



Ref. No. 151-00737

June 14, 2017

Mr. Kevin Neatt
 Director, Planning and Development
 Clayton Developments Limited
 255 Lacewood Drive, Unit 100 C
 HALIFAX NS B3M 3Y7

Sent via Email to kneatt@claytondev.com

RE: Traffic Impact Statement, Proposed Car Wash / Automotive Detailing Service, Broad Street (South) @ Larry Uteck Boulevard Intersection, Bedford, NS

Dear Mr. Neatt:

This is a Traffic Impact Statement (TIS) for a proposed Car Wash / Automotive Detailing Service on Broad Street (South) at the Larry Uteck Boulevard intersection as requested by HRM (Letter Carl Purvis to Kevin Neatt, June 12, 2017).

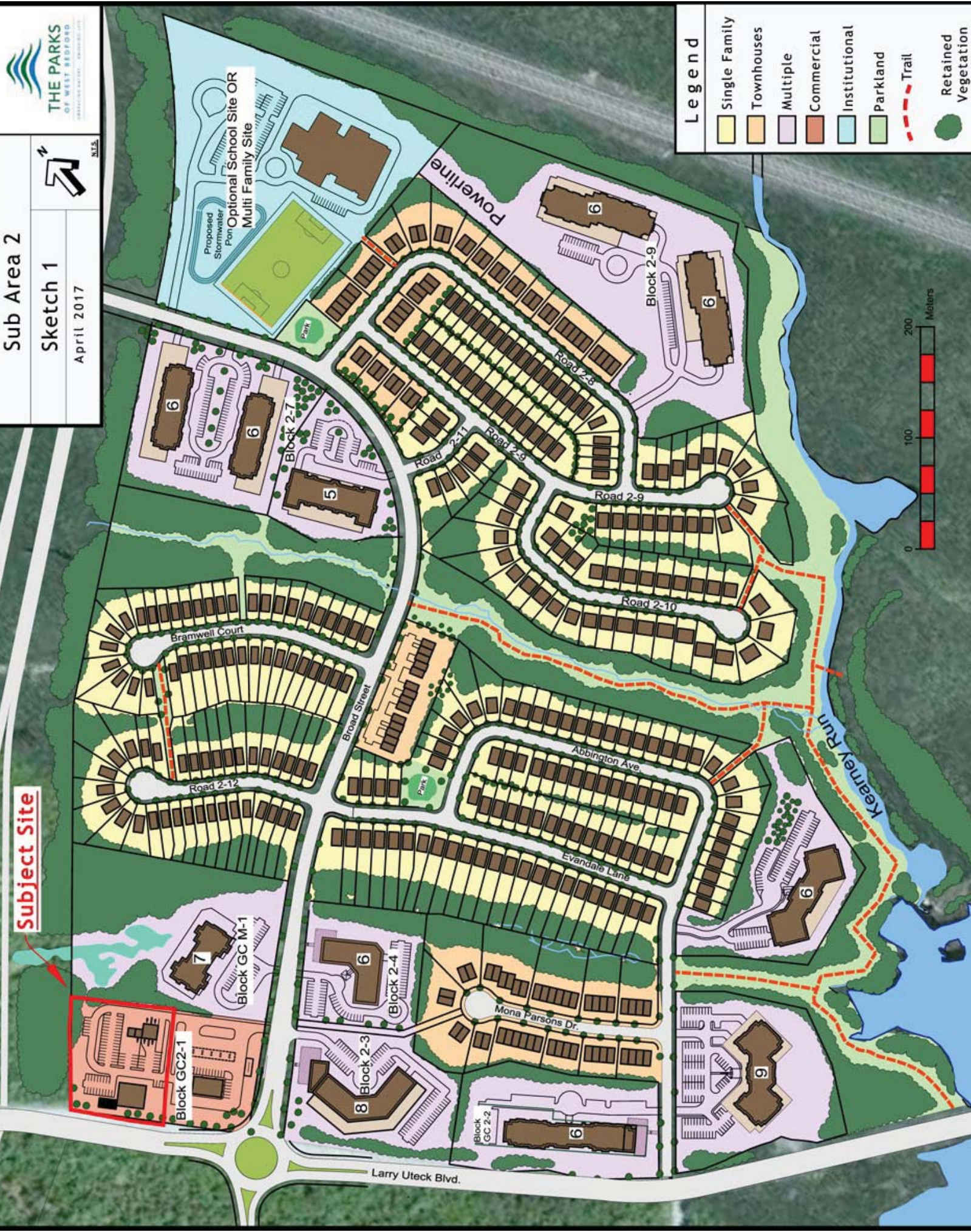
Background - A Gas Bar with Convenience Market is proposed on Block GC 2-1A in the northeast corner of the Broad Street (South) @ Larry Uteck Boulevard Intersection and a Car Wash / Automotive Detailing Service is proposed on the adjacent Block WB-16R5 (Sketch 1, Page 2). Site access for development on both blocks will be from a full movement driveway on Broad Street at the east site boundary as shown on Sketch 1.

Trip Generation for a Car Wash - The proposed Car Wash / Automotive Detailing Service is adjacent to the proposed Gas Bar with Convenience Market, and is essentially on the same site. The additional trips generated by the Car Wash portion of the development have been estimated by comparing trip generation estimates for *Gasoline / Service Station with Convenience Market and Car Wash* (Land Use 946) with those for *Gasoline / Service Station with Convenience Market* (Land Use 945). Trip generation estimates for a Car Wash, completed using published trip generation rates from *Trip Generation, 9th Edition*, (Institute of Transportation Engineers, 2012), are included in Table 1.

Table 1 - Trip Generation Estimates for Proposed Car Wash									
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 Estimates for Gasoline / Service Station with Convenience Market and Car Wash									
Land Use 946	10	6.04	5.8	7.07	6.79	60	58	71	68
Trip Generation Estimates for Gasoline / Service Station with Convenience Market									
Land Use 945	10	5.08	5.08	6.755	6.755	51	51	68	68
Estimated Additional Trips Generated by a Car Wash						9	7	3	0
NOTES: 1. Rates for indicated land uses which are published in <i>Trip Generation, 9th Edition</i> , Institute of Transportation Engineers, 2012, have been used. 2. Units are 'number of fueling positions'. 3. Rates are 'vehicles per hour per unit'; Trips generated are 'vehicles per hour for peak hours'.									



Subject Site



Legend

[Yellow Box]	Single Family
[Orange Box]	Townhouses
[Light Purple Box]	Multiple
[Dark Purple Box]	Commercial
[Light Blue Box]	Institutional
[Light Green Box]	Parkland
[Red Dashed Line]	Trail
[Green Circle]	Retained Vegetation



Trip Generation for a Car Wash (Continued) - Due to the on-site synergies between gas bar, convenience market, and car wash on the same site, additional site trip generated by a car wash are relatively minor. It is estimated that the car wash component of the proposed development will generate 16 two-way vehicle trips (9 entering and 7 exiting) during the AM peak hour and 3 two-way vehicle trips (3 entering and zero exiting) during the PM peak hour.

Trip Generation for a Car Detailing Center - Beyond the normal wash and wax job typical of a car wash, 'car detailing' involves top-to-bottom deep cleaning of the vehicle both inside and out to restore the vehicle to its original shine and beauty. Interior detailing includes shampooing and cleaning of carpets, floor mats, and seats, as well as thorough cleaning of dash and windows. Exterior detailing includes hand wash and wax, as well as cleaning windows, wheels and tires. While minimum detailing including wash of exterior and vacuum of interior may only take ten or fifteen minutes, full detailing of exterior and interior may take between one and two hours.

Since there are no published trip generation rates for a Car Detailing Center, the following assumptions have been made to estimate AM and PM trips that will be generated by that part of the proposed development:

- Staff for the car detailing center will arrive at the site before the AM peak hour or leave the site after the PM peak hour.
- Customers will generate 12 two-way vehicle trips (8 entering and 4 exiting) during the AM peak hour and 12 two-way vehicle trips (4 entering and 8 exiting) during the PM peak hour.

Trip Generation Estimates for the Proposed Car Wash / Automotive Detailing Service - Combining the trip generation estimates for a car wash and those assumed for the car detailing service, it is estimated that the proposed development will generate 28 two-way vehicle trips (17 entering and 11 exiting) during the AM peak hour and 15 two-way vehicle trips (7 entering and 8 exiting) during the PM peak hour.

Conclusion - Traffic impacts of the Bedford West development have been studied extensively over the past five years, including impacts of residential and commercial development; roadways, intersections, and roundabouts, have been designed to accommodate future traffic projections. The additional trips that are estimated to be generated by the proposed Car Wash / Automotive Detailing Service are not expected to have any significant impact to the operation of adjacent streets or intersections.

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

Sincerely:
Originally Signed

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

