1066 Dunbarton Road Residential Development

City of Pickering
Urban Transportation Considerations
Zoning By-law Amendment

Prepared For: KPMB Architects

December 9, 2022

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

TABLE OF APPENDICES

1.0 INTRODUCTION

BA Group is retained by KPMB Architects to provide transportation consulting services for a proposed residential infill development located at Dunbarton Fairport United Church, municipally known as 1066 Dunbarton Road, (hereafter referred to as the "Site") in Pickering, Ontario. This report has been prepared to address a Zoning By-law Amendment (ZBA) application being made to the City of Pickering for the proposed redevelopment of the Site.

The Site is located at the northwest corner of Dunbarton Road and Cloudberry Court, in the City of Pickering and is bounded by Dunbarton Road to the east and the south, and existing single-family homes to the north and west.

It shall be noted that, as part of the City of Pickering Traffic Impact Assessment Guidelines (March 2018), a traffic impact assessment is not required as the Site is proposing limited residential units meriting a low vehicular impact to the surrounding road network in future conditions.

1.1 STUDY SCOPE

The following study scope has been adopted as part of this study:

- A description of the existing and planned transportation context of the Site including vehicular, transit, active transportation, and pedestrian accessibility;
- A review of vehicle parking and bicycle parking in relation to the applicable municipal zoning By-law rates;
- A review of regional and local policies/plans and how they influence the future transportation context and travel patterns in the area;
- A review of the functionality and appropriateness of the proposed vehicular facilities incorporated into the site plan including, refuse and recycling collection;
- A Transportation Demand Management (TDM) framework plan that is focused on reducing single occupancy travel and promoting more sustainable modes of travel; and
- A review of the multimodal trip forecasting consideration based on the proposed land uses on the Site.

1.2 EXISTING SITE

1.2.1 Project Description

The Site is currently occupied by Dunbarton-Fairport United Church, with ancillary hall and day nursery uses related to the church on the Site. The Site includes a paved surface area on the north side of the building with no delineation of parking. Based on the existing paved area, approximately 60 spaces are accommodated on site including 4 delinated accessible parking spaces. There are no dedicated loading spaces and zero bicycle parking spaces to support the existing Site. However, there are currently three (3) two-way vehicular access to the Site provided via Dunbarton Road at the north and south sides. Pedestrian connection is provided extending from Dixie Road to Dunbarton Road through the Site.

The Site location and Site plan are illustrated in **Figure 1** and **Figure 2**, respectively.

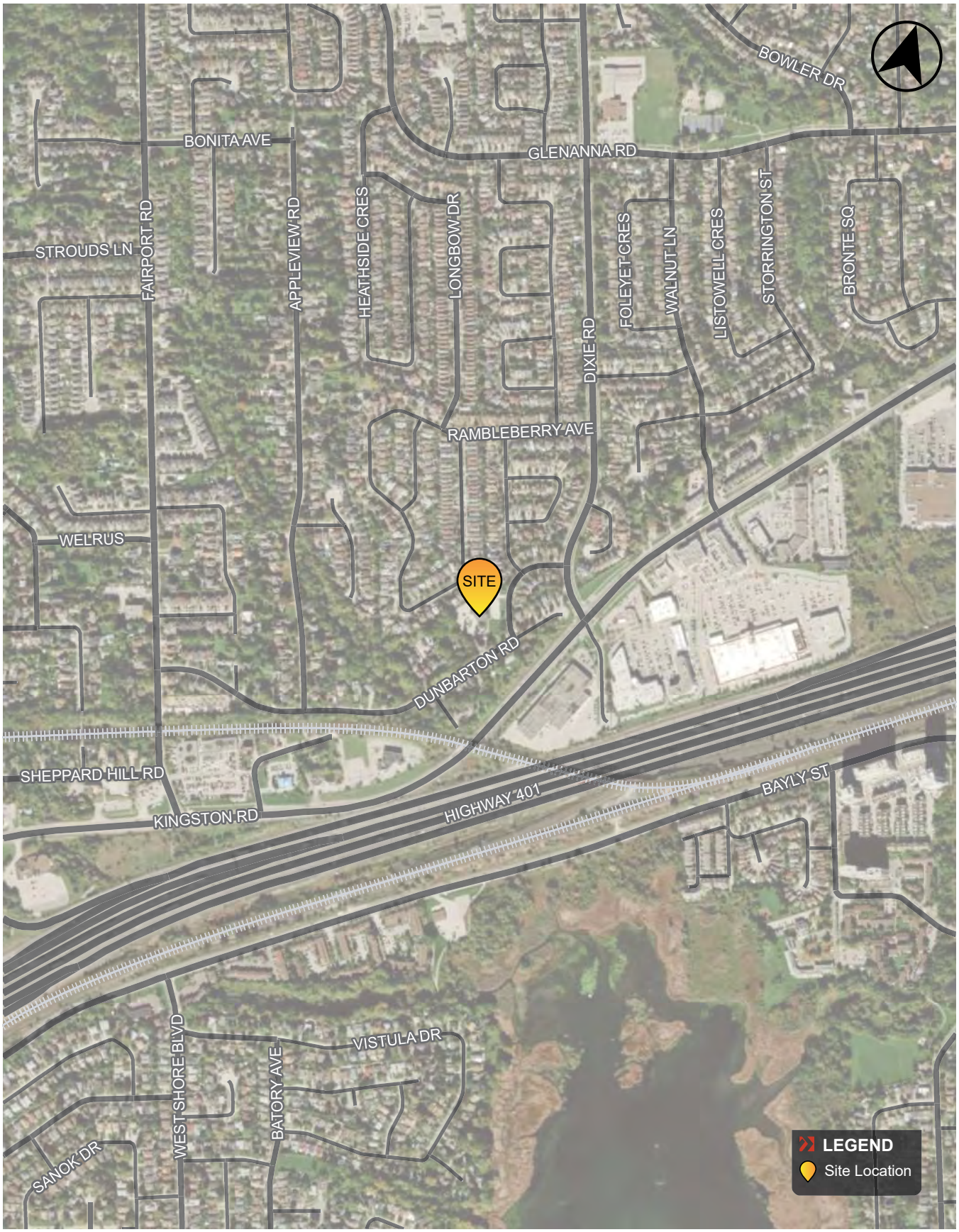

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FIGURE 1 SITE LOCATION

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FIGURE 2 SITE CONTEXT

1.3 DEVELOPMENT PROPOSAL

The proposed redevelopment includes the retention of the existing chapel building located in the southwest corner of the Site with the approximate footprint of 100 m^2 GFA, and the removal of the surface parking lot in order to accommodate 41 residential units including 8 townhouses and 33 three-storey walk-up apartments. The proposed development incorporates a mix of housing types, including affordable and market units. The chapel is proposed to be repurposed into a community space with an external playground.

Access to the proposed development will be provided from two (2) full movement accesses operating under STOP control off of Dunbarton Road. The existing driveway access at the southwest side of the Site is to be maintained, while a newly proposed site access will be generally located between the two existing driveways at the northeast side of the side along Dunbarton Road.

The proposed internal road will service municipal waste collection route and provide fire route access to all buildings. The internal road is 6.5 metres wide and expected to operate as a two-way drive aisle. Pedestrian pathways are provided to the Site providing users the ability to access Dixie Road from the existing mid-block connection at Dunbarton Road. In addition, bicycle parking for all land uses will be across the Site. As part of the development programme, a total of 34 resident parking spaces and 16 shared non-residential parking spaces are proposed.

Individual municipal curbside waste collection is proposed for the residential units. Waste collection and deliveries will occur off of the new internal road. A new waste bin staging and snow storage area is being proposed for the proposed community space uses north of the existing location. Waste collection for the non-residential uses will be conducted municipally in-front of the proposed bin staging area.

The proposed development programme is summarized in **Table 1**. Reduced architectural plans are provided in **Appendix A**.

TABLE 1 DEVELOPMENT PROPOSAL SUMMARY

Use		Development Proposal	
	**Residential Units**	1-Bedroom	11 Units
		2-Bedroom	22 Units
		3-Bedroom	8 Units
		Total	**41 Units**
	**Community Space**	100 m^2	
	**Vehicle Parking Spaces**	Resident	34 spaces
		Non-Resident	16 spaces
		Total	**50 spaces**
	**Bicycle Parking Spaces**	44 spaces	

Notes:
1. Site statistics per architectural plans provided by KPMB Architects, dated October 14, 2022.

2.0 EVOLVING AREA TRANSPORTATION CONTEXT

2.1 AREA ROAD CONTEXT

2.1.1 Existing Road Network

A description of the existing road network surrounding the Site is provided below. The area road network is illustrated in **Figure 3**.

TABLE 2 SUMMARY OF AREA ROAD NETWORK

Street Name	Orientation	Road Cross-Section	Description
Arterial Roadways			
Dixie Road	North – South	2 lanes including one lane in each direction and a centre left turn lane at signalized intersections. In addition to that, there is also a dedicated right turn lane at the Finch Avenue Intersection. Sidewalks are provided on both sides of the road.	Provides a north-south connection from Concession 3 Road in the north, down to Kingston Road in the south and continues south to a Cul de sac. The speed limit is 60 km / hour on most sections in the south but reduces to 40 km / hour around the school zones. Further north the speed limit is 50 km / hour. Signalized intersections provided at Kingston Road, Gienanna Road, Silverthorn Square and Finch Avenue.
Kingston Road	East – West	4 lanes (two lanes in each direction) with a dedicated left and right turn lanes at some signalized intersections. There is also a centre left turn lane at some driveways along the corridor. Sidewalks are provided on both sides of the road.	Provides an east-west connection from Highway 2A near the Old Kingston Road and Lake Ridge Road. The speed limit is 60 km / hour. There are dedicated BRT and bicycle lanes on both sides of the road east of Liverpool Street and planned BRT lanes along the remaining portion.
Collector Roadways			
Dunbarton Road	East – West	2 lanes (one lane in each direction) with parking permitted areas on both sides of the road.	Provides an east-west connection from Dixie Road Fairport Road. The speed limit is 40 km / hour.
Local Roadway			
Cloudberry Court	East – West	2 lanes (one lane in each direction) with parking permitted areas on both sides of the road.	Provides an east-west connection from Dunbarton Road ending in a cul-de-sac at 1014 Cloudberry Court. An unposted speed limit of 40 km / hour is assumed.
Falconcrest Drive	North – South	2 lanes (one lane in each direction) with parking permitted areas on both sides of the road.	Provides a north-south connection from Rambleberry Avenue to Dunbarton Road. The speed limit is 40 km / hour.

2.1.2 Planned Road Improvements

As part of the *Kingston Road Corridor and Specialty Retailing Node Intensification Study*, the area around the Site is planned to be redeveloped. New connections are proposed through the larger land parcels in the precinct, including a mid-block public road connection south of Kingston Road, connecting Dixie Road and Walnut Lane. It further proposes a planned connection between Walnut Lane and Liverpool Road on the south side of Kingston Road, which will provide a better and more direct connection to the Pickering GO station.

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FIGURE 3 EXISTING STREET NETWORK

2.2 AREA TRANSIT CONTEXT

2.2.1 Existing Transit Facilities

2.2.1.1 GO Train and Bus Terminal

The Site is located approximately 1.2 kilometre radius (or a 5-minutes drive) of Pickering GO Station, providing convenient access to the various higher-order local and regional public transit services available from this regional transit interchange. The GO Station is also serviced by numerous Durham Region Transit bus routes. GO Transit, a division of Metrolinx, operates 7 regional commuter rail services (GO Rail) that serves Southern Ontario. Transit services available at the Pickering GO Station are outlined in **Table 3**.

TABLE 3 EXISTING TRAIN AND BUS SERVICES AT PICKERING GO STATION

Service	Description
GO Rail	Pickering GO Station is a railway station on the Lakeshore East line which connects to Toronto's Union Station at the west end and Oshawa Station at the east end. The Lakeshore East line operates bi-directionally service throughout the day, 7 days a week, excluding holidays. During weekdays, trains operate approximately 5-15 minutes during peak hours, & approximately every 30 minutes during off-peak hours. During weekends, trains operate every 30 minutes for most of the day and every hour in the morning and evening. Regional Express Rail (RER) is proposed for the Lakeshore East line by Metrolinx, which will bring 15-20 minute two-way service throughout the day, following construction of a third track between Guildwood & Pickering.
GO Bus	GO Transit runs between Pickering GO Station and Union GO Station. Two buses run in the early morning and late evening in the peak direction.
101 Bay Ridges	The Durham Region Transit route runs from Pickering GO Station to the southeast. The route runs clockwise approximately every 30 minutes in the morning peak period, and runs counter-clockwise every half hour in the afternoon peak period and every hour during off-peak periods.
107 Rosebank	The Durham Region Transit route runs from Pickering GO Station to the west. The route runs in both directions approximately every 30 minutes in the morning and afternoon peak periods.
112 Brock	The Durham Region Transit route runs from Pickering GO Station to the northeast along Brock Road. The route runs in both directions approximately every 25-35 minutes in the morning and afternoon peak periods.
120 Whites	The Durham Region Transit route runs from Pickering GO Station to the northwest along Whites Road. The route runs in both directions approximately every 15-25 minutes in the morning and afternoon peak periods.

2.2.1.2 Local and Regional Bus Service

The Site is located within the Dunbarton neighbourhood in the City of Pickering with high frequency service operated by the Durham Region Transit (DRT). The nearest bus stop eastbound and westbound is at the intersection of Dixie Road / Kingston Road approximately 250 metres walking distance from the Site. DRT operates a number of bus services in the vicinity of the Site as illustrated in **Table 4.**

TABLE 4 EXISTING LOCAL & REGIONAL BUS SERVICES

Service	Description
DRT PULSE 900	Route is high frequency service along Highway 2 between University of Toronto Scarborough and Downtown Oshawa. Buses operate daily with a frequency of 7-8 minutes during weekday peak hours, every 10 minutes during weekday off-peak hours and every 30 minutes on weekday evenings. On Saturday, frequency is every 15 minutes during the day and 30 minutes in the morning and evening. On Sundays, buses operate every 30 minutes during the day and every 60 minutes in the morning and evening. The PULSE remains on Kingston Road past the PCC site and does not service the Pickering Parkway Terminal. Bus only lanes have been constructed on portions of Kingston Road, including adjacent to the PCC site, to facilitate improved travel time and reliability for the Bus Rapid Transit (BRT) service. The bus only lanes are part of the Highway 2 Transit Priority initiative to provide BRT through the region.
920	The Durham Region Transit route runs between McCowan Station and Harmony Terminal primarily along Kingston Road and Rossland Road. The route runs in both directions approximately every 15-30 minutes during the peak periods and every 30 minutes on off-peak periods.

Overall, the Site and nearby proprieties are very well served by transit under existing conditions, and is in close proximity with the Pickering GO Station and Pickering Parkway Terminal for trips to and from the wider area.

2.2.2 Planned Transit Improvements

2.2.2.1 Durham-Scarborough Bus Rapid Transit (BRT)

Metrolinx is working with Durham Region, Durham Region Transit, City of Toronto and the Toronto Transit Commission on the planning and design of a rapid transit corridor extending from Scarborough Centre to Downtown Oshawa – primarily along Kingston Road.

Bus Rapid Transit (BRT) was identified as the preferred transit technology to link Durham and Scarborough through Metrolinx's 2041 Regional Transportation Plan and the Durham-Scarborough Bus Rapid Transit Initial Business Case. The BRT is planned to include dedicated bus lanes, frequent 15-minute headway or better service, seven days a week, will have reliable service due to separation from traffic and signal priority measures, as well as include better connections to other transit modes. The other branches of the route will connect to the Kingston / Lawrence / Morningside area.

Public Information Centre (PIC) #1, 2 and 3 have been held, with the latest one occurring in November 2020. In the latest PIC, the technically preferred preliminary designs, including the design of each transit stop and intersection, were reviewed for each municipality involved. Feedback showed that the public was generally supportive of technically preferred solutions.

The recommended Hybrid Alternative Concept from the 2018 study will alternate between centre median running way and curbside running way. Adjacent to the Site, the proposed route will be in the centre median. The expected completion of the BRT section between Altona Road and Liverpool Road is expected to be completed by 2026.

2.2.2.1 Regional Express Rail

Metrolinx's Regional Express Rail (RER) is working on increasing GO Transit service through expansion and the electrification of the GO Transit rail network. As part of RER, GO Transit will offer more services and more stations. The City, Metrolinx and TTC have been working together to develop the RER to increase transit services between Etobicoke and Scarborough.

The new train technology / electrification will boost travel speeds on the Lakeshore East GO Transit line will provide all-day, two-way services with 15 minutes or better transit service. RER will add new stations (East Harbour) on the Lakeshore East line as well.

The RER program is currently underway and is anticipated to be completed in 2024, according to Metrolinx's 2041 RTP.

The increased service and new stations will provide the Site with an increased transit reach. Additionally, the high frequency services will increase the number of destinations that are "guaranteed" or departure time-independent.

The planned transit improvements in Pickering and around the vicinity of the Site are expected to promote and encourage less use of automobile modes of travel. The Site residents and visitors will be well serviced by the future BRT stop located at the intersection of Kingston Road and Dixie Road, which allows for an improved transit reach and connections between transit services.

The existing and future transit network is illustrated in **Figure 4**.

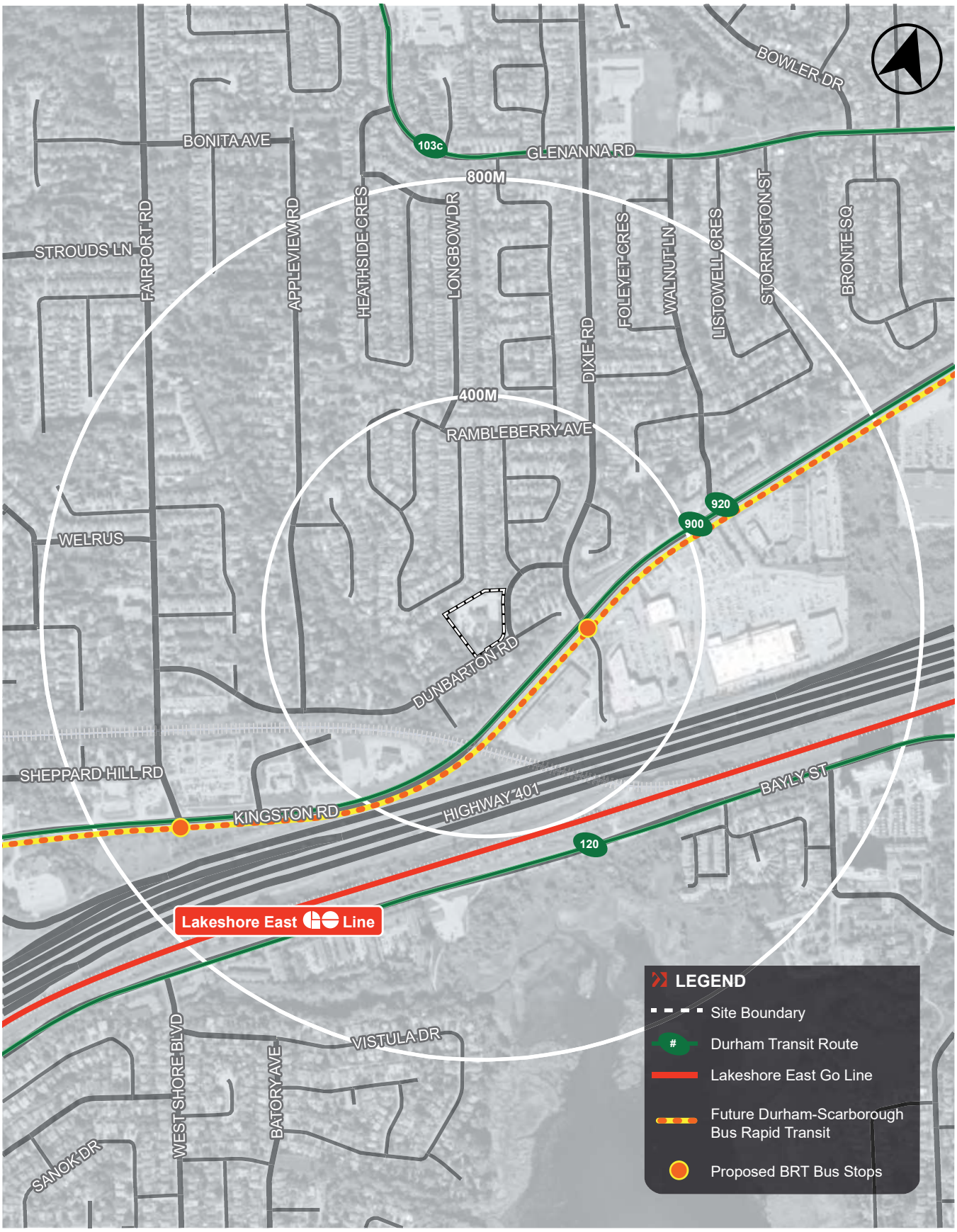

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FIGURE 4 EXISTING AND PLANNED TRANSIT NETWORK

2.3 AREA PEDESTRIAN AND CYCLING CONTEXT

2.3.1 Existing Pedestrian Network

The proposed redevelopment Site is centrally located along the Kingston Road corridor, just outside of the City Centre. There are a mix of uses along this corridor that can be accessed by walking, however, the vehicle-oriented design of the area (i.e. large surface parking lots and wide streets) does not prioritize pedestrian trips.

In the immediate area surrounding the Site, the signalized intersection of Kingston Road / Dixie Road are marked for pedestrian crossings, which adequately facilitate pedestrian movement in a safe manner. The Site is located approximately 200m walking distance to the intersection, which provides pedestrians greater access to transit services, local restaurants and retail services.

Sidewalks are provided along both sides of Kingston Road and Dixie Road. These sidewalks connect to the wider pedestrian networks of sidewalks, parks and pedestrian pathways, including the pedestrian bridge that provides a safe direct path of travel from Pickering City Centre and the Pickering GO Station.

The proposed site plan provides new sidewalk facilities along the internal road network that connect to the external sidewalk network. These sidewalks provide pedestrian connections between the new uses on-Site and the wider pedestrian network and surrounding uses.

2.3.2 Existing Cycling Network

Currently there are some portions of Kingston Road that contain on-street bike lanes in the vicinity of the Site. Additionally, bike lanes are provided on both sides of the road on Pickering Parkway. However, these routes do not have direct connections to the Site.

2.3.3 Planned Cycling Network Improvements

The Durham Region Cycling Plan (2021) includes planned primary cycling routes within the vicinity of the Site. The cycling infrastructure on Kingston Road is proposed to be continuous, extending from Altona Road in the west to Highway 412 in the east where the cycling infrastructure will continue along Dundas Street.

The existing and planned active transportation facilities are illustrated in **Figure 5**.

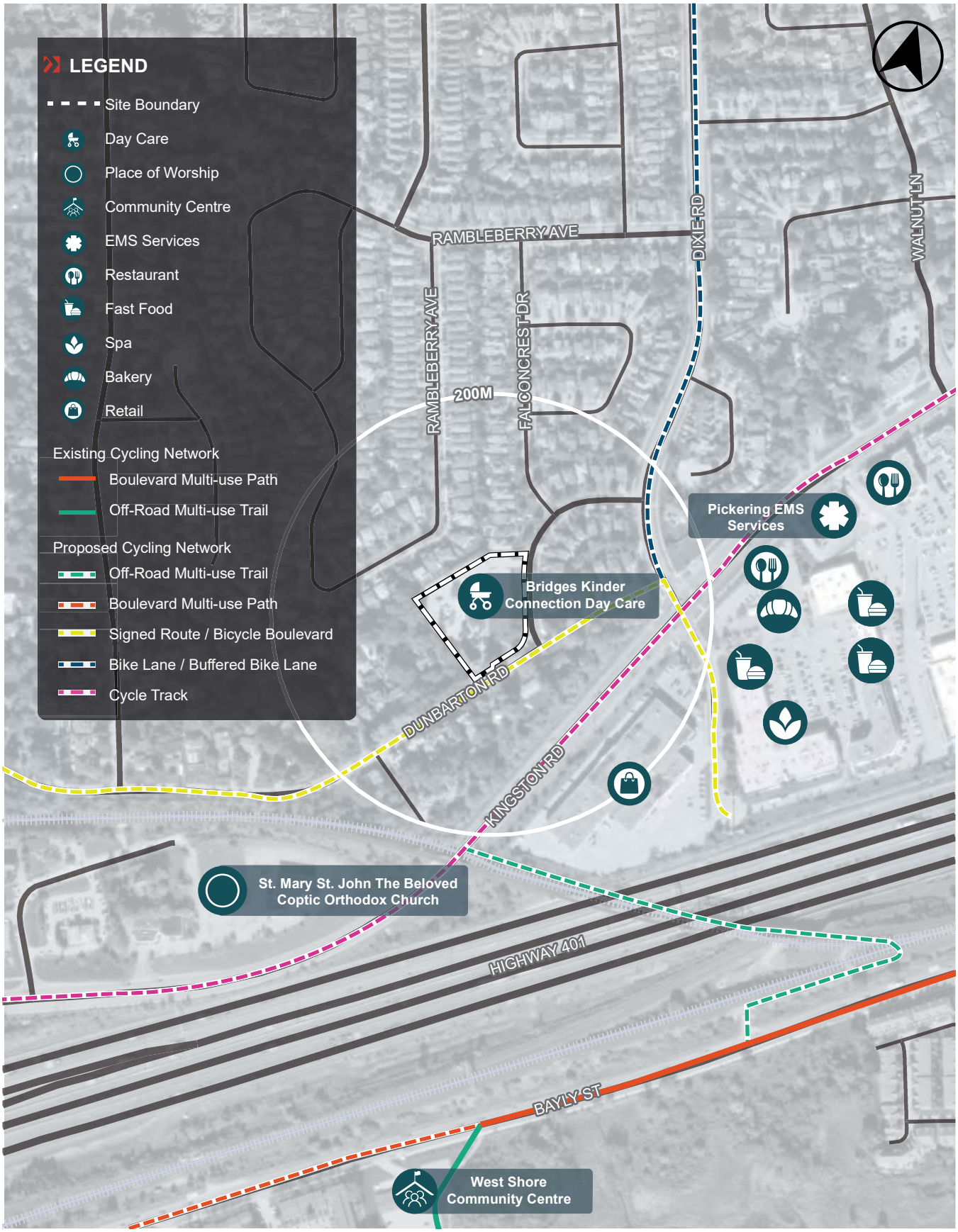

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FIGURE 5 EXISTING AND PLANNED ACTIVE TRANSPORTATION NETWORK

3.0 PLANNING & POLICY CONTEXT

3.1 PROVINCIAL AND REGIONAL POLICY FRAMEWORK AND DIRECTIVES

There are a number of provincial and regional policy documents related to transportation that pertain to the Site, including:

- 2020 Provincial Policy Statement;
- Places to Grow: Growth Plan for the Greater Golden Horseshoe (2019);
- Metrolinx 2041 Regional Transportation Plan (2018);
- Durham Transportation Master Plan (2017); and
- Durham-Scarborough Bus Rapid Transit Study (2018).

The key transportation details of these policy documents are summarized below. The development proposal for the Site incorporates the policy direction of these documents by incorporating, greater density and reduced parking standards based on the Site's proximity to existing and planned transit corridors and the implementation of transportation demand management (TDM) strategies as part of the proposal.

3.1.1 2020 Provincial Policy Statement

The 2020 Provincial Policy Statement (PPS) promotes efficient development patterns optimizing the use of land, resources and public investment in infrastructure and public service facilities. According to the PPS, efficient development patterns promote a mix of housing, including affordable housing, employment, recreation, parks and open spaces, and transportation choices that increase the use of active transportation and transit before other modes of travel.

Policies within the PPS address the importance of transit-supportive development to promote greater density in proximity to existing and planned transit in order to encourage the use of transit. The policies also promote healthy, active communities through active transportation facilities and street design that provide safe pedestrian facilities. In order to maximize the use of existing and planned transportation infrastructure, the PPS policies recommend the use of TDM strategies.

3.1.2 Places to Grow: Growth Plan for the Greater Golden Horseshoe

The *Growth Plan for the Greater Golden Horseshoe* (Growth Plan) report outlines the importance of reducing reliance on the automobile and promoting transit and active transportation. Planning along priority transit corridors and major transit station areas (MTSA) are to be prioritized and planned to achieve minimum density targets.

A MTSA is defined as "the area within an approximate 500 to 800 metre radius of a transit station, representing about a 10-minute walk". The Site is located within 500 to 800 metres of a future Durham-Scarborough Bus Rapid Transit (BRT) stop, located at the Kingston Road / Dixie Road intersection.

3.1.3 2041 Regional Transportation Plan

The Metrolinx 2041 *Regional Transportation Plan* (RTP), an update to The Big Move (2008), specifies a series of planned higher order public transit projects, including the Durham-Scarborough BRT. A key strategy of the plan is the integration of transit and land use by focusing development at mobility hubs and major transit station areas. Embedding TDM strategies in land use planning and development to prioritize cycling, walking and transit use is highlighted in the plan. Furthermore, the RTP encourages best practices in parking management, such as reducing minimum parking standards especially for developments near transit stations.

3.1.4 Durham Transportation Master Plan

One of the action items of the TMP is to create guidelines that support a Regional parking strategy, which could include amendments to zoning by-laws to reduce parking minimum, set maximum and allow shared parking.

3.1.5 Durham-Scarborough Bus Rapid Transit Study

The Durham-Scarborough BRT Study reviewed rapid transit alternatives for the future transit project and evaluated each alternative against the base case. The business case approach assessment recommended a hybrid alternative. The recommended design is now being studied further in the preliminary design phase of the transit project.

3.2 LOCAL AREA AND SITE-SPECIFIC PLANNING POLICY

There are a number of local area policies and strategic framework documents pertaining to the Site, including:

- Pickering Official Plan (2022); and
- Kingston Road Corridor and Specialty Retailing Node Intensification Study (2019).

The key transportation details of these policy documents are summarized in the following sections.

3.2.1 Pickering Official Plan

The Pickering *Official Plan* states that City Council shall consider a reduction in the number of required car parking spaces where bicycle parking facilities or TDM measures are provided. It also encourages intensification along primary transit corridors and MTSAs, such as the Pickering GO Station, as identified in Metrolinx's RTP.

3.2.2 Kingston Road Corridor and Specialty Retailing Node Intensification Study

The *Kingston Road Corridor and Specialty Retailing Node Intensification Study* (the "intensification study") explored intensification opportunities along the Kingston Road corridor. The areas surrounding the Site is identified as the Dunbarton/Liverpool Precinct. In the Dunbarton/Liverpool Precinct, the intensification study recommends greater densities in close proximity to the intersection of Kingston Road and Dixie Road. It is proposed that the Kingston Road / Dixie Road intersection become the gateway to the Dunbarton/Liverpool Precinct, an area with an opportunity to add new internal roads and improvements to pedestrian connections.

The intensification study recommends creating new connections through the larger land parcels in the precinct, including a mid-block public road connection south of Kingston Road, connecting Dixie Road and Walnut Lane. It further proposes a planned connection between Walnut Lane and Liverpool Road on the south side of Kingston Road, which will provide a better and more direct connection to the Pickering GO station. It also recommends reducing the number of individual access points on Kingston Road.

4.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) measures will be incorporated within the planned development to shift single-occupant vehicle (SOV) demand to and from the Site and to encourage and facilitate the use of non-automobile travel modes on a daily basis. The following outlines the proposed physical and operational strategies that complement the Site design with the goal of encouraging a shift in the travel pattern of future residents to sustainable modes of transportation.

TDM strategies strive to promote the use of more active and sustainable transportation modes, respond to the mobility needs of residents, and visitors to the Site, and reduce dependence on the private automobile. Generally, TDM strategies aim to reduce SOV trips with the primary objective of:

1. Reducing car dependence and shift demand on road infrastructure;
2. Making it easy and attractive for people to walk and cycle;
3. Promoting transit and low-carbon alternatives in comparison to car ownership and SOV travel;
4. Increasing car-sharing / vehicle occupancy, and;
5. Improving overall health.

A number of significant transportation network improvements are planned or underway in the Site environment that will alter the way area residents, and visitors are able to travel. Most significantly, these improvements will facilitate a shift in travel modes from predominantly automobile-based travel to predominantly non-automobile based travel, including transit, cycling and walking. These improvements are outlined in **Table 5**.

TABLE 5 RECOMMENDED TDM MEASURES

		Intent	Implementation
PROMOTION OF TRANSIT USE		Support and promotion of area transit services for both short and long-distance travel by residents, and visitors will reduce the overall use of vehicles and the need to own one. The development site's proximity to transit services, especially along Kingston Road, and access to local and regional transit services provides convenient access and connections across the City and Durham Region	• increase the awareness, utility, practicality and viability of transit travel • capitalize on the already good, and improving, level of local transit accessibility afforded to the Site • enable the widespread use of transit
BICYCLE FACILITIES		Bicycle use is a convenient and viable travel alternative to the personal automobile. Bicycle lanes are provided along Kingston Road to link the proposed development with the wider City cycling network. The proximity of the Site to the Kingston Road route and future connections provide safe, reliable pathways to connect into other areas in the City.	• Short-term bicycle parking spaces provided in excess of the minimum by-law requirements • short-term bicycle parking will be located near the primary entrances of the development to promote the use of bicycles • safe, clear and convenient access is provided to cyclists

		Intent	Implementation
PEDESTRIAN CONNECTIVITY		The quality of the public realm and pedestrian accessibility surrounding the Site influences the mobility choices of employees, residents, and visitors to the proposed development. A high-quality, safe, connection between transit stops, the public realm, and Site vicinity sidewalks encourages employees, residents and visitors to travel between the Site and surrounding neighbourhoods without the use of a vehicle.	• provide high-quality, safe pedestrian-scale connections from the Site to the surrounding street and pedestrian pathway network • maintain on-site pedestrian facilities to enable year-round pedestrian access • enhance the quality of the public realm through the provision of pedestrian-scale landscaping, appropriate sidewalk widths and parkland, and general improvement of the public realm along building frontages • enhance site porosity through the introduction of mid-block pedestrian routes, animated through the programming of retail and other uses
PARKING SUPPLY AND MANAGEMENT		Reduced parking standards applied to the proposed development encourages employees and visitors to re-consider the use or ownership of a vehicle. The reduction of office parking standards will increase the potential for employees and visitors to utilize transit, car-sharing, cycling and pedestrian facilities within the surrounding area.	• establish appropriate minimum parking supply standards for the proposed land uses that may be reduced compared to City by-law provisions to accommodate essential site related needs in this context.

5.0 VEHICULAR PARKING CONSIDERATIONS

5.1 ZONING BY-LAW PARKING REQUIREMENTS

5.1.1 Site Specific Zoning By-law Requirements

The Site is subject to the Site Specific Zoning By-law 2285-86 however the Site is also located in the Institutional (I(C)-DN) Zone in the City of Pickering Zoning By-law 3036. It is noteworthy that, the Site Specific By-law No. 2285-86 only permits church and day nursery uses to be provided on the Site. Therefore, parking provisions for the Site have been calculated using the underlying Zoning By-law 3036. The application of Zoning By-law 3036 to the proposed development requires a total of 73 vehicular parking spaces for the proposed uses on the Site. Detailed parking calculations are provided in **Table 6**.

TABLE 6 ZONING BY-LAW 3036 MINIMUM PARKING REQUIREMENTS

Use	Units / GFA[1]	Minimum Parking Rate	Minimum Parking Requirement
Residential			
Multiple Family Horizontal without attached garage (Townhouse)	8 units	2.0 space per unit[2]	16 spaces
Multiple Family Vertical (Apartment)	33 units	1.75 space per unit[2]	57 spaces
Residential Subtotal	*41 units*		*73 spaces*
Non-Residential			
Community Space	100m^2	N/A	0 spaces[3]
Non-Residential Subtotal			*73 spaces*
Total Parking Required			**73 spaces**

Notes:
1. Site statistics per architectural plans provided by KPMB Architects dated, October 14, 2022.
2. Includes parking provisions for visitors.
3. Not specified under this By-law. It is assumed no parking is required for these uses.

5.1.2 Other Applicable Parking Standards (Zoning By-law 7553-17)

The City of Pickering has a separate Zoning By-law for the City Centre area that includes reduced parking standards, acknowledging the transit accessibility of the City Centre and surrounding areas. Although these standards do not directly apply to the Site these standards have been reviewed, given the fact that the Site is located less than 1.5 kilometres from the City Centre Zone and within a 250 metre walking distance to the Kingston Road / Dixie Road intersection, which will be a future transit stop for the future BRT corridor along Kingston Road.

In addition, the prevailing Zoning By-law (Zoning By-law 3036) was passed over 30 years ago, and in our opinion, these parking ratios are considered to overstate the parking demands for the Site. Furthermore, it is our opinion that the City Centre parking standards are more appropriate for the Site.

Zoning By-law 7553-17 also includes shared parking provisions for different uses provided on the Site. This allows for the most efficient use of parking spaces provided on the Site while maintaining an appropriate supply for the proposed development.

Application the City of Pickering Zoning By-law 7553-17 minimum parking requirements to the proposed development is summarized in **Table 7** and results in a minimum of 64 vehicular parking spaces (including shared parking provisions), comprising of 55 residential parking spaces and 9 non-residential / residential visitor parking spaces.

TABLE 7 ZONING BY-LAW 7553-17 MINIMUM PARKING REQUIREMENTS

Use	Units/ GFA[1]	Min. Parking Rates	Min. Parking Req.	Requirement with Sharing							
				Weekday				Weekend			
				AM	Noon	PM	Eve	AM	Noon	PM	Eve
Residential											
Back-to-Back TH Units	8	1.75 sps / unit	14 sps	100%							
Stacked Dwelling (Apartment)	33	1.25 sps / unit	41 sps								
Residential Subtotal	*41*		*55 sps*	*55 spaces*							
Non-Residential											
Residential Visitors	41	0.15 sps / unit	6 sps	2 sps (20%)	2 sps (20%)	4 sps (20%)	6 sps (20%)	2 sps (20%)	2 sps (20%)	4 sps (20%)	6 sps (20%)
Community Space	100m^2	3.5 sps / 100m^2 GLFA	3 sps	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)
Non-Residential Subtotal			*9 sps*	*5 sps*	*5 sps*	*7 sps*	*9 sps*	*5 sps*	*5 sps*	*7 sps*	*9 sps*
Total Parking Required (with sharing)[2]			**64 sps**	**60 sps**	**60 sps**	**62 sps**	**64 sps**	**60 sps**	**60 sps**	**62 sps**	**64 sps**

Notes:
1. Site statistics per architectural plans provided by KPMB Architects dated, October 14, 2022.
2. Sharing provisions are in accordance with Zoning By-law 7553-17 Section 3.4.

It is noteworthy, that the above noted requirements do not take into account the mix of market and affordable units that are currently being proposed on the Site. As such a reduced residential parking supply has been adopted below the above noted parking requirements to account for the mix of market and affordable units proposed on the Site. Further details are provided in **Section 5.2.**

5.2 RECOMMENDED SITE-SPECIFIC PARKING STANDARDS

It is proposed to adopt the parking standards outlined in the City Centre Zoning By-law 7553-17 for the proposed non-residential and residential visitor parking uses, but adopt reduced parking standards for the proposed residential uses to account for the mix of affordable and market rate rental units offered on the Site. A summary of the proposed parking supply standards for the Site is summarized in **Table 8.**

TABLE 8 RECOMMENDED MINIMUM PARKING REQUIREMENTS

Use	Units / GFA[1]	Min. Parking Rates	Min. Parking Req.	Requirement with Sharing							
				Weekday				Weekend			
				AM	Noon	PM	Eve	AM	Noon	PM	Eve
Residential											
Back-to-Back TH Units	8	1.0 sps / unit	8 sps	100%							
Stacked Units (Apartment)	33	0.8 sps / unit	26 sps								
Residential Subtotal			*34 sps*	*34 spaces*							
Non-Residential											
Residential Visitors	41	0.15 sps / unit	6 sps	2 sps (20%)	2 sps (20%)	4 sps (60%)	6 sps (100%)	2 sps (20%)	2 sps (20%)	4 sps (60%)	6 sps (100%)
Community Space	100m^2	3.5 sps / 100m^2 GLFA	3 sps	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)	3 sps (100%)
Non-Residential Subtotal			*9 sps*	*5 sps*	*5 sps*	*7 sps*	*9 sps*	*5 sps*	*5 sps*	*7 sps*	*9 sps*
Total Parking Required (with sharing)[2]			**43 sps**	**39 sps**	**39 sps**	**41 sps**	**43 sps**	**39 sps**	**39 sps**	**41 sps**	**43 sps**

Notes:
1. Site statistics per architectural plans provided by KPMB Architects dated, October 14, 2022.
2. Sharing provisions are in accordance with Zoning By-law 7553-17 Section 3.4.

5.3 PROPOSED VEHICULAR PARKING SUPPLY

As part of the development plans, it is proposed to provide a total of 50 parking spaces, including 34 resident, and 16 non-residential parking / residential visitor spaces. Non-residential and residential visitor parking is to be provided on a shared, non-exclusive basis. The proposed parking supply meets and slightly exceeds the recommended parking supply ratios noted above in **Section 5.2**.

Further details on the appropriateness of the proposed parking supply is provided in **Section 5.4.**

5.3.1 Barrier Free Parking Supply

Application of the Zoning By-law 6604-05 barrier-free parking space standards to the proposed development would require a minimum of one (1) Type ‘A’ and one (1) Type ‘B’ barrier-free parking spaces. For the proposed total parking supply of 50 parking spaces, two (2) barrier-free parking spaces are provided having a minimum width of 3.4 metres and length of 5.3 metres.

5.4 APPROPRIATENESS OF PROPOSED PARKING SUPPLY

In our opinion, the resident parking standards outlined in the underlying By-law No. 3036 overstate the parking needs of contemporary multi-family residential buildings located in transit-accessible areas within the City of Pickering.

Adoption of a reduced series of parking standards are considered appropriate based upon the following considerations:

- Provincial and local policy / plan that direct municipalities to reduce or eliminate minimum parking requirements;
- The Site's transportation context, including its proximity to existing and planned transportation networks that provide non-automobile dependent travel connections across the City;
- A review of standards applicable to comparable uses and contexts in adjacent Ontario municipalities;
- The TDM measures for the Site that will influence parking demand on-site and in the wider area.

5.4.1 Provincial & Local Parking Policy

As previously discussed in **Section 3.0**, there are many Provincial plans and local policies that provide a framework to guide development in Ontario municipalities. These plans and policies often contain direction with regards to development along transit corridors, commenting on parking standards and the future regulations of parking minimums. A brief overview of the Provincial and local plans and policies that support a reduced parking minimum are outlined below.

5.4.1.1 2041 Regional Transportation Plan

The purpose of the 2041 RTP is to provide a framework that will create an integrated, multi-modal regional transportation system to support the growth of healthy, complete and sustainable communities. The RTP contains strategies that integrate land use and transportation planning to identify areas for investment and build new connections. One of these strategies specifically addresses parking management.

Strategy 4.8 rethinks the future of parking, encouraging the Province to adopt a region-wide policy that "*provides guidelines and encourages best practice in parking management."* The strategy states that "*zoning standards should be reviewed, with the expectation that minimum parking requirements will be reduced, particularly in transit-supportive neighbourhoods."*

5.4.1.2 Durham Transportation Master Plan

The TMP recommends Action 80 to support the goal of requiring new developments to support sustainable travel choices. The action item is to "*create guidelines that support a Regional parking strategy for strategic nodes and corridors, in partnership with the area municipalities. Actions could include amendments to zoning by-laws (e.g., to reduce parking minimums, set maximums and allow shared parking), identifying parking supply caps for key districts, and studying the feasibility and benefits of public parking authorities."* This aligns with the proposed (reduced) minimum parking requirements, and the applicant wants to work in partnership with the City of Pickering to amend the in force zoning by-laws.

5.4.1.3 Pickering Official Plan

The Official Plan states that City Council shall encourage shared parking in mixed uses areas and shall consider a reduction in the parking requirement where TDM measures are provided. While this is stated in regards to the City Centre parking, it shows the direction that City policy is headed and it is our opinion that is should be applied to all areas of Pickering or at least the transit-accessible areas.

5.4.2 Transportation Context

As outlined in **Section 2.0,** the Site is located in close proximity to existing transit services and planned transit services. The existing PULSE bus route, local bus routes and GO Transit services currently support non-automobile based travel, which ultimately supports a reduced parking standard.

A review of the 2016 Transportation Tomorrow Survey (TTS) for the area surrounding the Site revealed that while the majority of existing travel is conducted using an automobile, a considerable amount of home-based travel is conducted using transit and active transportation during the morning and afternoon peak periods.

TTS Zones 1038 and 1040 (the area generally bounded by Whites Road, Kingston Road, Glenanna Road, Fairport Road, and Stroud's Lane) were analyzed in order to determine peak period travel modes residents in the area. The data is summarized in **Table 9**.

TABLE 9 AREA PEAK PERIOD TRAVEL MODE DISTRIBUTION

Weekday Peak Period	Auto Driver	Auto Passenger	Transit	Walk	Cycle	Total
AM	63%	19%	11%	7%	0%	100%
PM	61%	13%	18%	8%	0%	100%

Notes:
1. Travel mode split calculated for home based trips within TTS 2006 Zones 1038 & 1040.

Based on the most recent 2016 Transportation Tomorrow Survey data, approximately 61-63% of all home-based trips taken during the weekday peak period in the Site's vicinity were undertaken by auto drivers. The provision of a parking space for 80% of apartment residents and 100% of townhouse residents (i.e. 0.80 spaces per unit and 1.00 spaces per unit) is above the upper range of the percent of areas residents that currently drive a vehicle to and from their home, based on 2016 data.

The 37-39% of area residents that carpool, use transit or use active transportation are supportive of a reduced parking standard, as it indicates that not all residents in the areas surrounding the Site depend on their own vehicle for their daily travel. With the introduction of the BRT along Kingston Road, it is expected that the mode shares would reflect that of an area with reduced auto mode splits. According to the Durham Region Transportation Master Plan (December 2017), the target future mode splits for auto (driver) within rapid transit corridors are expected to be reduced by approximately 9%.

The future BRT and RER services will enhance the existing transit services and increase the reliability / frequency of services across the City and wider region when compared to existing conditions, as outlined in **Section 4.2.2**.

5.4.3 Review of Current Municipal Zoning By-law Parking Requirements

The current parking requirements are relatively high when compared to other surrounding municipalities. BA Group reviewed parking rates and parking approvals in the Cities of Vaughan, Mississauga and Toronto, which are similarly attempting to shift from an auto-oriented approach in order to promote more sustainable forms of development and appropriately acknowledge transit context, in order to determine appropriate parking standards to apply as part of the development proposal.

The City of Mississauga, specifically the City Centre, has a comparable transit context to the proposed development. It is well served by MiWay bus routes, GO Transit services, and Zum bus routes. Although, it is important to note that the Hurontario LRT is planned to serve the City Centre upon its construction.

The City of Vaughan's Vaughan Metropolitan Centre (VMC) is also reviewed, as it is well served by York Region Transit bus routes (including Viva Rapid Transit routes), Toronto Transit Commission (TTC) services, GO Transit services, and Zum bus routes. The VMC is also targeted for mixed-use, urban intensification with supporting policies (including VMC specific parking standards within the City of Vaughan's Zoning By-Law 1-88) to encourage this growth. The City of Toronto's Comprehensive Zoning By-Law provides a range of parking requirements that are intended to recognize the transit accessibility of the area. The City's bylaw rates for Policy Area 4 (for avenues with surface transit) have been reviewed for this Site, given the Site's proximity to existing and future surface transit along the Kingston Road corridor and GO Transit Lakeshore East rail corridor. Though the proposed development is not in close proximity to sub-surface transit routes, the VMC provides a similar context where application of a lower parking standard is applied in response to an evolving area headed towards a more transit-oriented area.

A comparison of the current zoning by-laws for the Site, Pickering City Centre, Mississauga, Vaughan and Toronto, as well as the proposed parking standards for the Site, is summarized in **Table 10**.

TABLE 10 COMPARISON OF MUNICIPAL PARKING STANDARDS

Use	Current Zoning (ZBL - 3036)	City of Pickering – City Centre (ZBL - 7553-17)	City of Mississauga	City of Vaughan VMC	City of Toronto ZBL 89-2022 (all other areas)[4]	Proposed Standards
Residential	**Multiple Family Vertical:** 1.75 sps / unit **Multiple Family Horizontal:** 2.0 sps / unit [2]	**Apartment Dwelling:** 0.80 sps / unit **Back-to-Back Townhouse:** 1.75 sps / unit	**City Centre Rates** **Apartment:** 1.0 sps / unit **Non-City Centre Rates** **Townhouse:** 2.0 sps / unit	**Bach./1-bed:** 0.7 sps / unit **2-bed:** 0.9 sps / unit **3-bed**: 1.0 sps / unit **Townhouse:** 1.0 sps / unit	**Bach:** Max 0.8 sps / unit **1-bed:** Max 0.9 sps / unit **2-bed:** Max 1.0 sps / unit **3-bed:** Max 1.2 sps / unit **Townhouse:** None	**Apartment Dwelling:** 0.80 sps / unit **Back-to-Back Townhouse:** 1.00 sps / unit
Residential Visitor	Visitor parking included in the res. requirements	0.15 sps / unit	**City Centre Rates** 0.15 sps / unit[1] **Non-City Centre Rates** **Townhouse**: 0.25 sps / unit[3]	0.15 spaces per unit	0.15 spaces per unit	0.15 spaces per unit

Notes:
1. The City of Mississauga Zoning By-law 0225-2007 allows visitor parking to be shared with non-residential parking based on the greater of the visitor parking requirement or the parking requirement for all non-residential uses (with some limits).
2. For townhouse dwellings that provide parking without an attached garage.
3. For condominium townhouses.
4. City of Toronto By-law 89-2022 parking requirements have adopted no minimum rates, but only maximum parking rates.

For resident uses, recent applications in the City of Mississauga's City Centre have proposed residential parking rates of 0.80 to 0.92 spaces per unit, with the later approved through the Committee of Adjustment. Developments have also been approved in the City of Vaughan's VMC area at parking rates as low as 0.33 spaces per unit. Within the City of Toronto in similar contexts, according to the new By-law 89-2022, there are no minimum parking requirements, only maximum parking requirements.

Therefore, the parking standards in these respective zoning by-laws are not absolute and there is recognition that reduced parking standards are appropriate in highly transit-accessible areas with an intensive mix of uses and high quality urban realm.

Another key point of comparison is the City of Vaughan's zoning by-law review carried out by IBI Group in a 2010 report titled "*Review of Parking Standards Contained within the City of Vaughan's Comprehensive Zoning By-law"*. This report noted that the current Zoning By-law (1-88) has little consideration for the availability of alternative forms of transportation or the urban context that has evolved in the City of Vaughan. The report reviewed best practices and existing standards to develop a new framework for determining new parking standards. While not in force today, the proposed parking standards for the City of Vaughan contained a range based on the transportation context of different areas in Vaughan, including high-order transit hubs, local centres, primary centres / intensification areas, and base (other areas).
These drafted / proposed parking standards are based on a comprehensive review of background studies, technical studies and policy input. The range of rates are summarized in **Table 11.**

The proposed parking standards for the Site redevelopment fall within the range that has been drafted / proposed for the higher-order transit hub, local centres and primary centres / intensification areas in the City of Vaughan. The proposed parking standards are appropriate, given that the Site is located along a frequent bus service corridor that facilitates connections to Pickering GO Station, services that will be further improved with the introduction of the Kingston Road BRT and RER.

TABLE 11 PROPOSED CITY OF VAUGHAN PARKING STANDARDS – CITY OF VAUGHAN ZONING BY-LAW REVIEW

Use	Base	Higher-Order Transit Hub	Local Centres	Primary Centres / Intensification Areas
Resident	**1 bed:** 0.90 spaces per unit **2 bed:** 1.10 spaces per unit **Townhouse:** 2.00 spaces per unit	**1 bed:** 0.70 spaces per unit **2 bed:** 0.90 spaces per unit **Townhouse:** 1.00 spaces per unit	**1 bed:** 0.80 spaces per unit **2 bed:** 1.00 spaces per unit **Townhouse:** 1.00 spaces per unit	**1 bed:** 0.85 spaces per unit **2 bed:** 0.95 spaces per unit **Townhouse:** 1.00 spaces per unit
Residential Visitor	0.20 spaces per unit	0.15 spaces per unit	0.20 spaces per unit	0.20 spaces per unit

5.4.4 TDM Measures

A number of TDM measures (are being contemplated as part of the development proposal that will support a reduced residential parking supply. While a reduced parking supply is a direct incentive to reduce automobile use and ownership, there are additional TDM measures proposed to complement and work in tandem with the reduced parking supply. These include, but are not limited to, the following:

- New pedestrian connections that are integrated into the proposed road plan for the Site, which will support active transportation as a viable mode of traveling to and from the Site;
- The provision of bicycle parking to support and encourage cycling;
- Strong connectivity to the existing and planned transit terminals adjacent to the Site to facilitate and maximise transit usage;
- Providing new residents with information on existing transportation options to promote alterative modes of travel to the single occupant vehicle; and
- Additional measures developed in consultation with the City of Pickering.

5.5 PARKING SUMMARY

The current site-specific by-law does not apply to the proposed development uses thus the underlying By-law 3036 is used. However it is in our opinion that the parking rates presented in By-law 3036 are relatively high for current contemporary residential developments in areas close to higher order transit. Regional and local area policies/plans provide a framework and guidance to support sustainable communities and travel choices, by providing direction with regards to development along transit corridors, parking standards and future regulations of parking minimums. A review of other surrounding municipalities have shown a similar attempt to shift from an auto-oriented approach in order to promote more sustainable forms of development and to appropriately acknowledge an evolving transit context. As part of this development proposal a comparison of the other municipal parking standards was conducted to determine appropriate parking standards to apply to the Site.

Given the proximity of the Site to Pickering City Centre and the evolving area transportation context towards non-automobile modes of travel, it is recommended that the proposed development be subjected to the Pickering City Centre By-law 7553-17 and adopt the reduced parking standards of 1.0 parking spaces/unit (townhouse units) and 0.80/unit (apartment units) for the residential uses. The recommended reduced parking standards are comparable to those of the other municipalities with similar area transportation contexts.

The application of the proposed minimum parking standards results in a total minimum parking requirement of 43 parking spaces. As part of this development proposal a total of 50 parking spaces, including 34 residential parking spaces and 16 non-residential parking spaces are proposed. This proposed parking supply meets and exceeds the proposed minimum parking standards and will appropriately service the newly proposed development.

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6.0 BICYCLE PARKING CONSIDERATIONS

6.1 ZONING BY-LAW BICYCLE PARKING REQUIREMENTS

The Site-specific by-laws that apply to the Site, or the underlying Zoning By-law 3036, do not contain bicycle parking provisions.

6.2 RECOMMENDED BICYCLE PARKING REQUIREMENTS

As such, it is recommended to apply the bicycle parking provisions of the City Centre Zoning By-law 7553-17. These bicycle parking standards reflect the bicycle parking supply required to support a site within a transit-accessible area. Furthermore, the provision of bicycle parking is a TDM measure, which encourages in local and provincial policy, especially when contemplated a reduced parking supply.

The application of the minimum bicycle parking requirements of Zoning By-law 7553-17 to the proposed development is summarized in **Table 12**. The application of the bicycle parking requirements results in a total parking requirement of 35 parking spaces, including 33 residential parking spaces and 2 non-residential parking spaces.

TABLE 12 RECOMMENDED (ZONING BY-LAW 7553-17) BICYCLE PARKING REQUIREMENTS

Uses	Unit / Floor Area[1]	Rate (Minimum)	Requirement
Townhouse Dwelling	8 units	N/A	0 spaces
Stacked Dwelling	33 units	1.0 spaces per unit	33 spaces
Non-residential Uses	100 m^2	The greater of 2 or 1.0 spaces per 1,000 m^2 of GLA	2 spaces
Total			**35 spaces**

Notes:
1. Site statistics per architectural plans provided by KPMB Architects dated, October 14, 2022.

The development plan proposes a total of 44 bicycle parking spaces, including 42 bicycle parking spaces for residential uses, and 2 spaces for non-residential uses. There are 8 residential bicycle parking spaces located in bike storage containers in-front of the townhouse dwelling units. The other 34 residential bicycle parking spaces are located at secured open bike racks across the Site. The 2 non-residential bicycle parking spaces are located at secured open bike racks near the community space.

The proposed bicycle supply meets and exceeds the by-law requirements and can appropriately serve the Site.

7.0 LOADING CONSIDERATIONS

The proposed development is expected to receive municipal waste collection services. Individual curbside waste collection is proposed for the new residential units. Waste collection for the non-residential uses will be conducted municipally in-front of the proposed bin staging area.

In accordance with Durham Region's Waste Management Services By-law 46-2011 consolidated on January 2014, the proposed internal road is designed with a minimum width of 6.5 metres to accommodate access route requirements for waste collection services. The planned access route permits a continuous forward movement of the waste collection vehicle throughout the development.

Waste storage areas, accommodating bins for each waste stream as outlined in By-law 46-2011, will be provided in each individual unit. Bins will be placed outside in a set-out area adjacent to the private road for each residential dwelling / building on the day of pick-up.

In addition, the proposed internal road will accommodate move-in vehicles for residential units.

Detailed vehicular manoeuvring diagrams are provided in **Appendix B** to demonstrate the waste collection route and move-in vehicles.

8.0 TRAFFIC CONSIDERATIONS

8.1 APPROACH

The following section reviews the traffic impacts of the land uses proposed on the Site based on methodology adopted from the City of Pickering Traffic Impact Assessment (TIA) Guidelines (2018). A traffic impact assessment was not conducted for the Site, due to the low number of forecasted vehicular trips generated for the land uses being proposed, according to the City's TIA Guidelines (i.e. less than 75 additional peak hour trips to or from the Site). However, the following sections describe the trip generation methodology applied to the proposed land uses on the Site, including travel mode split and adopted vehicle trip rates.

8.2 TRIP GENERATION

8.2.1 Existing Site Traffic Volumes

Existing Site related traffic volumes were collected during the weekday morning and afternoon peak hour periods at the existing site driveways on Thursday, February 24, 2022 by Spectrum Traffic Data Inc. on behalf of BA Group and are summarized in **Table 14**.

TABLE 13 EXISTING SITE VEHICLE TRIPS

Site Driveways	Survey Date/Times	AM			PM		
		In	Out	2Way	In	Out	2Way
North Access	Thurs, Feb 24, 202 8:00-9:00AM 4:15-5:15PM	28	5	33	27	9	36
Middle Access		5	24	29	7	27	34
South Access		1	2	3	1	2	3
Total Existing Site Vehicle Trips		**34**	**31**	**65**	**35**	**38**	**73**

The existing Site, as surveyed, generates approximately 65 and 73 two-way vehicle trips during the weekday morning and afternoon peak hours, respectively. Note the existing site will be removed as part of the proposed development programme.

8.2.2 Forecast Site Traffic Volumes

In accordance to the City's TIA Guidelines, the vehicle trips were generated using the ITE *Trip Generation Manual* (11th Edition) rates for Land Use Code (LUC) 215 – *Single-Family Attached Housing* and Land Use Code (LUC) 220 – *Multifamily House (Low-Rise), Not Close to Rail Transit* in a general urban/suburban setting. The proposed 100 m^2 of community space uses is ancillary to the Site and is expected to serve the local area residents. As such, vehicle trips are considered minimal and is not generated for the community space uses. **Table 14** summarizes the trip generation for the proposed development.

TABLE 14 FORECASTED SITE TRIPS

	Units	AM			PM		
		In	Out	2Way	In	Out	2Way
ITE Trip Generation Manual, 11th Edition							
LUC 215 – Single-Family Attached Housing (General Urban/Suburban)		31%	69%	100%	57%	43%	100%
		0.15	0.33	0.48	0.32	0.25	0.57
Townhouse Vehicle Trips	**8**	**1**	**3**	**4**	**3**	**2**	**5**
LUC 220 - Multifamily Housing (Low-Rise), Not Close to Rail (General Urban/Suburban)		24%	76%	100%	24%	76%	100%
		0.10	0.30	0.40	0.12	0.39	0.51
Walk-up Apartment Vehicle Trips	**33**	**3**	**10**	**13**	**4**	**13**	**17**
Total Site Residential Vehicle Trips	**41**	**4**	**13**	**17**	**7**	**15**	**22**

The proposed development is expected to generate approximately 17 and 22 two-way vehicle trips during the weekday morning and afternoon peak hour, respectively.

8.2.3 Traffic Considerations Summary

The City of Pickering *Traffic Impact Assessment Guidelines* (dated March 2018) was later approved in council in May 7th 2018. In line with this guideline, since the proposed development would be generating less than 75 two-way vehicle trips during the peak hour, a full traffic analysis has not been completed at this time.

The existing Site, which included church and day nursery land uses were observed to generate 65 and 73 two-way vehicle trips during the weekday morning and afternoon peak hours, respectively. An additional 17 and 22 new two-way vehicle trips are forecast for the weekday morning and afternoon peak hours, respectively, for the proposed residential land uses. As a result of the redevelopment of the Site, the existing vehicle trips are to be removed from the area road network. This results in the net new vehicle trip generation of -48 and -51 vehicle trips during the weekday morning and afternoon peak hours.

Based on the above, the surrounding area road network is expected to acceptably accommodate the proposed development and the forecast Site traffic.

9.0 SUMMARY AND CONCLUSIONS

Development Proposal

1. The proposed development Site is located at the northwest corner of Dunbarton Road and Cloudberry Court in the City of Pickering, Ontario.

2. The proposed development includes the retention of the existing chapel building and the redevelopment of the remaining Site with 41 residential units, including 8 townhouses and 33 walk-up apartment units.

3. The retained chapel building is proposed to be repurposed for community space uses with an external playground.

4. Access to the proposed development will be provided from two (2) full movement accesses operating under STOP control off of Dunbarton Road. The existing driveway access at the southwest side of the Site is to be maintained, while a newly proposed site access will be generally located between the two existing driveways at the northeast side of the side along Dunbarton Road. The Site will be served by an internal private road.

Transportation Context

5. The Site is well located relative to the significant roadway connections provided across the City and the wider Durham Region.

6. The Site is located in close proximity (approximately 250 metres from the Kingston Road / Dixie Road intersection, which provides access to two bus routes, including the Durham Region Transit Pulse service (a bus rapid transit – BRT) service. These routes provide a direct connection to the Pickering GO Station and Pickering Parkway Terminal.

7. A number of planned transit improvements will enhance the transit reach and quality of service afforded to the Site, including the future Durham-Scarborough BRT and Metrolinx's Regional Express Rail (RER).

8. The key benefits of the BRT for the Site and surrounding area are; it provides transit service to multiple key destinations, the frequency of the BRT will reduce departure time dependency, and the BRT will maintain relatively constant travel speeds and reliable travel times even during times of congestion.

9. The RER, in combination with the BRT, will improve the transit reach of the Site and surrounding area, as well as reduce departure time dependency when traveling to key destinations.

10. The intensification study proposed new pedestrian crossing opportunities and connections. The study also plans new retail and secondary frontages along Kingston Road to animate the public realm and pedestrian interactions in the area. Additional roads are proposed on the south side of Kingston Road between Dixie Road to Walnut Lane, and Walnut Lane to Liverpool Road, which may provide a better and more direct connection to the Pickering GO Station.

11. The existing cycling network in the vicinity of the Site includes portions of the Kingston Road bike lane, and along both side of the road on Pickering Parkway. A number of planned improvements will foster and enhance the cycling network, including a continuous bike lane along Kingston Road

Planning Context

12. There are a number of local, regional, and provincial policy documents that support and encourage transportation demand management (TDM) strategies to be incorporated into new developments and reduced minimum parking standards, especially for developments in areas well served by transit services.

13. The Metrolinx 2041 Regional Transportation Plan includes plans for the Durham-Scarborough Bus Rapid Transit (BRT), which will provide reliable transit services adjacent to the Site. The initial design of the BRT has been established in the Durham-Scarborough Bus Rapid Transit Study.

14. The City of Pickering's Kingston Road Corridor and Speciality Retail Node Intensification Study (the "intensification study") recommends intensification scenarios along the Kingston Road corridor. The intensification study sets the framework for development in the area surrounding the Site, and will create greater densities in the area.

Travel Demand Management

15. A Travel Demand Management (TDM) Plan has been proposed for the Site to help reduce car dependence, encourage active modes of travel, and promote transit use. These include:
    - Promotion of transit usage;
    - Bicycle infrastructure and amenities;
    - Pedestrian connectivity; and
    - Parking supply and management.

Vehicular Parking Considerations

16. The Site is subjected to the Site-specific By-law No. 2285-86. However, under the Site-specific by-laws, only church and day nursery uses are permitted on the Site. Thus, the residential parking requirements of the underlying By-law No. 3036 were applied to the Site.

17. Application of By-law No. 3036 to the proposed development results in a minimum parking requirement of 73 vehicular parking spaces.

18. The application of the City Centre By-law 7553-17 to the proposed development results in a minimum residential parking requirement of 55 vehicle parking spaces and 9 shared non-residential parking spaces.

19. It is proposed to provide parking at the City Centre parking rates, with the exception of the following supply ratios:
    - Townhouses: 1.0 spaces per unit; and
    - Stacked Dwelling (walk-up apartments): 0.8 spaces per unit.

The resulting recommended minimum parking requirement is 34 residential parking spaces and 9 shared non-residential parking spaces.

20. The recommended parking requirements are considered appropriate based on provincial and local policies, the Site's future transportation context, a review of other notable municipality's zoning by-law parking requirements, and travel demand management elements of the proposed development.

21. The proposed development is contemplating a total parking supply of 50 vehicle parking spaces, including 34 residential parking spaces and 16 non-residential parking spaces. Non-residential parking is to be provided on a shared, non-exclusive basis.

Bicycle Parking Considerations

22. The site-specific by-laws that apply to the Site, or the underlying Zoning By-law 3036, do not contain bicycle parking provisions. Thus it is recommended to apply the bicycle parking provisions of the City Centre zoning by-law.

23. Application of the City Centre Zoning By-law 7553-17 to the development proposal results in a requirement of 35 total bicycle parking spaces, including 33 residential spaces for the walk-up apartments and 2 spaces for non-residential uses. It should be noted that townhouse units are not included in the by-law.

24. The development plan proposes a total of 44 bicycle parking spaces, including 42 bicycle parking spaces for residential uses, and 2 spaces for non-residential uses.

Loading Considerations

25. The proposed development is expected to receive municipal waste collection services. Individual curbside waste collection is proposed for the new residential units. Waste collection for the non-residential uses will be conducted municipally in-front of the proposed bin staging area.

26. In accordance with Durham Region's Waste Management Services By-law 46-2011 consolidated on January 2014, the proposed internal road is designed with a minimum width of 6.5 metres to accommodate access route requirements for waste collection services. The planned access route permits a continuous forward movement of the waste collection vehicle throughout the development.

27. The proposed internal road will accommodate move-in vehicles for residential units.

Traffic Consideration

28. The existing Site currently generates approximately 65 and 73 two-way vehicle trips during the weekday morning and afternoon peak hours, respectively.

29. The proposed development is expected to generate approximately 17 and 22 two-way vehicle trips during the weekday morning and afternoon peak hours, respectively.

30. In line with The City of Pickering *Traffic Impact Assessment Guidelines* (dated March 2018), since the proposed development would be generating less than 75 two-way vehicle trips during the peak hours, a full traffic analysis has not been completed at this time.

31. As a result of the redevelopment of the Site, the existing vehicle trips are to be removed from the area road network. This results in the net new vehicle trip generation of -48 and -51 vehicle trips during the weekday morning and afternoon peak hours, respectively.

32. The surrounding area road network is expected to acceptably accommodate the proposed development and the forecast Site traffic.

Overall

33. The proposed development programme contemplates the retention of the existing chapel building and repurposing it for community uses and proposing 41 new residential units, including 8 townhouse units and 33 three-storey walk-up apartment buildings. The new development will supply a total of 50 parking spaces, including 34 spaces for resident uses and 16 spaces for non-residential uses. Non-residential parking is to be provided on a shared, non-exclusive basis.

34. An internal road and pedestrian network is provided within the Site to allow connections to the greater area transportation network.

35. Bicycle parking is afforded to the site and is provided in excess to the recommended applicable zoning by-law. A total of 44 bicycle parking spaces are proposed, including 42 bicycle parking spaces for residential uses, and 2 spaces for non-residential uses.

36. The proposed development is expected to receive municipal waste collection services for the new residential units and community space uses.

37. The proposed development is expected to generate approximately 17 and 22 two-way vehicle trips during the weekday morning and afternoon peak hours, respectively. As a result of the redevelopment of the Site, -48 and -51 net new two-way vehicle trips are expected during the weekday morning and afternoon peak hours, respectively.

38. In line with The City of Pickering *Traffic Impact Assessment Guidelines* (dated March 2018), since the proposed development would be generating less than 75 two-way vehicle trips during the peak hours, a full traffic analysis has not been completed at this time.

39. The proposed access, circulation, and parking arrangements are functional and will support the redevelopment of the Site following the construction of the development proposal, as planned.

APPENDIX A:
Reduced Architectural Plans

1066 Dunbarton Rd, Pickering, ON L1V 1G8	
1 Municipal Address	1066 Dunbarton Rd, Pickering, ON L1V 1G8
2 Applicable Zoning By-Laws	Pickering By-Law 2285/96
3 Zoning Designation	I(C)-DN
4 Current Lot Area (m2)	7,893m²
5 Total Building GFA (m2) (Pickering By-Law 2285/21)	4,005m²
6 Coverage (Area at Grade, m2)	1,338m²
7 Sustainability Target	n/a
8 Established Grade Group 1 (Pickering By-Law 2285/21)	Geodetic el. 99.850
9 Established Grade Group 2 (Pickering By-Law 2285/21)	Geodetic el. 99.550
10 Established Grade Group 3 (Pickering By-Law 2285/21)	Geodetic el. 98.550
11 Established Grade Group 4 (Pickering By-Law 2285/21)	Geodetic el. 96.900
Proposed Building Height Group 1 from Est. Grade to Mid Point of Peak	9.805m
Proposed Building Height Group 2 from Est. Grade to Mid Point of Peak	10.105m
Proposed Building Height Group 3 from Est. Grade to Mid Point of Peak	9.805m
Proposed Building Height Group 4 from Est. Grade to Mid Point of Peak	10.355m

1 Pickering By-Law 2285/21 4. Definitions (9) ""Grade" or "Established Grade" means the average elevation of the finished level of the ground adjoining all exterior walls of a building."

2 Pickering By-Law 2285/21 "Height, Building" shall mean the vertical distance between the established grade, and in the case of a gabled, hip or gambrel roof, the mean height level between eaves and ridge.

3 Floor heights are measured from Principal Entrance Grade at Geodedic el. to top of floor levels

Project Area Breakdown (m2)

Level	Gross Constructed Area (GCA)	Existing Heritage Chapel	New Community	New Residential	
BASEMENT	347.50 m²	206.44 m²	0.00 m²	0.00 m²	
LEVEL 1	1,338.04 m²	185.73 m²	0.00 m²	1,338.04 m²	
LEVEL 2	1,340.20 m²	0.00 m²	0.00 m²	1,340.20 m²	
LEVEL 3	1,326.36 m²	0.00 m²	0.00 m²	1,326.36 m²	**FSI**
	4,352.10 m²	**392.17 m²**	**0.00 m²**	**4,004.60 m²**	**0.60**

Residential Suite Mix

Level	Standard Walkup	BF Walkup	Standard Townhouse	Total Count
LEVEL 1	0	11	8	19
LEVEL 2	11	0	0	11
LEVEL 3	11	0	0	11
	22	11	8	41

Bedroom Mix

Level	1BR	2BR	3BR	Total Count
LEVEL 1	11	0	8	19
LEVEL 2	0	11	0	11
LEVEL 3	0	11	0	11
	11	22	8	41
	27%	**54%**	**19%**	

Barrier Free Units

	% of total units required	# of Units Required	% of total units provided	# of units provided	Comments
	20%	8.2	27%	11	

% Site Greenspace

	Area on Site (m2)	% of Site Greenspace	Comments
Greenspace	2,978m²	45%	

Site Amenity

	Area on Site (m2)	Comments
Playground	68m²	Site amenity not including greenspace lawn. See area for greenspace.
Community Courtyard	57m²	
Play Area	50m²	
Total	**174m²**	

Car Parking

Land Use	Units	Recommended Rates (per unit or m2)	Parking Provided	
Residential				Spaces Provided/Notes
Townhouses	8	1 per unit	8	
3 Storey Walkups	33	0.8 per unit	26	
Sub-Total			**34**	
Effective Resident Ratio (Spaces per unit)			**0.83**	
Non-Residential				Spaces Provided/Notes
Visitors	41	0.15 per unit	6	
Community	100m2	3.5 spaces / 100m2	10	
Sub-Total			**16**	
Total			**50**	
1 Where the application of the parking standards results in a numeric fraction, fractions shall be rounded down to the nearest whole number				

Bicycle Parking

		Recommended Rates (per unit or m2)	Spaces Provided	Spaces Provided/Notes
Residential	41	1 per unit	42	8 Residential bike parking spots located in bike boxes infront of units.
Community	100m2	Greater of 2 or 1.0 spaces per 1000sqm	2	
Total Bicycle Parking			**44**	

GENERAL NOTES:
1. Drawings are not to be scaled. Contractor will verify all existing conditions and dimensions required to perform the Work and will report any discrepancies with the Contract Documents to the Architect before commencing work.
2. The Architectural Drawings are to be read in conjunction with all other Contract Documents including the Project Manuals and the Structural, Mechanical and Electrical Drawings. In cases of difference between the Consultants' documents with respect to the quantity, sizes or scope of work, the greater shall apply.
3. Positions of exposed or finished Mechanical or Electrical devices, fittings and fixtures are indicated on the Architectural Drawings. Locations shown on the Architectural Drawings shall govern over Mechanical and Electrical Drawings. Mechanical and Electrical items not clearly located will be located as directed by the Architect.
4. Dimensions indicated are taken between the faces of finished surfaces unless otherwise noted.
5. The architect has not been retained for supervision of construction and assumes no responsibility for means, methods and techniques of construction.
6. These documents are not to be used for construction unless specifically noted for such purpose.

Rev.	Date	Issued
1	10/14/2022	ZBA Submission

[redacted]
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UPRC

Dunbarton - Fairport

1066 Dunbarton Rd
Pickering, ON L1V 1G8

Project North True North

Project No. 2139
Scale 1 : 1
Plot Date 10/14/2022

STATISTICS

A1-00

GENERAL NOTES:

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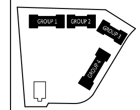

KEY PLAN

LEGEND

- PROPERTY LINE
- EXISTING BUILDING TO BE DEMOLISHED
- PROPOSED TREE
- EXISTING TREE
- DEMOLISHED TREE

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UPRC

Dunbarton - Fairport

1066 Dunbarton Rd
Pickering, ON L1V 1G8

Project North True North

Project No. 2139
Scale 1 : 150
Plot Date 10/14/2022

GROUND FLOOR PLAN

A2-01

APPENDIX B:
Vehicular Manoeuvring Diagrams