LANDTEK LIMITED
Consulting Engineers
205 Nebo Road, Unit 4B
Hamilton, Ontario
L8W 2E1
Phone: 905-383-3733
engineering@landtek.ca
www.landtek.ca

June 20, 2023
File: 23061

Adi Developments (Masonry) Inc.
110 Burloak Drive, Suite 700
Burlington, Ontario
L7L 6B2
Email: ayza.anwar@adidevelopments.com

Attention: Ms. Ayza Anwar, Land Development

Re: Update Phase 1 Environmental Site Assessment
1120 Cooke Boulevard (formerly 101 Masonry Court), Burlington, Ontario

1.0 BACKGROUND

Landtek Limited (Landtek) is pleased to submit this Update Phase 1 Environmental Site Assessment (ESA) report for the property located at 1120 Cooke Boulevard (formerly part of 101 Masonry Court) in Burlington, Ontario (the Site). The work was initiated following authorization to proceed from Ms Ayza Anwar of the Adi Developments. (the Client) in March 2023.

Landtek is pleased to review and update the following reports prepared by Landtek on behalf of the Client:

- Phase One Environmental Site Assessment, 101 Masonry Court, City of Burlington, Ontario, prepared for the Adi Development Group, File: 14190, dated June 14, 2016" (Landtek 2016)
- Phase Two Environmental Site Assessment, 101 Masonry Court, City of Burlington, Ontario, prepared for the Adi Development Group, 14190, dated June 14, 2016" (Landtek 2016)
- Record of Site Condition – No. 222207 filed for 101 Masonry Court, Burlington, Ontario
- Update Phase 1 Environmental Site Assessment – 1120 Cooke Boulevard (formerly 101 Masonry Court) Burlington, Ontario, File: 21086, dated April 30, 2021" (Landtek 2021)

Landtek conducted a Site Visit on April 2 and May 22, 2023 to confirm the conditions of the Site. The purpose of this update was to assess whether the environmental site assessment activities contained in the above report has sufficiently characterized the likelihood, types and location of potential environmental impacts that may be found at the Site.



FIGURE 1: Site Location

2.0 UPDATE PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

The Update Phase 1 ESA site visit was conducted on April 2 and May 22, 2023 for 1120 Cooke Boulevard (former 101 Masonry Court – southwest corner), Burlington, Ontario (the Site), in accordance with O.Reg. 153/04. The investigation included a review of current and historical information for the Site and adjoining properties.

The Site is identified as 1120 Cooke Boulevard, formerly southwest portion of 101 Masonry Court, located in City of Burlington, Ontario. The Site is a currently undeveloped and has been used as temporary show office for Station West residential development and as a construction staging area for the adjacent Station West residential development.

3.0 PREVIOUS REPORTS

3.1 Phase One ESA (2016)

The following report was completed by Landtek for Adi Developments (which 1120 Cooke was a small portion see **Figure 1**):

- Phase One Environmental Site Assessment, 101 Masonry Court, City of Burlington, Ontario, prepared for the Adi Development Group, prepared by Landtek Limited, File: 14190, dated June 14, 2016" (Landtek 2016)

The following summary outlines the findings of the Phase One ESA:

- No structures were identified on the Site (*1120 Cooke*) at the time of the site inspection. A barn or house structure was historically located north of the Site circa 1986 and 1992.

- The Site (1120 Cooke) and property to the east (101 Masonry Court) were historically industrial use for cement block and brick manufacturing from approximately 1956 to 2002.

- The former plant operation east of the Site was was covered with gravel and crushed bricks. A large stockpile (approximately 7,000 m^3) of crushed concrete, gravel, and bricks is located on the northeast of the Site (*101 Masonry Court portion not on 1120 Cooke*).

- No indication of USTs or ASTs were observed on the Site (1120 Cooke) and there were no observed vent pipes, filler pipes, or ground depressions that could be associated with the presence of USTs.

3.2 Phase Two ESA (2016)

A Phase Two Environmental Site Assessment was required to investigate the Areas of Potential Environmental Concern on the Site prior to the submission of a Record of Site Condition.

Based on the results of the subsurface investigation conducted at the Site, the following findings are presented:

1. The Phase Two ESA on consisted of a total of fifteen boreholes, thirteen of which were completed as monitoring wells, and the excavation of forty-one test pits were located on the existing Station West development to the east of the Site.

2. The general stratigraphy of the Site consisted of variable sand, gravel and silt fill overlying sand, silty sand, silt and till.

3. Based on the relative groundwater elevations, the groundwater below the Site was assessed to flow in a north/northwest direction. Regional groundwater flow is expected to generally flow to the south towards and Lake Ontario.

4. No soil or groundwater exceedance were identified for volatile organic compounds, petroleum hydrocarbons, polycyclic aromatic hydrocarbons and metals and inorganic for the Site.

The Phase Two ESA has been completed in accordance with Regulation 153/04 (as amended) and was used to support the filing of a Record of Site Condition (RSC) No. 222207.

3.3 Record of Site Condition No 222207

Record of Site Condition Property (RSC Property) is identified as 101 Masonry Court in Burlington, Ontario. The RSC property was a total area of about 5.1 hectares (*which included the Site – 1120 Cooke Boulevard, located on the southwest corner*). The Site is located on the north side of Masonry Court and is bound by vacant land and GO Transit railway lines to the north, vacant industrial land to the east, and Waterdown Road to the west.

A total of 20,865 tonnes (13,040 m^3) of soil impacted with various metals, inorganic parameters, Polycyclic aromatic hydrocarbons (PAH) and petroleum hydrocarbons (PHC) parameters was excavated and transported off the RSC Property to an MOE licenced landfill. No contaminated material was identified on the *current Site -1120 Cook Boulevard parcel*.

The soil was imported to the RSC Property for the express purpose of restoring the RSC Property back to approximately the original grade. A total of 17,187 m^3 silty clay was also imported to the Phase Two Property and placed as engineered fill within the proposed residential redevelopment. No fill has been placed on 1120 Cooke Boulevard parcel.

The remedial activities were completed in accordance with O. Reg. 153/04 (as amended) and was used to support the filing of RSC No. 222207 for the proposed residential/parkland/ institutional (RPI) land use.

3.4 Update Phase 1 ESA (2021)

The Update Phase 1 ESA site visit was conducted on April 17, 2021 for 1120 Cooke Boulevard (*former 101 Masonry Court – southwest corner*), Burlington, Ontario (the Site), in accordance with O.Reg. 153/04. The investigation included a review of current and historical information for the Site and adjoining properties.

The Site is identified as 1120 Cooke Boulevard, formerly the southwest portion of 101 Masonry Court, and is located in City of Burlington, Ontario. The Site is a currently undeveloped and has been used as temporary show office for Station West residential development and as a construction staging area for the adjacent Station West residential development.

3.5 Hydrogeological Investigation (2022)

The proposed development is to comprise of two, 36-storey towers and a 26-storey tower connected by a four-storey podium. The structure will include a maximum of five levels of basement parking. The footprint of the proposed structure is to cover the full site area.

The Hydrogeological Investigation is required to assess the current site groundwater conditions, determine potential development/post development effects of the proposed development; estimate the potential dewatering requirement, and provide monitoring and mitigation plans for the development.

Depths to groundwater the monitoring wells were measured on January 24, February 15, March 23, April 14, May 10, June 23, and October 24, 2022. Based on the groundwater levels recorded depth to groundwater ranged from 3.09 mbgs to 5.53 mbgs. The highest ground water level was determined to be 3.09 mbgs.

Laboratory results for analyzed groundwater samples collected from three (3) monitoring wells at the Site were compared to the City of Burlington Municipal Storm Sewer Discharge Limits Guidelines. The following parameters exceeded guideline values: Biological Oxygen Demand, Chloroform, Phenols, Total Chromium, Total Manganese, Total Nickel, Total Phosphorous, Total Suspended Solids, and Total Zinc.

4.0 UPDATE PHASE 1 ESA (2023)

The Update Phase 1 ESA site visit was conducted on April 2 and May 22, 2023 for 1120 Cooke Boulevard (former 101 Masonry Court – southwest corner), Burlington, Ontario (the Site), in accordance with O.Reg. 153/04. The investigation included a review of current and historical information for the Site and adjoining properties.

The following sections summarize the observed Site conditions. The Site visit consisted of a walkthrough of the Site and visual reconnaissance of neighbouring properties from publicly accessible areas. Photographs of typical Site conditions are shown in **Appendix A**.

4.1 Site Uses and Structures

At the time of Landtek's Site visit, the Site vacant property currently used as a temporary show office and construction staging area for the adjacent Station West Phase 1 development. The surrounding properties were mostly commercial and residential.

4.2 Site Specific Observations

Observations of Site conditions were made during the Site reconnaissance and are summarized in the table below.

Description	Observed On-Site	Comments
Air Emissions	No	None observed during the Site visit.
Storage Tanks: ASTs	No	None observed during the Site visit.
Storage Tanks: USTs	No	None reported or observed during Site visit.
Hazardous Substances and Petroleum Products	No	None observed during the Site visit.
Hazardous Waste Management	No	None observed during the Site visit.
Unidentified Substance Containers	No	4 x 30 m^3 steel construction material dumpster on Site full of construction debris
Drums	No	None observed during the Site visit
Hydraulic Equipment	No	None observed during the Site visit.
Fill Material	Yes	Fill material temporarily stockpiled on Site from the original RSC Property (101 Masonry Court). Large stockpile approximate 100m^3 located on the southwest corner of the Site
Wells	Yes	Monitoring wells located on Site from hydrogeological investigation
Drains, Sumps, Oil/Water Separators/Sand Traps	No	None observed
Stained Soil, Stained Pavement, Corrosion to Pavement	No	None observed during the Site visit.
Strong, Pungent, or Noxious Odors	No	Not identified during the Site visit.
Stressed Vegetation	No	None observed during the Site visit.
Utilities (Electricity/ Natural Gas)	Yes	The property has municipally sourced natural gas and electricity.
Water Supply	Yes	The Site is supplied by municipally sourced water supply.
Wastewater	No	Not identified during the Site visit.

Description	Observed On-Site	Comments
Septic	No	Not identified during the Site visit.
Storm Water	No	Not identified during the Site visit.
Pits, Ponds, Lagoons	No	None observed during the Site visit.

Based on the Site visit completed by Landtek, environmental concerns were observed with the presences of stockpiled fill and significant quantities of construction debris stored on Site. on the Site and/or adjacent properties.

5.0 FINDINGS

The information reviewed and Landtek's site visit conducted on April 2 and May 22, 2023, the investigation concluded current operations on Site was a construction staging area and temporary show office.

The following summary outlines the findings of the Phase 1 ESA:

- The Site is identified as 1120 Cooke Boulevard, formerly southwest portion of 101 Masonry Court, located in City of Burlington, Ontario. The Site is a currently has been used as temporary show office for Station West residential development and as a construction staging area for the adjacent Station West residential development.
- Large stockpile of soil and concrete sewer pipe located in the southwest corner of the Site, approximately 100m^3 , to be used during construction.

6.0 RECOMMENDATIONS

Based on the Phase 1 ESA findings, it is the opinion of Landtek that further action or evaluation be undertaken at this time:

- Complete a limited Phase 2 ESA (shallow soil sampling), to assess construction staging activities and whether these activities have had an environmental impact to Site.

Stockpiles of material are from excess soils generated during the construction activities at Stationwest Phase I (101 Masonary Court) and will be re-used during the construction of Stationwest Phase II (1120 Cooke Boulevard).

6.0 LIMITATIONS

This was prepared for the sole use of the Client and the City of Burlington is intended to provide an evaluation of the current environmental conditions at the Site. Any use that a third party makes of this report, or decisions made based on it, are the responsibility of the third party. Landtek Limited accepts no responsibility for damages of any type suffered by the third party as a result of actions or decisions made based on this report.

Landtek assumes that information provided by others is factual and accurate, and accepts no responsibility for any deficiency, misstatement, of inaccuracy in this report from information provided by others.

If you have any questions concerning this report or if we can be of any further assistance to you please do not hesitate to contact our office.

Yours truly,
LANDTEK LIMITED



Paul J. Blunt. P. Eng. QPESA
Senior Environmental Engineer

ATTACHMENT: Site Photographs

Photograph 1	
Site facing northeast.	

Photograph 2	
Site facing east.	

LANDTEK LIMITED		
Project No.	23061	Date: May 2023
Update Phase One ESA 1120 Cooke Boulevard Burlington , Ontario		
Title:	Typical Site Condition Photographs	

Photograph 3	
Temporary Site office	

Photograph 4	
Material stockpile southwest corner	

LANDTEK LIMITED		
Project No.	23061	Date: May 2023
Update Phase One ESA 1120 Cooke Boulevard Burlington , Ontario		
Title:	Typical Site Condition Photographs	