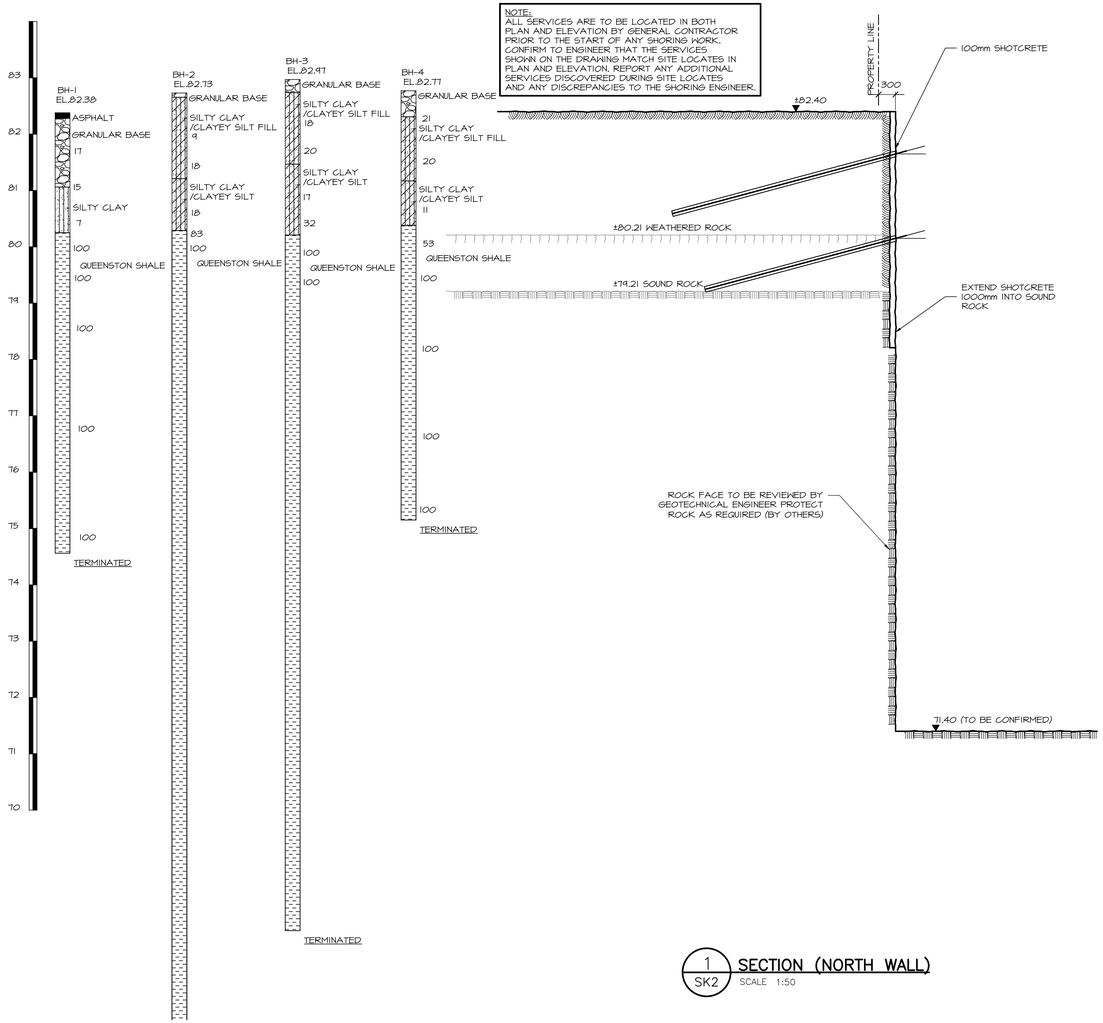
2020 LAKESHORE

BURLINGTON ONTARIO

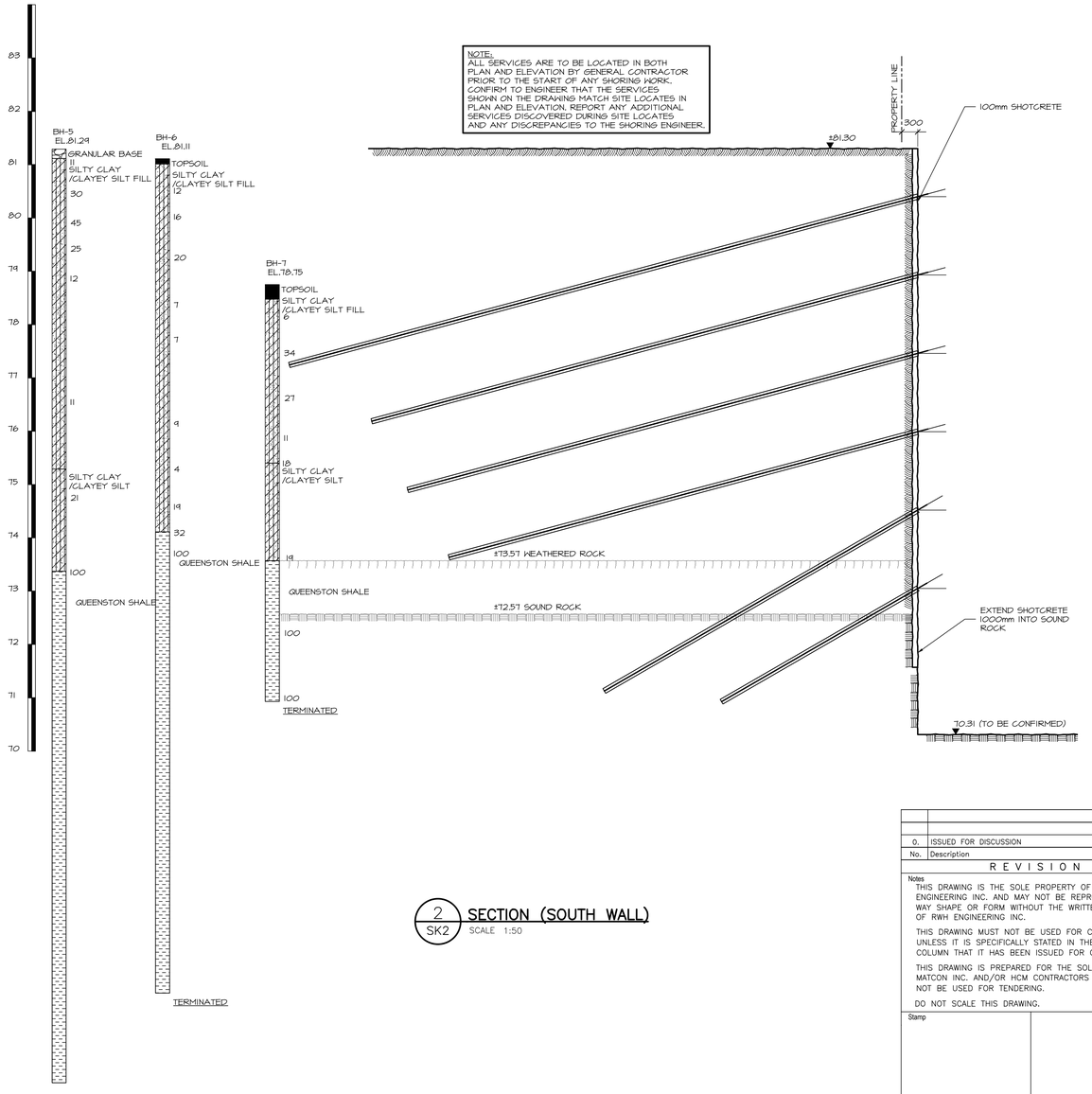
Drawing Title

PILES AND LAGGING SECTIONS

Drawn: O.K	Scale: AS NOTED
Checked: K.D	Date: OCT. 2021
Project No.	Drawing No.: SK1



1 SK2 SECTION (NORTH WALL)
SCALE 1:50



2 SK2 SECTION (SOUTH WALL)
SCALE 1:50

Tuesday, October 5, 2021 2:14:44 PM

D:\PVR\HCM\2021\2021-09-29 2020 LAKESHORE, BURLINGTON\2020 LAKESHORE.DWG

No.	Description	Date
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1238 MAIN STREET E MILTON, ON L9T 8M7
PHONE 905-876-1444

Project

2020 LAKESHORE

BURLINGTON ONTARIO

Drawing Title

SHOTCRETE SECTIONS

Drawn: O.K	Scale: AS NOTED
Checked: K.D	Date: OCT. 2021
Project No.	Drawing No.: SK2

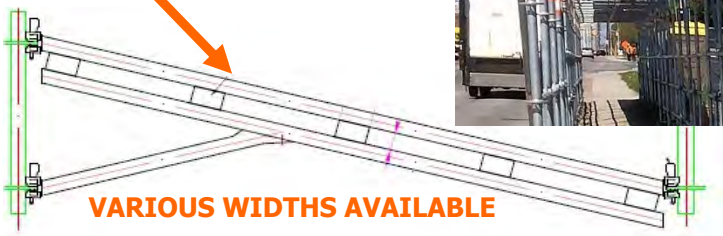
Appendix F: Pre-Manufactured Scaffolding Overhead Sidewalk Protection System

PATENTED "Nu-Slope"™ - Overhead Sidewalk Protection

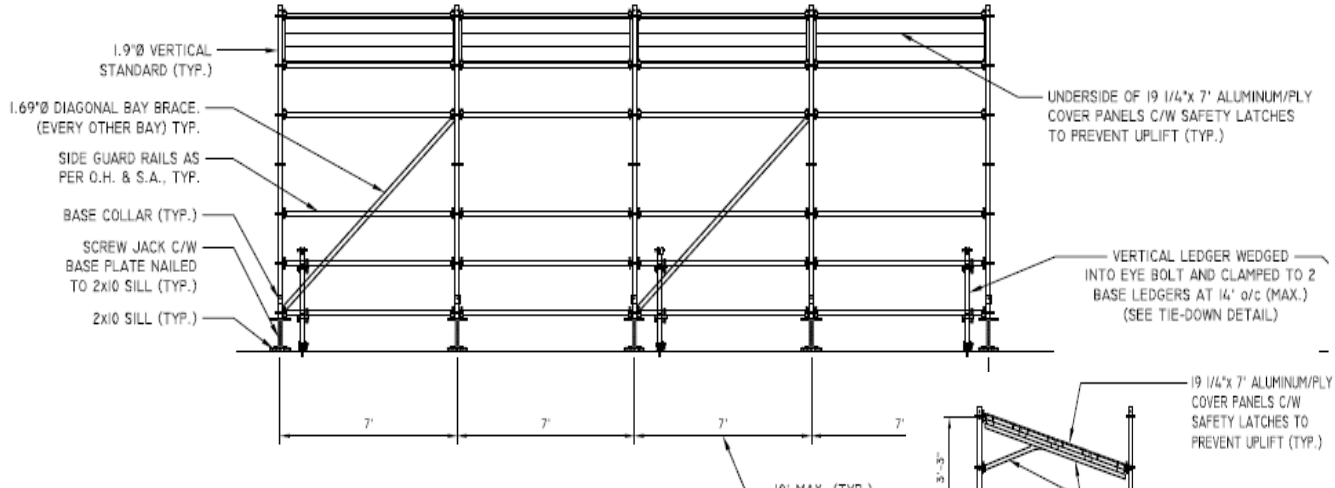
- Protective public pedestrian walkway with attractive curb appeal
- One piece "Y" shaped, 3 lock connection
- Quick cost efficient assembly
- Sloped design deflects weather, debris or other objects to site side
- Accommodates elevated advertising space street side, privacy on site side with plywood & fitted panel options
- Modular design suits neighbouring scaffolds, heights, corners, uneven terrain, gateways, truck entrances, lighting etc.



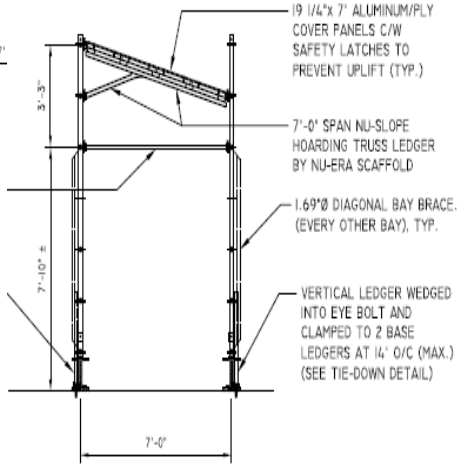




VARIOUS WIDTHS AVAILABLE







B/2 TYPICAL SCAFFOLD SECTION (ALT. 3)
SCALE: 1/4" = 1'-0"

SPEED
SAFETY
ADAPTABLE
FLEXIBLE & VERSATILE
DESIGNED TO LAST
ENGINEERED TO PERFECTION