

May 8, 2019

Plazacorp Investments Ltd.
10 Wanless Avenue, Suite 201
Toronto, ON M4N 1V6

**Re: Parking Utilization Study
1255 Birchmount Road, Toronto ON
Our Project No. NT-17-072**

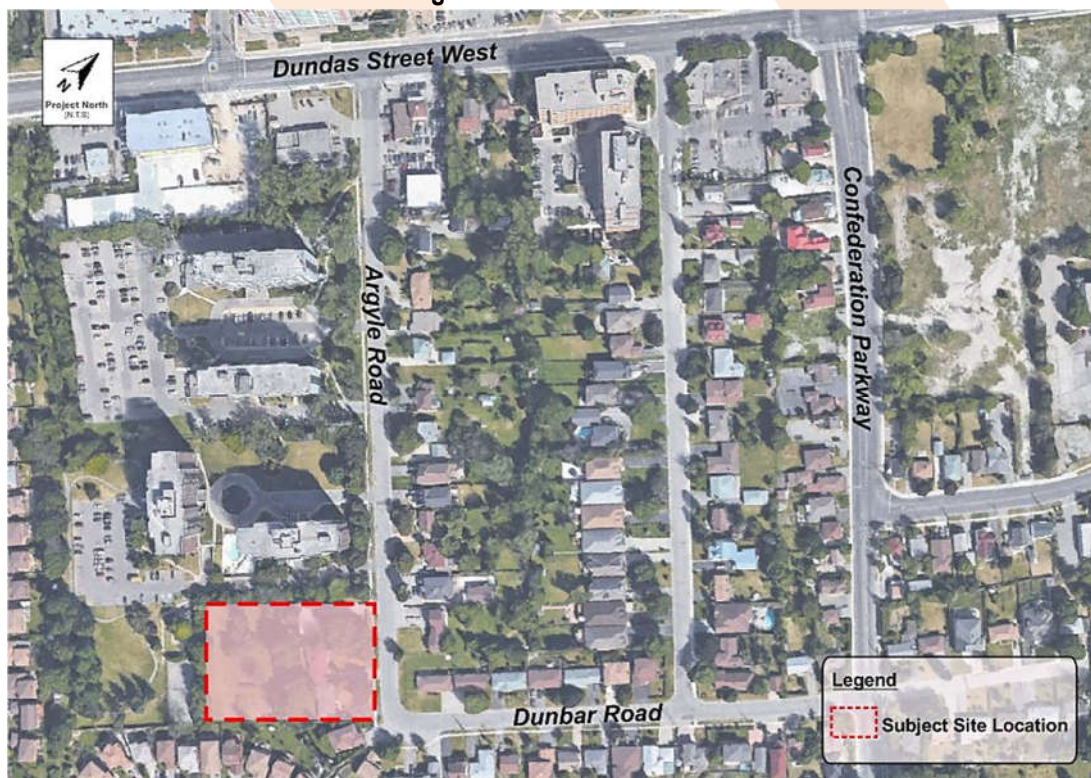
1.0 INTRODUCTION

Nextrans Consulting Engineers (A Division of NextEng Consulting Group Inc.) was retained by Plazacorp Investments Limited (the 'Client') to undertake a Parking Utilization Study to address the City of Mississauga comments and in support of an Official Plan Amendment and Zoning By-law Amendment applications for a proposed residential development.

Based on the proposed site plan, the parking reduction is less than 10% of the by-law requirement and rather than providing a Letter of Justification, a Parking Utilization Study was undertaken to support the parking reduction of the residential development by using current parking utilization rates and demand at a proxy site. This Parking Utilization Study conforms to the City of Mississauga guidelines, see **Appendix A** for the established terms of reference.

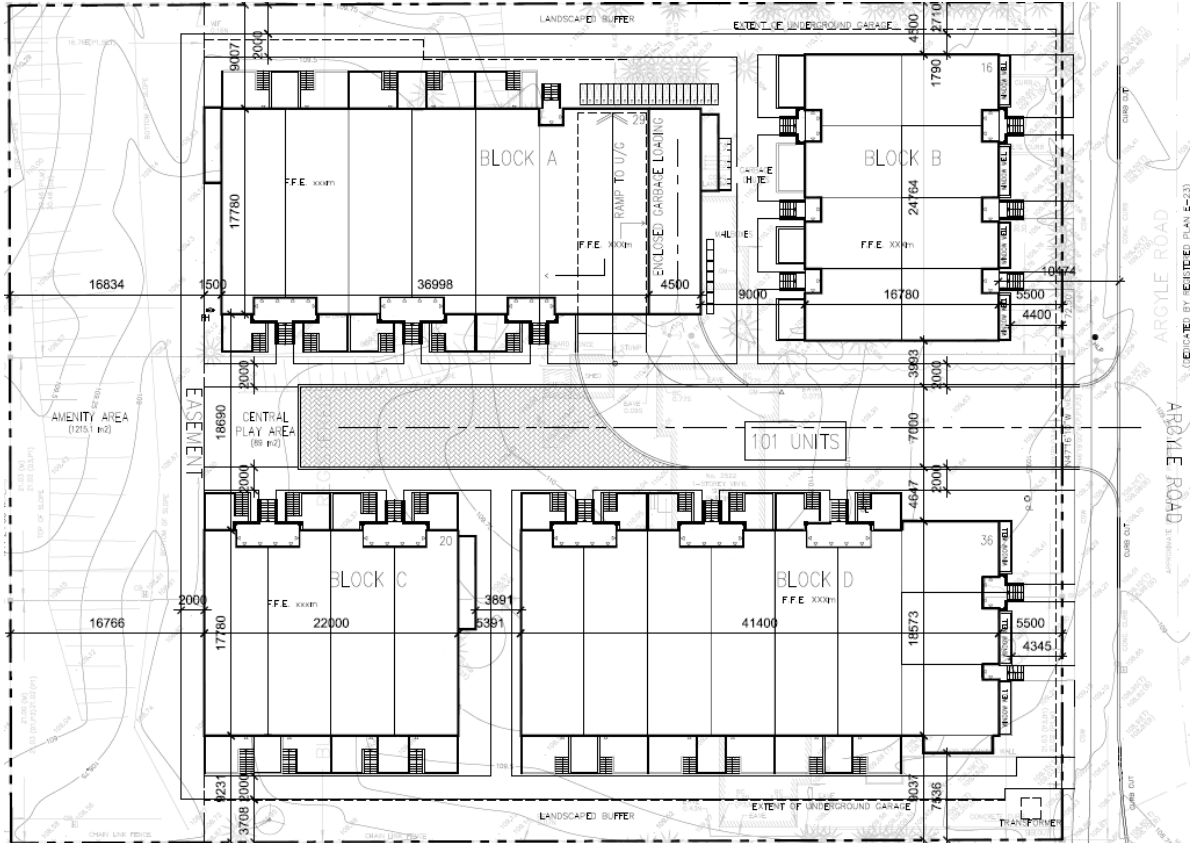
The subject property municipally known as, 2512, 2522, 2532 Argyle Road, is located west of Argyle Road and south of Dundas Street West. The proposed subject site location is illustrated in **Figure 1-1**.

Figure 1-1 – Site Location



The development proposal is to redevelop the existing 6,483.5 m² site to include 101 residential units divided among four (4) blocks of stacked back-to-back townhouses and provide 153 underground parking spaces. Vehicular access to the site is proposed via a full movement driveway located on Argyle Road. **Figure 1-2** illustrates the current site plan; **Appendix B** also provides larger scale version of the current site plan.

Figure 1-2 – Proposed Development Site Plan



1.1 Parking By-law Requirements

The City-wide Zoning By-law No. 0225-2007 has been adopted by the City of Mississauga and it was enacted on June 20th, 2007. The Zoning By-law is a comprehensive By-law covering the entire amalgamated City of Mississauga.

The existing development provides a total of 101 stacked back-to-back townhouse units which are comprised of the following: 32 one-bedroom units, 67 two-bedroom units, and 2 three-bedroom unit. The technical parking requirement for the subject site is detailed in **Table 1.1**.

Table 1.1 – City of Mississauga Vehicle Parking Requirements (ZBL 0225-2007)

Use	Units	Parking Rate	Parking Requirement
Condominium Horizontal Multiple Dwelling (without exclusive use garage and driveway)	32 1-bedroom	1.10 spaces per 1-bedroom unit	35
	67 2-bedroom	1.50 spaces per 2-bedroom unit	101
	2 3-bedroom	1.75 spaces per 3-bedroom unit	4
Condominium Horizontal Multiple Dwelling – Visitor	101	0.25 spaces per unit	25
Total			165

Based on the City of Mississauga Zoning By-law 0225-2007, a total of 165 parking spaces will be required for the proposed residential development. The proposed development provides a total of 153 parking spaces, inclusive of resident and visitor parking, which results in a shortfall of 12 parking spaces.

2.0 PARKING REDUCTION JUSTIFICATION

2.1 Parking Data at Proxy Site

In order to recommend a reasonable parking provision rate, NexTrans has undertaken a parking survey at an existing site with similar characteristics to the proposed with the main difference is that residential parking is on the surface as opposed to an underground garage. The proxy site municipally known as, 5005-5055 Oscar Peterson Boulevard, is located at the northeast corner of the Eglinton Avenue West and Oscar Peterson Boulevard, in the City of Mississauga. The proxy surveys were based on the following:

- The proxy site is an existing stacked back-to-back townhouse complex with 157 residential units;
- The development includes 93 individual parking garages and 100 tenant and 32 visitor surface parking;
- The existing 93 individual garages are assumed to be occupied; and
- The surveys were undertaken for two consecutive weeks from 6:00PM to 1:00AM at 30-minute intervals on Friday March 1st, Saturday March 2nd, Sunday March 3rd, Friday March 8th, and Saturday March 9th. The surveys in the second week were based on the two days that experienced the highest peak parking demand in the first week.

The proxy site location is illustrated in **Figure 2-1** and the parking utilization survey results from Week 1 and Week 2, are summarized below.

Figure 2-1 – Proxy Site Location

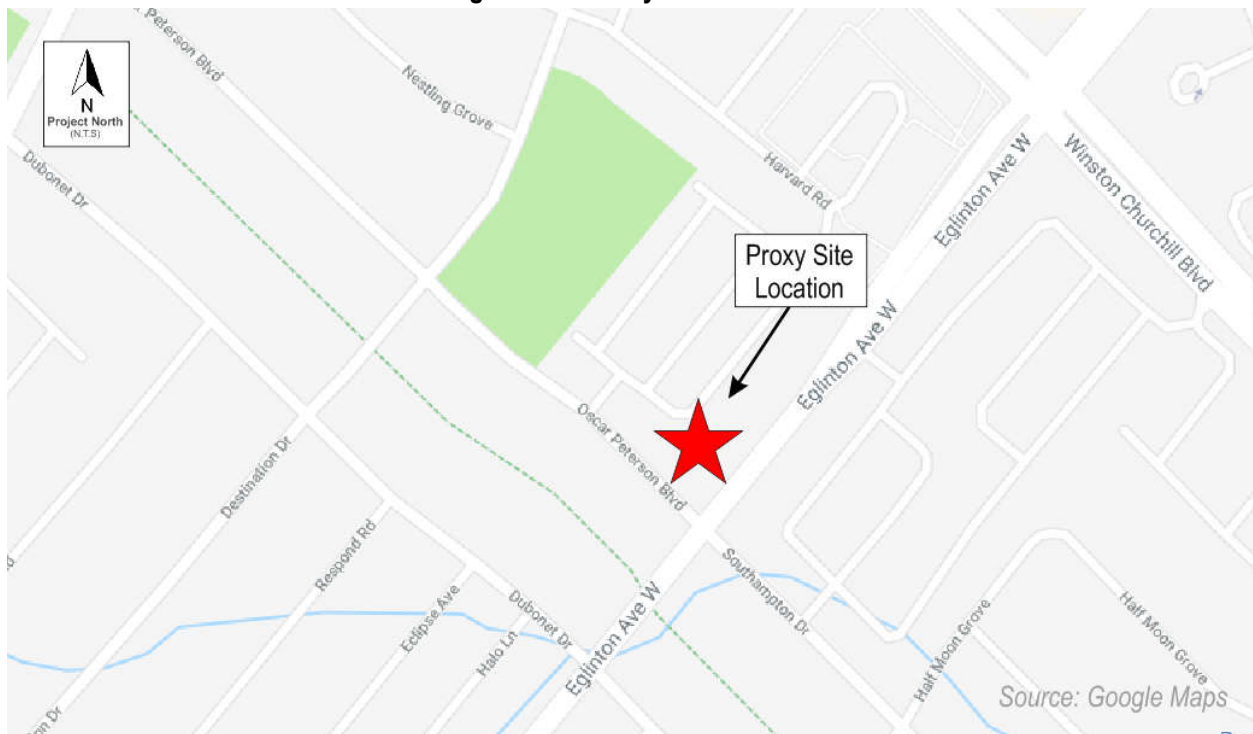


Table 2.1 – Parking Utilization Survey (Friday March 1st, 2019)

Time (Starting)	Resident			Parking Rate (spaces per unit)	Visitor	
	Parking Demand				Parking Demand	Parking Rate (spaces per unit)
	Surface	Garage	Total			
6:00 PM	49	93	142	0.90	11	0.07
6:30 PM	55	93	148	0.94	11	0.07
7:00 PM	58	93	151	0.96	9	0.06
7:30 PM	59	93	152	0.97	8	0.05
8:00 PM	63	93	156	0.99	7	0.04
8:30 PM	59	93	152	0.97	7	0.04
9:00 PM	57	93	150	0.96	6	0.04
9:30 PM	60	93	153	0.97	8	0.05
10:00 PM	65	93	158	1.01	7	0.04
10:30 PM	70	93	163	1.04	6	0.04
11:00 PM	72	93	165	1.05	6	0.04
11:30 PM	75	93	168	1.07	8	0.05
12:00 AM	76	93	169	1.08	6	0.04
12:30 AM	79	93	172	1.10	5	0.03
1:00 AM	79	93	172	1.10	4	0.03
1:30 AM	79	93	172	1.10	4	0.03
Max	79	93	172	1.10	11	0.07

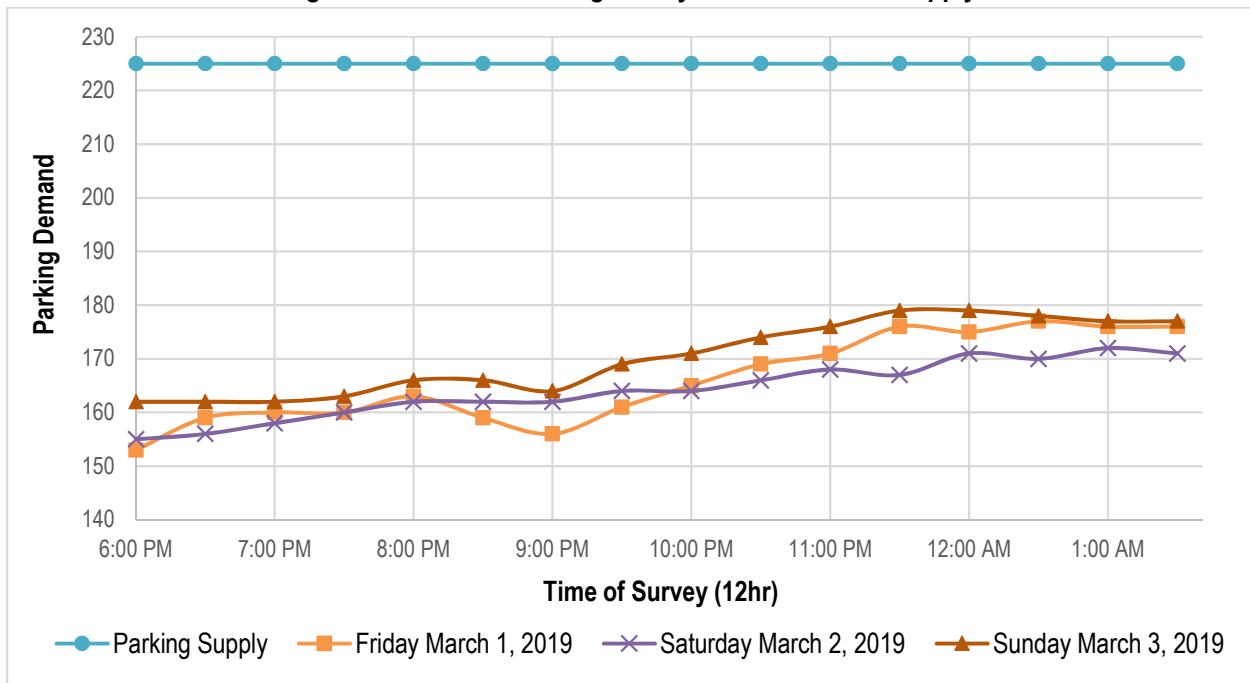
Table 2.2 – Parking Utilization Survey (Saturday March 2nd, 2019)

Time (Starting)	Resident			Parking Rate (spaces per unit)	Visitor	
	Parking Demand				Parking Demand	Parking Rate (spaces per unit)
	Surface	Garage	Total			
6:00 PM	45	93	138	0.86	17	0.11
6:30 PM	47	93	140	0.89	16	0.10
7:00 PM	50	93	143	0.91	15	0.10
7:30 PM	51	93	144	0.92	16	0.10
8:00 PM	52	93	145	0.92	17	0.11
8:30 PM	52	93	145	0.92	17	0.11
9:00 PM	51	93	144	0.92	18	0.12
9:30 PM	53	93	146	0.93	18	0.12
10:00 PM	54	93	147	0.94	17	0.11
10:30 PM	57	93	150	0.96	16	0.10
11:00 PM	60	93	153	0.97	15	0.10
11:30 PM	62	93	155	0.99	12	0.08
12:00 AM	67	93	160	1.02	11	0.07
12:30 AM	70	93	163	1.04	7	0.04
1:00 AM	73	93	166	1.06	6	0.04
1:30 AM	73	93	166	1.06	5	0.03
Max	73	93	166	1.06	18	0.12

Table 2.3 – Parking Utilization Survey (Sunday March 3rd, 2019)

Time (Starting)	Resident			Visitor		
	Parking Demand		Total	Parking Rate (spaces per unit)	Parking Demand	Parking Rate (spaces per unit)
	Surface	Garage				
6:00 PM	58	93	151	0.96	10	0.06
6:30 PM	58	93	151	0.96	9	0.06
7:00 PM	60	93	153	0.97	9	0.06
7:30 PM	62	93	155	0.99	8	0.05
8:00 PM	66	93	159	1.01	7	0.04
8:30 PM	66	93	159	1.01	6	0.04
9:00 PM	65	93	158	1.01	5	0.03
9:30 PM	68	93	161	1.03	5	0.03
10:00 PM	71	93	164	1.04	3	0.02
10:30 PM	75	93	168	1.07	3	0.02
11:00 PM	77	93	170	1.08	2	0.01
11:30 PM	78	93	171	1.09	2	0.01
12:00 AM	80	93	173	1.10	2	0.01
12:30 AM	79	93	172	1.10	3	0.02
1:00 AM	80	93	173	1.10	3	0.02
1:30 AM	80	93	173	1.10	3	0.02
Max	80	93	173	1.10	10	0.06

Figure 2-2 – Week 1 Parking Surveys Demand versus Supply



From the survey results, it is observed that the maximum parking utilization rate for the residential units is 1.10 spaces per unit and 0.12 visitor spaces per unit. In the summary tables above, Friday and Sunday experienced the same peak parking demand (tenant plus visitor) so Friday was selected as one of the survey days in Week 2. Saturday experienced the highest parking demand (91 total vehicles) and had the most visitor parking demand. On-street parking is a community concern at our proposed site so, in order to establish a visitor parking rate which will eliminate future on-street parking, Saturday is the most representative day to survey. Therefore, based on the surveyed days in Week 1,

Friday and Saturday have been selected as the survey days in Week 2. The parking utilization survey results from Week 2 are provided below.

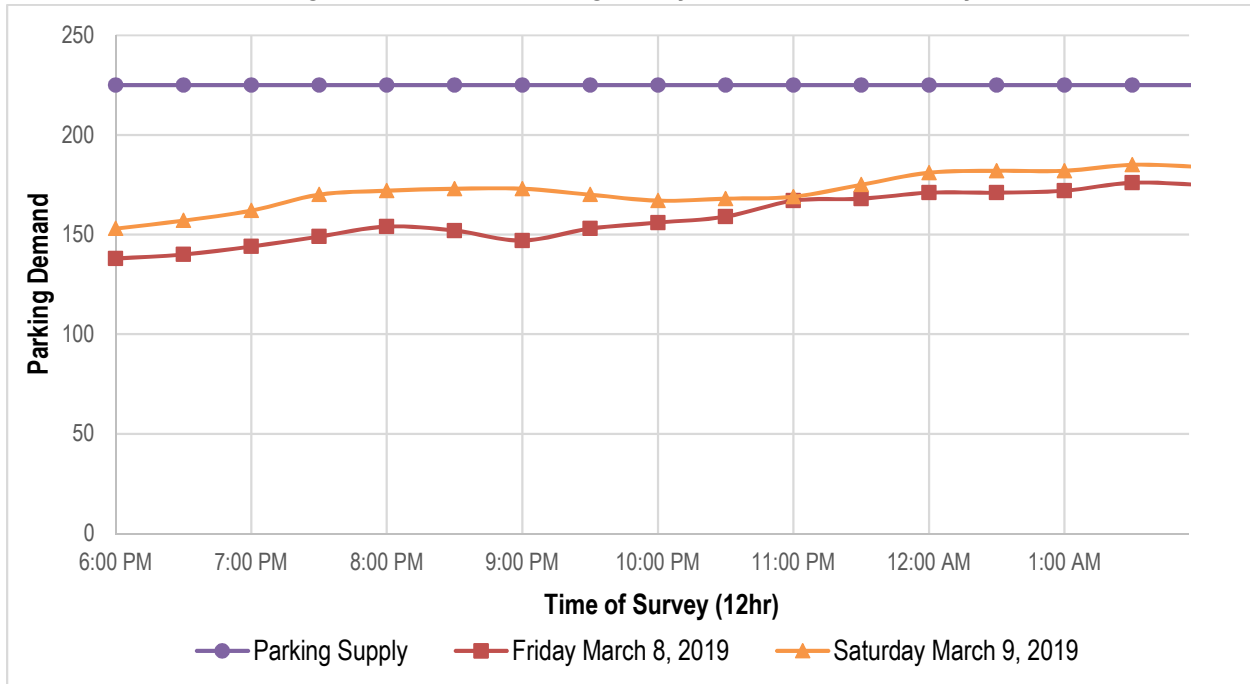
Table 2.4 – Parking Utilization Survey (Friday March 8th, 2019)

Time (Starting)	Resident			Visitor		
	Parking Demand			Parking Rate (spaces per unit)	Parking Demand	Parking Rate (spaces per unit)
	Surface	Garage	Total			
6:00 PM	38	93	131	0.83	7	0.05
6:30 PM	40	93	133	0.85	7	0.05
7:00 PM	43	93	136	0.87	8	0.05
7:30 PM	49	93	142	0.90	7	0.05
8:00 PM	54	93	147	0.94	7	0.05
8:30 PM	52	93	145	0.92	7	0.05
9:00 PM	47	93	140	0.89	7	0.05
9:30 PM	50	93	143	0.91	10	0.06
10:00 PM	52	93	145	0.92	11	0.07
10:30 PM	55	93	148	0.94	11	0.07
11:00 PM	62	93	155	0.99	12	0.08
11:30 PM	64	93	157	1.00	11	0.07
12:00 AM	67	93	160	1.02	11	0.07
12:30 AM	68	93	161	1.03	10	0.06
1:00 AM	70	93	163	1.04	9	0.06
1:30 AM	74	93	167	1.06	9	0.06
2:00 AM	74	93	167	1.06	8	0.05
Max	74	93	167	1.06	12	0.08

Table 2.5 – Parking Utilization Survey (Saturday March 9th, 2019)

Time (Starting)	Resident			Visitor		
	Parking Demand			Parking Rate (spaces per unit)	Parking Demand	Parking Rate (spaces per unit)
	Surface	Garage	Total			
6:00 PM	51	93	144	0.92	9	0.06
6:30 PM	52	93	145	0.92	12	0.08
7:00 PM	54	93	147	0.94	15	0.10
7:30 PM	58	93	151	0.96	19	0.12
8:00 PM	59	93	152	0.97	20	0.13
8:30 PM	60	93	153	0.98	20	0.13
9:00 PM	59	93	152	0.97	21	0.13
9:30 PM	59	93	152	0.97	18	0.12
10:00 PM	57	93	150	0.96	17	0.11
10:30 PM	60	93	153	0.98	15	0.10
11:00 PM	61	93	154	0.98	15	0.10
11:30 PM	66	93	159	1.01	16	0.10
12:00 AM	72	93	165	1.05	16	0.10
12:30 AM	74	93	167	1.06	15	0.10
1:00 AM	75	93	168	1.07	14	0.09
1:30 AM	78	93	171	1.09	14	0.09
2:00 AM	78	93	171	1.09	13	0.08
Max	78	93	171	1.09	21	0.13

Figure 2-3 – Week 2 Parking Surveys Demand versus Supply



From the survey results in Week 2, it is observed that the maximum parking utilization rate for the residential units is 1.09 resident spaces per unit and 0.13 visitor spaces per unit. The parking utilization survey results over the course of two consecutive weeks is summarized in **Table 2.6**.

Table 2.6 – Parking Utilization Survey Results Summary

Day of Survey	Number of Units	Peak Parking Demand		Parking Rates	
		Resident	Visitor	Resident	Visitor
Friday March 1, 2019	157	172	11	1.10	0.07
Saturday March 2, 2019		176	18	1.12	0.11
Sunday March 3, 2019		173	10	1.10	0.06
Friday March 8, 2019		167	12	1.06	0.08
Saturday March 9, 2019		171	21	1.09	0.13
Maximum Parking Rate per Unit				1.12	0.13
Combined Parking Rate per Unit				1.25	

Based on the survey information, the maximum parking utilization for residents is 1.12 spaces per unit and for visitors is 0.13 spaces per unit, with a combined rate of 1.25 spaces per unit. As indicated in Section 1.0, the proposed development will provide a total of 153 parking spaces with a combined rate of 1.51 spaces per unit.

As such, it is our opinion that the proposed parking rate for the proposed development are reasonable and consistent with other existing developments with similar characteristics.

Table 2.7 below, summarizes the recommended parking requirement for the proposed development based on the justification provided in this report.

Table 2.7 – Recommended Parking Rates for 2512, 2522, 2532 Argyle Road Residential Development

Use	Units	Parking Rate	Parking Requirement	Parking Provided	Difference
Condominium Horizontal Multiple Dwelling (without exclusive use garage and driveway)	101	1.12 spaces per unit	113	153	+27
Condominium Horizontal Multiple Dwelling – Visitor		0.13 spaces per unit	13		
Total			126	153	+27

As summarized in **Table 2.7**, the adjusted parking requirement is 126 parking spaces (113 resident and 13 visitor), the proposed site provides for 153 parking spaces which results in a surplus of 27 parking spaces. NexTrans recommends the surplus of parking spaces be allocated to visitor use to prevent on-street visitor parking during potential busy periods that might occur at the site. On this basis, the future parking demand is completely satisfied with the parking provision.

3.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) refers to variety of strategies to reduce congestion, minimize the number of single-occupant vehicles, encourage non-auto modes of travel, and reduce vehicle dependency to create a sustainable transportation system. Typically, TDM strategies are for residential and office developments where large quantities of people congregate in one origin or destination.

Based on the review of the context of the proposed development, the following TDM measures are recommended:

- Construct direct shared pedestrian and cycling connections from the proposed development to Argyle Road; as shown on the proposed site plan;
- Provide long- and short-term bike parking spaces for residents and visitors; as shown on the proposed site plan;
- The Owner to consider providing transit incentives for residents, if appropriate.

3.1 Transit and Active Transportation Mode Assessment

The public transportation services operated by MiWay provide a reliable, cost effective alternative mode of travel through the comprehensive and continually growing transit network system. MiWay transit only charges PRESTO card users 80 cents when taking the bus to connect to a GO Transit station or transferring from GO Transit to MiWay. The full fare will be charged from the PRESTO card at the first tap on the bus and later deducted when tapping on to the GO Transit, and vice versa.

The Hurontario LRT Project is proposed to bring a modern, reliable, rapid transit to serve the cities of Mississauga and Brampton. The LRT line proposes a future stop at Hurontario Street and Dundas Street West, approximately a 13-minute walk or 4-minute bike ride. This station will provide residents with a quick mode of transit north to Gateway Terminal in Brampton and south to the Port Credit GO Station. The LRT is set to be completed by the year 2022 and will also enhance the streetscape with bike lanes and pedestrian walkways throughout.

The proposed development is situated in a transit supportive neighbourhood with bus stops located approximately 4-minutes to the subject site within comfortable walking distance. The route services are illustrated in **Appendix C**. The route services in the immediate area are described below:

- **28 Confederation:** The 28 Confederation bus route operates approximately every 15 minutes northbound to the City Centre Transit Terminal and southbound to Trillium Health Centre. The 28 Confederation bus route provides service 7 days a week. Weekend service operates approximately every 25 minutes up to 7:30pm. Accessible service and bike racks are provided on the route. This route stops at the Cooksville GO Transit platform.
- **1 Dundas:** The 1 Dundas bus route operates approximately every 15 minutes eastbound to Islington TTC Subway Station, and westbound to Vega Boulevard and Laird Road. The 1 Dundas bus route provides service 7 days a week. Weekend service operates approximately every 20 minutes. Accessible service and bike racks are provided on the route. This bus route connects transit users to the University of Toronto Mississauga Campus.

Based on the study prepared by the Ministry of Transportation Ontario titled: 'Transit Supportive Guidelines', dated January 2012, transit users are generally willing to walk 400 meters to a local stop or 800 meters to a rapid transit station. The Dundas Street West at Argyle Road, and Confederation Parkway at Dunbar Road bus stops are both approximately 350 meters from the proposed subject site.

3.2 Existing Active Transportation Infrastructure

Sidewalks

The area surrounding the proposed development is serviced with dedicated sidewalks. Currently, sidewalks are available on both sides of Dundas Street West and Confederation Parkway South. Argyle Road provides a sidewalk only on the west side of the roadway.

Bicycle Lanes

Dedicated bicycle lanes are provided on both sides of the roadway of Confederation Parkway South. There is a high density of amenities indicating many necessities are within walking distance in the study area.

3.3 Active Transportation Mode and Assessment

Existing Conditions

The review of the area surrounding the proposed development in downtown Cooksville, indicates numerous retail, food, and service establishments including a retail/commercial plaza at Dundas Street West and Confederation Parkway as well as a 1-km walk away from the Dundas Street West and Hurontario Street shops. Parks such as Floradale, Parkerhill, and Lummis Park are all within 500-meter radius from the site as well as the Floradale Public School.

The above combined public transportation services operated by the can provide a reliable, cost effective alternative mode of travelling through the comprehensive and continually growing transit network system. Pedestrian sidewalks are provided on both sides of the roadways, and sidewalk connectivity is provided throughout the proposed municipal road to ensure a complete sidewalk network.

4.0 CONCLUSIONS / RECOMMENDATIONS

The review and investigation of existing parking supply and demand trends within the City of Mississauga at a proxy site of similar characteristics, indicates that the current by-law parking requirements for Condominium Horizontal Multiple Dwelling (without exclusive use garage and driveway) are in excess and incomparable to the existing travel patterns and behaviors. Parking utilization surveys at the proxy site, 5005-5055 Oscar Peterson Boulevard, indicate a resident parking demand of 1.12 spaces per unit and a visitor parking demand of 0.13 spaces per unit with a combined parking rate of 1.25 spaces per unit.

In summary, we believe in light of the parking utilization surveys, the proposed parking provisions are sufficient to accommodate the anticipated parking demands for the proposed residential development at 2512, 2522, 2532 Argyle Road.

We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

NEXTRANS CONSULTING ENGINEERS

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