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HTC Project: 182026

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ATTENTION: LLOYD ROBBINS

RE: TRAFFIC IMPACT STATEMENT – REDEVELOPMENT OF 272 AUBURN DRIVE, COLE HARBOUR, NS

Mr. Robbins,

Harbourside Transportation Consultants has completed a traffic impact statement, as per Halifax Regional Municipality (HRM) requirements, for the redevelopment of 272 Auburn Drive in Cole Harbour, NS. The location of the proposed development is shown in Figure 1. The existing building includes two residential units with a convenience store on the ground floor.

The Municipal Planning Strategy for Cole Harbour/Westphal makes note of this property stating that “it shall be the intention of Council to consider new neighbourhood business uses, and to provide for the expansion of, and/or consideration of additional uses, at an existing neighbourhood convenience store at 272 Auburn Drive.” A number of considerations for Council regarding such agreements are provided, including:

- Neighbourhood business uses shall be limited to uses that are primarily intended to serve the local neighbourhood.
- The proposed development does not exceed a maximum gross floor area of 2,000 square feet, exclusive of any area devoted to an accessory dwelling unit.

The proposed redevelopment will include changing the land use of the ground floor (approximately 1435 square feet), the upper floor will remain as two residential units. The traffic impact statement was prepared to support the application for a Development Agreement to allow the following eight (8) potential land uses for the redevelopment of the building.

1. Food take-out service with or without convenience store
2. Office/Professional/Business
3. Convenience store
4. Retail store
5. Daycare
6. Medical clinic

7. Personal service shops
8. Apartments in existing building



Figure 1 – Location of the proposed development

Trip Generation

Trip generation rates for the eight potential land uses were quantified using the 10th edition of the *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). A number of assumptions were made when selecting the ITE land use codes (LUC) for the various options where direct land use codes were not available, including:

- Option 1: Food take-out service with or without convenience store – LUC 933 Fast Food Restaurant without Drive-Through Window
- Option 4: Retail store – LUC 814 Variety Store
- Option 7: Personal service shops – LUC 918 Hair Salon

The trip generation rates for the AM and PM peak hours of adjacent stream traffic are noted in Table 1. The existing convenience store land use generates the highest number of trips; 90 trips (45 trips in/45 trips out) during the AM peak hour and 71 trips (36 trips in/35 trips out) during the PM peak hour. It should be noted that due to the nature of the store as a local neighbourhood convenience store, the majority of these trips would be considered pass-by trips. Pass-by trips are

existing trips on the road network travelling from an origin to a primary trip destination (for example from home to work or work to home) that will make an intermediate stop at the site.

Table 1 – Trip generation rates

Option	Land Use	Number	Unit	ITE Code	AM Peak Rate	AM Peak Trip Gen	AM Peak In	AM Peak Out	PM Peak Rate	PM Peak Trip Gen	PM Peak In	PM Peak Out
1A	Fast Food Restaurant without Drive-Through	1,435	sq. ft.	933	25.10	37	22	15	28.34	41	21	20
1B	Fast Food Restaurant without Drive-Through	300	sq. ft.	933	25.10	8	5	3	28.34	9	5	4
	Convenience Market	1,135	sq. ft.	851	62.54	71	36	35	49.11	56	29	27
						79	41	38		65	34	31
2	Small Office Building	1,435	sq. ft.	712	1.92	3	2	1	2.45	4	1	3
3	Convenience Market	1,435	sq. ft.	851	62.54	90	45	45	49.11	71	36	35
4	Retail Store	1,435	sq. ft.	814	3.18	5	3	2	6.84	10	5	5
5	Day Care Centre	1,435	sq. ft.	565	11.00	16	8	8	11.12	16	8	8
6	Medical Clinic	1,435	sq. ft.	630	3.69	6	5	1	3.28	5	1	4
7	Hair Salon	1,435	sq. ft.	918	1.21	2	1	1	1.45	3	1	2
8	Multifamily Housing	2	DU	220	0.46	1	0	1	0.56	2	1	1

Typically, HRM requires a traffic impact study to be completed for a development that generates over 100 peak hour trips. All proposed redevelopment options generate fewer than 100 peak hour trips.

Access

There are two existing accesses to the site, one on Auburn Drive for the convenience store parking lot, and one on Quindora Crescent for the residential driveway. There are no internal connections between the commercial parking lot and residential driveway.

The access to the commercial parking lot and parking lot layout were reviewed as part of this traffic impact statement. The proposed site plan can be found in Appendix A. This site plan is based on aerial photography and is conceptual. The property line in the sketch is approximate.

The access on Auburn Drive should be relocated to the northern end of the property to improve the parking lot layout, site circulation and maximize the number of parking spaces. The new location will also provide additional spacing between the entrance and the intersection of Auburn Drive/Quindora Crescent.

A site plan also proposes a new access to the commercial parking lot on Quindora Crescent, the second access would improve site circulation. There are no proposed changes to the existing residential driveway on Quindora Crescent.

Pedestrians and Transit

The area is serviced by Halifax Transit with route 61 Auburn-North Preston on Auburn Drive. Bus stops are located on Auburn Drive within 150 metres of the site. Sidewalks are provided on one side of Auburn Drive; the site is located on the same side as the sidewalks.

Conclusions

The proposed redevelopment of the 1435 square feet of commercial space at 272 Auburn Drive as any of the eight (8) proposed land uses is not expected to have any appreciable operational



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impact on the adjacent roadways. These land uses include food take-out service with or without convenience store, office/professional/business, convenience store, retail store, daycare, medical clinic, personal service shops and apartments.

If you have any questions or additional discussion, please feel free to contact the undersigned.

Regards,

Original Signed

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Appendix A – Site Plan



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APPENDIX A

Site Plan