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September 13, 2024

TO: The City of Burlington
426 Brant Street
Burlington, Ontario, L7R 3Z6
Attention: Faye Wang

Re: Response to the 2nd Submission Comments
New Apartment Building, 141, 147, 153 Plains Road West, Burlington, Ontario
City File: DPC-009-23

Luban Ltd. (the "Engineering Consultant") has reviewed the cooments of the second submision of the above referenced project. Below, are proposed modifications made in response to the comments in the civil package.

Pavers and Pedestrian Routes		
2	Ensure aboveground infrastructure for servicing and utilities, like pedestals/boxes, gas piping/meters, protective bollards, EV charging stations, etc. as well as outdoor amenity areas, do not create an obstruction or impede the width of the barrier-free path of travel.	**LUBAN , AAA** (Aboveground infrastructure has been checked, and there are no obstructions impeding the barrier-free path.)
Functional Servicing & Storm Water Management Report		
1	The **SWM Report** indicated the emergency overland flow to be directed to Plains Road West. The **Grading Plan**, Rev 2 (prepared by LUBAN + Associates, dated January 19, 2024) showed along north property some overland flow is directed to the neighboring property to the north. Please update and confirm that the overland flow will continue to be directed to Plains Road West.	**LUBAN (The grading design indicates that there will be no runoff directed toward adjacent properties, including along the north property.)**
2	**Servicing Plan** (prepared by LUBAN + Associates, dated January 19, 2024), please clarify the proposed CB5 connection.	**LUBAN (CB5 connects to the stormwater detention tank on the left.)**
3	Civil Dwgs and Architect Dwgs are not showing the same information i.e., different stormwater tank shape, size and location information is shown on the architect drawing on **UG Parking Plan (A104 and A103).**	**LUBAN , AAA** (Civil and architectural drawings have been revised and are now consistent.)
General Servicing Comments		
1	The developer should undertake to locate the size and location of all watermains, water services, water meters, wastewater mains (sanitary sewers), wastewater	**LUBAN** (A SUE has been retained to conduct an underground utilities

	(sanitary) services, stormwater mains, property line sanitary sewer inspection manholes and stormwater services that exist within the road right-of-ways, to the property and within the property and place them on Existing Site Servicing Plan drawings within their reports. Public and private utility companies can be utilized for this purpose.	survey. Once we receive the SUE drawings, all underground utilities will be updated.)
Functional Servicing Report		
1	A Functional Servicing Report (FSR) is required to be prepared by the developer's civil engineering consultant (watermains, water services, fire hydrants, sanitary sewer mains, sanitary sewer services, property line sanitary sewer inspection manholes, stormwater mains and stormwater services) to show options for how the property is proposed to be serviced according to City of Burlington and Halton Region standards.	**LUBAN** (A functional report addendum is provide in this submission.)
2	Local watermain and wastewater main (sanitary sewer) hydraulic analysis should be completed by the developer's consultant as well for the local sewers and the drainage area down to the nearest trunk sewer.	**LUBAN** (We have requested copies of the sanitary and water master plans from the Region but have not yet received them. Therefore, the hydraulic analysis will be submitted once we receive the drainage master plans.)
3	The consultant should include details about other developments properties in the drainage area in their analysis of the local sewers (if any).	**LUBAN** (We will submit the drainage analysis for the other development properties within the drainage area once we receive the master drainage plan from the agencies.)
4	The report should speak to the number/type of units proposed and the phasing of the development with respect to the impacts on the Region's water distribution system and wastewater collection system. Phasing, timing of the development, and required/available capacity shall be detailed in the report.	**LUBAN** (The mixed-use condo will be developed in a single phase, with construction expected to start in spring 2025 and be completed by summer 2027.)
5	The consultant will include details about potential external main upsizing or main extensions to accommodate the development, etc. Also, future forecast Regional capital works projects.	**LUBAN** (The watermain hydraulic analysis will be submitted once we receive the drainage master plans from the Agencies.)
6	The proposed development (FSR) will have to align with any Area Servicing Plan and Master Servicing Plan that is required for the area, City and Region.	**LUBAN** (We are still waiting for the drainage master plans from the Agencies.)
7	The FSR report should incorporate Fire Flow Rate Testing. The proponent should undertake fireflow rate testing of	**LUBAN** (A fire flow test has been conducted, and the

	representative Regional fire hydrants in the area, with the proponent's fireflow contractor and Region forces present. Include within the Report a copy of the fireflow rate testing results, and the Fire Underwriters Survey (FUS) requirements for the development. This information will help to assist in informing the watermain design and watermain hydraulic modelling analysis that is being undertaken by the proponent's consultants.	results indicate that the estimated water supply pressure at the building is 332 kPa, which meets the requirements to service the proposed development. The watermain hydraulic modeling analysis will be submitted once we receive the watermain master plan from the agencies.)
8	Further to the formal hydraulic analysis requirement, the developer's consultant can utilize the Region's current water and wastewater models (if required). The developer's civil consulting engineering firm will be required to enter into a Data License Agreement prior to obtaining any digital information from the Region.	**LUBAN** (We have requested the Region for the Data License Agreement, but we have not yet received their instructions.)
9	The FSR should include information related to all the other Utilities infrastructure in the area and potential conflicts.	**LUBAN** (We are still waiting for the SUE results to assess potential conflicts.)
10	The FSR should show the existing site services and note how they are proposed to be decommissioned to make way for the development.	**LUBAN** (It shows on removal plan C1)
11	The Professional Engineer preparing the FSR must prepare a number of cross-section engineering drawings (through the proposed w/ww/stm services) along the southern portions of the property and the City's Plains Road West road right-of-way. Proposed footings, foundation walls, overhangs, excavation, shoring, tie-backs, municipal mains, proposed service connection laterals, utilities and boulevard features including plantings are required to be detailed for review by the Region.	**LUBAN** (There are 5 cross-sections are shown on drawings C5 and C6.)
12	Because of the close proximity of the building to the Region's wastewater main (sanitary sewer), the developer's Civil Engineering Consultant may need to increase the slope of the building's wastewater (sanitary) sewer connection lateral, over the minimum 2% slope, to ensure that any future Regional capital works sewer reconstruction project in the area, i.e., re-sizing or re-location of the Region's wastewater main does not affect the building sewer.	**LUBAN** (The proposed sanitary sewer is now designed with a 2.5% slope instead of 2.0%.)
13	Please note that this development may require additional municipal watermain isolation, and possibly a full size water chamber (including three/four valves) for the proposed development's water service connections, to the Region's water distribution system. The developer's Civil Engineering Consultant must undertake a design exercise within the FSR in order to demonstrate that a full size water chamber, if required, can fit	**LUBAN** (The current design follows Region STD 409.010. Necessary valves, backflow preventer, and water meter will be installed within the building's mechanical room and designed by the

	within the road/boulevard, while giving adequate separation distances from the other utilities in the area. The Engineer shall prepare a number of detail drawings, for discussion with the Region early in the process.	building's mechanical engineer.)
1	The developer's Professional Civil Engineers should familiarize themselves with the normal flow levels of wastewater (sanitary sewage), i.e., average flow levels and peak wet weather flow levels, etc., in the Region's wastewater main within Plains Road West in order to design an appropriate sewer invert elevation for their proposed sanitary sewer connection lateral that will enter the Region's wastewater main.	**LUBAN** (The sanitary design flow accounts for both normal flow levels and peak wet weather flow levels.)
2	Please be advised that servicing (water/wastewater) of a standard nature is required to go through the Regional Services Permit process in the future. At the Site Plan Application stage, the developer's Professional Civil Engineers will submit their draft site servicing drawings to the Regional Service Permit Section for a full review (water/wastewater) of the developer's Engineers servicing drawings (i.e., infrastructure within Plains Road West, water meters, water backflow prevention devices and water quality testing).	**LUBAN** (noted.)
3	The property is located within the Aldershot GO Major Transit Station Area. Plains Road is also a land development corridor. Halton Region has initiated a Water, Wastewater and Transportation Integrated Master Plan review exercise for the Region, together with, and in time, background studies and formal programs. It is anticipated that the Region will be identifying a number of infrastructure projects (watermains and wastewater mains) in the City (and Region) for reconstruction, relocation and upsizing.	**LUBAN** (noted.)
5	The developer's Professional Civil Engineer's should keep themselves up to date, throughout their land development site servicing works project, with the municipal infrastructure planning that is taking place in the area.	**LUBAN** (noted)

Yours Truly



Feng Shi, P.Eng.
Princial Engineer