Starmont Estates Inc.

PARKING JUSTIFICATION STUDY

Proposed Mixed-Use Development

2555 Erin Centre Boulevard
City of Mississauga

December 2024

25054

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APPENDICES

APPENDIX A HISTORICAL PROXY RESIDENTIAL PARKING UTILIZATION SURVEY RESULTS

1 INTRODUCTION

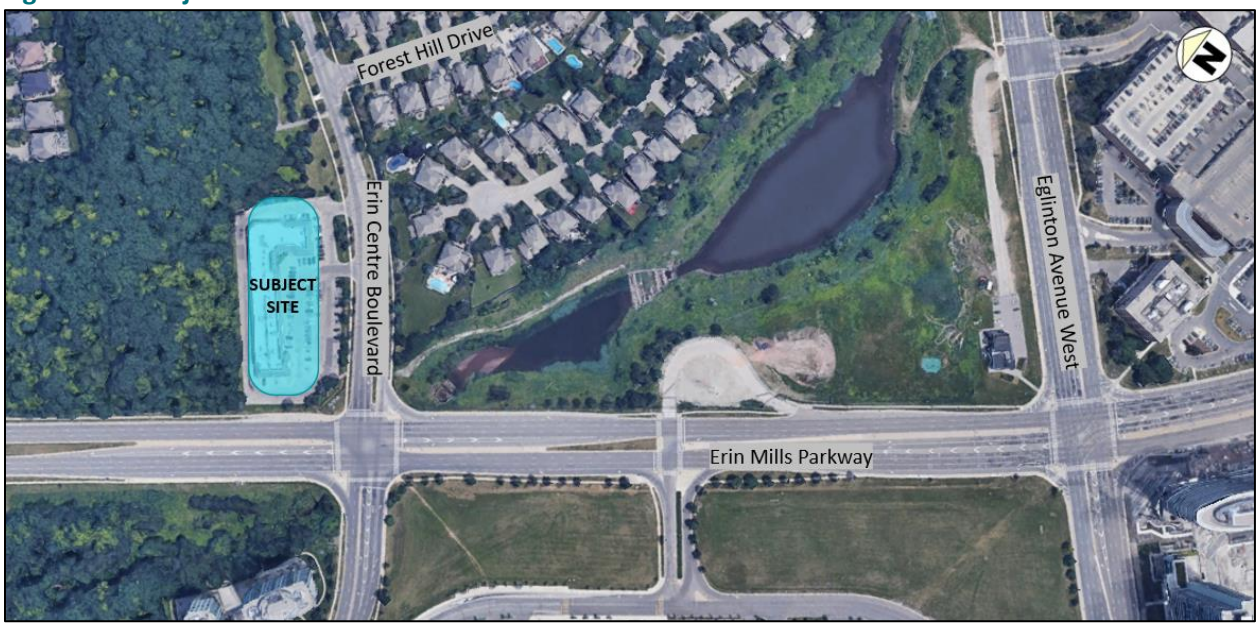
LEA Consulting Ltd. (LEA) has been retained by Starmont Estates Inc. to undertake a Transportation Impact Study (TIS) in support of the Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA) for the proposed mixed-use development located at 2555 Erin Centre Blvd, Mississauga (hereinafter referred to as the "subject site") in the City of Mississauga.

It is our understanding that a reduction from the City's zoning by-law parking requirements is being sought for the proposed development based on similar residential uses of similar context. A Parking Study is required by the City of Mississauga to justify proposed parking reductions of more than 10% from current Zoning By-law standards.

1.1 SITE LOCATION

The subject site is located in City of Mississauga's Precinct 4. The existing neighbourhood surrounding the subject site is comprised of a mix of residential, recreational, institutional, and commercial uses. Key destinations surrounding the subject site include the Erin Mills Town Centre Shopping Mall, and Credit Valley Hospital. The subject site itself is currently occupied by a single-story retail plaza and surface parking lot. **Figure 1-1** illustrates the subject site location.

Figure 1-1: Subject Site Location



Source: Google Maps, accessed July 2024

1.2 DEVELOPMENT PROPOSAL

The proposed development at 2555 Erin Centre Blvd consists of three buildings. Retail will be located in Block A fronting Erin Centre Boulevard and Erin Mills Parkway. The proposed site plan is shown in **Figure 1-2**.

Figure 1-2: Proposed Site Plan

Source: Arcadis, December 2024

The proposed development will replace the existing commercial plaza entirely. The existing site has two driveways along Erin Centre Blvd and the redeveloped site will maintain one site access along Erin Centre Blvd.

In total, 1022 residential units and 1,080 m^2 of retail GFA are proposed. A total of 1146 parking spaces are proposed to accommodate the development, to be located on levels P1 to P4. Three loading spaces will be provided within the ground floor. The proposed site statistics are presented in **Table 1-1**.

Table 1-1: Proposed Mixed-Use Development Statistics

Land Use	Units/GFA (m2)		Total
	Block A	Block B	
Studio	0	0	*0*
1 Bedroom	457	206	*663*
2 Bedroom	247	112	*359*
3 Bedroom	0	0	*0*
Total Units By Block	**704**	**318**	1022
Retail GFA m^2	**1080 m^2**	-	1080 m^2

2 EXISTING TRANSPORTATION NETWORK

This section identifies and assesses the existing transportation conditions within the study area, including the road, transit, cycling, and pedestrian networks. The study area includes the following intersections:

- Erin Mills Parkway & Erin Centre Boulevard (Signalized)
- Erin Mills Parkway & Erin Mills Town Centre East Access (Signalized)
- Erin Mills Parkway & Eglinton Avenue West (Signalized)
- Existing West Access & Erin Centre Boulevard (Unsignalized)
- Existing East Access & Erin Centre Boulevard (Unsignalized)
- Forest Hill Drive Erin Centre Boulevard (Signalized)

2.1 ROAD NETWORK

The following section provides a description and classification of the roadways within the study area. All roadways within the study area are under the jurisdiction of the City of Mississauga. **Figure 2-1** illustrates the existing lane configuration.

Figure 2-1: Existing Lane Configuration

Erin Mills Parkway is a north-south major collector that operates with a six-lane cross-section (i.e. three lanes per direction). The roadway operates with a posted speed limit of 70 km/h within the study area. Sidewalks are provided on both sides of the street. Parking is not permitted on Erin Mills Parkway.

Eglinton Avenue West is an east-west arterial road that operates with a six-lane cross section (i.e. three lanes per direction). The roadway operates with a posted speed limit of 60 km/h within the study area. Sidewalks are provided on the north side of the street with a multi-use path (MUP) on the south side. Parking is not permitted on Eglinton Avenue West.

Erin Centre Boulevard is an east-west major collector that operates with a 4-lane cross section (i.e. two lanes per direction). The roadway operates with a posted speed limit of 50 km/h within the study area. Sidewalks are provided on both sides of the street. Parking is not permitted on Erin Centre Boulevard.

Forest Hill Drive is an east-west local road that operates with a two-lane cross-section (i.e. one lane per direction). The roadway operates with a posted speed limit of 50 km/h within the study area and has sidewalk on the north side only. Parking is permitted on both sides of Forest Hill Drive.

2.2 TRANSIT NETWORK

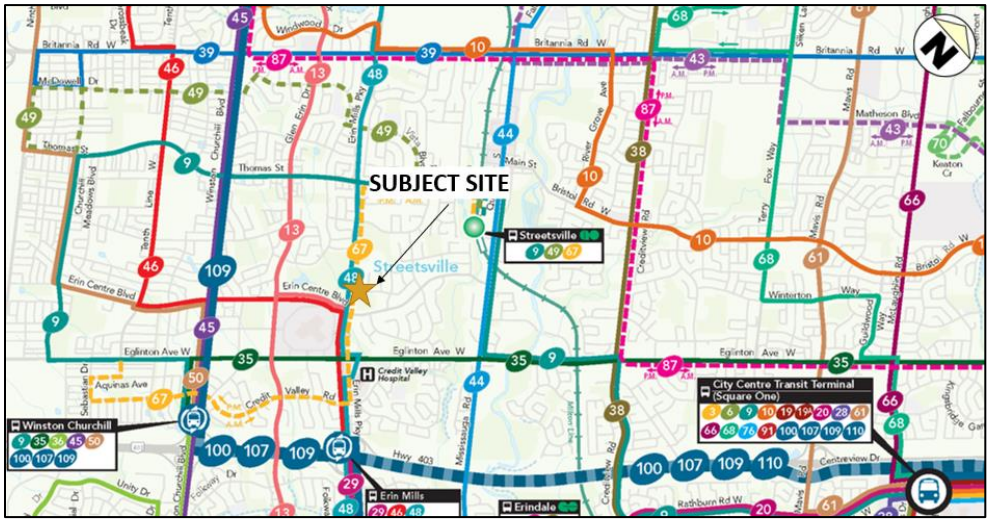
The subject site is served by MiWay transit and GO Transit. The subject site is within walking distance to the nearest local transit stops Erin Centre Boulevard and Erin Mills Parkway and within 7-minute walking distance to the Erin Mills Town Centre Bus Terminal.

Additionally, the subject site is within an approximate 4-minute drive or 6-minute bike ride to Streetsville GO Station on the Milton GO Train Line.

Overall, the subject site receives a Transit Score of 56/100 – "Good Transit" when entered into the WalkScore application.

The surrounding transit network currently servicing the area is illustrated in **Figure 2-2**.

Figure 2-2: Existing Transit Network



Source: MiWay, effective July 1, 2024

MiWay Route 46 – Tenth Line is a bus route that operates in an north-south direction between Meadowvale Town Centre, and Erin Mills Station. The route operates all day, seven days a week. Route 46 operates with headways between 10 to 15 minutes during peak periods.

> *Access Location:* Route 46 is accessible at Erin Mills Town Centre Bus Terminal, located 450m away from the subject site.

MiWay Route 48 – Erin Mills is a bus route that operates in an north-south direction between Meadowvale Town Centre, and South Common Centre. The route operates all day, seven days a week. Route 48 operates with headways between 10 to 15 minutes during peak periods.

> *Access Location:* Route 48 is accessible at the intersection of Erin Centre Blvd & Erin Mills Pkwy in front of the subject site.

MiWay Route 49 – Erin Mills is a bus route that operates in an east-west direction between Erin Mills Town Centre, and Churchill Meadows Blvd. The route operates all day, Monday to Friday. Route 49 operates with headways between 10 to 15 minutes during peak periods.

> *Access Location:* Route 49 is accessible at Erin Mills Town Centre Bus Terminal, located 450m away from the subject site.

MiWay Route 9 – Erin Mills is a bus route that operates in an east-west direction between City Centre Transit Termina, and Churchill Meadows Community Centre Terminal. The route operates all day, seven days a week. Route 9 operates with headways between 10 to 15 minutes during peak periods.

> *Access Location:* Route 9 is accessible at the intersection of Erin Centre Blvd & Erin Mills Pkwy in front of the subject site.

MiWay Route 13 – Milton is a local bus route that operates generally in an north-south direction between Meadowvale Town Centre and Clarkson GO Station. The route operates all day, seven days a week. Route 43 operates with headways between 10 to 15 minutes during peak periods.

> *Access Location:* Route 13 is accessible at Erin Mills Town Centre Bus Terminal, located 450m away from the subject site.

Go Bus Route 21 – Lisgar Go is a bus route that operates generally in an east-west direction between Milton Go Station and Lisgar Go Station. Route 21 operates Monday to Saturday, and operates during peak periods only. Route 43 operates with headways between 30 to 35 minutes during peak periods.

> *Access Location:* Route 21 is accessible at the intersection of Erin Centre Blvd & Erin Mills Pkwy, in from the subject site.

The Milton GO Train Line provides rush hour service every 15 minutes eastbound to Toronto's Union Station in the morning peak period and westbound to Milton in the evening peak period.

> *Access Location:* The Milton GO Train Line is accessible from Streetsville GO Station (2km from subject site).

2.2.1 Regional Transit Services

The subject site is also within proximity to GO Transit services operated by Metrolinx, including rail service via Streetsville GO Station and bus service via Erin Mills Station.

Streetsville Go is a railway station that is about 15-minute cycling distance from the subject site. It connects multiple GO Train routes, facilitating travel to key destinations across the Greater Toronto Area and southern Ontario, including downtown Toronto, Brampton, and Kitchener.

Access Location: Streetsville GO Station is accessible within an approximate 7-minute bus ride, 28-minute walk, and 7-minute bike ride and is located approximately 1.5km from the site.

Erin Mills Station is part of the 18-kilometre Mississauga Transitway and is located northwest of the Erin Mills Parkway/Highway 403 interchange. It is approximately a 24-minute walking distance from the subject site. Erin Mills Station facilitates connections to destinations such as Square One Shopping Centre, the City Centre, and various local neighborhoods. It also serves as a link to GO Transit routes, enabling travelers to reach downtown Toronto and other municipalities in the Greater Toronto Area.

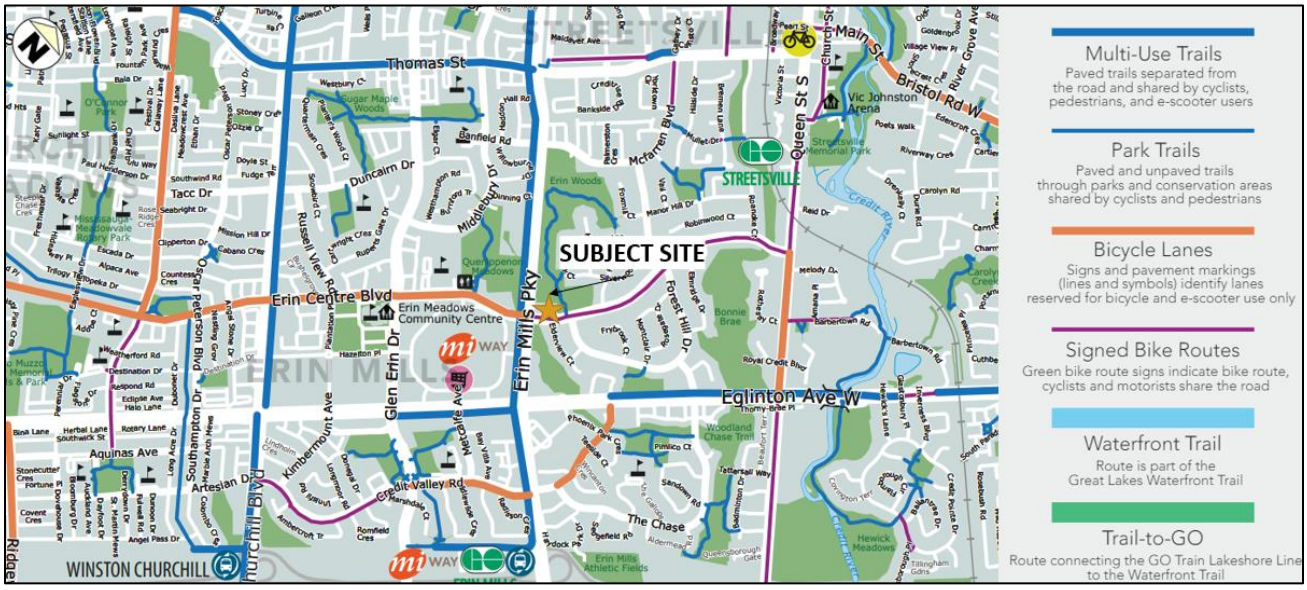
Access Location: Erin Mills Station Bus Terminal is accessible within an approximate 24-minute walk or 8-minute bike ride and is located approximately 1.5km from the site.

2.3 CYCLING NETWORK

The existing cycling network surrounding the site is illustrated in **Figure 2-3.** The local cycling network provides connections to local destinations, such as the Streetsville GO, retail and nearby schools. The subject site is well-connected to the City's cycling network and is within close proximity to dedicated cycling infrastructure and facilities. A multi-use trail is located on Erin Mills Parkway, providing a north-south connection across the City. Bike lanes are also present on Erin Centre Boulevard, providing an east-west cycling corridor.

The subject site receives a Bike Score of 55/100 – "Bikeable" when entered into the WalkScore application.

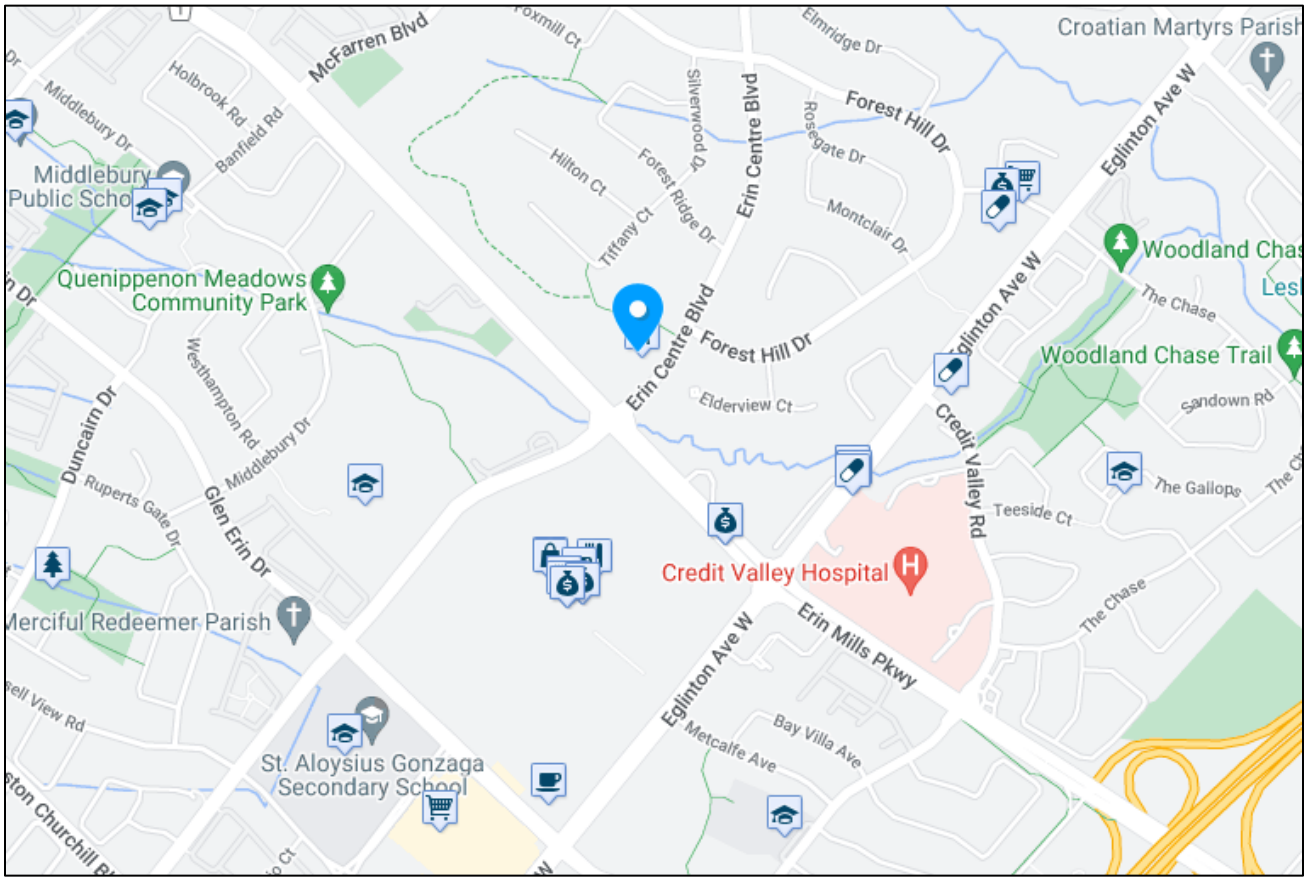
Figure 2-3: Existing Cycling Network



Source: City of Mississauga, September 2023

2.4 PEDESTRIAN NETWORK

Figure 2-4: Existing Pedestrian Network



[1] Walk Score is a private company that operates a large-scale, public access walkability and transit connectivity index that assigns a numerical walk/transit score to any address in Canada. More information can be found at: walkscore.com.

The subject site receives a Walk Score of 75/100 – "Very Walkable" when entered into the WalkScore application. In the area immediately surrounding the subject site, the existing pedestrian network consists of sidewalks. Pedestrian crosswalks are available on all approaches with protected pedestrian phases at the signalized intersections within the study area.

3 PARKING REVIEW

3.1 VEHICULAR PARKING REVIEW

The subject site is governed by the City of Mississauga Zoning By-law 0225-2007, which sets out the minimum vehicular parking rates required for the subject site. It is noted that Zoning By-law 0225-2007 has been amended by By-law 0117-2022 as of June 8, 2022, following the City's completion of a citywide Parking Regulations Study. A key change of this by-law is the removal of unit-type rates for residential dwellings, and instead defines rates based on the site's location in the City. This results in a general reduction in parking requirements for most residential uses.

The rates required by Zoning By-law 0225-2007 and the proposed rates are shown in **Table 3-1**.

Table 3-1: Parking Requirements and Proposed Supply

Land Use	Units	GFA (m^2)	Zoning By-law 0225-2007		Proposed Supply	
			Parking Rate	Parking Spaces	Rates	Spaces
1-bedroom	663	-	1.1(sp./unit)	1124	0.97	992
2-bedroom	359	-				
Residential Total				**1124**	**-**	**992**
Visitors	1022	-	0.2(sp./unit)	204	0.15	154
Retail	-	1080	5(sp./100m^2)	54		
Retail/Visitor Total				**204**	**-**	**154**
Total				**1329**	**-**	**1146**

**Note: parking supply required by zoning by-law 0225-2007 has been calculated in accordance with article 3.1.2.1.3 which allows for shared parking between retail and residential visitor uses, with either the greater of 0.15 visitor spaces per unit or the required number of spaces for all non-residential uses including retail.*

Detailed justification for the proposed residential parking rate is provided in **Section 4**. Based on policy directions, proxy site surveys, observed precedents and the Transportation Demand Management (TDM) measures proposed for the subject site, the proposed supply is expected to be appropriate for the development.

3.2 ELECTRIC VEHICLE READY PARKING

The City of Mississauga requires 20% of residential parking and 10% of visitor parking to be Electric Vehicle Ready as per Zoning By-law 0225-2007. **Table 3-2** summarizes the required EV-ready parking supply that must be provided on-site.

Table 3-2: Zoning By-law 0225-2007 Electric Vehicle Ready Parking Requirements

Land Use	Minimum Number of Required EV Parking		Proposed Supply
	Rate	Spaces	
Residential	20% of the total required parking spaces	199	199
Visitor	10% of the total required parking spaces	16	16
	Development Total	215	215

The proposed development will provide a total of 215 EVSE parking spaces.

3.3 ACCESSIBLE PARKING

The subject development is required to satisfy the minimum requirements for accessible parking as set out in Zoning By-law 0225-2007. Accessible parking requirements are calculated based on the total number of non-residential parking spaces required on-site.

Table 3-4 highlights the required accessible parking supply on-site and the proposed supply.

Table 3-4: Zoning By-law 0225-2007 Accessible Parking Requirements

Total Required Parking Spaces (Non-Residential)	*Required Accessible Parking Spaces*	Required Parking Spaces	Proposed Supply
204	*2 plus 2% of total required parking spaces*	6	7
	Development Total	6	7

The proposed development will provide a total of 7 accessible parking spaces, meeting the requirements.

3.4 BICYCLE PARKING REVIEW

The City of Mississauga's Zoning By-law 0225-2007 was amended on June 8, 2022 through by-law 0118-2022 to include bicycle parking regulations based on the City's Bicycle Parking Regulations Study.

A summary of the zoning by-law requirements and proposed bicycle parking supply for the proposed development are provided in **Table 3-5**.

Table 3-5: Bicycle Parking Requirements – Zoning By-law

Use	Scale	Minimum Bicycle Parking Rate		Bicycle Parking Spaces Required		Proposed Bicycle Parking Spaces	
		Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term
Residential	1022 units	0.6 sp./unit	0.05 sp./unit	613	51	614	52
Retail	1080m^2	0.15 sp./100m^2	0.2 sp./ 100m^2	2	2	2	2
			Total	**615**	**53**	**616**	**54**

In total, 614 long term and 52 short-term bicycle parking spaces are proposed for the residential use and 2 long term and 2 short term bicycle spaces are proposed for the retail use for the development. The minimum requirement of the Zoning By-Law is satisfied.

4 PARKING JUSTIFICATION

The proposed development will supply residential vehicular parking and residential long-term (Class A) bike parking below the zoning by-law requirements.

To assess the appropriateness of the proposed parking supply, the following section will review the transportation and planning context of the subject site. Following this review, further justification for the proposed reduction from by-law requirements will be provided based on a review of residential proxy parking demand of comparable locations in Mississauga and the GTA and recently pursued development applications.

4.1 PLANNING CONTEXT AND FRAMEWORK

The following planning policies and documents were reviewed to establish an understanding of the current planning and transportation context and objectives applicable to the subject site:

- Provincial Policy Statement, 2024
- City of Mississauga Official Plan, 2022

Based on a review of the above-noted planning policies, it is noted that the proposed development is subject to several planning goals that seek to support intensification along major corridors and within the GTA, and support transit infrastructure investment and ridership while avoiding an oversupply of parking. Key planning policies and goals applicable to the subject site are summarized below.

4.1.1 The Provincial Policy Statement (2024)

The *Provincial Planning Statement* (PPS 2024) is a streamlined province-wide land use policy framework that replaces both the Provincial Policy Statement, 2020 and A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019. The new PPS provides policy direction on matters of provincial interest related to land use planning and development. Some of the key changes introduced through the PPS 2024 are changes to growth targets, settlement area expansions, strategic growth areas, major transit areas, intensification, municipal comprehensive reviews, employment land conversions, and protection of employment uses amongst other changes. **Chapter 2** of the PPS 2024 outlines the direction for building homes, sustaining strong and competitive communities and include guidance on the achievement of creating complete communities by accommodating an appropriate range and mix of land uses, housing options, transportation options with multi-modal access, employment, public service facilities and other institutional uses. **Section 2.9** states that planning authorities shall plan to reduce greenhouse gas emissions and prepare for the impacts of a changing climate through approaches that support the achievement of compact, transit-supportive and complete communities and promote green infrastructure, low impact development and active transportation. **Section 3.2** and **3.3** provide policy direction on transportation systems and transportation infrastructure to ensure the safe, energy-efficient movement of people and goods.

Through proposing a reduced parking supply, the proposed redevelopment is in support of the changing paradigm, which shifts away from the provision of excess parking. The subject site is located in close proximity to existing transit serving the City of Mississauga. Therefore, the decision to provide less parking aids in promoting mobility options that are not automobile-dependent, such as active transportation and transit.

4.1.2 City to Mississauga Official Plan (2022)

The City's Official Plan sets out a framework for how the municipality will grow to the year 2051. The Official Plan aims to direct growth in a sustainable manner that protects and enhances its natural and cultural heritage resources, as well as the urban form. The Official Plan's approach to land use planning focuses on strategic management of growth and integration of land use, transportation, and design.

The City plans to direct growth within locations supported by existing and planned higher-order transit through high density and pedestrian-oriented development. In particular, one of the Plan's overarching themes is sustainable development. Applied to transportation planning and development, sustainable development can be carried out through parking management.

Policy 5.6.17.15 addresses parking specifically and recognizes it as a tool to help influence travel behaviour and choice of transportation modes, stating "Encourage the local municipalities to adopt alternative development standards and policies within Strategic Growth Areas to promote the use of active transportation and public transit, such as reduced parking standards."

The proposed reduced parking supply is supportive of the City's Official Plan growth approach as it plans to leverage its location in proximity to the existing Erin Mills Town Centre Bus Terminal, Streetsville GO Train Station and Erin Mills Station. The proposed development will encourage future residents, visitors, customers, and employees to utilize alternative transportation modes to the personal vehicle.

4.2 PARKING UTILIZATION SURVEYS

To further justify the proposed parking supply, parking demand surveys from LEA Consulting's existing database were reviewed for comparable residential sites. A review of existing parking supplies and residential demand at three proxy sites was undertaken.

The proxy sites selected are located within the City of Mississauga, as well as the City of Toronto. They have similar high-rise residential contexts, however, are not located in the City Centre or Downtown Toronto. Therefore, the subject site is expected to have better access to non-auto transportation modes and amenities due to its location in the City Centre, and thus can be expected to have a lower parking demand that those observed at the proxy sites. The Transit Score and Walk Score was noted as a simple metric to compare the walkability and transit accessibility of each site. As such, the selected sites are considered to be suitable proxy site locations to assess the appropriateness of the proposed parking rates and supply for the development.

Table 4-1 shows the comparable proxy sites and the peak parking demand observed during the survey period. The subject development will meet the visitor parking requirements and the visitor parking proxy data is included in the table just for context. Detailed survey data summaries are provided in **Appendix A**.

Table 4-1: Historical Proxy Residential Parking Utilization Survey Results

Proxy Site Location	Site Stats	Walk Score/Distance to Higher-Order Transit	Survey Period	Observed Max. Parking Demand Rate	
				Spaces	Rate/Unit
1750 Bloor Street (Precinct 4)	153 Units	Walk Score: 73 Transit Score: 52 **Distance to HOT:** 1.85km (27 min by bus) to Dixie GO Train Station	Sun. Jan 14, 2024, Mon. Jan 15, 2024, & Tues. Jan 16, 2024 (6:00PM – 1:00AM)	Res: 175 Vis: 18	Res: 0.85 Vis 0.09 Overall 0.94
3480 Havenwood Dr (Precinct 4)	132 Units	Walk Score: 68 Transit Score: 50 **Distance to HOT:** 2.0km (21 min by bus) to Dixie GO Train Station	Thurs. Aug 11, 2022 (6:00PM – 1:00AM) Fri. Aug 12, 2022 Sat. Aug 13, 2022 Fri. Aug 19, 2022 Sat. Aug 20, 2022 (6:00PM – 3:00AM)	Res: 156 Vis: 10	Res: 0.77 Vis: 0.04 Overall: 0.81
1055 Bloor Street (Precinct 4)	323 Units	**Walk Score:** 69 **Transit Score:** 51 **Distance to HOT**: 2.0km (26 min by bus) to Dixie GO Train Station	Thurs. October 24, Friday. October 25 (11:00PM-3:00AM)	Res: 409 Vis: 50	Res: 0.85 Vis: 0.04 Overall: 0.89
Subject Site		**Walk Score:** 75 **Transit Score: 56** **Transit Access:** Within 2km of Streetsville GO	**Proposed Rates**		**Res: 0.97** **Vis: 0.15** **Overall: 1.12**

Based on the historical survey results, sites with similar contexts have been observed to have a peak residential parking demand as low as 0.77 spaces per unit and a peak visitor parking demand ranging from 0.04 to 0.09 spaces per unit. The parking demand rates of the proxy sites indicate a general travel behaviour where residents utilize alternative modes of transportation as opposed to personal vehicles for day-to-day trips. These observed trends indicate a reduced demand for residential and visitor parking from the supply provided in response to a shifting trend, where residents are able to live a car-free lifestyle for the majority of their travel needs.

The subject site has a Walk Score of 75 and Transit Score of 56, indicating a relatively high degree of walkability and transit accessibility under existing conditions. Given the comparability in the transportation context between these sites and the subject site, it is expected that a similar demand for parking would exist at the proposed development. The proposed residential supply rate of 0.97 spaces per unit and visitor supply rate of 0.15 spaces per unit (combined at 1.12 spaces per unit) are aligned with the demand observed at these proxy sites. As such, the proposed parking supply will be sufficient to meet the anticipated residential parking demand.

4.3 RECENTLY PURSUED PARKING RATES

Further to the proxy survey data, a review was conducted of comparable developments pursuing reduced parking rates from the Zoning By-law requirements.

Information regarding the development applications was obtained from the City of Mississauga's Development Application database. **Table 4-2** summarizes the reduced parking rates for developments that are under review.

Table 4-2: Pursued Residential Parking Rates

Site Location	Site Stats	Walk Score/Distance to Transit	Proposed Parking Rate (spaces/unit)	Unix Mix	Application Status
1750 Bloor Street & 3315 Fieldgate Drive (Precinct 3)	17-storey residential; 562 units	**Walk Score:** 68 **Transit Score:** 52 **Distance to Transit:** 2.0km to Cooksville GO; 350m to future Hurontario LRT stop	Res: 0.65 Vis: 0.15 Overall: 0.80	1BD: 54% 2BD: 42% 3BD: 4%	Application in Progress (OZ 17/014 W3)
Subject Site (Precinct 4)	**28-34 storey buildings: 1,022 units and 1,088 m^2 retail**	**Walk Score: 75** **Transit Score: 56** **Transit Access: Within 2km of Streetsville GO**	**Res: 0.97** **Vis: 0.15** **Overall: 1.12**	**1BD: 65%** **2BD: 35%**	**Proposed**

A review of recently proposed reduced residential parking ratios of developments of comparable precinct areas reveal a range of residential parking rates below the by-law requirements. The studied sites display a similar trend of proposing significantly reduced parking supplies from the Zoning By-law requirements. It should also be noted that these developments have proposed reduced residential parking rates despite having lower walk scores and transit scores than the subject site. As such, the reduced parking supply is reasonable for the subject development.

4.4 PARKING JUSTIFICATION CONCLUSIONS

The subject site requires a total parking supply of 1329 spaces, consisting of 1124 residential spaces and 204 visitor/retail spaces, as per City of Mississauga Zoning By-law requirements. A reduced residential and visitor parking supply is proposed, which presents a deficiency from zoning by-law requirements.

Based on the review of contemporary policy direction, proxy demand survey results and recently pursued development applications, it is our opinion that the proposed parking supply is sufficient to meet the needs of the proposed development. To support the proposed parking supply, a Transportation Demand Management (TDM) Plan is provided in **Section 5**. TDM measures will be essential to support multi-modal travel options to and from the subject site.

5 TRANSPORTATION DEMAND MANAGEMENT PLAN

Transportation Demand Management (TDM) is a set of strategies which strive towards a more efficient transportation network by influencing travel behaviour. Effective TDM measures can reduce vehicle usage and encourage people to engage in more sustainable modes of transportation. There are several opportunities to incorporate TDM measures to promote alternate modes of transportation and support existing and future planned transit infrastructure. The following subsections discuss the TDM initiatives with focus on reducing SOV trips to and from the subject site. These include a number of multi-modal travel and parking-based strategies, which collectively will reduce the auto-dependency of future residents and visitors.

5.1 EXISTING TRAVEL BEHAVIOUR

Transportation Tomorrow Survey (TTS) 2016 data was reviewed to determine the existing travel behaviour of the subject site and surrounding area. A breakdown of the travel mode split is provided in **Table 5-1**.

Table 5-1: Modal Split Reductions

Land Use	Mode	AM/PM Peak
Residential	Auto Driver	59%
	Auto Passenger	12%
	Transit	17%
	Cycling	10%
	Walking	2%
Retail	Auto Driver	80%
	Auto Passenger	13%
	Transit	5%
	Cycling	2%
	Walking	0%

Currently, 59% of residential trips and 80% of retail trips are made by vehicle. The following sections discuss TDM measures that will encourage an increase in more sustainable travel modes to further increase the non-auto driver mode split for trips generated by the subject development.

5.2 PEDESTRIAN-BASED STRATEGIES

Connectivity to nearby amenities: The subject site is situated within an area that offers various retail, services, restaurants and employment. The development itself will provide at-grade retail uses to benefit the larger community. The subject development is also within convenient walking distance from existing transit stops and the Erin Mills Town Centre Bus Terminal. This will help to reduce the need for a personal vehicle to accomplish regular trips.

Development form: The proposed development will have an entrance along Erin Centre Boulevard, providing convenient access for pedestrians, cyclists, and transit users. Loading activities will take place within the parking garage, away from pedestrian activity.

Enhanced landscaping: Enhanced landscaping will be provided to improve the public realm and 'eyes of the street', which will support a safe and attractive pedestrian environment at all times of day.

5.3 CYCLING-BASED STRATEGIES

Bicycle parking: Provision of bicycle parking facilities will support and encourage active transportation. Short-term bicycle parking facilities should be located at-grade in a highly visible and convenient area close to building entrances and parks/gardens for residents and visitors. Long-term bicycle parking should be provided in secured and weather-protected locations, such as storage rooms and bicycle locker rooms. Bike parking will be provided in accordance with Zoning By-law 0225-2007 to encourage bicycle ownership as an alternative to vehicle ownership, to support cycling as a viable travel mode for regular trips, as well as to facilitate first and last-mile trips.

Bicycle repair station: The provision of a bicycle repair station increases the accessibility of cycling for residents and visitors as common tools will be available in the building. Therefore, residents won't need to worry about buying or keeping tools to maintain their bicycle. A bicycle repair station should be located at-grade or near long-term bicycle parking.

Promote and increase cycling awareness & multi-modal transportation: It is recommended that information packages be provided to residents to help encourage active transportation and increase awareness of different travel alternatives. The package should include information regarding the environmental and health benefits of cycling, rules of the road, and maps of active transportation infrastructure available in the surrounding area.

5.4 TRANSIT-BASED STRATEGIES

Support existing and future transit connections: The subject site is located in an area with accessibility to surface transit provided by MiWay bus routes that connect to local destinations, other MiWay routes and to GO Transit services in the City of Toronto.

Provide public transit information to residents: Public transit information should be made available to residents and employees, such as MiWay route maps and seven-day schedule timetables for nearby stops. Route and scheduling information could be provided as displays in lobbies, or through real-time updated digital displays in a central location in the building. This will increase the likelihood of new residents incorporating alternatives in their travel patterns when residing at the development. Transit screens will also allow individuals to wait inside or make alternate arrangements if there is a significant delay. It is recommended that the owner coordinate an information session with the City of Mississauga to deliver and promote transit incentives to residents that work in the City.

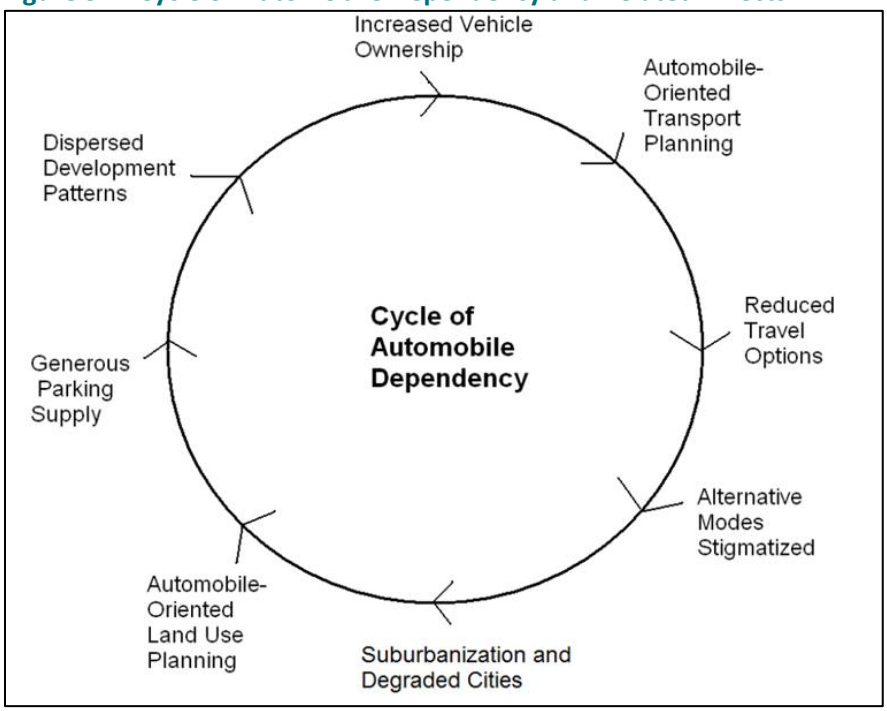
5.5 TRAVEL AND PARKING MANAGEMENT STRATEGIES

A parking strategy is proposed for the subject site that includes a reduction from the typical zoning by-law parking requirements to maximize the efficiency of the parking supply. The following strategies with respect to managing parking demand on-site are recommended for consideration as the development concept continues to develop through the application process.

Parking reduction from Zoning By-law requirements: Parking policies can either encourage households to choose transit, or to purchase a vehicle. illustrates the self-reinforcing cycle of increased automobile dependency and urban sprawl, with has been reinforced by many transportation and land use planning practices observed during the last century. This was generally unintended, reflecting a lack of consideration of the consequences behind these decisions. For example, when determining the parking requirements for a

particular type of land use, traffic engineers generally determine minimum parking rates disregarding the additional sprawl that may result from these supply rates.

Figure 5-1: Cycle of Automobile Dependency and Related Affects



Source: Evaluating Transportation Land Use Impacts Considering the Impacts, Benefits and Costs of Different Land Use Development Patterns 27 (February 2017).

As displayed by the figure, it has been recognized that an oversupply of parking is becoming problematic in areas with strong transit access and active transportation networks, wherein the availability of parking greatly reduces transit ridership, along with walking and cycling trips. Parking policies should be based on location, transit availability, context of the development, and strategic plans for the area outlined by the City.

A reduced parking supply will be a key measure in supporting existing transit services, avoiding oversupply of parking, discouraging automobile use, and supporting the City's long-term transportation goals.

Shared Parking Strategy: It is recommended that a shared parking strategy be adopted for the non-residential uses on-site, namely the retail and residential visitor components. This will ensure that parking is being provided appropriately to accommodate demand without oversupplying parking to accommodate a 'worst-case scenario'.

5.5.1 Incentives

Unbundled Parking: It is recommended that parking be provided unbundled from the lease of rental units and/or sale of apartment units to support zero-car households and tie the cost of vehicle ownership to units requiring parking only.

Reduction of single-occupant vehicle trips: The TDM Scheme discussed above is intended to support the development in reducing the number of single-occupant vehicle trips generated by increasing the attractiveness of other travel modes.

5.5.2 TDM Monitoring

It is recommended that ongoing monitoring and evaluation be undertaken to collect data and information regarding TDM performance measures. The key goal of performance measuring is to provide useful information on identifying successful program activities, improvements to existing programming as well as the potential development of future programs. The owner should perform periodic evaluation to assess how well the TDM Program is achieving the goal of reducing the number of single-occupant vehicle trips generated by the site. A baseline travel survey followed by a follow-up survey two years later and annual monitoring five years onward is recommended to ensure effective monitoring.

5.6 SUMMARY OF TDM RECOMMENDATIONS

Table 5-2 summarizes the recommended TDM measures and benefits for the subject site.

Table 5-2: Summary of TDM measures

Category	TDM Measure	Estimated Cost	Impact (% Reduction in SOV Trips)
Pedestrian Circulation	Connectivity to nearby amenities	N/A	1%
	Development form – building entrances fronting public streets	N/A	
	Development form – sidewalks along Proposed Future Street	Design Cost	
	Development form – consolidated driveways, parking and loading	N/A	
	Enhanced landscaping	Design Cost	
Cyclist Orientation	Bicycle parking	Design Cost	3%
	Bicycle repair station	$2,500 per station; one station per building Total Cost: **$5,000**	
	Cycling information packages	**$1,000**	
Transit Service	Connectivity to nearby transit	N/A	1%
	Transit information packages	**$1,000**	
Motor Vehicle Parking	Reduced parking supply	N/A	10%
	Shared non-residential parking supply	N/A	
Incentives	Unbundled parking cost	TBD	5%
Monitoring	Monitoring	**$5,000**	-
	Estimated Total	**Approx. $12,000 +**	**20%**

6 LOADING REVIEW

Based on the City of Mississauga By-law 0225-2007, one (1) loading space is required per apartment building containing a minimum of 30 dwelling units. Retail loading requirements are based on the gross floor area. **Table 6-1** summarizes the loading requirements and proposed supply.

Table 6-1: Zoning By-law Loading Requirements

Block	Proposed Use	Units/GFA (m^2)	Zoning By-Law 0225-2007		Proposed Spaces
			Loading Rate	Required Spaces	
A	Residential	704	> 30 units	1	3
B	Residential	318	> 30 units	1	
A	Retail	1080	250 to 2,350 m^2	1	
			Total	**3**	**3**

A total of 3 loading spaces are proposed for the subject site, satisfying the requirements of By-law 0225-2007. It should be noted that the property management will ensure that the loading spaces are operated in an efficient manner, where the loading spaces will be reserved for waste collection vehicles during dedicated times.

7 CONCLUSIONS

LEA Consulting Ltd. (LEA) was retained by Starmont Estates Inc. to prepare a Parking Justification Study application for the proposed mixed-use development located at 2555 Erin Centre Blvd in Mississauga. The proposed development will introduce three (3) residential towers consisting of 1022 residential units and 1080m^2 of retail. The proposed vehicular parking supply of 1146 spaces satisfies the proposed minimum residential supply ratio of 0.85 spaces per unit and a shared visitor/retail supply ratio of 0.15 spaces per unit, as shown in **Table 7-1**.

Table 7-1: Proposed Parking Rates and Supply

Land Use	Units	GFA (m^2)	Zoning By-law 0225-2007		Proposed Supply	
			Parking Rate (space/unit)	Parking Spaces	Rates	Spaces
1-bedroom	663	-	1.1	1124	0.97	992
2-bedroom	359	-				
			Residential Total	**1124**	**-**	**992**
Visitors	1022	-	0.2	204	0.15	154
Retail	-	1080	5	55		
			Retail/Visitor Total	**204**	**-**	**154**
			Total	**1329**	**-**	**1146**

**Note: parking supply required by zoning by-law 0225-2007 has been calculated in accordance with article 3.1.2.1.3 which allows for shared parking between retail and residential visitor uses, with either the greater of 0.15 visitor spaces per unit or the required number of spaces for all non-residential uses including retail.*

Historical parking surveys conducted by LEA were reviewed, resulting in residential parking demand as low as 0.77 spaces per unit. Development applications of similar precincts in Mississauga were also reviewed. The

development has proposed residential parking rates as low as 0.80 spaces per unit, even in locations with lower walk scores and transit scores than the subject site.

In addition, the suggested TDM measures are expected to further support the proposed parking supply reduction. Therefore, the proposed residential parking rate is considered to be progressive and feasible for the development and is appropriate considering the subject site's location and area planning goals.