Report to: Development Services Committee Report Date: May 11, 2020

SUBJECT: RECOMMENDATION REPORT
One Piece Ideal (MS) Developments Inc.
Applications for Official Plan Amendment, Zoning By-law Amendment, and Site Plan Approval to permit a 47-storey, residential mixed-use building with a total of 362 units on the Phase 1 (westerly) parcel of 28 Main Street (Ward 3)

File Nos: PLAN 19 142690 and SC 15 119946

PREPARED BY: Sabrina Bordone, M.C.I.P., R.P.P., extension 8230
Senior Planner, Central District

REVIEWED BY: Stephen Lue, M.C.I.P., R.P.P., extension 2520
Manager, Central District

RECOMMENDATION:

1) That the report dated May 11, 2020 titled "RECOMMENDATION REPORT, OnePiece Ideal (MS) Developments Inc., Applications for Official Plan Amendment, Zoning By-law Amendment, and Site Plan Approval to permit a 47-storey, residential mixed-use building with a total of 362 units on the Phase 1 (westerly) parcel of 28 Main Street (Ward 3)", be received;

2) That the Official Plan Amendment application (PLAN 19 142690) submitted by OnePiece Ideal (MS) Developments Inc., be approved and the draft Official Plan Amendment, attached as Appendix 'A', be finalized and brought forward to a future Council meeting to be adopted without further notice;

3) That the Zoning By-law Amendment application (PLAN 19 142690) submitted by OnePiece Ideal (MS) Developments Inc., be approved and the draft Zoning By-law Amendment, attached as Appendix 'B', be finalized and brought forward to a future Council meeting to be enacted without further notice;

4) That in accordance with the provisions of subsections 45 (1.4) of the *Planning Act*, R.S.O. 1990, as amended, the Owner shall through this Resolution, be permitted to apply to the Committee of Adjustment for a variance, if necessary, from the provisions of the accompanying Zoning By-law, except for building height increase, before the second anniversary of the day on which the by-law was approved by Council;

5) That the application for Site Plan Approval (SC 15 119946) submitted by OnePiece Ideal (MS) Developments Inc. be endorsed, in principle, subject to the conditions attached in Appendix 'C';

6) That site plan approval be delegated to the Director of Planning and Urban Design or his designate and not to be issued prior to execution of a Site Plan Agreement;

7) That Council grant servicing allocation for the 362 units on the Phase 1 (westerly) parcel;

8) That the City reserves the right to revoke or reallocate servicing allocation should the development not proceed in a timely manner;

9) That this endorsement shall lapse after a period of three (3) years from the date of endorsement in the event that a Site Plan Agreement is not executed within that period; and

10) And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

This report recommends approval of applications for Official Plan Amendment and Zoning By-law Amendment, and the endorsement, in principle, of a Site Plan Approval application (the "Applications"), submitted by OnePiece Ideal (MS) Developments Inc. (the "Owner") to permit a 47-storey, residential mixed-use building consisting of 362 units with ground floor retail.

The Owner obtained previous permissions to construct a high density, residential mixed-use development on the subject lands through Official Plan Amendment No. 219 ("OPA 219") and site-specific Zoning By-law Amendment 2018-134 ("By-law 2018-134). The previous approvals permitted the development shown on Figure 4.

The Owner's technical review of the Phase 1 lands identified the potential for unacceptable impacts on the building foundations of the adjacent land uses due to site limitations and geotechnical and hydrogeological conditions. This resulted in revisions to the Phase 1 building design, involving removal of the strata condition from the proposed public park and relocation of the underground parking to an above grade location within the Phase 1 building podium. In order to accommodate these revisions and maintain the 362 approved residential units, an increase to the building height and alterations to the building setbacks are required.

The statutory Public Meeting held by the Development Services Committee (the "DSC") on March 3, 2020, together with the two Community Information Meetings (the "CIM") held on March 12, 2020, and April 30, 2020, provided public input on the Applications. This report identifies how the matters raised throughout the application review process have been resolved or considered.

Staff recommend that Council approve the Applications and that the draft Official Plan Amendment (attached as Appendix 'A') and the draft Zoning By-law Amendment (attached as Appendix 'B') be finalized and brought forward to a future Council meeting

for adoption and enactment without further notice. Further, Staff recommend that the application for Site Plan Approval be endorsed, in principle, subject to the conditions attached in Appendix 'C', and that site plan approval be delegated to the Director of Planning and Urban Design or his designate.

PURPOSE:
This report recommends approval of the Applications submitted by the Owner to facilitate a high-density, residential mixed-use development on the northwest corner of Main Street Unionville and Enterprise Boulevard (28 Main Street) in Markham Centre, as shown on Figure 1 (the "Subject Lands").

PROCESS TO DATE:
The following summarizes the process to date and next steps involved:

January 16, 2020:	Staff deemed the applications for Official Plan Amendment and Zoning By-law Amendment complete
February 24, 2020:	the DSC received the Preliminary Report
March 3, 2020:	the City held the statutory Public Meeting
March 12, 2020:	the Local Ward Councillor held the first CIM
April 30, 2020:	the Local Councillor intends to hold the second CIM (at the time of writing this report this meeting had yet to take place)

If Committee chooses to support the Applications, the planning process will include the following next steps:

- site-specific Official Plan Amendment adoption
- site-specific Zoning By-law Amendment enactment
- approval of the Site Plan Application (File No. SC 15 119946)

Application Processing
It should be noted that the Applications are moving forward during a period when the Province of Ontario has suspended *Planning Act* timelines for the review of an application and any appeal to the Local Planning Appeal Tribunal. Municipalities have the discretion to continue the processing of applications, so long as the procedural requirements of the *Planning Act* can be met (e.g. sending of notices, public meetings, etc.). Where a decision is made on an application, the City must send out notice of the decision at any point up to fifteen (15) days after the termination of the emergency; however, anyone eligible to file an appeal under the *Planning Act* may do so prior to the City issuing a notice of decision. The City has held a public meeting in accordance with the *Planning Act*, and the Applications have been circulated to commenting departments and agencies, and the City has received comments as outlined in this report. Further, Staff will continue to work with the Owner on any outstanding issues identified.

BACKGROUND:
The 2.06 ha (5.08 ac) Subject Lands are located on the northwest corner of Main Street Unionville and Enterprise Boulevard (28 Main Street) in Markham Centre, as shown on Figure 1. Bill Crothers Drive bisects the Subject Lands creating two distinct land parcels;

each represents a phase of development, being the west parcel ("Phase 1 lands") and east parcel ("Phase 2 lands"). The Subject Lands are vacant with a 0.63 ha (1.55 ac) woodlot occupying the western portion of the Phase 1 lands. Figure 3 identifies the surrounding land uses.

Approval History

The Owner obtained previous permissions to construct a high density, residential mixed-use development on the Subject Lands through OPA 219 and By-law 2018-134.

Previous Proposal

The previous permissions (the "Approved Development Concept") allowed the development of the Subject Lands with the following, as shown in Figure 4:

- 673 apartment dwelling units contained in two buildings (362 units on the Phase 1 lands and 311 units on the Phase 2 lands)
- building heights of 33-storeys (Phase 1 lands) and 29-storeys (Phase 2 lands)
- up to 1,700 m^2 (18,300 ft^2) of non-residential/retail uses for both buildings
- 428 parking spaces accommodated in three levels of underground parking (Phase 1 lands) and 399 parking spaces accommodated in four levels of underground parking (Phase 2 lands)
- the conveyance of two park blocks (the west park block being stratified with three level of underground parking) and the woodlot to the City

Revised Proposal

The Applications subject to this report address the Phase 1 lands only. The Owner will similarly submit further development applications for the Phase 2 lands in the future. The Owner proposes to develop the Phase 1 lands as follows (the "Proposed Development"), as shown in Figure 5:

- 362 apartment dwelling units (consistent with the Approved Development Concept)
- building height of 47-storeys (including roof top mechanical penthouse)
- gross floor area ("GFA") consisting of 54,257 m^2 (584,036 ft^2) residential uses and 569 m^2 (6,129 ft^2) grade-related retail space
- 432 parking spaces accommodated in a nine-storey above grade parking structure incorporated into the building podium with four at grade parking spaces
- one underground level that would accommodate mechanical and building operations and a resident bicycle parking area
- the conveyance of a new 0.35 ha (0.86 ac) public park (unencumbered, with no parking underneath) and a 0.63 ha (1.55 ac) woodlot to the City

Through the technical review of the Approved Development Concept, the Owner's engineers and contractors identified the potential for unacceptable impacts on the building foundations of the adjacent land uses due to the site limitations and the geotechnical and hydrogeological conditions of the Subject Lands. This resulted in

revisions to the Phase 1 building design, which primarily involved the removal of the strata condition from the proposed public park and the relocation of the parking supply above grade and within the building podium. To accommodate the revisions and maintain the density at the previously approved 362 residential units, the Owner proposes an increase to the Phase 1 building height from 33-storeys to 47-storeys and alterations to the building setbacks.

Public Engagement

The statutory Public Meeting held by the DSC on March 3, 2020, together with a CIM held on March 12, 2020, and a second CIM to be held on April 30, 2020 (at the time of writing this report this meeting had yet to take place), have facilitated public input on the Applications. The following summarizes the main concerns raised by members of the DSC and the Public under the following themes, which are addressed in the Discussion section of this report:

a) Height, Density and Angular Plane Analysis

b) Consideration in advance of the Markham Centre Secondary Plan Update (the "MCSP Update")

c) The possibility of a height and density transfer from the Phase 1 lands to the Phase 2 lands, and the option to revert to a previous three building concept on the Subject Lands

d) Request for further geotechnical analysis as it relates to the feasibility of using a diaphragm wall or other methodologies to construct a multi-level underground parking structure on the Phase 2 lands

e) The feasibility of accommodating underground or overhead connections (or a combination of the two) to the YMCA, Markham Pan Am Centre, Unionville GO Station, and future York University lands

f) Shadow Study

g) Wind Study

DISCUSSION:

The following section highlights the land use policies and planning considerations in response to the Official Plan and Zoning By-law Amendment applications, the response to the public engagement, and the detailed review of the Site Plan Approval application.

Land Use Policies and Planning Considerations

Staff have reviewed the Applications on the Phase 1 lands, in light of the following land use policies:

<u>The Provincial Policy Statement, 2014 (the "PPS")</u>

The PPS provides policy direction on matters of Provincial interest related to land use planning and development, and promotes growth in settlement areas away from significant or sensitive resources. Growth is to be managed through efficient

development patterns that optimize the use of land, resources and public investment in infrastructure and public service facilities. These land use 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.

The Proposed Development facilitates a compact urban form through the intensification of lands located within the established Settlement Area of the City of Markham where full municipal services presently exist. It contributes towards the economic prosperity of Markham Centre, the City's emerging downtown, and offers a range of residential unit types that would accommodate additional population, including families, to support the existing and planned surrounding commercial and cultural uses. The Proposed Development will take advantage of public investments in higher-order transit and support alternate modes of transportation, such as transit, cycling and walking while using existing infrastructure more efficiently and minimizing land consumption. Staff are satisfied that the Proposed Development conforms to the PPS.

Provincial Growth Plan for the Greater Golden Horseshoe, 2019 (the "Growth Plan")
The Growth Plan outlines Provincial policies for managing and directing where and how growth should occur within the Greater Golden Horseshoe to the year 2041. The premise of the Growth Plan is building compact, vibrant and complete communities, developing a strong competitive economy, protecting and wise use of natural resources and optimizing the use of existing and new infrastructure to support growth in a compact, efficient form.

The Growth Plan directs growth to settlement areas and prioritizes intensification. The Subject Lands are located in Markham Centre, which is one of the 25 identified "Urban Growth Centres" in the Greater Golden Horseshoe. Urban Growth Centres are recognized as regional focal points for accommodating population and employment growth. The Growth Plan also provides a definition of a Major Transit Station Area ("MTSA"), as being the area within an approximate 500 to 800 m radius of a transit station. The Subject Lands are located within 450 m of the Unionville GO Station and are in proximity to numerous existing YRT and VIVA bus routes.

Staff are of the opinion that the Proposed Development conforms to the Growth Plan, as it is located in an Urban Growth Centre and MTSA, seeks to intensify underutilized lands with a mix of uses at transit supportive densities, and aids in the creation of a complete community with non-residential opportunities and amenities for residents, including a new public park.

York Regional Official Plan, 2010 (the "Regional Plan")
The Regional Plan designates the Subject Lands "Urban Area" and within a "Regional Centre" (Markham Centre), and identifies Enterprise Boulevard, abutting the Subject Lands, as a "Regional Corridor". The urban structure of the Region is to intensify into a new generation of sustainable and quality compact areas, with a focus on the Region's Centres and Corridors. These areas will provide a diverse and compatible mix of land

uses, including residential and employment uses, to support vibrant neighbourhoods. Staff are satisfied the Proposed Development conforms to the Regional Official Plan.

Markham Official Plan, 2014 (the "City's Official Plan")

The Subject Lands are designated "Mixed Use High Rise" and "Greenway" in the City's Official Plan (as partially approved on November 24, 2017, and further updated on April 9, 2018). Lands designated "Mixed-Use High Rise" are priority locations where development with the greatest level of intensification is intended to take place. The "Greenway" designation applies to the woodlot portion of the Subject Lands.

The policies of the City's Official Plan identify that until an updated secondary plan is approved for the Regional Centre-Markham Centre lands, the provisions of the 1987 Town of Markham Official Plan, as amended, and the 1997 Markham Centre Secondary Plan ("OPA 21"), as amended, shall apply to the Subject Lands.

Markham Centre Secondary Plan ("OPA 21")

The Subject Lands are designated "Community Amenity Area - Major Urban Place", "Open Space" and "Open Space – Environmentally Significant", by way of site-specific OPA 219, which amended the OPA 21. OPA 219, which was approved by the Local Planning Appeal Tribunal (the "LPAT") in its decision issued on February 5, 2019, includes site-specific permissions for the Subject Lands based on the Approved Development Concept and indicated that a Precinct Plan is not required. The approval also included a special provision to permit a stratified park for the Phase 1 lands.

The draft Official Plan Amendment, as shown in Appendix 'A', proposes to increase the maximum permitted building height from 33-storeys to 47-storeys and deletes the permission for below grade parking beneath a portion of the Phase 1 lands designated "Open Space". The Owner's Proposed Development maintains the density at the previously approved 362 residential units.

Zoning

The Subject Lands are zoned "Markham Centre Downtown Two *28 *(Hold)" [MC-D2*28(H)], "Markham Centre Public Space One *29" (MC-PS1*29), "Markham Centre Public Space One" (MC-PS1) and "Markham Centre Public Space Two (MC-PS2)", by By-law 2018-134, which amends By-law 2004-196, as shown in Figure 2. The Owner's Zoning By-law Amendment application seeks to amend By-law 2018-134 to reflect the Proposed Development.

The draft Zoning By-law Amendment, as shown in Appendix 'B', rezones a portion of the Subject Lands from "Markham Centre Public Space One *29" (MC-PS1 *29) to "Markham Centre Public Space One" (MC-PS1), amends certain site-specific development standards, including the maximum building height and setbacks, deletes subsection 6.29 (*29), which allowed for parking beneath the west park block, and amends the definition of "storey" for the purposes of applying building standards, but does not change the overall permitted height of the proposed building.

Response to Public Engagement

The following section identifies how the matters raised throughout the application review process, specifically those raised at the statutory Public Meeting and the March 12, 2020, CIM, have been resolved or considered.

a) Height, Density and Angular Plane Analysis

At the March 3, 2020, statutory Public Meeting, and the March 14, 2020, CIM, the Public and members of the DSC expressed concerns relating to the proposed building height increase, compatibility with the Main Street Unionville area, and potential impacts from the density to the surrounding community.

A total of 673 residential units (362 on the Phase 1 lands) and 1,700 m^2 (18,300 ft^2) of grade-related retail space have already been determined as an appropriate development density on the Subject Lands through the adoption and enactment of OPA 219 and By-law 2018-134. The Owner maintains the previously approved residential density and the provision of grade-relate retail space, and proposes revisions to the proposed Phase 1 building form in response to soil and groundwater conditions.

The Subject Lands are located within Markham Centre, a provincially identified Urban Growth Centre and Regional Centre, where the highest intensity of development has been directed to occur. Markham Centre is also identified as "Mobility Hub - Anchor Hub" by Metrolinx within the Regional Transportation Plan for the Greater Toronto Area. It is intended that lands within mobility hubs be developed at higher densities and with a greater variety of uses to support the planned function of the mobility hub by taking advantage of the increased transit opportunities provided by the station facilities. The Subject Lands are an appropriate location for the Proposed Development.

In response to the concerns regarding the proposed building height, Urban Design Staff prepared a Context Plan, as shown in Appendix 'D', and Angular Plane Study, as shown in Appendix 'E'. The Context Plan identifies the separation distance from the closest residential dwelling (56 Main Street Unionville) to the Subject Lands, at approximately 310 m from the Phase 1 lands and approximately 240 m from the Phase 2 lands.

The Context Plan further demonstrates the preservation of key sightlines from Bill Crothers Secondary School and the seniors' residence to the north with the strategic placement of the buildings and proposed park blocks. The Angular Plane Study demonstrates that the Proposed Development satisfactorily meets the 45-degree angular plane test and provides adequate separation distance and transition with minimal impact to the existing low-rise residential community to the north.

b) Consideration in advance of the MCSP Update

The Public raised the matter respecting consideration of the Applications in advance of the finalization of the MCSP Update. In Q4-2019, the City commenced the Secondary Plan Study Update to OPA 21. The Owner previously received approvals for a 33-storey building consisting of 362 residential units. For the reasons already noted, the Owner now requests a 47-storey building while maintaining the 362 units in Phase 1, which were already approved through OPA 219, which amended OPA 21, and the implementing Zoning By-law 2018-134.

The previous approvals, being the Approved Development Concept as illustrated in Figure 4, predate the work currently being undertaken on the MCSP Update, which began in October 2019, and will be incorporated into the Existing Conditions analysis. The Existing Conditions analysis will examine the existing and approved building heights, densities, and related site-specific policies in Markham Centre. Staff opine that consideration of the Proposed Development, as illustrated in Figure 5, in advance of the MCSP Update finalization is appropriate on the basis that the Owner proposes to maintain the previously approved residential density. Through the work with Staff on the Angular Plane Study and the preservation of key sightlines in the Context Plan, the Owner has satisfactorily demonstrated that the proposed building height increase would have minimal impact on the surrounding area. Should Council approve the Proposed Development, the development concept for the MCSP Update would factor in the additional building height. Staff anticipate the completion of the recommended development concept of the MCSP Update in 2021.

c) The possibility of a height and density transfer from the Phase 1 lands to the Phase 2 lands, and the option to revert to a previous three building concept on the Subject Lands

At the statutory Public Meeting, members of the DSC requested Staff to look into the possibility of transferring a portion of the proposed Phase 1 building height and density to the Phase 2 lands, and the feasibility of eliminating the proposed public park on the Phase 2 lands to accommodate a third building to absorb additional density.

At the March 12, 2020, CIM, the Owner clarified the inaccurate information given at the statutory Public Meeting regarding the units sold. The Owner clarified that 89% of the Phase 1 units (323/362 units) are sold and 87% of the Phase 2 units (270/311 units) are sold. The Owner further explained that financing of Phases 1 and 2 are administered through separate financial institutions and that the lenders would likely withdraw should any of the Phase 1 units be transferred to the Phase 2 lands.

When asked of the possibility to revert to a three building scheme with a stratified park arrangement, the Owner was not supportive. The Owner explained their

desire to maintain the park block on the Phase 2 lands, which represents an appropriate and prominent location as an integral part of the negotiations with the landowner to the north (the Main Street Residence (Unionville) Inc.). Staff also note that with the introduction of the Provincial Community Benefit Charge ("CBC"), the ability for the City to secure future parkland in Markham Centre may be limited and therefore preservation of existing/available parkland should be the priority. The Owner advised that the challenge in this area is not the stratification of parkland to accommodate parking, but rather that the minimum required 1.8 m soil depth to ensure proper tree growth and a regularized grade on the park, which would continue to affect the high water table and existing soil conditions that remains the catalyst for the proposed building height increase. For these reasons, Staff do not support a third building at the expense of the proposed park block on the Phase 2 lands.

Staff and the Owner have worked diligently to propose an innovative and well-articulated built form that responds to existing soil conditions, in a location intended for intensification. The Proposed Development is not the first building in Markham Centre to have parking above grade embedded in the building podium. Other examples of developments in Markham Centre that incorporated above grade podium parking in response to the high water table include, but are not limited to, the following:

i) The Signature Condos complex by Marriot Hotel and Remington located at the northeast corner of Birchmount Road and Enterprise Boulevard
ii) York Condos by Remington located at the northeast corner of Enterprise Boulevard and Warden Avenue
iii) Fontana Condominiums by H & W Corporation located at the northeast corner of South Town Centre Boulevard and Cedarland Drive.

In this regard, Staff are of the opinion that the Proposed Development will not set an undesirable precedent in Markham Centre.

d) Request for further geotechnical analysis as it relates to the feasibility of using diaphragm wall or other methodologies to construct a multi-level underground parking structure

At the March 3, 2020, statutory Public Meeting, and the March 14, 2020, CIM, the Public and members of the DSC requested additional geotechnical analysis be undertaken for the Phase 2 lands to determine whether the planned building height could be reduced by accommodating some or all of the required parking below grade. In response to this request, the Owner's Engineering Consultant (Grounded Engineering) provided a Diaphragm Wall Feasibility Review on April 1, 2020, to demonstrate the feasibility of using a diaphragm wall, or other methodologies, to construct a multi-level below grade parking structure for the Phase 2 lands. The review concluded that while diaphragm wall systems are technically well suited to handle the complex subsurface conditions on the Phase

2 lands, they do not meet the Owner's cost, schedule, or risk profiles for the proposal.

Based on the boreholes advanced to date across both phases of the development, the upper silty clay layer thickness is not thick enough to accommodate a second level of unground parking on the Phase 1 lands. Notwithstanding this, Grounded Engineering advises that it may be possible to construct a 2-level below grade parking structure on the Phase 2 lands given the increased thickness of the weak salty clay layer based on observations from the preliminary boreholes, but this requires verification once a detailed Geotechnical Investigation of the Phase 2 lands is completed. The Owner commits to verify this preliminary option through a detail Geotechnical Investigation on the Phase 2 lands as part of the future development planning applications.

Staff commit to continue working with the Owner to determine possible design changes on the Phase 2 lands including, the possibility of accommodating additional underground parking levels.

e) Feasibility of accommodating underground or overhead connections (or a combination of the two) to adjacent existing and proposed facilities

At the March 3, 2020, statutory Public Meeting, members of the DSC requested that there be underground or overhead connections (or a combination of the two) from the Proposed Development to the YMCA, Markham Pan Am Centre, Unionville GO Station, and future York University lands. Staff, the Owner, and the Owner's consulting team have looked into the feasibility of implementing these proposed connections and opine that this is unsupportable for the following reasons:

i) Engineering
The Owner's Engineering Consultant advised that underground connections are unfeasible based on the shallow location of services within the Bill Crothers Drive and Enterprise Boulevard right-of-ways. Relocating these services could be cost prohibitive and technically challenging due to the high water table and soil conditions in the area.

ii) Transportation
Currently there are no plans or details with respect to how an overhead connection would be designed and constructed. Accommodating an above grade overpass would require a sightline analysis to ensure there are no sightline obstructions. This would depend on the design and location in relation to the characteristics of Enterprise Boulevard, such as road profile and location of traffic signal heads.

iii) Planning

Two of the key planning considerations when examining this request are Crime Prevention Through Environmental Design ("CPTED") and Complete Streets. CPTED is based on the principle that proper design and effective use of buildings and public spaces in neighborhoods provide for natural surveillance and can lead to a reduction in the fear and incidence of crime, and an improvement in the quality of life for citizens. In Staff's opinion, an underground tunnel system, in particular, would fail the design principles of CPTED.

Moreover, taking pedestrians away from the streets and into potentially isolating tunnels could result in less active and complete streets and potentially affect the success of grade-related retail in the area. Further considerations including, but not limited to funding, maintenance, easement requirements, and liability would require close examination. It should also be noted that the Subject Lands are already well connected through the existing sidewalk system to the YMCA, Markham Pan Am Centre, Unionville GO Station, and future York University lands.

Given the reasons cited above, particularly the costs involved, the Owner is not prepared to consider underground or overhead connections to adjacent existing and proposed facilities.

f) Shadow Study

At the March 3, 2020, statutory Public Meeting, members of the DSC requested that the Shadow Study form part of the Recommendation Report for their review (refer to Appendix 'F'). Intervals of 1-hour increments from 9:18 am to 6:18 pm on March 21, June 21 and September 21 provide the basis for this study. The most notable difference between the shadow studies undertaken for the Approved Development Concept and the Proposed Development are the length of shadow cast by the tower portion. Notwithstanding this, as the tower portion of the Proposed Development consists of a minimal floor plate size, the resulting shadows remain narrow and move quickly. As a result, shadows do not dwell over any particular area of an adjacent property for an extended period. The extent of the shadows cast by the podium portion of the building remain generally consistent with the previous Approved Development Concept. Staff concur with the results of the Owner's Shadow Study.

g) Wind Study

At the March 3, 2020, statutory Public Meeting, a member of the Public questioned the potential wind impacts that the Proposed Development might have. The Owner undertook a Wind Study Analysis for the Proposed Development, which concludes that wind conditions over most pedestrian sensitive grade-level locations within and surrounding the study site will be acceptable for the intended uses. Where required, mitigation measures, in the form of vertical wind barriers

and canopies/pergolas, are recommended and have been incorporated in the proposed architectural and landscape designs.

Site Plan Approval Application

The following section discusses site plan matters identified and examined through the application review process.

a) Site Plan

The Proposed Development responds to an urban environment by providing a strong built form that frames the intersection of Enterprise Boulevard and Bill Crothers Drive. The Owner proposes 569 m^2 (6,129 ft^2) of grade-related retail space along Enterprise Boulevard, to be retained and marketed by the Owner, which would contribute to the activation of the public realm and provide residents with local amenities. The proposed public park and woodlot conveyance to the west of the Phase 1 lands expands the provision of community amenities in a highly visible and accessible location, provides enhanced opportunities for connectivity between Bill Crothers Secondary School and Enterprise Boulevard, and facilitates woodlot preservation and restoration (see Figure 5).

The provision for vehicular access to the Phase 1 lands continues via a driveway off Bill Crothers Drive that provides left-in/right-in/right-out movements (left out movements will be prohibited). A future connection to the lands to the north is also proposed. The pick-up, drop-off, loading area, and ramp to the above grade podium parking are located off the driveway on the north side of the building, away from the Enterprise Boulevard and Bill Crothers Drive streetscapes, and have been integrated into the building massing and screened from public view (see Figure 6). The Owner proposes 432 parking spaces accommodated in a well-integrated nine-storey above grade podium with four at grade parking spaces. The proposed parking supply meets the parking rate previously approved through By-law 2018-134.

b) Building Elevations

The design of the tower element minimizes shadowing impacts and provides appropriate separation distances on the adjacent properties. The Proposed Development seamlessly integrates a nine-storey podium that incorporates step-backs and massing articulation at different levels that further articulate the building massing for a varying and interesting built form. Variations in architectural expression with strong corner elements and complimentary material and colour palette add to the visual interest and enables the podium parking to appear as residential units. The proposed façade materials include vision and spandrel glass, porcelain panel with gray undertone, and white and graphite gray metal panel (see Figures 7 and 8). Staff may require minor changes to the building façade and materiality, which the Owner will address prior to the issuance of site plan endorsement.

c) Landscape and Amenity Space

The landscape plan proposes a combination of hardscape and soft landscape, bicycle parking spaces, and opportunity for outdoor café space. Residential dwelling units have access to exclusive outdoor amenity areas in the form of private balconies, patios and terraces. Common indoor and outdoor amenity space are provided at level 10 and on the podium rooftop. Revisions to the landscape plan and streetscape plans, based on the requirements of the City of Markham Streetscape Manual, Markham Centre Streetscape Guidelines, and Staff comments, may be required and addressed prior to the issuance of site plan endorsement.

d) Bird Friendly Measures and Dark Sky Compliance

Bird friendly treatment is required in accordance with the City's Bird Friendly Guidelines (2014). The primary treatment is comprised of integral/applied coverings (dots). The treatment will consist of a minimum of 85% coverage on continuous glass with an area greater than 2 m^2 within a height of 16 m from finished grade. Lighting is mitigated by eliminating up-lighting, will be limited to areas where lighting is needed for safety and security, and is designed to avoid creating "pools" of light and eliminate light spillage on adjacent properties.

The Owner must submit a Photometric Lighting Plan for review, with confirmation that the Proposed Development has been designed in accordance with the City's Bird Friendly and Dark Sky Compliance guidelines, as a condition of the site plan agreement (Appendix 'C').

e) Markham District Energy

The Owner proposes to connect the Proposed Development to Markham District Energy, making efficient use of infrastructure while leveraging the investments made by the municipality in creating this energy system.

f) Leadership in Energy and Environmental Design ("LEED") and Sustainability Measures

The Owner will be seeking LEED Silver certification in accordance with the City's policy for high-density residential development. This LEED Silver certification requirement has been captured as a condition of site plan approval (Appendix 'C'). The Owner proposes additional sustainable measures to be incorporated in to the Proposed Development (Appendix 'G') including, but are not limited, to the following:

i) provisions for bicycle storage rooms for the residents, residential and retail visitors, and retail staff

ii) Electric Vehicle (EV) charging stations will be available for residents and visitors
iii) terraces and roof landscape areas will be designed to reduce heat island effects and the roof will be treated with high albedo materials
iv) water efficiency measures, such as water use reduction measures, water efficient landscaping and water sub-metering, will be implemented
v) a construction indoor air quality management plan will be implemented including low emitting materials for adhesives and sealants, paints and coatings, and flooring.

The Owner will be required to implement the sustainable measure (Appendix 'G') as a condition of the site plan agreement (Appendix 'C').

g) Additional Building Amenities

The Owner proposes a variety of communal amenities for the Phase 1 building residents including, but not limited to, the following:

i) multiple meeting rooms
ii) library/tech lounge
iii) gym and yoga/meditation studio
iv) guest suites
v) game lounge and theatre

h) Landowners Group

A clearance letter from the Trustee of the Markham Centre Landowners Group is required to confirm that the Owner has met their cost sharing obligations. A condition of site plan approval has been included to this effect (Appendix 'C').

CONCLUSION:

Based on the discussion above Staff recommend the following:

a) That the Official Plan Amendment application be approved and that the draft Official Plan Amendment attached as Appendix 'A' be finalized and brought forward to a future Council meeting to be adopted without further notice
b) That the Zoning By-law Amendment application be approved and that the draft Zoning By-law Amendment attached as Appendix 'B' be finalized and brought forward to a future Council meeting to be enacted without further notice
c) That the application for Site Plan Approval be endorsed in principle subject to the site plan conditions attached in Appendix 'C'
d) That final approval of the site plan be delegated to the Director of Planning and Urban Design following execution of a Site Plan Agreement between the City and the Owner

FINANCIAL CONSIDERATIONS AND TEMPLATE:

Not applicable.

HUMAN RESOURCES CONSIDERATIONS
Not applicable.

ALIGNMENT WITH STRATEGIC PRIORITIES:
The Proposed Development aligns with the strategic priority to manage growth in an effective and efficient matter.

BUSINESS UNITS CONSULTED AND AFFECTED:
The Applications were circulated to internal City department and external agencies. Requirements of the City and external agencies have been reflected in the implementing Official Plan Amendment and Zoning By-law Amendment, and in the conditions of Site Plan Approval (see Appendices 'A', 'B' and 'C').

RECOMMENDED BY:

Biju Karumanchery, M.C.I.P., R.P.P.
Director of Planning & Urban Design

Arvin Prasad, M.C.I.P., R.P.P.
Commissioner of Development Services

ATTACHMENTS:
Figure 1: Location Map
Figure 2: Area Context/Zoning
Figure 3: Air Photo
Figure 4: Approved Development Concept
Figure 5: Proposed Development (Phase 1)
Figure 6: Site Plan (Phase 1)
Figure 7: Elevations (Phase 1)
Figure 8: Conceptual Rendering (Phase 1)

APPENDICES:
Appendix 'A': Draft Official Plan Amendment
Appendix 'B': Draft Zoning By-law Amendment
Appendix 'C': Conditions of Site Plan Approval
Appendix 'D': Context Plan
Appendix 'E': Angular Plane Study
Appendix 'F': Shadow Study
Appendix 'G': Sustainable Features Letter

AGENT:
Adam Layton
Evans Planning Inc.
8481 Keele St., Unit 12
Vaughan, ON
L4K 1Z7

Tel: (905) 669-6992 ext. 102
Email: alayton@evansplanning.com