

19 June 2024
Project: 230558

Gordon Driedger
2824955 Ontario Inc.
5 Douglas Street
Guelph ON N1H 2S8

Dear Mr. Driedger:

**RE: 26-40 CARDEN STREET & 27-39 MACDONELL STREET, GUELPH
LOADING & WASTE MANAGEMENT ARRANGEMENT**

Paradigm Transportation Solutions Limited (Paradigm) has prepared this Technical Memo to review the proposed Loading and Waste Management arrangement for the Mixed-Use Development at 26-40 Carden Street and 27-39 Macdonell Street in Guelph.

The subject site is assembled from two properties with frontages on Carden Street to the south and Macdonell Street to the north. Neither property has vehicular access to the fronting roadway. The proposed redevelopment of the assembled site will also not provide for vehicle driveways or onsite vehicle parking.

However, the development provides for loading and garbage collection in a designated area fronting Macdonell Street. Given the site constraints, the loading and garbage collection operations will involve trucks executing reverse motions to enter/exit the site from/to Macdonell Street.

Figure 1 (attached) illustrates the Site Layout including the proposed Designated Area and driveway on Macdonell Street.

The design of the designated loading/garbage area with driveway on Macdonell Street provides for the following entry/exit operations for garbage and loading trucks:

- ▶ Garbage Trucks: Will enter the designated area from the eastbound travel lane on Macdonell Street and exit by reversing onto Macdonell Street and then proceeding east on Macdonell Street.
- ▶ Loading Trucks: Will enter the designated area in a reverse motion from the eastbound lane on Macdonell Street and exit by turning right onto the same eastbound lane.

We have conducted simulations using AutoTURN (AT) assessment software for both loading and garbage truck operations. The simulations indicate that the operations can be performed without conflicts with existing structures.

Appendix A contains the AutoTURN drawings.

In order to minimize conflicts with pedestrians and bicyclists and road traffic, the following cautionary measures should be included in the driveway design and loading/garbage operations:

- ▶ Curb cuts should be minimized, and pedestrian movement prioritized with a continuous material treatment extending from the sidewalk or pedestrian path over the vehicular path;
- ▶ Weekday peak period restrictions (Monday to Friday, 7:00 – 9:00 am and 4:00 – 6:00 pm);
- ▶ Appropriate signage on Macdonell Street advising pedestrians and vehicles of the operations of the loading and garbage collection vehicles;
- ▶ Trained staff overseeing the overall loading/garbage vehicle entry and exit; and
- ▶ A Flag Person to be provided to guide the turning trucks.

These measures will help ensure safety during loading and garbage collection operations, and they could be secured through conditions of Site Plan Approval.

It is to be noted that loading/garbage operations in a downtown context, as proposed for the subject development, are not daily operations, and they are undertaken outside the road traffic peak hours.

Specific to the subject development comprising 106 apartment units, the proposed onsite arrangement for garbage collection is a preferred alternative to providing for on-street garbage collection.

We trust that this Letter addresses the requirements for allowing loading/garbage collection operations at the subject development as outlined above. Please do not hesitate to contact us if you need additional information.

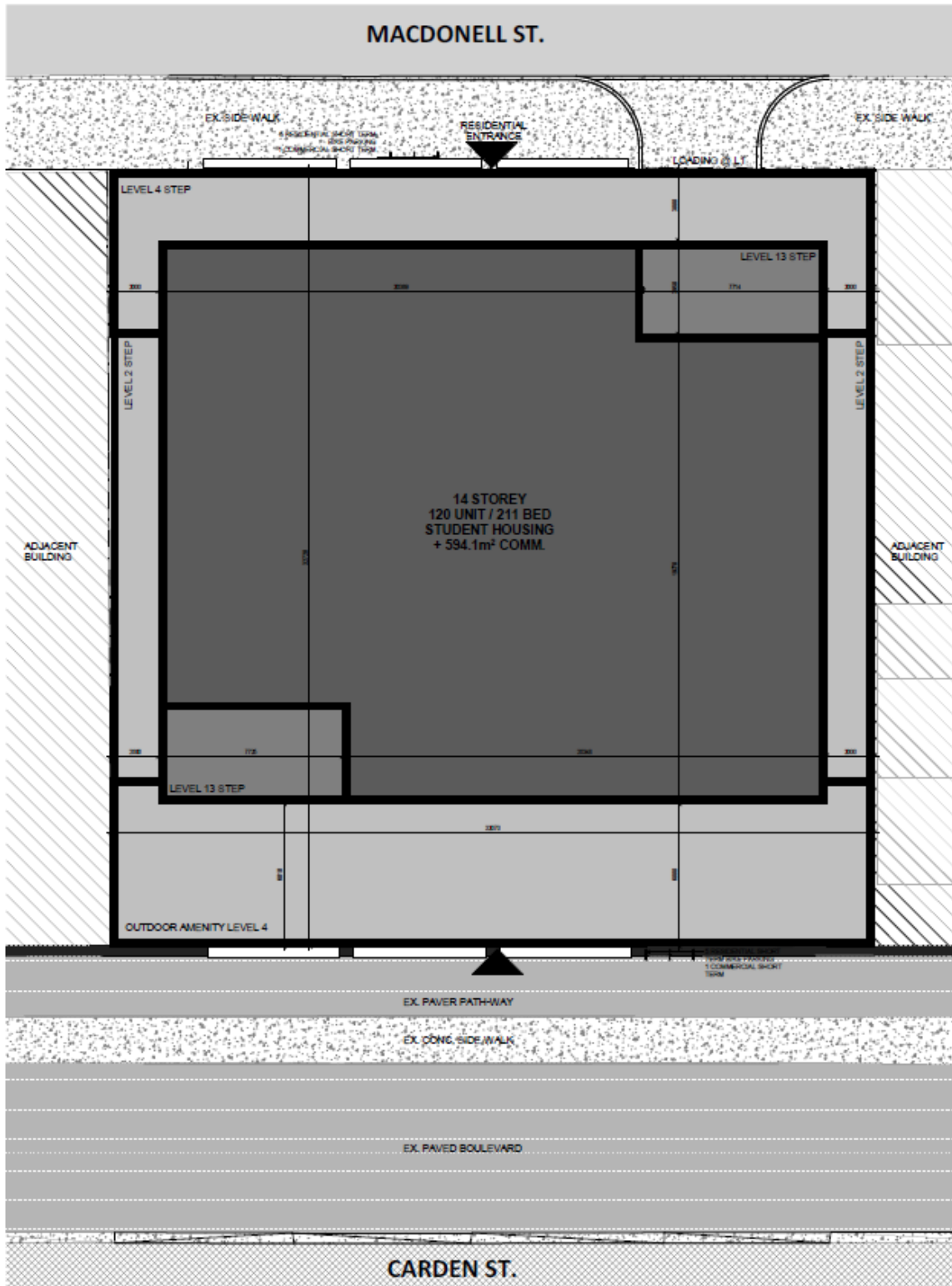
Yours very truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED



Rajan Philips
M.Sc. (PI), P.Eng.
Senior Transportation Consultant



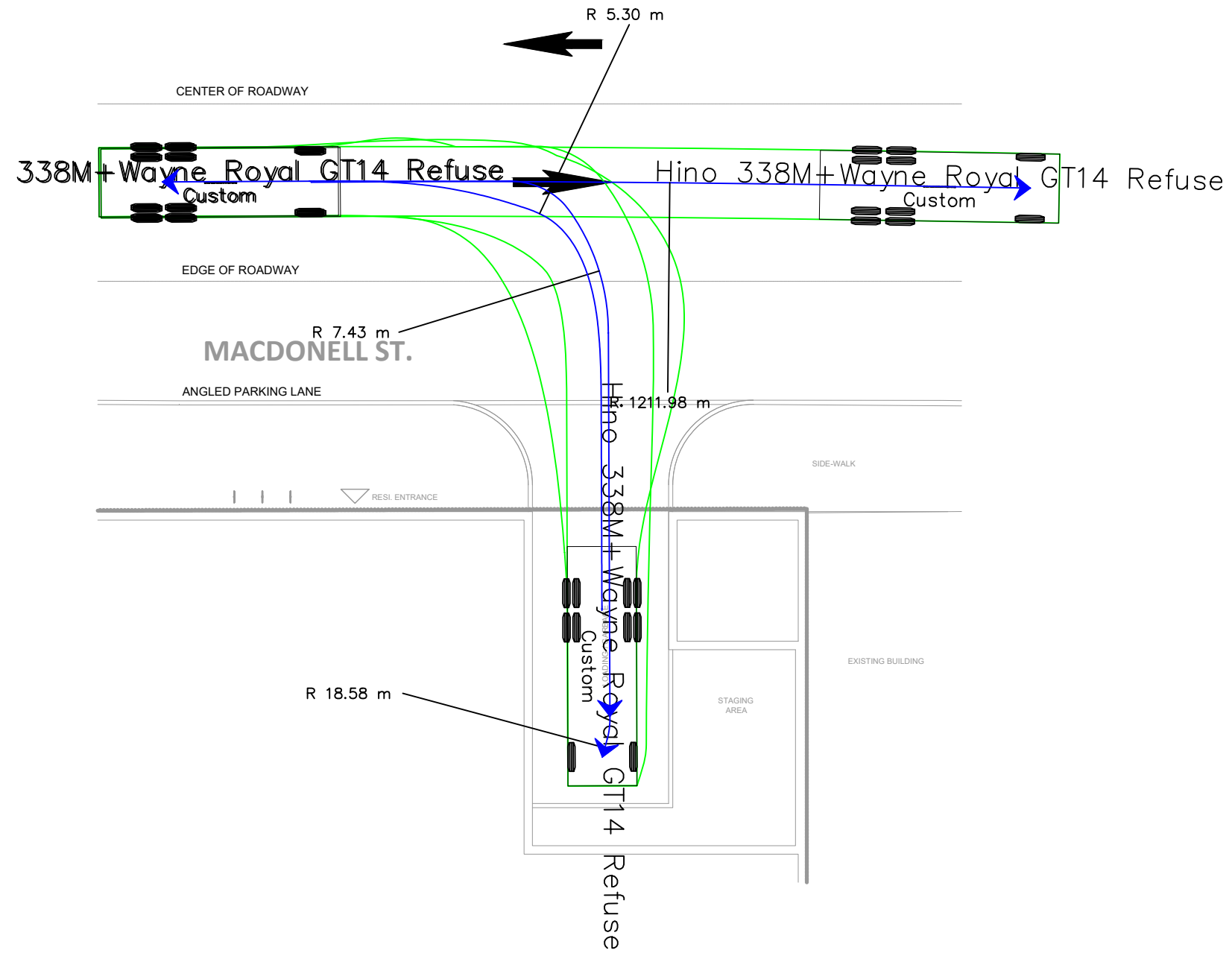


Site Layout

Appendix A

AutoTURN Drawings





THIS AUTOTURN SWEEP PATH ANALYSIS HAS BEEN PREPARED USING BASE PLANS PROVIDED BY OTHERS. THE PRACTITIONER HAS NOT INSPECTED THE ACCURACY AND/OR THE COMPLETENESS OF THESE BASE PLANS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

NO.	DATE	INITIAL	REVISION DETAIL

DESIGN VEHICLE:

Hino 338M+Wayne Royal GT14 Refuse

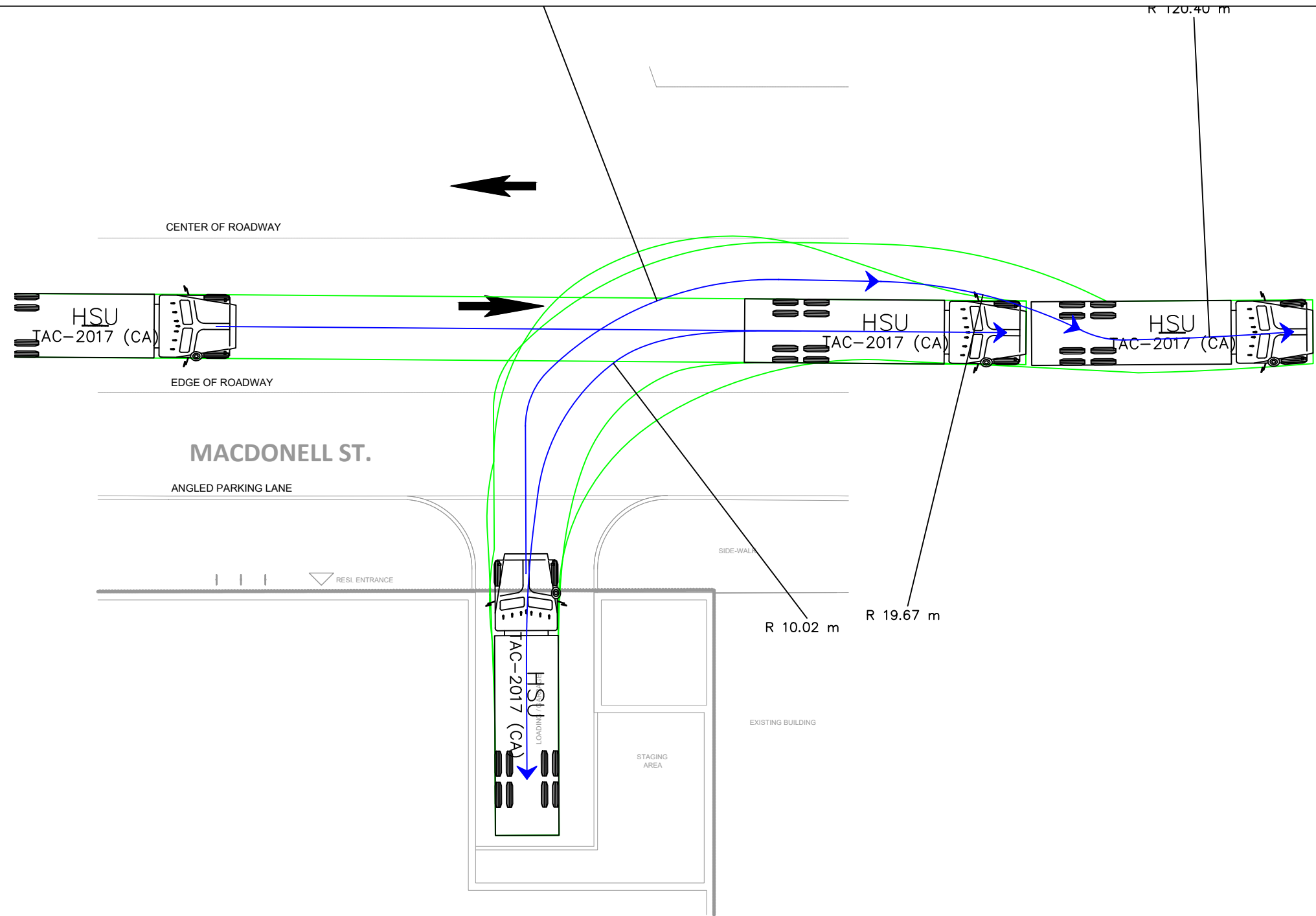
meters

- Width : 2.45
- Track : 2.77
- Lock to Lock Time : 6.0
- Steering Angle : 44.5

AUTOTURN ASSESSMENT
26-40 CARDEN STREET
GUELPH, ON

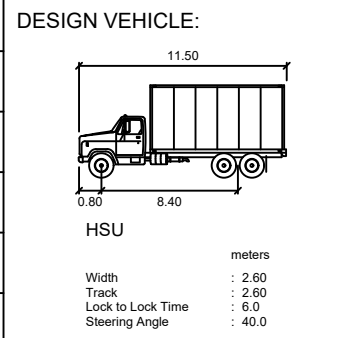


PROJECT NO.: 230558	DATE: JUNE 2024	SCALE: 1:200	DRAWING NO.: 01
DRAWN: LC	DESIGN: LC	CHECK: RP	



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**AUTOTURN ASSESSMENT
26-40 CARDEN STREET
GUELPH, ON**



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