



Ref. No. 191-02595

March 21, 2019

Ms. Ashley Blissett, P. Eng.
Senior Development Engineer
Halifax Regional Municipality
PO Box 1749
HALIFAX NS B3J 3A5

RE: Traffic Impact Statement, Proposed Twin Lakes Development, Prince Albert Road, Dartmouth, NS

Dear Ms. Blissett:

Twin Lakes Development is proposing changes to the proposed development on Prince Albert Road which has an existing Development Agreement for an 84 unit multi-tenant residential building. The revised development (Figure 1) will include approximately 173 residential units (a net increase of 89 units) in two buildings, and about 7,700 square feet of commercial space.

Description of Development Site - The proposed development (Figure 1) is on the south side of a section of Prince Albert Road that was by-passed when Highway 111 was constructed in the 1960s. The two-lane street has curbs on both sides and a sidewalk along the side adjacent to the site. The existing site includes *NAPA Auto Parts* (Civic Number 327), a retail and wholesale auto parts store with approximately 13,000 SF of commercial space. *NAPA* has 12 employees working in the building with 7 or 8 delivery vehicles based at and operating from the site. The site also includes a building used as an office by the *Association of Nova Scotia Land Surveyors* (Civic Number 325A). Visibility is good on both Prince Albert Road approaches to the proposed two new site driveways located near the west and east site boundaries as illustrated on Photos 1 to 4.



Photo 1 - Looking west along Prince Albert Road from the drop-off and ground level parking area driveway near the west site boundary.



Photo 2 - Looking east across the site frontage from the drop-off and ground level parking area driveway near the west site boundary.



Photo 3 - Looking west across the site frontage from the indoor parking area driveway near the east site boundary.



Photo 4 - Looking east along Prince Albert Road from the indoor parking area driveway near the east site boundary.



Figure 1

A-6
SITE PLAN AND ENTRY POINTS

SCALE: 1" = 60.0'
Feb 27, 2019

TWIN LAKES RE-DESIGN
PRINCE ALBERT ROAD, DARTMOUTH NS

Kassner Goodspeed Architects Ltd.

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Description of Pedestrian Facilities - There is a continuous sidewalk along the south side of the Prince Albert Road adjacent to the site, as well as a short section of sidewalk on the north side of the street to provide access to a bus stop. There is a marked crosswalk across the street near the middle of the lot frontage which provides access to the bus stop, as well as to the Superstore. Sidewalks and pedestrian overpasses provide access to Westphal Plaza which is on the east side of Highway 111 approximately 500 meters from the site. The existing walkway through the site which provides access to Alderney School immediately south of the site will be replaced by a new walkway along the west property boundary.

Trip Generation Estimates - Table 1 includes trip generation estimates for the proposed development and existing land uses on the site. Where available, published trip generation rates from *Trip Generation, 10th Edition*, have been used. While the Halifax Integrated Mobility plan has a target for 60% non-auto trips within the regional centre, a 25% reduction for non-auto trips has been considered to be more reasonable for this location on the 'old' section of Prince Albert Road.

Table 1 - Trip Generation Estimates for Existing Land Use and Proposed Twin Lakes Development									
Land Use ¹	Units ²	Trip Generation Rates ³				Trips Generated ³			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Trip Generation Estimate for the Proposed Twin Lakes Development ⁴									
Hugh Rise Apt (Land Use 222)	173	0.07	0.24	0.22	0.14	13	41	38	24
Small Office Building (Land Use 712)	3.85 KGFA	1.59	0.33	0.78	1.67	6	1	3	6
Specialty Retail ⁴ (Land Use 826)	3.85 KGLA	0.76	0.60	1.19	1.52	3	2	5	6
Total Estimated Trip Generation for Proposed Twin Lakes Development						22	44	46	36
25% Reduction for Non-Auto Usage ⁵						6	11	12	9
Adjusted Trip Generation Estimates for Proposed Development						16	33	34	27
Trip Generation Estimate for the Existing NAPA Auto Parts and NSLS Office on the Site ⁶									
Auto Parts Sales (Land Use 843)	13.0 KGFA	1.42	1.17	2.36	2.55	18	15	31	33
Nova Scotia Land Surveyors Office		It is understood that two cars usually arrive during the AM and leave during the PM				2	0	0	2
Estimated Trip Generation for the Existing Businesses ⁶						20	15	31	35
Estimated Change in Trips Generated by the Redeveloped Site									
Changes in Vehicle Trip Estimates for the Redeveloped Site ⁷						(4)	18	3	(8)
NOTES: 1. Rates are for indicated Land Use Codes, <i>Trip Generation, 10th Edition</i> , Institute of Transportation Engineers, 2017, except as noted. 2. Units are 'Number of Apartments'; KGLA is 'Gross Leasable Area x 1000 square feet'; KGFA is 'Gross Floor Area x 1000 square feet'. 3. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'. 4. Since <i>10th Edition</i> does not include Specialty Retail, rates for Land Use 826 from the <i>9th Edition</i> have been used. Since there is no published rate for the AM peak hour of adjacent street for this Land Use, and since AM peak hour trips to Specialty Retail are generally low, AM trip rates have been assumed to be 50% of the PM rate with reversal of the directional split. 5. Since the site is well served by transit and has easy pedestrian access to the Superstore, as well as convenient pedestrian access to Westphal Plaza, trip generation estimates have been reduced by 25% to account for non-auto trips expected for this development. 6. These are the trip generation estimates for the existing NAPA Auto Parts building and NSLS office. 7. These are the estimated changes in AM and PM peak hour vehicle trips as a result of re-developing the site to allow construction of the Twin Lakes Development.									

It is estimated that the proposed Twin Lakes development will generate 49 two-way vehicle trips (16 entering and 33 exiting) during the AM peak hour and 61 two-way vehicle trips (34 entering and 27 exiting) during the PM peak hour.

After trips generated by the existing *NAPA Auto Parts* and *Association of Nova Scotia Land Surveyors* building on the site are considered, it is estimated that the proposed Twin Lakes development will generate 14 additional two-way vehicle trips (4 fewer entering and 18 more exiting) during the AM peak hour and 5 fewer two-way vehicle trips (3 more entering and 8 fewer exiting) during the PM peak hour.

Transit Service - Metro Transit provides service on the section of Prince Albert Road adjacent to the site for Route Number 62 with bus stops near the site. Route 62 provides connections to Penhorn, Alderney Gate and Bridge transit terminals.

Traffic Volumes - While traffic counts are not available for the section of Prince Albert Road adjacent to the site, AM and PM peak hourly volumes are expected to be low to moderate.

Summary -

1. The proposed *Twin Lakes Development* on Prince Albert Road will include approximately 173 residential units in two buildings, and about 7,700 square feet of commercial space.
2. The existing site includes *NAPA Auto Parts* (Civic Number 327), a retail and wholesale auto parts store with approximately 13,000 SF of commercial space. *NAPA* has 12 employees working in the building with 7 or 8 delivery vehicles based at and operating from the site. The site also includes a building used as an office by the *Association of Nova Scotia Land Surveyors* (Civic Number 325A).
3. The site will be served by two driveways located near the west and east site boundaries. Visibility is good on both Prince Albert Road approaches to the proposed new driveways. Curbing along the site frontage will be adjusted as required to accommodate the two new driveways.
4. There is a continuous sidewalk along the south side of the Prince Albert Road adjacent to the site, as well as a short section of sidewalk on the north side of the street to provide access to a bus stop. There is a marked crosswalk across the street near the middle of the lot frontage which provides access to the bus stop, as well as to the Superstore.
5. Metro Transit provides service on the section of Prince Albert Road adjacent to the site for Route Number 62 with bus stops near the site. Route 62 provides connections to Penhorn, Alderney Gate and Bridge transit terminals.
6. It is estimated that the proposed Twin Lakes development will generate 49 two-way vehicle trips (16 entering and 33 exiting) during the AM peak hour and 61 two-way vehicle trips (34 entering and 27 exiting) during the PM peak hour.
7. After trips generated by the existing *NAPA Auto Parts* and *Association of Nova Scotia Land Surveyors* building on the site are considered, it is estimated that the proposed Twin Lakes development will generate 14 additional two-way vehicle trips (4 fewer entering and 18 more exiting) during the AM peak hour and 5 fewer two-way vehicle trips (3 more entering and 8 fewer exiting) during the PM peak hour.

Conclusions -

8. Review of the existing crosswalk location near the middle of the lot frontage indicates that it will continue to provide a satisfactory crossing location for new tenants and existing pedestrian traffic to cross Prince Albert Road to access the bus stop or shopping opportunities.
9. Since estimated site generated trips for the proposed development are similar to those generated by the existing site businesses which will be removed during construction, the small number of additional site generated trips during the AM peak hour and the reduced number of trips during the PM peak hour are not expected to have any significant impact on adjacent intersections, streets, or the regional road network.

If you have any questions, please contact me by Email to ken.obrien@wsp.com or telephone 902-452-7747.

Sincerely,



Ken O'Brien, P. Eng.
Senior Traffic Engineer
WSP Canada Inc.

