

June 24, 2024
Our File No.: 32406-000

VIA: E-MAIL

Brent Harden
President
Harden Realties
110 Place D'Orleans Drive, Mailbox 69
Ottawa, ON K1C 2L9

Dear B. Harden:

Re: Harden Realties – 1280 Trim Road Transportation Services – TIA Addendum #1

J.L. Richards & Associates Limited (JLR) is pleased to present the findings of our Transportation Impact Assessment (TIA) Addendum for the proposed development at 1280 Trim Road in Ottawa, ON.

INTRODUCTION

By way of background, the original TIA dated January 2024 had been prepared for a development featuring three buildings: an office/personal services building (up to five units for future tenants, totaling approximately 550 m²), an automotive service building (one unit totaling approximately 680 m²), and a building consisting of two restaurant spaces (totaling approximately 325 m²), one of which will include a drive-through facility planned to be an A&W restaurant. The previous site plan made provisions for 75 parking spaces in total.

Since the time of submission, the Site Plan has been updated and is included in **Attachment 1**. While the proposed land use remains the same, the latest Site Plan indicates some changes in the overall layout of each building within the site, including the ground floor area and the provided parking spaces. Building 1 is a restaurant which consists of a drive-through facility, planned to be an A & W restaurant of approximately 194 m². Building 2 consists of an offices and personal services space (up to four units for future tenants) and one unit space for a restaurant, totalling approximately 640 m². Building 3 is an automotive service building of approximately 650 m². The latest Site Plan now includes 68 parking spaces in total.

The purpose of this TIA Addendum is to focus on the update of trip generation based on changes in the site plan. The remaining aspects of the original January 2024 TIA that were not impacted by the updated site plan remain applicable and are not repeated in this TIA Addendum.

SCREENING

Due to Site Plan changes, JLR has updated the City of Ottawa's Screening Form in accordance with the City of Ottawa's 2023 Transportation Impact Assessment (TIA) Guidelines. It was

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determined that the proposed development still triggered the trip generation, location and the safety criteria outlined in the Screening Form. The updated Screening Form is provided in **Attachment 2**.

TRIP GENERATION

The Site Plan updates are expected to affect the previous trip generation estimates using the same trip generation rates as in the original TIA (excluding the second restaurant space). The trip generation rates used for each land used are summarized in **Table 1** below.

Table 1: ITE Peak Hour Trip Generation Rates

Land Use	ITE Land Use Code	AM Peak Hour	PM Peak Hour
Fast Food Restaurant with Drive-Through Window	ITE 934 General Urban/Suburban Vehicle Trips	$T_A = 40.19(X)$; $T_F = n/a$	$T_A = 32.67(X)$; $T_F = n/a$
Small Office Building	ITE 712 General Urban/Suburban Vehicle Trips	$T_A = 1.67(X)$; $T_F = n/a$	$T_A = 2.16(X)$; $T_F = n/a$
Automobile Parts and Service Centre	ITE 943 General Urban/Suburban Vehicle Trips	$T_A = 1.91(X)$; $T_F = n/a$	$T_A = 2.06(X)$; $T_F = 2.41(x) + 11.83$
Fast Food Restaurant without Drive-Through Window	ITE 933 General Urban/Suburban Vehicle Trips	$T_A = 43.18(X)$; $T_F = n/a$	$T_A = 33.21(X)$; $T_F = 25.22(x) + 18.31$
Notes: T_A = Average Vehicle Trips T_F = Vehicle Trips by Fitted Curve X = 1,000 ft ² of Gross Floor Area (GFA)			

Based on the foregoing, the projected weekday morning and afternoon peak hour person trip generation for the proposed development is summarized in **Table 2**.

Table 2: Modified Peak Period Person Trips

Land Use	Area	AM Peak Hour (Person Trips/h)			PM Peak Hour (Person Trips/h)		
		In	Out	Total	In	Out	Total
Fast Food Restaurant with Drive-Through Window	2,071 ft ²	60	58	118	45	43	88
Small Office Building	4,600 ft ²	8	2	10	4	9	13
Automobile Parts and Service Centre	6,955 ft ²	12	5	17	14	20	37

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Fast Food Restaurant without Drive-Through Window	1,250 ft ²	41	30	71	39	26	65
Total Person Trips		121	95	216	102	98	203
10% Multi-Purpose Trip Reduction		-12	-9	-21	-10	-10	-23
Total 'New' Person Trips		109	86	195	92	88	180

As summarized in **Table 2**, the proposed development is projected to generate an approximate two-way total of 195 and 180 person trips/h during weekday morning and afternoon peak hours, respectively.

Using the same Travel Mode Shares as the original TIA, the projected site-generated person trips were subdivided into separate travel modes and summarized in the following **Table 3**, **Table 4**, **Table 5**, **Table 6**, and **Table 7**.

Table 3: Projected Site Generated Trips – Fast Food Restaurant with Drive-Through

Travel Mode	Mode Share	AM Peak Hour (Person Trips/h)			PM Peak Hour (Person Trips/h)		
		In	Out	Total	In	Out	Total
Auto Driver	70%	38	37	75	29	28	57
Auto Passenger	5%	3	3	6	2	2	4
Transit	15%	8	7	15	6	6	12
Non-motorized	10%	5	5	10	4	3	7
Total Person Trips	100%	54	52	106	41	39	80
<i>Less Pass-by 50%</i>		-19	-19	-38	-14	-14	-28
Total 'New' Vehicle Trips		19	18	37	15	14	29

Table 4: Projected Site Generated Trips – Small Office Building

Travel Mode	Mode Share	AM Peak Hour (Person Trips/h)			PM Peak Hour (Person Trips/h)		
		In	Out	Total	In	Out	Total
Auto Driver	70%	5	2	7	3	6	9
Auto Passenger	5%	1	0	1	1	1	2
Transit	15%	1	0	1	0	1	1
Non-motorized	10%	0	0	0	0	0	0

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Total Person Trips	100%	7	2	9	4	8	12
Total 'New' Vehicle Trips		5	2	7	3	6	9

Table 5: Projected Site Generated Trips – Automobile Parts and Service Centre

Travel Mode	Mode Share	AM Peak Hour (Person Trips/h)			PM Peak Hour (Person Trips/h)		
		In	Out	Total	In	Out	Total
Auto Driver	70%	8	4	12	10	13	23
Auto Passenger	5%	1	1	2	1	1	2
Transit	15%	1	0	1	1	3	4
Non-motorized	10%	1	0	1	1	1	2
Total Person Trips	100%	11	5	16	13	18	31
Total 'New' Vehicle Trips		8	4	12	10	13	23

Table 6: Projected Site Generated Trips – Fast Food Restaurant without Drive-Thru

Travel Mode	Mode Share	AM Peak Hour (Person Trips/h)			PM Peak Hour (Person Trips/h)		
		In	Out	Total	In	Out	Total
Auto Driver	70%	26	19	45	25	17	42
Auto Passenger	5%	2	2	4	2	1	3
Transit	15%	5	3	8	5	3	8
Non-motorized	10%	3	2	5	3	2	5
Total Person Trips	100%	36	26	62	35	23	58
	<i>Less Pass-by 45%</i>	-10	-10	-20	-9	-9	-18
Total 'New' Vehicle Trips		16	9	25	16	8	24

Table 7: Total Projected Site Generated Trips

Travel Mode	Mode Share	AM Peak Hour (Person Trips/h)			PM Peak Hour (Person Trips/h)		
		In	Out	Total	In	Out	Total
Auto Driver	70%	77	61	138	65	62	127
Auto Passenger	5%	6	5	11	5	5	10
Transit	15%	16	12	28	13	13	26

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Non-motorized	10%	10	8	18	9	8	17
Total Person Trips	100%	109	86	195	92	88	180
<i>Less Pass-by 45% / 50%</i>		-29	-29	-58	-23	-23	-46
Total 'New' Vehicle Trips		48	32	80	42	39	81

As shown in **Table 7**, the total projected 'new' vehicle trips is projected to be approximately a two-way vehicle volume of 80 veh/h and 81 veh/h during weekday morning and afternoon peak hours, respectively.

With regard to active modes, the proposed development is projected to generate two-way person trips of 18 trips/h and 17 trips/h during weekday morning and afternoon peak hours, respectively.

With regard to transit trips during weekday morning and afternoon peak hours, the proposed development is projected to generate approximately two-way person trips of 28 trips/h and 26 trips/h, respectively.

Table 8 below compares the total projected 'new' vehicle trips from the January 2024 TIA to this current Addendum report.

Table 8: Trip Generation Comparison

Report	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Original TIA – January 2024	52	36	88	46	43	89
TIA Addendum #1	48	32	80	42	39	81
Change in Trip Generation	-4	-4	-8	-4	-4	-8

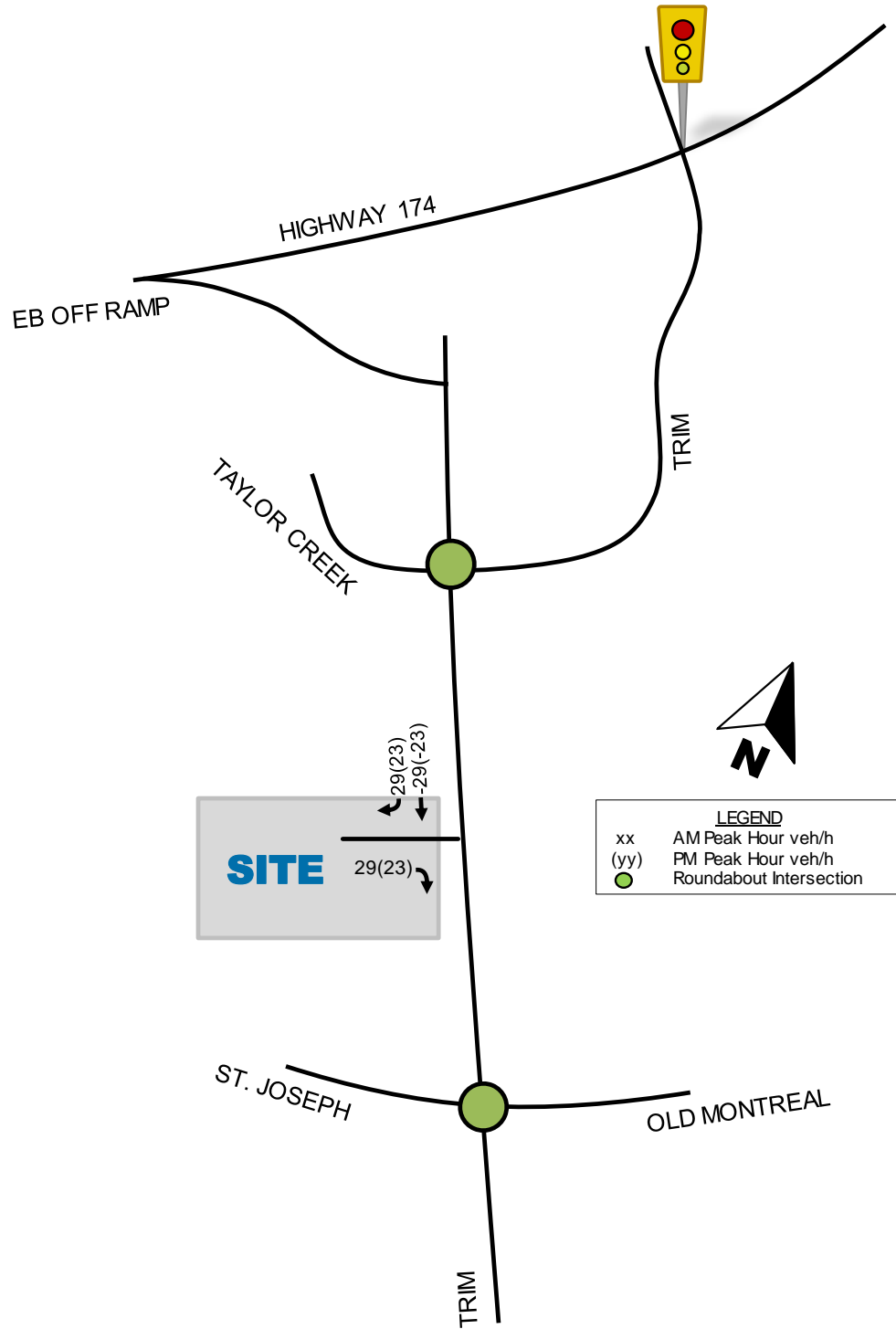
As shown in **Table 8**, the proposed land use changes indicate a minor decrease in site trips compared to the site trips analyzed in the original TIA. Therefore, the projected operational impact on the transportation network remains the same as the January 2024 TIA. All results and recommendations in the original TIA remain applicable and represent a conservative analysis for the revised site plan.

TRIP DISTRIBUTION

Using the assumed trip distribution in the original TIA, the updated 'new' and 'pass-by' site-generated traffic assigned to the study area network are depicted in the following **Figure 1** and **Figure 2**, respectively.

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Figure 2: 'Pass-By' Projected Site-Generated Traffic



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PARKING

The parking requirements and provisions have been updated per the latest Site Plan. The following **Table 9** and **Table 10** summarize the appropriate vehicle and bicycle parking rates, respectively, and minimum parking requirements for the subject development.

Table 9: Vehicular Parking Supply

Land Use	Zoning Requirement	GFA/service bay	Minimum Parking Requirement	Vehicle Provided Parking
Personal Services	3.4 per 100 m ² of GFA	516 m ²	18	-
Automobile Service Centre	2 per service bay	7 service bays	14	-
Restaurant	10 per 100 m ² of GFA	314.3 m ²	32	-
Total Required			64	68

As summarized in **Table 9**, the minimum vehicle parking space requirement for the subject development is 64 vehicle parking spaces. This minimum by-law is exceeded as there will be 68 vehicle parking spaces provided.

Table 10: Bicycle Parking Supply

Land Use	Zoning Requirement	GFA	Minimum Parking Requirement	Bicycle Parking Provided
Personal Services	1 per 500 m ² of GFA	516 m ²	2	-
Automobile Service Centre	1 per 500 m ² of GFA	646.1 m ²	2	-
Restaurant	1 per 250 m ² of GFA	314.3 m ²	2	-
Total Required			6	6

As summarized in **Table 10**, the subject development is required to have a minimum of 6 bicycle parking spaces. The proponent will be providing 6 bicycle parking spaces on-site.

SITE ACCESS THROAT LENGTH

Following previous TIA submissions and the pre-consultation meeting with the City of Ottawa held on November 23rd, 2023, the City staff noted that a 25 m throat length as measured from the end of the curb return radii is deemed acceptable.

As depicted in the latest Site Plan (**Attachment 1**), the proposed driveway clear throat length, measured from the curb return radii, is approximately 25 m, thereby meeting this requirement.

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CONCLUSION

The Site Plan of the proposed development at 1280 Trim Road has been updated since the original TIA was prepared and submitted in January 2024. At this stage, and with respect to the City's TIA Guidelines, the following findings and conclusions are offered:

- The proposed development is projected to generate 'new' two-way vehicles volumes of 80 veh/h and 81 veh/h during weekday morning and afternoon peak hours, respectively.
- With regard to active modes, the proposed development is projected to generate approximate two-way person trips of 18 trips/h and 17 trips/h during weekday morning and afternoon peak hours, respectively.
- With regard to transit trips during weekday morning and afternoon peak hours, the proposed development is projected to generate approximately two-way person trips of 28 trips/h and 26 trips/h, respectively.
- With regard to the site driveway throat length, an approximate 25 m clear driveway throat length, measured from the curb return radii is provided.
- The proposed parking supply for the subject development is proposed to meet minimum By-Law requirements.
- This addendum has verified that changes to the Site Plan will have no meaningful impact on the operational analysis, and all intersections will continue to operate at the projected level of service as outlined in the original January 2024 TIA. Therefore, conclusions related to the intersection capacity analysis remain applicable.
- The other components of the original TIA that are not repeated in this addendum remain applicable.

Based on the enclosed study findings, it is expected that the proposed development can continue to be accommodated by the study area's transportation network.

Best Regards,

J.L. RICHARDS & ASSOCIATES LIMITED

Prepared by:



Bomo Dambo, EIT
Civil Engineer-in-Training, Transportation

Reviewed by:

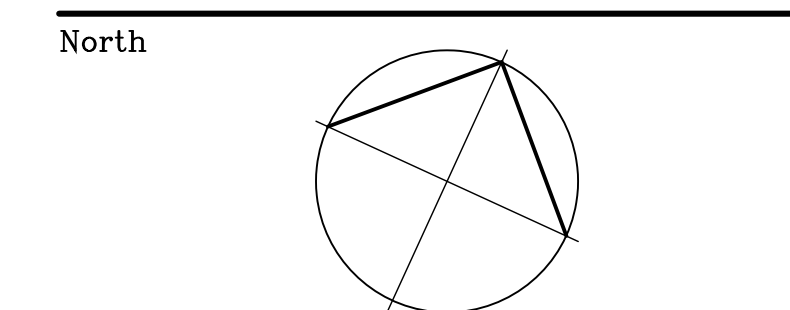
Lee Jablonski, P.Eng. LEED AP
Senior Civil Engineer, Transportation

Attachment 1: Proposed Site Plan
Attachment 2: Screening Form



03 LOCATION PLAN
SCALE: NTS

TRIM WORKS DEVELOPMENT LTD.
110 Place d'Orleans Drive
Orleans, ON K1C 2L9



Revisions

No.	By	Description	Date
06	JAS	ISSUED FOR PRE-CONSULT	2023-03-02
07	JAS	ISSUED FOR REVIEW	2023-03-30
08	JAS	REVISED FOR REVIEW	2023-08-02
10	JAS	ISSUED FOR COORD.	2023-08-21
12	JAS	REVISED FOR COORD.	2023-09-14
13	JAS	ISSUED FOR SPA	2023-10-26
14	JAS	REVISED FOR COORD.	2024-01-18
15	JAS	REVISED FOR SPA	2024-01-29
16	JAS	REVISED FOR REVIEW	2024-05-17
17	JAS	REVISED FOR SPA	2024-06-06

Project

PLAZA TRIM WORKS DEVELOPMENT

1280 TRIM ROAD, ORLEANS, ON

Drawing

SITE PLAN

Scale AS SHOWN Stamp

Drawn AK

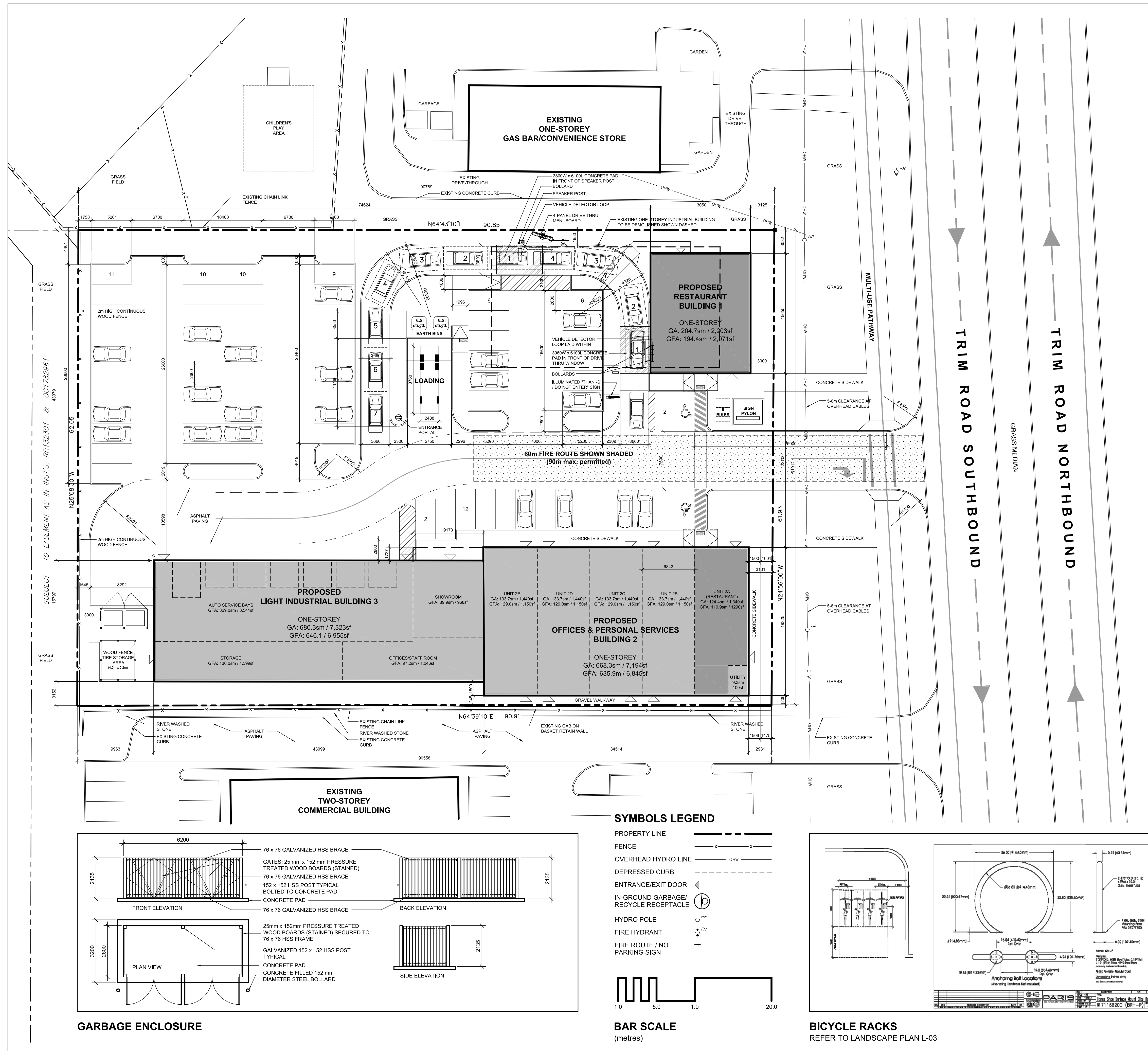
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Project No. Drawing No.

22-168

Date **SP-A01**

07 JUNE 2022



SITE INFORMATION

SITE AREA: 5,620sm

BUILDING DATA:

AREA CALCULATIONS:

	GA	GFA
Building 1:	204.7sm	194.4sm
Building 2:	668.3sm	635.9sm
Building 3:	680.3sm	646.1sm
TOTAL	1,553.3sm	1,476.4sm
	16,720sf	15,892sf

ZONING

DESIGNATION:

IL H(21) Light Industrial Zone (Section 203 and 204)

PERMITTED USES:

- Day care
- Drive-through facility
- Medical facility
- Office
- Personal brewing facility
- Place of assembly
- Post office
- Production studio
- Service and repair shop
- Training centre
- Warehouse

PERMITTED USES LESS THAN 300sm PER USE TO A MAXIMUM CUMULATIVE OF 2,999sm:

- Automotive service station
- Bar
- Convenience store
- Personal service business
- Recreational and athletic facility (no area limitation)
- Restaurant

MAXIMUM FSI (Table 203):

2 times coverage
Permitted: 11,754sm
Proposed: 1,553.3sm (.28 times coverage)

SETBACKS (Table 203):

	Required	Proposed
Front & corner side yard:	7.5m	3.0m (north)
Interior side yard:	7.5m	6.0m (south)
Rear yard:	15.0m	9.5m (west)

MAXIMUM BUILDING HEIGHT (Table 203):

Permitted: 18m maximum
Proposed: 7m

MAXIMUM LOT COVERAGE (Table 203):

Permitted: 65% = 3,653sm
Proposed: 28% = 1,553sm

PARKING (Table 101):

Restaurant: 10.0 cars per 100 sm of GFA = 32
Pers. Serv.: 3.4 cars per 100sm of GFA = 18
Auto Serv.: 2.0 per service bay = 14

Required: 64 cars
Provided: 68 cars

PROVISIONS FOR DRIVE-THROUGH (Table 112):

7 before/at order board and a minimum total of 11

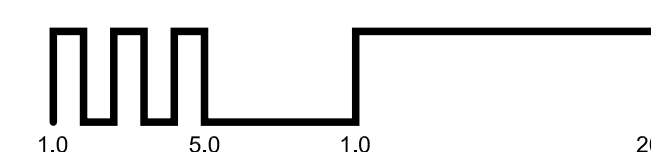
BICYCLE PARKING (Section 111):

Required: 6
Provided: 6

02 SITE PLAN
SCALE: 1:250

SYMBOLS LEGEND

- PROPERTY LINE
- FENCE
- OVERHEAD HYDRO LINE
- DEPRESSED CURB
- ENTRANCE/EXIT DOOR
- IN-GROUND GARBAGE/RECYCLE RECEPTACLE
- HYDRO POLE
- FIRE HYDRANT
- FIRE ROUTE / NO PARKING SIGN

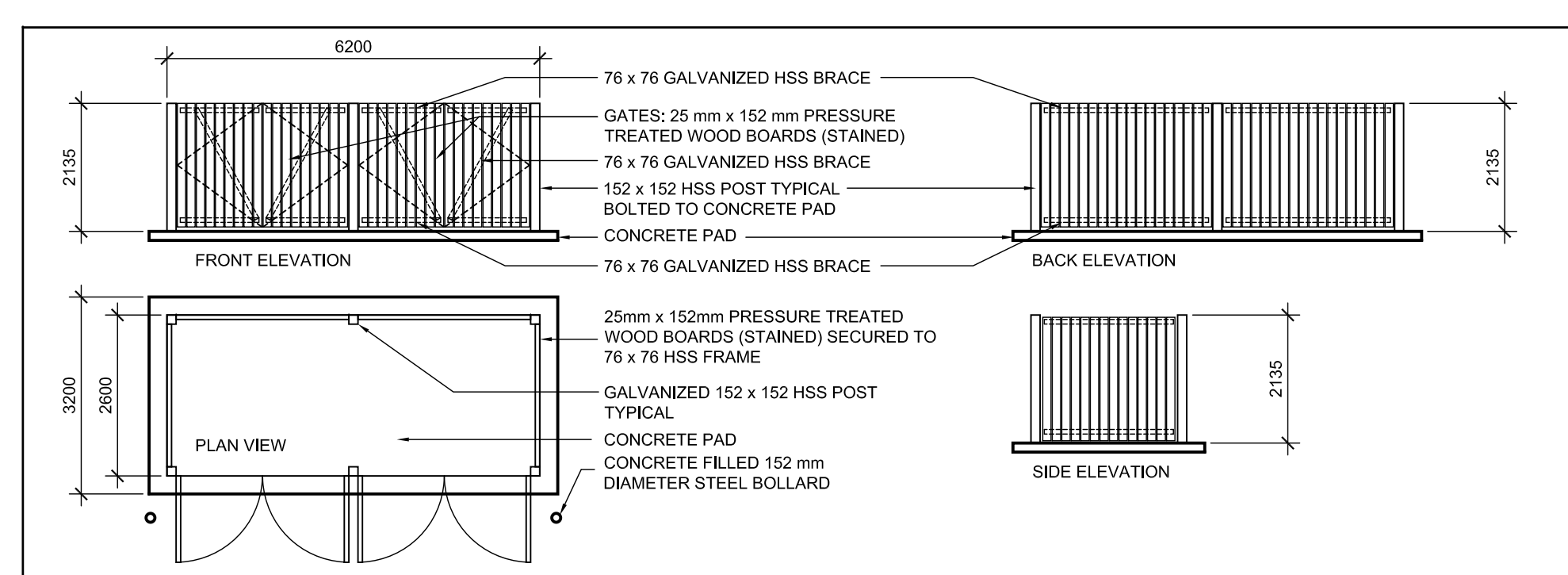


BAR SCALE
(metres)

BICYCLE RACKS

REFER TO LANDSCAPE PLAN L-03

GARBAGE ENCLOSURE



City of Ottawa 2017 TIA Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	1280 Trim Road
Description of Location	Trim Road, North of Montreal Road
Land Use Classification	Industrial (IL Zone)
Development Size (units)	3 buildings total, 7 units
Development Size (m ²)	Total GFA 1,476.4 m ²
Number of Accesses and Locations	1 access to Trim Road
Phase of Development	Single phase
Buildout Year	2026

If available, please attach a sketch of the development or site plan to this form.

2. Trip Generation Trigger

Considering the Development's Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Land Use Type	Minimum Development Size
Single-family homes	60 units
Multi-Use Family (Low-Rise)	90 units
Multi-Use Family (High-Rise)	150 units
Office	1,400 m ²
Industrial	7,000 m ²
Fast-food restaurant or coffee shop	110 m ² ✓
Destination retail	1,800 m ²
Gas station or convenience market	90 m ²

** If the development has a land use type other than what is presented in the table above, estimates of person-trip generation may be made based on average trip generation characteristics represented in the current edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual.*

If the proposed development size is greater than the sizes identified above, the Trip Generation Trigger is satisfied.

3. Location Triggers

	Yes	No
Does the development propose a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit or Cross-Town Bikeways?		✓
Is the development in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone?*	✓	
Is the development in a Protected Major Transit Station Areas (PMTSAs) and identified in Schedule C1-Protected Major Transit Station Areas (PMTSA)	✓	

*DPA and TOD are identified in the City of Ottawa Official Plan (DPA in Section 2.5.1 and Schedules A and B; TOD in Annex 6). See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA).

If any of the above questions were answered with 'Yes,' the Location Trigger is satisfied.

4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street are 80 km/hr or greater?		✓
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		✓
Is the proposed driveway 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)?	✓	
Is the proposed driveway within auxiliary lanes of an intersection?		✓
Does the proposed driveway make use of an existing median break that serves an existing site?		✓
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?	✓	
Does the development include a drive-thru facility?	✓	

If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.

5. Summary

	Yes	No
Does the development satisfy the Trip Generation Trigger?	✓	
Does the development satisfy the Location Trigger?	✓	
Does the development satisfy the Safety Trigger?	✓	

If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).