

To: City of Ottawa

From: Martin Peat

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**Reference: LeBreton Flats – Rail Proximity Study**

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## 1 Introduction

Stantec is engaged by the National Capital Commission (NCC) on the LeBreton Flats development, producing a draft plan of subdivision. This is based on the LeBreton Flats Master Concept Plan which envisions a place that is pedestrian- and cyclist-friendly, surrounded by lively and active parks and plazas, and highlights the dynamic future Aqueduct District, the Ottawa riverfront, and a large destination park. A diverse residential community will be supported by retail and employment opportunities, capitalizing on direct access light rail transit at Pimisi Station.

A Rail Proximity Study is required for any proposed infrastructure near the LRT corridor and development (including roadways) planned within the Development Zone of Influence (DZI). The Terms of Reference for Rail Proximity Studies highlights the opportunity for transit-supportive development within the Development Zone of Influence while protecting the O-Train corridor.

The purpose of the Rail Proximity Study is to demonstrate that the proposed development will protect O-Train infrastructure. This means that areas wholly or partially within the DZI are designed and built protecting the integrity of the O-Train, through construction and subsequent use. The Study is to review all applicable information from the City of Ottawa, identified in the Term of Reference (TOR) for Rail Proximity Studies. The TOR directs applicants to address the Confederation Line Proximity Study Guidelines (2024) and Guidelines for New Development in Proximity to Railway Operations (2013).

**Reference:** LeBreton Flats - Rail Proximity Study

This memo outlines our strategy for addressing the requirements of a Rail Proximity Study for this site. In preparing this memo, we have referenced:

1. City of Ottawa Rail Proximity Study Terms of Reference ([Rail Proximity Study Terms of Reference](#))
2. City of Ottawa Confederation Line Proximity Study Guidelines 2024 ([O-Train Proximity Study Guidelines 2024](#))

As per the City of Ottawa O-Train Proximity Study Guidelines (2024), “development in proximity to Rail Corridors where there are active rail operations currently being undertaken by other railways and/or railway operators, including operators providing passenger and freight rail services, or where there is a regulatory requirement to accommodate rail freight or a reasonable prospect of rail freight operating resuming, will also be required to demonstrate alignment with the Federation of Canadian Municipalities-Railway Association of Canada Guidelines for New Development in Proximity to Railway Operations”. Based upon this statement and being in proximity to only transit lines, this memo has not reviewed the Plan of Subdivision application against the Guidelines for New Development in Proximity to Railway Operations.

## 2 Development Details

The NCC’s application will subdivide most of the LeBreton Flats site into development parcels, public rights of way, parkland blocks and other open space blocks. The plan of subdivision will be used as a structuring element of the future community by creating the public streets delineating development blocks.

During draft plan approval the City reviews and approves the functional servicing layout and subdivision blocks. Once draft approval is granted for dividing the land into blocks, development partners will advance the planning and development of portions of the site in phases. Detailed site design (including site layout, building details, underground parking) does not form part of the current application and would be proposed and reviewed by the City on a block-by-block basis through future site plan control applications once the subdivision has received final approval and is registered.

### 2.1 Development Zone of Influence

There is potential for impacts within the DZI associated with servicing infrastructure, transportation infrastructure, construction activities, and future buildings and underground parking facilities. These are categories in two parts:

- future site work to implement the subdivision (servicing and road infrastructure)
- future block development (construction processes; buildings and below-grade parking; etc.)

The functional layout of public works associated within the zone of influence is set out in Figure 2-1. This illustrates clearances from the O-Train and identifies portions of the subdivision plan where it is wholly or partially within twenty (20) metres of the LRT corridor.

Reference: LeBreton Flats - Rail Proximity Study

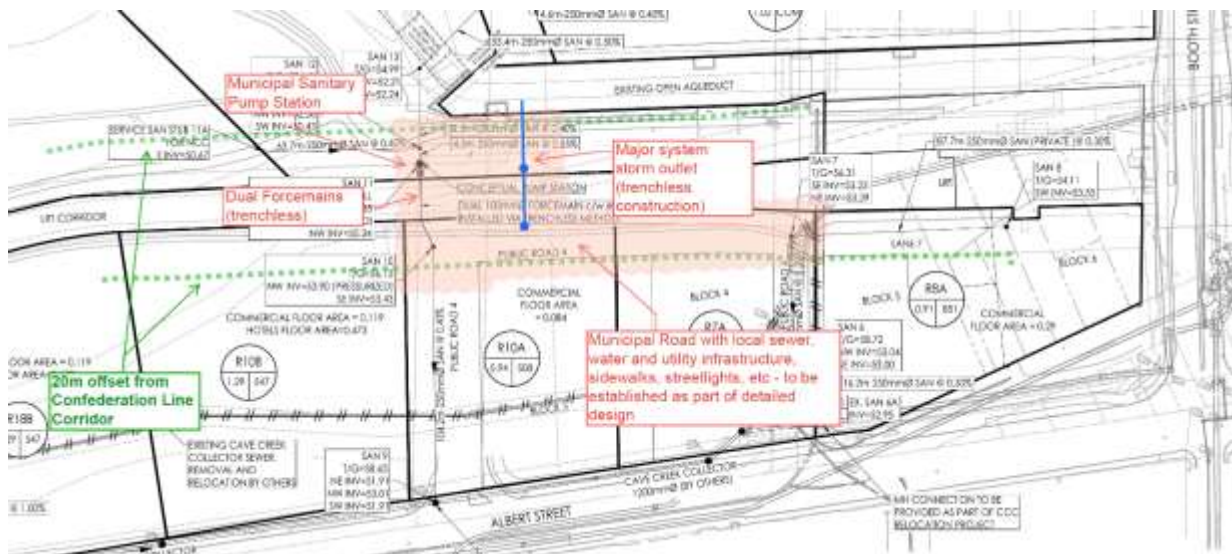


Figure 2-1 Public works associated with the plan of subdivision

Based on the draft plan application and supporting documentation, subdivision works within the DZI are expected to include the following (subject to City review and approval of the Functional Servicing Report, Draft Plan of Subdivision and other supporting documentation):

- East-west segment of Public Road 4 and all associated roadway, servicing, utility and landscaping infrastructure.
- Storm sewer from Public Road 4 crossing of the LRT corridor with associated manholes to accommodate emergency overland flow capture including flow from 21 ha of land south of Albert Street.
- Sanitary pump station and associated components required to service Block 17, City Park and NCC Park including dual forcemains crossing the LRT corridor and receiving manhole.
- Commercial and residential development of south of the LRT corridor and all associated roadway, servicing, utility and landscaping infrastructure:
  - Block 1 (commercial / residential): 2 towers
  - Block 2 (commercial / residential / hotel): 4 towers

As the development is progressed to detailed design following draft plan approval, the type and scale of any impacts will be identified and mitigated.

Reference: LeBreton Flats - Rail Proximity Study

## **3 O-Train Proximity Study Guidelines 2024**

Areas of review for the Rail Proximity Study include elements that are not available at the draft subdivision plan stage, such as detailed design of the roadways and infrastructure, building locations, construction methodology and management plans. This supports revisiting the production of a Rail Proximity Study when more detailed development plans are available. As such, this memo will provide a review for the level of information available at this stage of the subdivision application. The structure of this memo follows the format of Study Guidelines.

### **3.1 Proximity Study Scope and Purpose**

At this stage of the subdivision application, this memo will not be able to address all the detailed structures and infrastructure as identified in Section 2 of the Study due to the detailed nature (i.e. below and above grade structures, station and tunnel ventilations shafts, construction working zones, etc.).

### **3.2 Level of Review**

Three levels of Proximity Study requirements are based primarily on the proximity of the development to the O-Train and anticipated impacts:

- Level 1 is the lowest risk of potential impacts on the O-Train; capturing developments on lands wholly or partially within the DZI where minimal impact on O-Train system is anticipated
- Levels 2 and 3 indicate higher risk for potential impacts to the O-Train; with developments wholly or partially within the DZI in proximity to the O-Train where sufficient design detail is known and can be used to assess the potential impacts of the proposed development on the O-Train.

We anticipate that a Level 2 review will be required for the site to examine and assess:

- The risk of structural settlement and/or damage to O-Train infrastructure
- The potential impact on access and egress to O-Train for use, operation, maintenance, repair and replacement of O-Train infrastructure and assets
- The risk of operational impacts resulting from construction of the development

Accordingly, a scoped Rail Proximity Study will accompany the detailed design of the roadways and infrastructure that will follow Draft Plan Approval. There may be further expectation of review and analysis identified in the conditions of approval for the Plan of Subdivision. We expect that development specific rail proximity studies would also be required at the time when block developments are proposed and subject to a site plan control application.

### **3.3 Process**

Section 4 of the Proximity Study details the application process for lands within the Development Zone of Influence. Based on Figure 2, this memo is at the review stage.

Reference: LeBreton Flats - Rail Proximity Study

## 3.4 Proximity Study Submission Requirements

### 3.4.1 Level 1-2 Requirements

Table 3-1 lists the applicable requirements and the status of each item.

Table 3-1 O-Train Rail Proximity Study Requirements

| General Submission Requirements (Level 1)               | Response   |
|---|--|
| Plan of Subdivision of the development                  | The subdivision plan shows the LRT Corridor. Figure 2-1 illustrates a 20m offset from the corridor.  |
| Floor Plans for the development                         | Floor plans will be provided by block with site plan applications  |
| Development cross-section                               | Development cross-sections will be provided by block with site plan applications   |
| Geotechnical Report                                     | Foundation designs will be prepared during detailed design. Construction methodology will be provided, once available.   |
| Property survey of existing and proposed property lines | Included with the Plan of Subdivision and supporting documents   |
| Utility Servicing Plan                                  | Refer to the Functional Servicing Report and supporting documents  |
| Stormwater Management Plan and Grading Plan             | Refer to the Functional Servicing Report and supporting documents  |
| Architectural drawings and Landscape Plans              | Refer to the LeBreton Flats Master Concept Plan. Additional detail will be provided once available, through subsequent steps.  |
| Noise and Vibration Study                               | Appropriate mitigation measures for noise, vibration, stray current and electromagnetic interference will be accounted for in detailed design.   |
| Additional Requirements (Level 2)                       | Response   |
| Fire/life safety and HVAC Report (as applicable)        | These will be provided as required, once available.  |
| Excavation Plan (as applicable)                         | Excavation plans and shoring design for the proposed development will be provided in subsequent steps, once available.   |
| Construction Plan (as applicable)                       | A high-level construction schedule and construction staging plan will be provided prior to construction. This will identify crane locations, site access provisions and any temporary impacts on access to Pimisi Station or O-Train maintenance activities. |

### 3.4.2 Level 3 Requirements

Due to the nature of a Plan of Subdivision application, the details required for this section are not currently available. More information would be available at the Site Plan Control stage.

Reference: LeBreton Flats - Rail Proximity Study

### **3.5 Technical Requirements**

Plans identified in this section would be available later in the development process.

### **3.6 Conditions of Approval**

It is understood that conditions of approval for the Plan of Subdivision may be added. Detailed conditions will be discussed with City staff when the application is closer to approval.

## **4 Guidelines for New Development in Proximity to Railway Operations**

As per the O-Train Proximity Study Guidelines (2024), “development in proximity to Rail Corridors where there are active rail operations currently being undertaken by other railways and/or railway operators, including operators providing passenger and freight rail services, or where there is a regulatory requirement to accommodate rail freight or a reasonable prospect of rail freight operating resuming, will also be required to demonstrate alignment with the Federation of Canadian Municipalities-Railway Association of Canada Guidelines for New Development in Proximity to Railway Operations”.

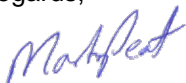
Based upon this statement and being in proximity to only transit lines, this memo has not reviewed the Plan of Subdivision application against the Guidelines for New Development in Proximity to Railway Operations.

## **5 Next Steps**

Given that the detailed infrastructure requirements for the development are not known at this early stage in the subdivision process, nor are they required for Draft Plan Approval, requirement for a more detailed Rail Proximity Study should be deferred to a later stage in the development approvals process or clearly articulated in Draft Conditions for the Plan of Subdivision. The scope and level of the Rail Proximity Study can be refined during development review process.

The NCC and its future development partners, will seek final approval of the subdivision blocks, and any further municipal planning approvals, such as zoning revisions, minor variances, and site plan approvals for individual blocks. The requirement for a Rail Proximity Study would be an appropriate condition for final approval and site plan control, to which all development blocks will be subject. This approach will satisfy the intent of the Rail Proximity Study Terms of Reference.

Regards,



**Stantec Consulting Ltd.**

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