

March 10, 2025

Halifax Regional Municipality
PO Box 1749
Halifax, NS
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Attention: Ashley Blissett, P.Eng.
Email: blissea@halifax.ca

Dear Ashley:

**RE: Magic Beings Daycare Expansion Traffic Impact Statement
Frederick Avenue Campus**

Background

DesignPoint Engineering and Surveying is pleased to submit the traffic impact statement for the Magic Beings Daycare expansion project for its Frederick Campus. Magic Beings Daycare is a locally owned business in the community of Fairview.

The Frederick Campus consists of one building. This building is a former single-family dwelling that has been retrofitted for the day care operation. Full day childcare (toddlers) takes place at 110 Frederick Avenue. The site location plans are shown in Figures 1 and 2.

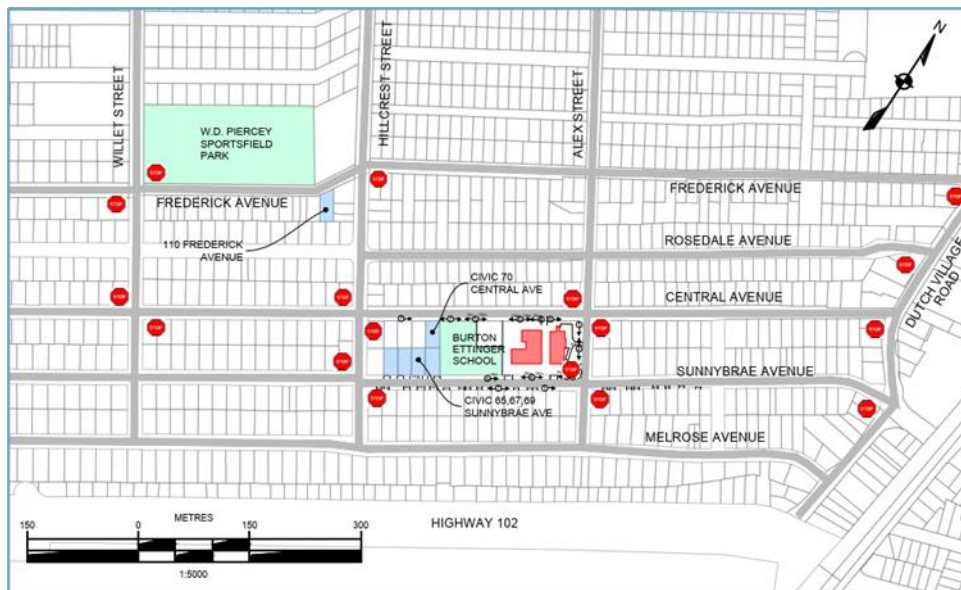


Figure 1 - Site Location



Figure 2 - 110 Frederick Avenue

Site Operations

The Frederick campus currently has an enrollment of 14 children. The owner has provided the following data:

- Most children (57%) are dropped off between 7:45 and 8:45am.
- Most children (71%) are picked up between 4:00 and 5:00 pm
- There are three 3 staff.

From this data, the critical period for parking demand is the 60-minute period from 4 to 5:00pm

Magic Beings would like to expand its Frederick campus by **26 seats**. The Halifax Regional Municipality requires that a traffic impact statement be prepared for this location.

Parking Inventory

Frederick Avenue

The parking inventory in the vicinity of 110 Frederick Avenue is presented in Figure 3.

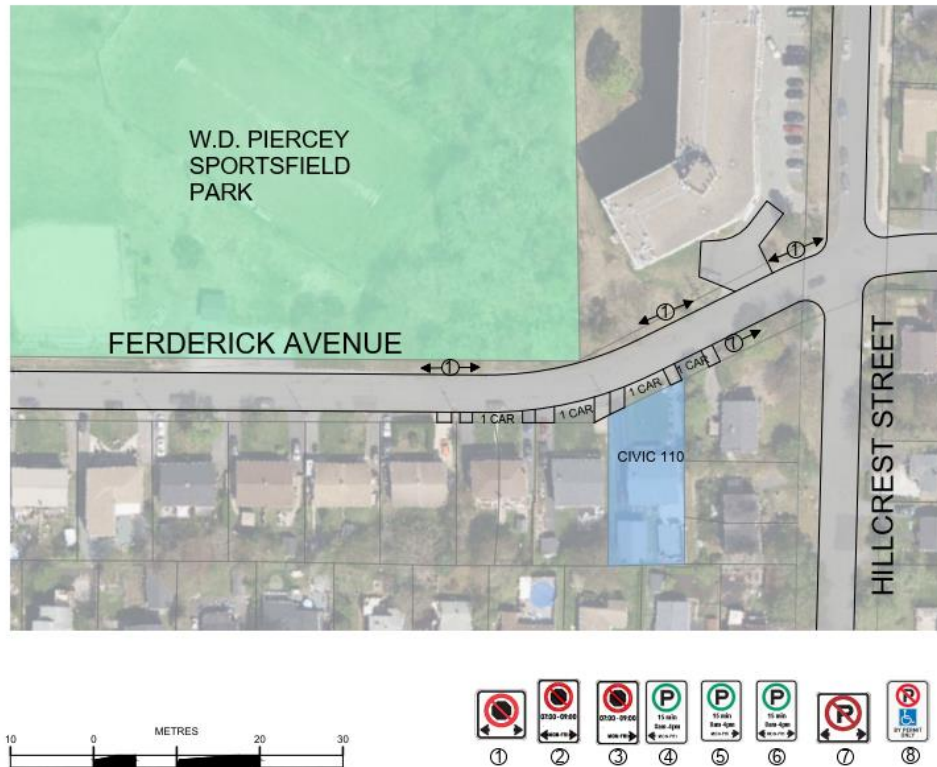


Figure 3 - Parking Inventory

No stopping/no parking is permitted on the north side of Frederick Avenue. Except for a section in front of Civic 108, there is unrestricted parking on the south side. There is space for 4 parked cars on the south side, and two off street parking spaces.

Parking Demand

A site visit was carried out on February 25, 2025, to observe the parking utilization near the Daycare. Surveys were carried out during the morning (7:30 – 9:00 am), noon (12-1 pm), and afternoon (4-5 pm) periods.

Observations

- The average drop-off and pick up time was 3 minutes.
- The driveways were not used for parking, drop offs, or pick ups. One driveway was icy.
- Pick-ups peaked between 4:45 and 5:15pm.
- It appeared that one off-street parking space was used by staff.
- One pick-up was a pedestrian.
- When the spaces in front of the day care were occupied, a few clients stopped in the no-parking zone in front of Civic 108, and in the no stopping zone along the north side.
- There was a school bus pick up on the north side at 8:00 am.
- Traffic on Frederick was light during peak pick-up times.
- Occupancy was 1 child per vehicle.
- The on-street parking spaces were used almost exclusively for the day care.

Analysis

There are four (4) on-street and two (2) off street parking spaces near the campus. If we assume that one off-street space is used by staff, this equates to five (5) spaces available for drop-offs and pick-ups.

If we assume that two pick ups are pedestrians and the demand for the period from 4:45 – 5:15 pm will be 26 cars, the spaces will need to turn over 5 times. This equates to a gap of 5 minutes for each space which is greater than the observed gaps.

Access Review

An access review was carried out on February 25, 2025 to confirm stopping sight distances. A 50 km/h design speed was used for the section of Frederick Avenue in the vicinity of the daycare. This is a reasonable assumption given the geometry and the proximity of the daycare to the intersection.



Figure 4 - Eastbound Sight Distance Approaching the Day Care



Figure 5 - Westbound Sight Distance Approaching the Day Care

The critical sight distance for a low volume driveway is stopping sight distance. Stopping sight distance is the distance travelled during the perception and reaction time, the time it takes a driver to identify the need to stop and begin braking, and the braking distance, the distance travelled from the time brakes are first applied to when the vehicle comes to a stop.

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads defines the following minimum stopping sight distances.

Direction of Travel	Minimum Stopping Sight Distance	Measured Sight Distance	Result
Frederick Avenue (50 km/h)			
Eastbound	65 m	65+	Pass
Westbound	65 m	65+	Pass

Summary

- Magic Beings Daycare plans to expand its Frederick Avenue Campus from 14 to 40 seats. Based on its children's current travel patterns, this equates to a total of 26 pick-ups between 4:45 and 5:15 pm.
- There are 6 on and off-street parking spaces near the campus. These spaces are typically not occupied during the afternoon peak hour period.
- The average pick-up time is three minutes. The available parking space can accommodate the parking demand because of the high turnover of spaces.
- Based on the above, the existing parking should be able to accommodate to Magic Beings proposed expansion.

Recommendations

1. Only one-off street parking space should be reserved for staff.
2. Staff should be encouraged to use alternate forms of transportation when commuting to and from work.
3. Staff should not be allowed to park in-front of the building on the street. This should be reserved for drop-offs and pick-ups
4. The off-street parking spaces should be maintained in the winter so that clients can use them for drop-offs and pick-ups.
5. HRM should consider restricting parking in front of the building to 15-minutes, Monday-Friday, from 8am to 6 pm.

Closing

We appreciate your help with this traffic impact statement. If you have any questions or proposed changes to the report, please do not hesitate to contact me directly.

Thank you,
DesignPoint Engineering & Surveying Ltd.

Paul. V. Burgess, M.Eng., P.Eng
Senior Transportation Engineer

