Transportation Impact Assessment (TIA)
(Screening and Scoping Report)

797 Richmond Apartments

Ainley Group

Project No. 21006-2

Prepared for:

Dentech Holdings Inc.

June 8, 2021

Ainley CONSULTING ENGINEERS PLANNERS

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1. INTRODUCTION

The Ainley Group was retained by Dentech Holdings Inc. to prepare a Transportation Impact Assessment (TIA) addressing the Site Plan Approval process requirements of the City of Ottawa.

The subject site is located at 797 Richmond Road approximately 540m east of Woodroffe Avenue, 80m west of the intersection of Cleary Avenue and Richmond Road on the north side of Richmond Road (See Key Map in Figure 1). This property parcel is part of the ward number 15 (Kitchissippi).

The subject site is currently used as retail (i.e. denture clinic), with a total site area of 0.116 ha. See Figure 2, Google street view of the mentioned site. The proposed development will be a 9 story (28.5m, 31.5m including roof amenities) apartment building above two levels of underground parking. The ground floor will be 3 retail units. The development will have a total combined floor area of approx. 5,175sq.m and 51 residential units. The 51 residential units will be divided into one-bedroom, one-bedroom & den and two-bedroom apartments.

This TIA- Screening and Scoping Report addresses the transportation requirements for the proposed 9 storey apartment building as per the City of Ottawa's TIA (Transportation Impact Assessment) Guidelines (2017) approved by Transportation Committee and City Council on June 14, 2017.



Figure 1. Key Map



Figure 2. Google Street View of 797 Richmond Rd.

2. STEP 1 - SCREENING

2.1. Summary of the Development

Table 1 below summarizes the proposed development information

Table 1. Summary of the Development

Municipal Address	797 Richmond Rd, Ottawa, ON K2A 0G7
Description of Location	The subject site is located at 797 Richmond Road approximately 540m east of Woodroffe Avenue, 80 m west of Cleary Avenue, on the north side of Richmond Road.
Land Use Classification	Mid-rise residential with 1st-floor commercial
Development Size (units)	51 units
Development Size (m2)	5,175sq.m including commercial 352 sq. m.
Number of Accesses and Locations	One Access located at South-East corner of the property and one right-in/right-out pick-up/drop off access
Phase of Development	Development will be constructed in one (1) phase.
Buildout Year	Construction starts early 2022, complete early 2023. Estimated date of occupancy; - May 2023.

2.1.1. Preliminary access scheme

797 Richmond Rd is located on the north side of Richmond Road. Figure 3 illustrates the streets nearby this location. The development will have access to Richmond Road from its main access located at South-East corner of the building as illustrated in Figure 4. Furthermore, the development will have a right-in/right-out pick-up/drop-off access in front of the building along the Richmond Road. There will be no drive-thru facility for this development.

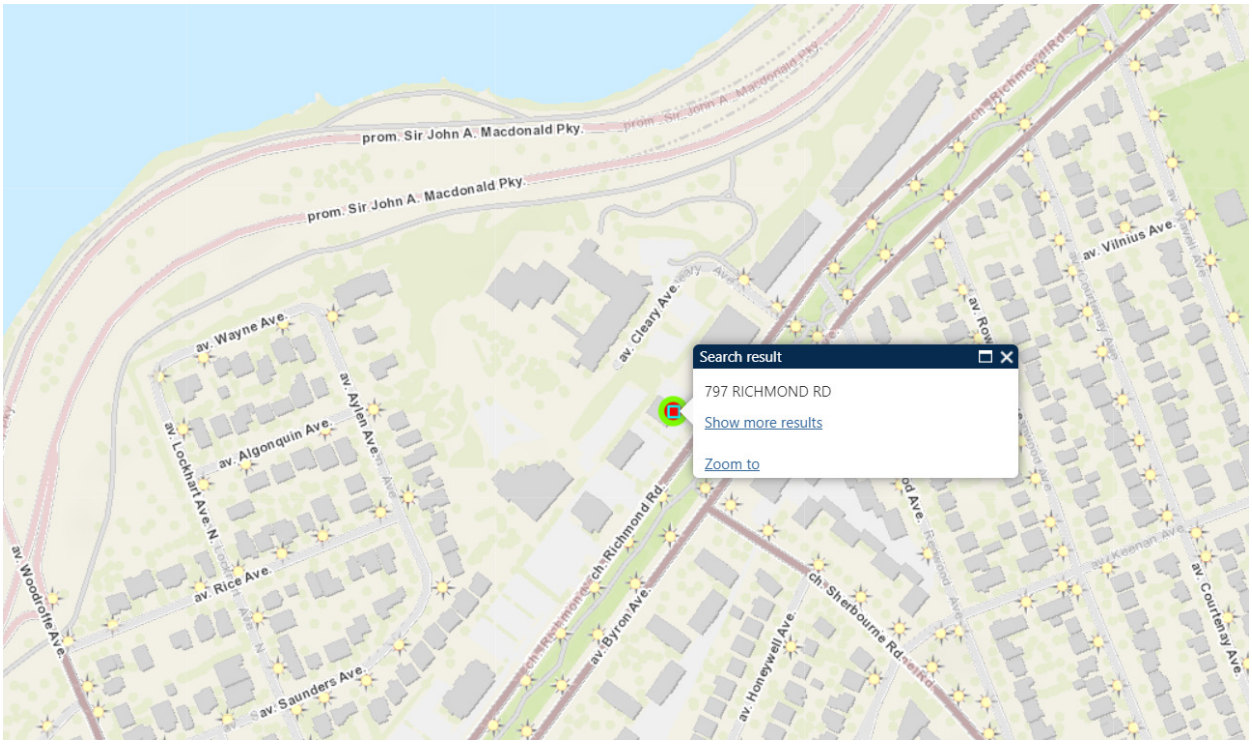


Figure 3. Extract form GeoOttawa Streets nearby 797 Richmond Rd

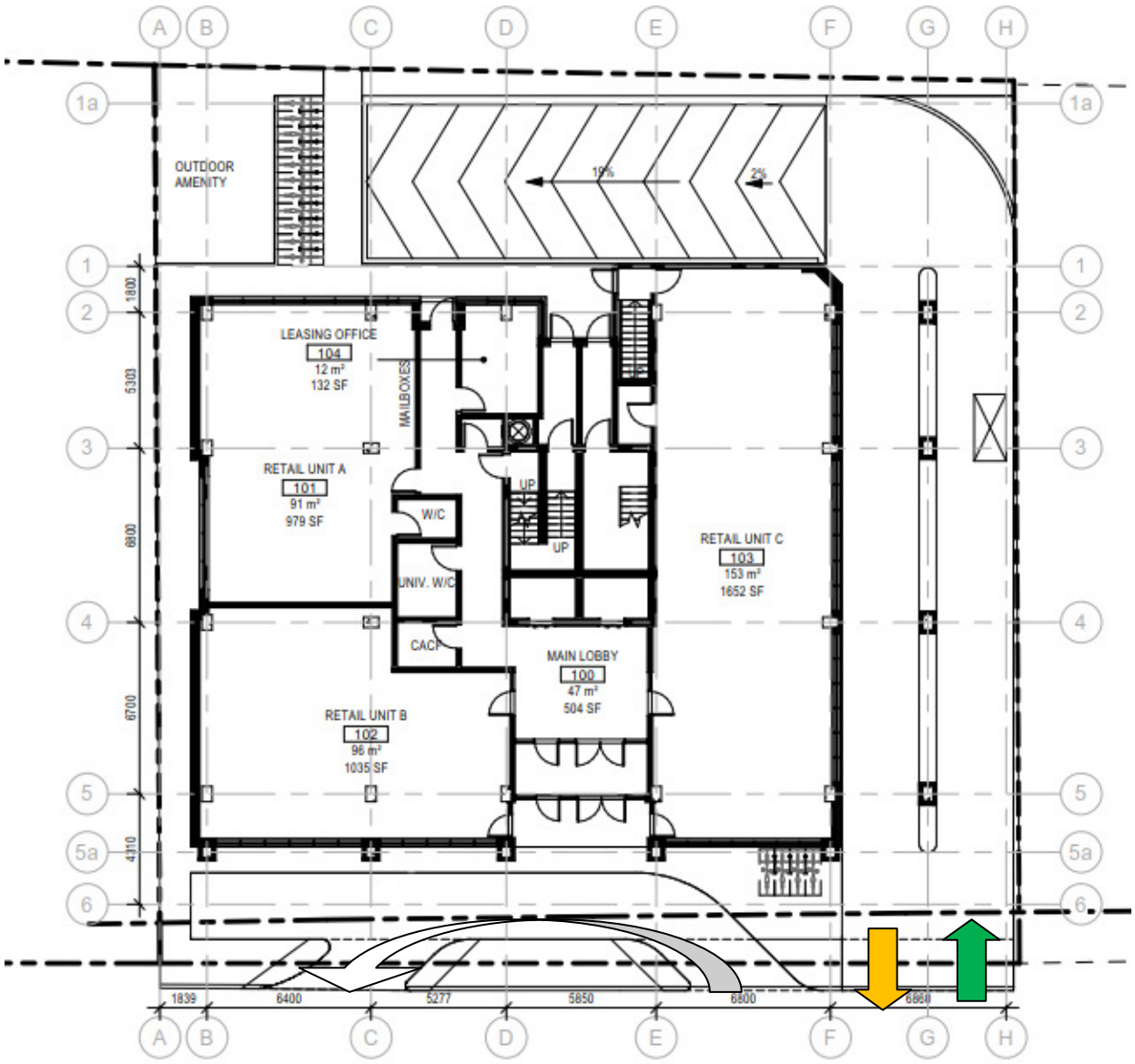


Figure 4. Level 1 Floor Pan and Access location

2.2. Trip Generation Triggers

The trip generation of proposed development is reviewed to determine if it is generating 60 person-trips or more during weekday peak hours or not. Table 2 summarizes the land use of development size for each land use and Table 3 is the trip generation triggers from City of Ottawa's TIA (Transportation Impact Assessment) Guidelines (2017).

Table 2. Summary of Development Size and Land Use

Land Use	Development Size
Apartments	51 Unites
Office	12 m^2
Retail	340m^2 (Retail A= 91 m^2, Retail B= 96 m^2, Retail C=153 m^2)

Table 3. Trip Generation Trigger from TIA Guidelines

Land Use Type	Minimum Development Size
Single-family homes	40 units
Townhomes or apartments	90 units
Office	3,500 m^2
Industrial	5,000 m^2
Fast-food restaurant or coffee shop	100 m^2
Destination retail	1,000 m^2
Gas station or convenience market	75 m^2

Comparing the development size summarized in Table 2 and Table 3, it is understood that the development size is below threshold to trigger a TIA. Specifically, the 51 apartment units are below the 90-unit trigger and the office and retail areas are similarly below their respective trigger levels.

2.3. Location Triggers

TIA Guideline (2017) requires the development's location to be reviewed to determine if:

- The development proposes a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit or Spine Bicycle Networks; or
- The development is in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone.

Design Priority Areas (DPA) are defined in Section 2.5.1, Designing Ottawa, of City of Ottawa Official Plan. The Traditional and Arterial Mainstreets as identified on Schedule B of this Plan are recognized as DPA. City of Ottawa Official Plan - Schedule B - Urban Policy Plan has identified Richmond Road as "Traditional Main Street" and therefore this developmen's location will be recognized as part of the DPA. Figure 5 illustrates an extract from City of Ottawa Official Plan - Schedule B - Urban Policy Plan where 797 Richmond Rd is located.

Furthermore, per Section 2.5.1 of City of Ottawa Official Plan, future 797 Richmond building as a midrise building will be subject to evaluation using the policies of Section 4.11. [Amendment #150, LPAT July 18, 2019]

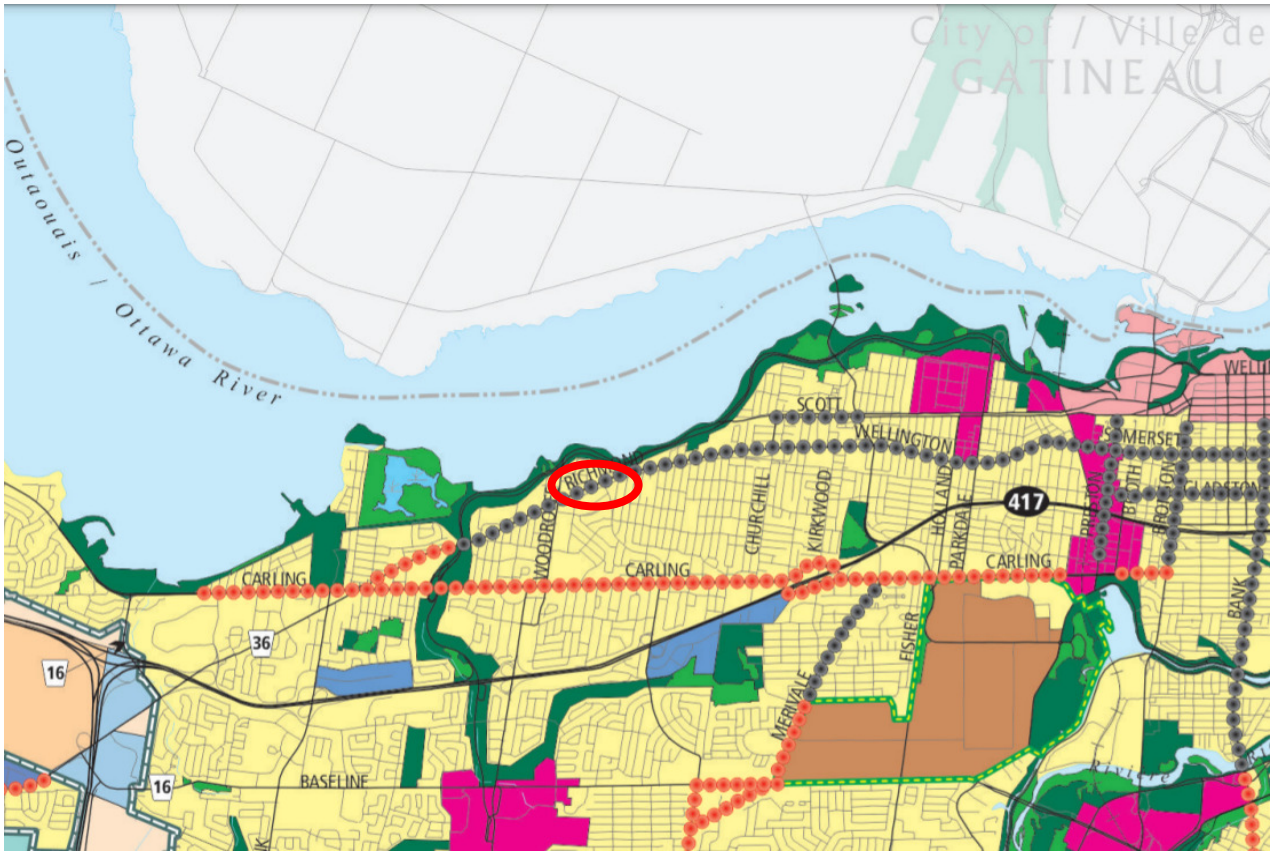


Figure 5. Extract from City of Ottawa Official Plan - Schedule B - Urban Policy Plan

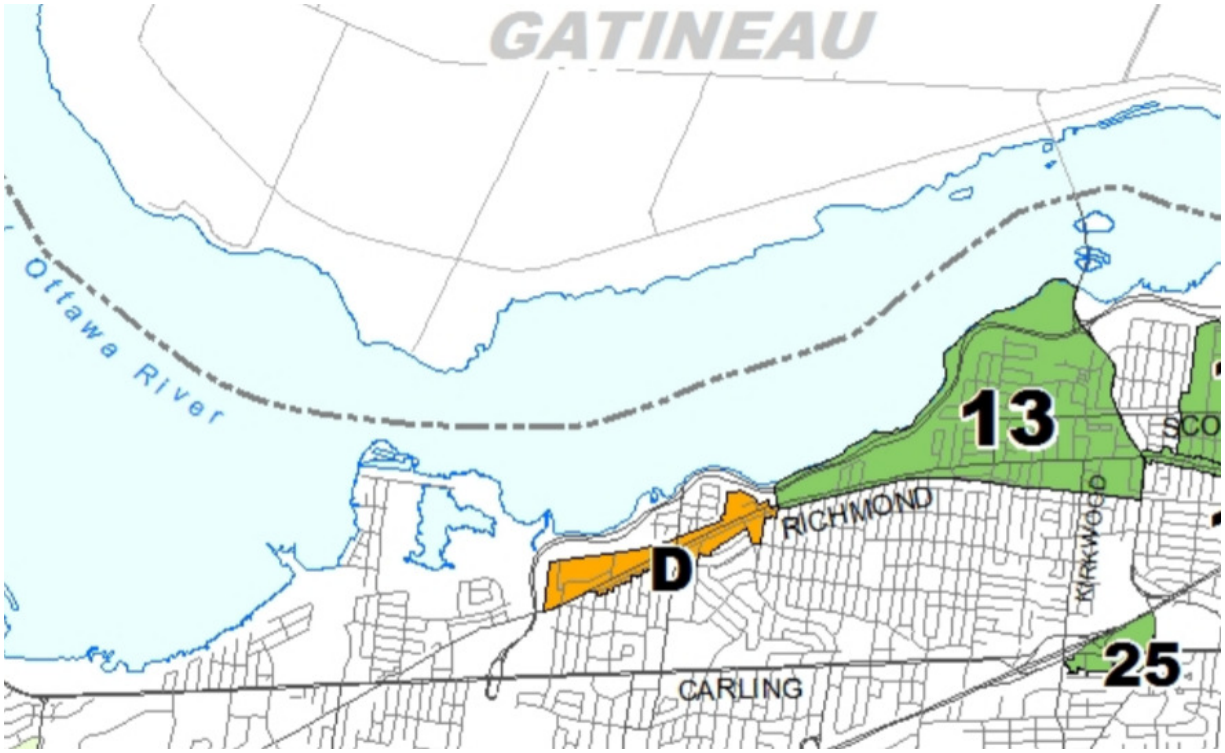


Figure 6. Extract from Annex 6 - Secondary Plans and Site-Specific Policies

Figure 6 illustrates that 797 Richmond is part of area D, Site-Specific Cleary and New Orchard. Part of the guiding principles listed for develpoments within this area are as follows:

- The northern frontage of Richmond Road will be characterized by a mid-rise (either mid-rise buildings or podiums); taller building elements, where permitted, will be set back, and the tallest buildings will be near the two rapid transit stations;
- The scale and character of existing neighbourhoods will be preserved through appropriate height transitions of new development, with an emphasis on ensuring that new development supports Light Rail Transit over individual automobile transportation.

The above principles were implemented during the design of this development. The develpopment has 51 appartment units in 9 stories. There are 2 under ground parking storey with a total of 37 auto parking spaces (21 parking stalls in P2 level and 16 parking stalls in P1 level), outdoor bike raks and an indoor secured bike storage room.

2.4. Safety Triggers

By review the proposed development and its location within Richmond Road it is determined that the development's location triggered because it is located at 80m west of the intersection of Cleary Avenue and Richmond Road and within 150 m and at the eastbound left turn lane taper area of the intersection. Below are the triggers for safety concerns:

- Posted speed limits on a boundary street are 80 km/hr or greater;
- Horizontal/vertical curvature on a boundary street limits sight lines at a proposed driveway;
- A proposed driveway is within the area of influence of an adjacent traffic signal or roundabout (i.e.
- within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban
- conditions) or within auxiliary lanes of an intersection;
- A proposed driveway makes use of an existing median break that serves an existing site;
- There is a documented history of traffic operations or safety concerns on the boundary streets
- within 500 m of the development; or
- The development includes a drive-thru facility.

2.5. Summary of the Screening Review:

The proposed development trip generation levels are below the levels identified in Table 2 for TIA triggers. However as the location of the development activates the Safety trigger, as demonstrated in Section 2.4 above, and as this portion of the Richmond Road is categorized as Traditional Main Street per City of Ottawa Official Plan - Schedule B - Urban Policy Plan this development, therefore, falls within a Design Priority Areas (DPA) and TIA needs to be continued to Step 2- Scoping, which is detailed below in STEP 2.

3. STEP 2 - SCOPING

3.1. Existing Conditions

The subject site is currently used for retail use (i.e. denture clinic), with a total site area of approximately 0.116 ha. Figure 2, illustrates the Google street view of the site. The footprint of the building is approximately 255 m² (2745 ft²) and the Calculated Parcel Area is 1164.71 m² (12536.82 ft²) (0.12 ha). The approximate parcel geometry is shown in Figure 7.

There is only one property east of the project site and between the site and Cleary Avenue. This 15-story, 94 units building (municipal address: 75 Cleary Avenue) was built in 2010 by Charlesfort Developments. (Building Name: The Continental).

Below is the list of the properties located on the west side of the 797 Richmond Road parcel:

- 801 Richmond Rd: Dave Rennie's Autocare.
- 809 Richmond Rd (70m west of the 797 Richmond Road): Kristy's Restaurant.
- 851 Richmond Rd (220m west of the 797 Richmond Road): 10-story apartment building (Lord Richmond).



Figure 7. Parcel Geometry

Approximate parcel dimensions are as listed below (Per GeoOttawa):

- **A0-A1**: 34.44 m (112.99 ft)
- **A1-A2**: 33.52 m (109.99 ft)
- **A2-A3**: 35.05 m (115.00 ft)
- **A3-A0**: 33.54 m (110.04 ft)
- **Total Perimeter**: 136.56 m (448.02 ft)
- **Total Area**: 1164.71 m² (12536.85 ft²) (0.12 ha)

3.1.1. Study Area Network

3.1.1.1. Roadway Network

Currently 797 Richmond Road is located north of the Richmond Road. Richmond Road is a 2 lane, 2-way roadway (each lane of 3m wide in each direction). The City's Official Plan identifies Richmond Road as an arterial. It is located approximately 540m east of Woodroffe Avenue (a signalized intersection) and 80m west of the intersection of Cleary Avenue (signalized intersection, See Key Map in Figure 1). Richmond Road between the above two intersections is under construction for the LRT project and concrete jersey barriers are placed along the south side of the Richmond Road as part of the traffic control plan for the LRT project. Speed limits for Richmond Road between Cleary Ave and Woodroffe Ave is 50 km/h however reduced-speed-limit signs in the construction zones are posted for the safety of workers and drivers in the area. The intersection of Cleary Avenue and Richmond Road is a signalized "T" intersection. An eastbound left turn is provided on Richmond Road. A single shared lane is provided on the southbound and westbound approaches.

3.1.1.2. Transit Services/Routes

The 797 Richmond Road is adjacent to two (2) OC Transpo bus stops:

- #7513 (RICHMOND / CLEARY), located 20m east of the project site, west of the intersection of Cleary Avenue and Richmond Road
- #7512 (RICHMOND / REDWOOD), located 110m east of the project site, west of the intersection of Redwood Avenue and Richmond Road

At the time of this study, both of the above stops serve the users of route #11 & #153, the route information and locations are as follows:

- The 153 bus, departing from Tunney's Pasture D and ending in Lincoln Fields 4a.
- The 11 bus, from Elgin / Queen and ending in Bayshore.

3.1.1.3. Pedestrian & Bicycle Facilities

The City's Official Plan identifies a cross-town bikeway on Richmond Road. Originally the multi-use

pathway (MUP) located between Richmond Road and Byron Avenue was being used by pedestrian and cyclists. However due to the construction of the Light Rail Transit (LRT) Confederation Line which will run parallel to Richmond Road and Byron Avenue, directly in between these roadways and construction of the Sherbourne Station this MUP has been removed and the entire area is barricaded by concrete jersey barriers that are placed along the south side of Richmond Road as part of the traffic control plan for LRT project.

Currently, within the study area, concrete/asphalt sidewalks are located along north side of Richmond Road and along the south side of Byron Avenue. No designated cycling facilities are currently available along Richmond Road or Byron Avenue. On site, there are currently no cycle racks.

3.2. Planned Condition

The planned network conditions do not substantively change from existing. As shown in Appendix B, the roadway configuration for Richmond Road does not significantly change with the implementation of the LRT. However, a 3.0 m concrete sidewalk will be on the north side and a 2.0 m asphalt cycle track will be on both the north and south sides of Richmond Road. The proposed development is a nine-storey building with commercial units at ground floor level, and residential units comprising floors 2 to 9. On top there will be a mechanical room and a rooftop outdoor amenity area. The Light Rail Transit (LRT) Confederation Line under development will run parallel to Richmond Road and Byron Avenue, directly in between these roadways. Sherbourne Station will be located across Richmond Road from the study building. The section of the LRT Confederation Line running along the study site will travel underground. The Richmond Road elevation of the proposed building (south elevation) will be facing Sherbourne Station (The preliminary geometry design of the area surrounding the Sherbourne Station is shown in Appendix A). In summary:

- Underground Level P2 – Auto Parking (21 spaces) and Bicycle Parking (13m2 for 6 spaces), Storage Rooms.
- Underground Level P1 - Auto Parking (16 spaces, one accessible) and Bicycle Parking (17m2 for 9 spaces), garbage room, hydro vault, main electrical room, water entry space.
- Ground Level 1 (Main Entrance): Bicycle Parking (11 spaces in the back and 4 spaces in front), Retail units, main lobby.

- Level 2 to 9, residential units
- Roof level, Mechanical room and amenity.

City of Ottawa staff will be consulted in order to receive assistants with identifying the type and magnitude of probable future developments. Also, as the future traffic condition of the area and the network will be significantly affected by construction of the LRT and the Sherbourne Station, the City of Ottawa staff will be consulted as if any further studies will be required for this project. Appendix B will present the Development Generated Travel Demand.

3.3. Exemption Review

The proposed development does not trigger the trip generation. The proposed development warrants scoping review as it is located within a Traditional Mainstreet Design Priority Area (DPA) and at the beginning of a left turn lane taper area. A Traditional Main Street DPA requires design consideration of the Urban Design Guidelines for Development along Traditional Mainstreets. Relative to the Traffic Impact Assessment, two sections of the design guidelines are most relevant; that being section 3 - Pedestrians and Cyclists and Section 4 – Vehicles and Parking. The proposed development complies will all relevant aspects of the design guidelines specifically:

Guideline #18 – provision of external bicycle parking near entrances.

Guideline #26 – vehicular driveways can be provided for landlocked properties, and

Guideline #27 – provide only minimal number of car parking spaces.

Given the minimal site traffic volumes estimated, an extension of the eastbound left turn lane on Richmond Road at Cleary Avenue to the site entrance is not likely required. Based on this review it is believed the proposed development potentially could be exempted from further forecasting and analysis. It is proposed this exemption be reviewed by City staff for concurrence/recommendations and subject to confirmation at subsequent review meetings. The list of the complete exemptions will be finalized after City of Ottawa review and consultation meetings with City of Ottawa Staff. To have better understanding of the generated trips appendix B was completed.

Sincerely,

Prepared by:

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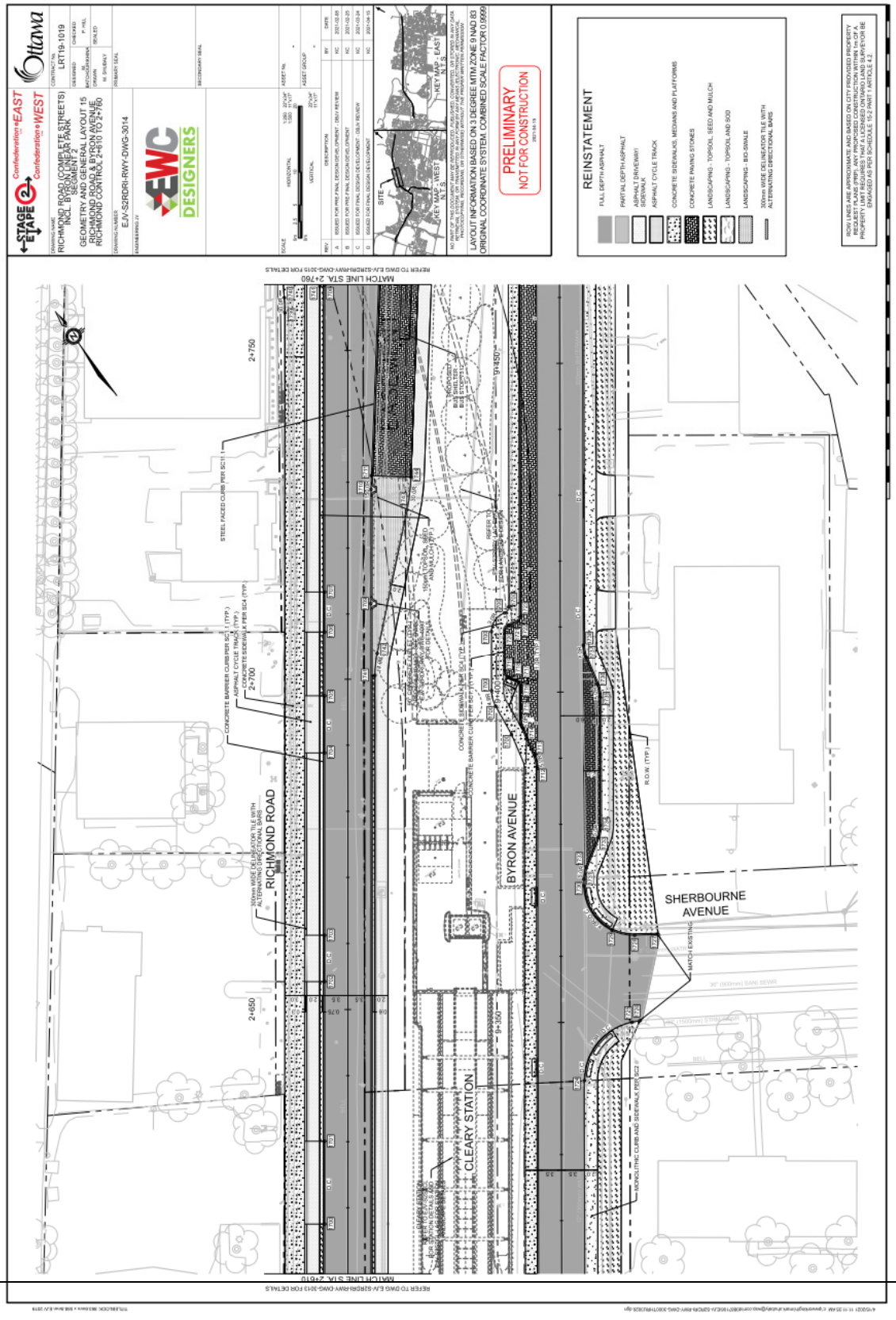
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APPENDIX A – PD of Richmond Rd (Complete Streets)- Sherbourne Station



APPENDIX B – Development Generated Travel Demand

ITE Trip Generation Manual 10th edition for residential rates is used for selecting based trip generation rates. The "Average Rates" were utilized in this report. For ITE Land Use Code 231, Mid-rise residential with 1st-floor commercial (3-10 floors) for AM Peak Hours the rate is 0.30 and for PM Peak Hours the proposed rate is (0.36), see **Error! Reference source not found.**.

	Land Use		Peak Hours Rate	Vehicle Trip Generated
1	51 Residential Units (ITE LUC– 231)	AM	0.30	15
2		PM	0.36	18

Directional Split

ITE Trip Generation Manual 10th edition for directional split rates is used for this report. For ITE Land Use Code 231, Mid-rise residential with 1st-floor commercial (3-10 floors) for AM Peak Hours the rate is 28% for inbound and 72% for outbound traffics. For PM Peak Hours the rate is 70% for inbound and 30% for outbound traffics see **Error! Reference source not found.**.

	Land Use		Peak Hours Rate	Vehicle Trip Generated	Directional Split Rate		Trip Generation	
					Inbound	Outbound	Inbound	Outbound
1	51 Residential Units (ITE LUC– 231)	AM	0.30	15	28%	72%	4	11
2		PM	0.36	18	70%	30%	13	5