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Re: Driveway Assessment for 302-306 Edinburgh Road South

INTRODUCTION

GHD Ltd. has been retained to provide a professional opinion regarding the driveways proposed for a residential development located on the property with municipal address of 302 and 306 Edinburgh Road South in the City of Guelph.

The project involves a comprehensive review of applicable zoning bylaws and an assessment of the contextual conditions surrounding the site.

The location of the subject site is illustrated in **Figure 1** below.



Figure 1 Site Location

Existing Road Network

Edinburgh Road South is a north/south arterial road under the jurisdiction of the City of Guelph. It extends from Gordon Street in the south to Woodlawn Road West to the north. It has a four-lane urban cross-section adjacent to the subject site with an assumed speed limit of 50 km/h.

PROPOSED DEVELOPMENT

The proposed development of the subject site would demolish the existing single family detached unit on both sites and sever each lot into four new lots, each containing a semi-detached dwelling unit for a total of four new semi-detached dwellings.

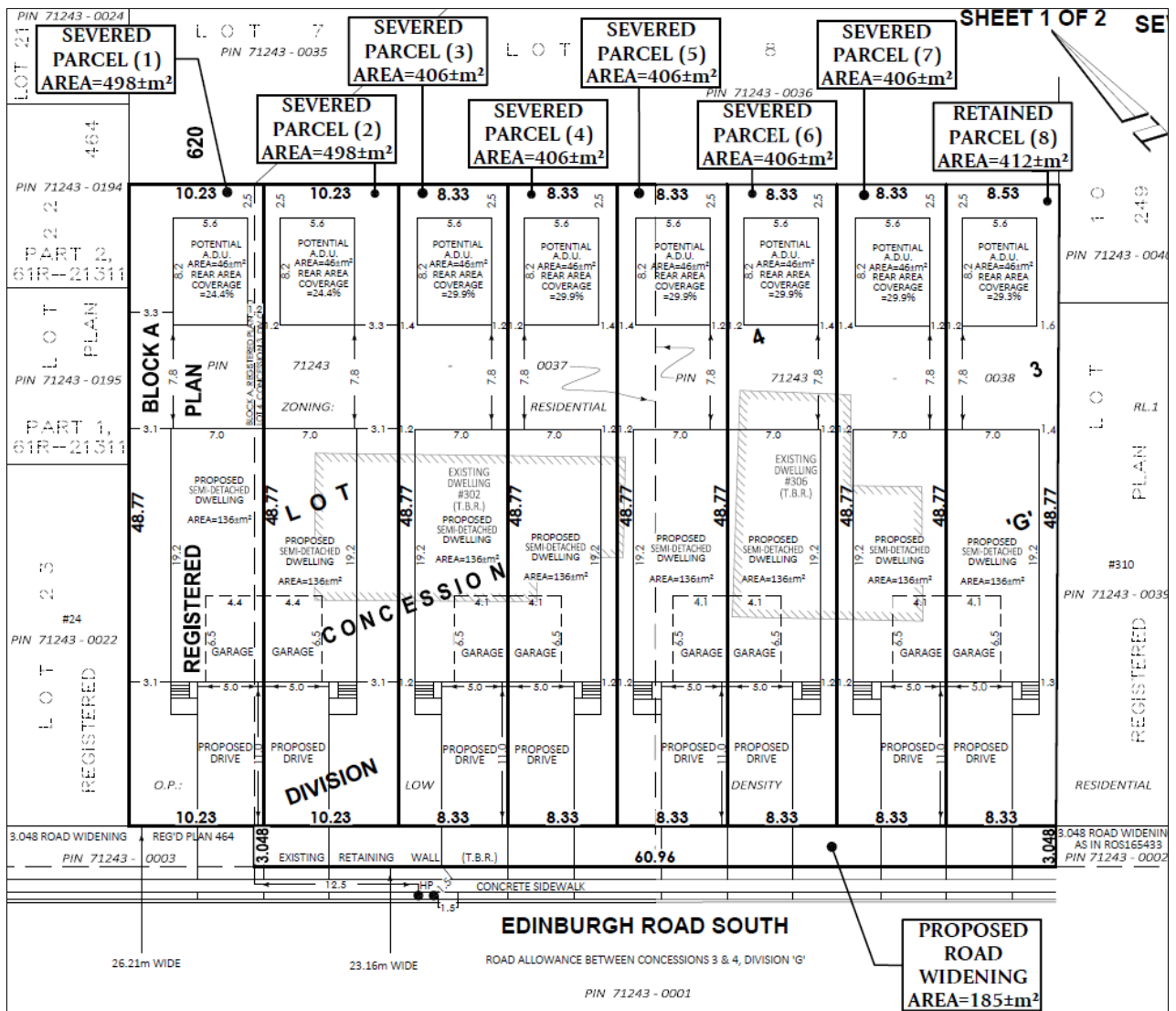


Figure 2 Proposed Site Plan

Each semi-detached unit is further proposed to contain one potential external Accessory Dwelling Unit resulting in a total of two dwelling units per lot.

An Accessory Dwelling Unit (ADU) is a secondary, smaller residential unit located on the same lot as a primary dwelling. ADUs can provide additional living space for family members, renters, or other occupants.

Key characteristics of ADUs include:

- They have their own kitchen, bathroom, and sleeping areas, functioning as a complete, self-contained unit.
- ADUs can be detached from the main home (a separate structure), attached (such as a converted garage), or built within the main home (like a basement or attic conversion).
- Smaller footprint: ADUs are typically smaller than the primary residence.

ADUs are popular for creating rental income, providing housing for extended family or elderly parents or increasing housing availability in urban areas without large-scale developments.

Many cities are encouraging the development of ADUs as part of a strategy to address housing shortages and affordability.

TRAFFIC CONSIDERATIONS AND SAFETY

Road Characteristics

The proposed driveways are situated along a straight, level section of Edinburgh Road South, which has a speed limit of 50 kph. This moderate speed limit supports safe vehicle operations by allowing drivers ample time to respond to typical road conditions and anticipate interactions with other vehicles. Also, this stretch of Edinburgh Road South already features numerous residential driveways, creating an environment where drivers are accustomed to vehicles making turning movements into and out of private properties. This conditioning contributes to an overall driving behavior that accounts for potential ingress and egress activities, thereby reducing the likelihood of operational issues or unforeseen hazards associated with the addition of new driveways.

Furthermore, Edinburgh Road South's straight and level design offers unobstructed visibility for vehicles entering and exiting the proposed driveways. This optimal sightline condition extends to pedestrians and cyclists using adjacent sidewalks or bike lanes, enhancing overall safety for all road users. The clear visibility allows drivers to see and react appropriately to any movement within the vicinity, further supporting safe operations. The combination of a moderate speed limit, driver familiarity with similar existing conditions, and excellent sightlines reinforces the suitability of these proposed driveways from a traffic engineering perspective. This ensures that the additional driveways will integrate smoothly into the current road network without compromising safety or operational efficiency.

Driveway Frontage Compliance

Despite being currently under appeal, the proposed driveway widths of 5 metres meet the City's new zoning requirements, as outlined in Table 5.10 – Maximum residential driveway width. This is significant as it demonstrates that the proposed driveways align with the most current municipal standards, ensuring consistency with broader urban planning and safety guidelines.

Moreover, by aligning with the City's zoning standards, the proposal contributes to maintaining traffic flow efficiency and minimizing potential conflicts between vehicles and pedestrians, which is essential for a safe and functional urban environment.

Setbacks and Visibility

The driveways comply with the setback and visibility requirements in the City's Zoning By-law, ensuring clear sightlines for both vehicles entering/exiting the driveways and pedestrians/cyclists using the adjacent sidewalks or cycle lanes. No obstructions or hazards are anticipated that would affect the operational safety of these access points.

Precedent Along the Corridor

This section of Edinburgh Road South is characterized by a well established pattern of residential driveways, providing direct property access along the corridor. The addition of any new driveways aligns with this existing built form, ensuring that the road continues to operate within familiar operational characteristics for drivers. The existing residential driveways contribute to a consistent and navigable roadway environment and facilitates the seamless integration of new access points without impacting the overall character or functional expectations of the corridor.

Existing Examples in the City

A similar built form has been approved and constructed within the city on Paisley Road north of Imperial Road South, where new lots with closely spaced driveways front directly onto an arterial road with a 50 km/h speed limit. The operational impact of semi-detached and single-detached driveways on the roadway is minimal, making this development a suitable comparison to the subject site in terms of traffic flow and driveway operation.

This example demonstrates that, under controlled conditions, such multiple driveway designs can integrate well into the overall road network without compromising traffic flow or safety.



Figure 3 Existing Example in the City on Paisley Road north of Imperial Road South

CONCLUSION

After a review of the proposed Site Plan, the City’s zoning regulations and the current on-site conditions, it is our profession opinion that the proposed driveways are appropriate and safe from a traffic engineering standpoint. The proposed design integrates smoothly into the current streetscape without disrupting traffic flow or pedestrian safety.

From an engineering perspective, the proposed driveways adhere to all applicable zoning requirements outlined in the City’s By-laws.

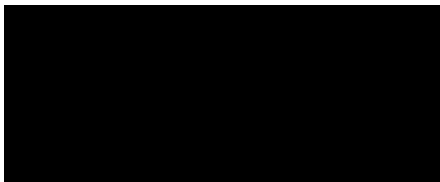
Edinburgh Road South is a level straight road that provides clear visibility for vehicles entering and exiting the driveways, as well as for pedestrians and cyclists using adjacent sidewalks or road. This ensures that the driveways will not impair operational safety or create unforeseen hazards.

The proposed driveways will be anticipated by drivers traveling along the arterial road, as they are already accustomed to similar residential access points. This ensures that the proposed new driveways do not introduce a new or unfamiliar element to the roadway. Instead, they align with the existing driving environment, where motorists and pedestrians expect and are conditioned to interact with vehicles entering and exiting driveways.

In conclusion, after a comprehensive review of zoning regulations, site-specific details, and city planning guidelines, it is GHD’s opinion that the proposed driveways are appropriate and safe for the intended residential development. They meet all relevant requirements and align with existing conditions, ensuring seamless integration into the current roadway environment.

If further discussions are needed or additional information is required, please do not hesitate to contact me.

Regards



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