

February 14, 2025

Mr. Kevin Neatt
Clayton Developments

via email: kneatt@claytondev.com

**RE: Traffic Impact Statement – Brick Lands Development
Lantz, Nova Scotia**

Dear Mr. Neatt,

Plans are being prepared for a residential development on the land bounded by Church Street, Shaw Drive, and Highway 102 in Lantz, Nova Scotia (See Figure 1). This is the Traffic Impact Statement for the development, which will involve the construction of four eight-unit stacked townhouses and include about 53 parking spaces.



Figure 1: Study Area

SITE DESCRIPTION AND ACCESS

The proposed redevelopment is in close proximity to Shaw Precast Solutions, East Hants Sportsplex, and an Elementary School. There are no existing sidewalks on Church Street, but there is a sidewalk on the North side of Highway 2. The access to the parking lot at the proposed development will be located on Church Street, as shown on the conceptual plan (See Figure 2).



Appendix A - Concept Plan

Figure 2: Conceptual Plan

Vehicular access is proposed via Church Street. Views from the general site access driveway area looking along Church Street are shown in Photo 1 and Photo 2.



Photo 1: Looking North (to the left) along Church Street from the Proposed Site Access



Photo 2: Looking South (to the right) along Church Street from the Proposed Site Access

ACCESS REVIEW

The vehicular access to the proposed subdivision and its 53 parking spaces is via Church Street about 80m south of the STOP controlled intersection of Church Street and Highway 2, and 130m north of the STOP controlled intersection of Church Street and Route 277 (See Photo 1 and Photo 2). WSP completed onsite observations and measurements along Church Street and determined:

- The available Stopping Sight Distance (SSD) for traffic traveling along Church Street approaching the site access in each direction exceeds the minimum SSD of 65m for a travel speed of 50km/h.
- The available Intersection Sight Distance (ISD) looking right from the site connection exceeds 115m. This is greater than the 105m required from STOP control onto a roadway with a 50km/h design speed.
- The available Intersection Sight Distance (ISD) looking left from the site connection exceeds 80m (to the Highway 2 intersection). This is greater than the 75m required from STOP control onto a roadway with a 40km/h speed. The driver of a vehicle exiting the driveway will be able to see traffic along Highway 2 that is slowing down to turn right or left onto Church Street.

STREET AND INTERSECTION DESCRIPTIONS

Church Street, at the site location, is a local two-way street extending from Highway 2 in the north to Trunk 277 in the south. There are no sidewalks or cycle lanes on either side and there is a posted speed limit of 50km/hr.

Highway 2 is a two-lane highway extending all the way from the North End of Halifax in the south through to Truro in the north. It runs parallel to Highway 102 at the site location. There is a sidewalk on the North side of Highway 2 and painted shoulders that may be used by cyclists.

Highway 2 at Church Street is a three-leg unsignalized intersection with free flow along Highway 2 and STOP control on Church Street. The intersection is about 80m north of the development access on Church Street. All approaches have shared movements and no marked pedestrian crossings.

Highway 2 at Lantz Connector is a four-leg roundabout intersection about 200m west of the Church Street intersection. The eastbound approach on Highway 102 has a shared through/left-turn lane and a shared through/right-turn lane. The two through lanes taper into one approximately 30m after the roundabout. The westbound approach on Highway 2 has a shared through/left-turn lane and a dedicated right-turn lane. The southbound approach on the Lantz Connector has a dedicated left-turn lane and a shared through/right-turn lane. The northbound approach is one shared lane on Shaw Drive. There are pedestrian crossings on the southbound and westbound approaches.

TRANSIT

At this time there is no transit service operating within the Municipality of East Hants. There have been several studies examining the feasibility and business case for operating fixed route transit service in the area, the most recent being *Transit Services 2024 Update (WSP, 2024)*. The proposed routing from this report is shown in Figure 3.

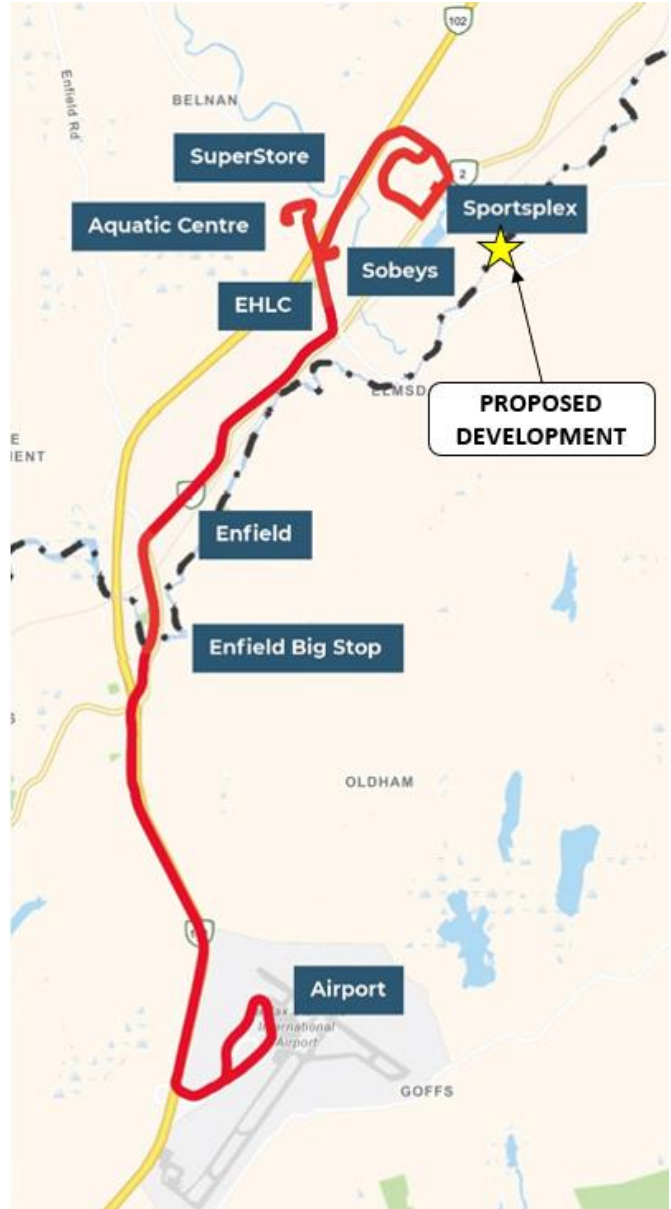


Figure 3: Proposed Transit Route near Proposed Development (Transit Services 2024 Update)

KILN CREEK DEVELOPMENT

Planning is currently underway on the Kiln Creek Development that is seeing the development of approximately 1,775 residential units and approximately 225,000 square feet of commercial space. This nearby development (See Figure 4) will have a larger effect on traffic in the area. A recent (December 2024) Traffic Impact Study Addendum was prepared for this nearby development and submitted to NSPW.



Figure 4: Kiln Creek Development Area

TRIP GENERATION

When using the published trip generation rates in *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, Washington, 2021) the transportation engineer’s objective should be to provide a realistic estimate of the number of trips that will be generated. Generated trips for Single-Family Attached Housing (Land Use 215) are estimated for the AM and PM peak hours of traffic by the number of dwelling units. The proposed development includes 32 dwelling units with estimated trip generation shown in Table 1.

The estimated number of trips that will be generated by the development include:

- 11 two-way auto trips (3 entering and 8 exiting) during the AM peak hour; and,
- 15 two-way auto trips (9 entering and 6 exiting) during the PM peak hour.

Table 1 - Trip Generation Estimates

Land Use ¹	Units ²	Trip Generation Rates ³				Trip Generation Estimates ³			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Single-Family Attached Housing (Land Use 215)	32 Units	Equations from Page 239 & 240				3	8	9	6
Trip Estimate for the Proposed Development					3	8	9	6	

NOTES:

1. Land Use Code 215 is from Trip Generation, 11th Edition (Institute of Transportation Engineers, Washington, 2021). The in-out distribution of trips have been corrected using the ITE Errata, May 17, 2023.
2. Number of Residential Units.
3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.



Traffic Impact Statement – Brick Lands Development Lantz, Nova Scotia

SUMMARY

1. Plans are being prepared for a residential development on the land bounded by Church Street, Shaw Drive, and Highway 102 in Lantz, Nova Scotia.
2. Vehicular access to the proposed development is via Church Street. The available stopping sight distance for traffic travelling along Church Street exceeds the minimum 65m for a 50km/h approach speed in each direction. Sufficient Intersection Sight Distance is available along Church Street at the proposed site connection.
3. Trip generation estimates were prepared using rates published in *Trip Generation, 11th Edition* (Institute of Transportation Engineers, Washington 2021). It was estimated that the proposed development will generate:
 - 11 two-way trips (3 entering and 8 exiting) during the AM peak hour; and,
 - 15 two-way trips (9 entering and 6 exiting) during the PM peak hour.

CONCLUSION

4. Site generated trips are not expected to have any significant impact to levels of performance on adjacent streets and intersections or to the regional street system.

If you have any questions or comments, please contact me by email at patrick.hatton@wsp.com or by telephone at 902-444-7712.

Sincerely,

Patrick Hatton, P. Eng.
Senior Transportation Engineer
WSP Canada Inc.

