

PLANNING RATIONALE
PROPOSED AMENDMENTS TO THE CITY OF OTTAWA
OFFICIAL PLAN & ZONING BY-LAW

6150 THUNDER ROAD & 5368 BOUNDARY ROAD, OTTAWA

APRIL 2021 (JULY 2021 UPDATE)

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1.0 INTRODUCTION

Avenue 31 has retained Re: public Urbanism to prepare a planning rationale in support of an Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBLA) affecting 3 contiguous properties at 6150 Thunder Road, 5368(A) Boundary Road, and 5368(B) Boundary Road – shown on Figure 1 (opposite). The purpose of these applications is to facilitate the future development of the subject lands for light industrial, logistics, and distribution warehouse uses, by expanding an existing Rural Employment Area located around the Boundary Road – Highway 417 interchange, creating new opportunities for economic development, growth, and diversity in the City.

The proposed amendments will seek to:

- change the official plan designation of the subject lands from “General Rural Area” to “Rural Employment Area”; and,
- change the zoning of the subject lands from “Rural Countryside (RU) Zone” to “Rural General Industrial (RG) Zone”.

This report has been prepared in support of the proposed amendments and development, and has been organized into the following sections:

- Section 2.0 provides an overview of the subject lands, including site location, notable features, current uses, and the local land use context in the immediate vicinity;
- Section 3.0 outlines the proposed development based on a demonstration plan for the lands, as well as the specific details of the proposed official plan and zoning by-law amendments;
- Section 4.0 summarizes and analyses the policy framework applicable to the proposal including the Provincial Policy Statement and City of Ottawa Official Plan;
- Section 5.0 summarizes the supporting application materials identified by City Staff as required as part of a complete application;
- Section 6.0 provides a conclusion and recommendations on the proposed amendments.



HIGHWAY 417

HIGHWAY 417

THUNDER RD

BOUNDARY RD

AMAZON

6150
THUNDER RD

5368 (A)
BOUNDARY RD

5368 (B)
BOUNDARY RD

250 M

Figure 1 - Subject Site & Demonstration Plan

2.0 OVERVIEW OF SUBJECT LANDS & LOCAL CONTEXT

2.1 SITE LOCATION

The subject lands are located at a major eastern gateway to the National Capital Region, approximately 2.5 km south of the Village of Carlsbad Springs in the City of Ottawa (Figure 2). The lands are situated immediately south of the Highway 417/Boundary Road interchange on Thunder Road, and west of an established and designated rural employment area anchored by Amazon's distribution warehouse at 5371 Boundary Road. The subject lands are an assembly of three parcels: 5160 Thunder Road, 5368(A) Boundary Road, and 5368(B) Boundary Road as previously shown on Figure 1. While the subject lands are an assembly of three contiguous parcels of land, for the purposes of this report the subject lands will be treated as a single site.

2.2 SITE DETAILS

The subject lands are approximately 17.75 hectares with frontages on both Thunder Road (423 metres) and Boundary Road (82 metres). The lands are relatively flat with some tree cover, and are bisected by an unnamed drain at the north end of the subject lands crossing west-east. This drain creates a natural division of the lands with a 2.41 ha "northern" parcel and a 15.34 ha "southern" parcel. While the majority of the lands are undeveloped, two developed areas do exist within each of these respective parcels:

- On the "northern parcel", a single detached dwelling homesite occupies approximately 0.75 ha and fronts onto Thunder Road.
- On the "southern parcel" a second single detached dwelling homesite occupies approximately 0.13 ha, which fronts onto Boundary Road.

The above developed areas also contain two of the three existing road entrances to the subject lands. A third existing road entrance is located adjacent to the northernmost boundary of the subject lands. It is intended that the buildings and other improvements on the lands be removed to facilitate the proposed development.

CARLSBAD
SPRINGS

HIGHWAY 417

THUNDER RD

SUBJECT
LANDS

AMAZON

BOUNDARY RD

HIGHWAY 417

1 KM



Figure 2 - Community Context

2.3 CURRENT OFFICIAL PLAN DESIGNATION

The subject lands are currently designated “General Rural Area” on Schedule A of the City of Ottawa Official Plan (OP), as shown below in Figure 3.

Section 3.7.2 of the OP states that the intent of this designation is “to accommodate a variety of land uses that are appropriate for a rural location and to limit the amount of residential development such that development will not preclude, or resist continued agricultural and or other non-residential uses”. Subsection 3.7.2.4 of the OP further outlines the permitted uses in the General Rural Area, which generally include, but are not limited to: agriculture/agriculture-related uses; limited residential uses; and open space. Subsection 3.7.2.5 outlines a list of uses that may be permitted, subject to approval of a zoning by-law amendment, which generally include, but are not limited to: agriculture-related commercial/industrial uses; new recreational commercial and non-profit uses; and new non-residential uses that would not be better located within a Village or Rural Employment Area and which are in keeping with the rural character or those uses that meet the needs of the traveling public (ex. restaurant).

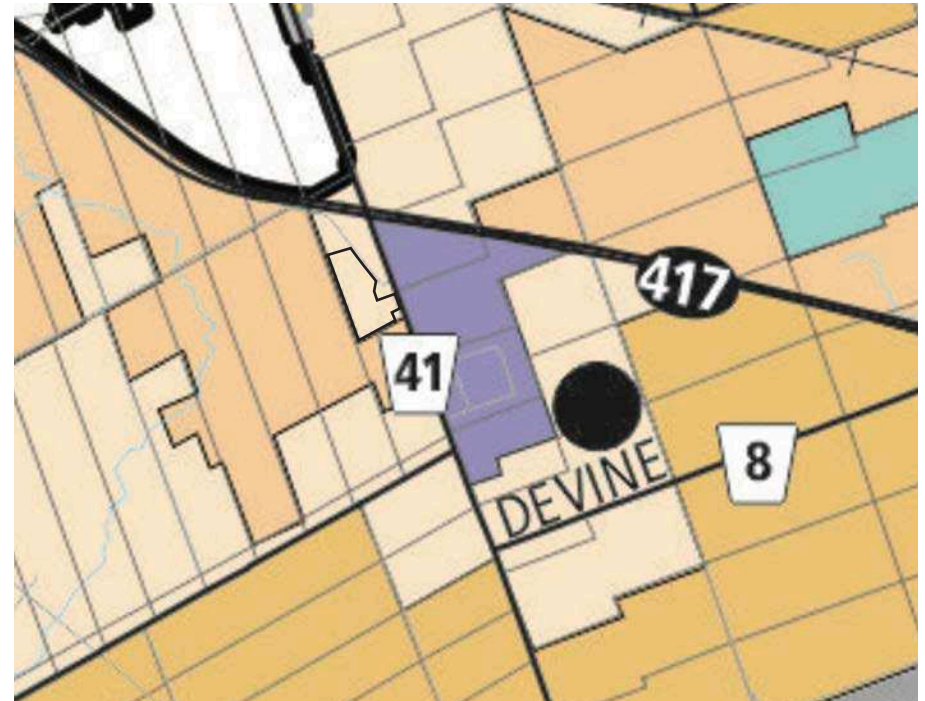









Figure 3 - City of Ottawa Official Plan Schedule A

Greenbelt (see Schedule B)		Ceinture de verdure (voir annexe B)
Agricultural Resource Area		Zone de ressources agricoles
General Rural Area		Zone rurale générale
Rural Natural Features Area		Zone rurale caractéristiques naturelles
Natural Environment Area		Zone écologique naturelle
Rural Employment Area		Zone rurale d'emploi
Urban Area Boundary		Limite de la zone urbaine

2.4 CURRENT ZONING DESIGNATION

The subject lands are currently zoned “Rural Countryside (RU) Zone” under City of Ottawa Zoning By-law No. 2008-250 (ZBL), as shown below in Figure 4.

The ZBL states that the general purpose of the RU zone is to:

- accommodate agricultural, forestry, country residential lots created by severance and other land uses characteristic of Ottawa’s countryside, in areas designated as General Rural Area, Rural Natural Features and Greenbelt Rural in the Official Plan;
- recognize and permit this range of rural-based land uses which often have large lot or distance separation requirements; and
- regulate various types of development in manners that ensure compatibility with adjacent land uses and respect the rural context.

Sections 227 of the ZBL establishes the permitted uses and provisions applicable to uses in the RU Zone. Below is a brief overview of the permitted uses:

*agricultural use	environmental preserve and educational area
animal care establishment	forestry operation
animal hospital	*group home
artist studio	*home-based business
*bed and breakfast	*home-based day care
*Cannabis Production Facility, limited to outdoor and greenhouse cultivation	*kennel
cemetery	*on-farm diversified use, limited to a place of assembly
detached dwelling	*retirement home, converted
equestrian establishment	*secondary dwelling unit

*These uses have use-specific provisions

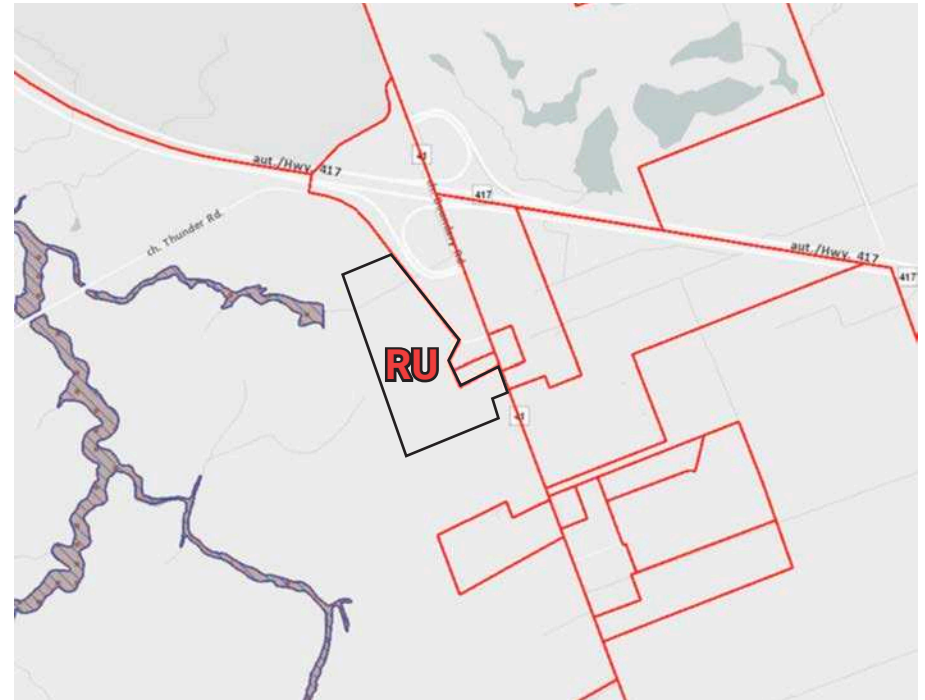


Figure 4 - City of Ottawa Zoning By-law Designations

2.5 LOCAL CONTEXT

Surrounding lands were examined to provide an understanding of the local land use/development context of the immediate area to help identify any potential challenges or opportunities that may exist. The findings of this investigation are provided in Figure 5 and the table below.

<p>NORTH</p>	<ul style="list-style-type: none"> • 4 large rural-residential parcels each containing a single detached dwelling • Trans-Canada Highway 417 as well as the Boundary Road Interchange • (north of Highway 417, east of Boundary Road) Southeast extent of the Ottawa Greenbelt • (north of Highway 417, west of Boundary Road) Grey Hawk Golf Club
<p>EAST</p>	<ul style="list-style-type: none"> • Some highway commercial uses at the Thunder Road/Boundary Road intersection (gas/service station, road-side restaurant, open storage, auto parts service/vehicle storage yards) • Highway 417/Boundary Road Rural Employment Area, containing a range of light to heavy industrial uses, including the +1 million ft² Amazon Distribution Warehouse, a number of contractor shops/yards, automobile salvage, equipment rentals, as well as the future Capital Region Resource Recovery Centre • One existing single detached dwelling immediately south of the Boundary Road frontage, and two existing single detached dwellings on the east side of Boundary Road
<p>SOUTH</p>	<ul style="list-style-type: none"> • Two properties containing single detached dwellings are located immediately south of the subject lands on Boundary Road, one of which appears to also accommodate a home-based contracting/landscaping business • An undeveloped lot that is largely forested • Further south (approx. 310 m) there is a third residential property containing a single detached dwelling, as well as a 7.65 ha property zoned for Rural Heavy Industrial uses. It is our understanding that preliminary development proposals have been created for these properties to accommodate a future 60,000 ft² truck transportation terminal/warehouse • The lands immediately south of the Boundary Road and Mitch Owens Road intersection have also been recently developed to accommodate a 50,000ft² transport tuck terminal/warehouse
<p>WEST</p>	<ul style="list-style-type: none"> • The lands to the west of the site are completely forested and contain a number of smaller drains/watercourses, locally known as the "Bear Brook Headwaters"



Urban Boundary /
Greenbelt

Recreation / Golf Course

General Rural Area

HIGHWAY 417

HIGHWAY 417

Rural
Residential

Rural
Residential

Rural
Residential

THUNDER RD

Amazon

SUBJECT
LANDS

Highway
Commercial

Capital Region Resource
Recovery Centre Lands

Highway
Commercial

D-Squared
Asphalt Plant

Natural Heritage Area
Woodlands / Bear Brook Headwaters

Industrial/Employment Uses

Day & Ross Industrial
Tuck Transport Terminal

Capital Region Resource
Recovery Centre Lands

General Rural Area

BOUNDARY RD

Rosedale Industrial
Tuck Transport Terminal

500 M



Figure 5 - Local Land Use Context Map

3.0 PROPOSED DEVELOPMENT & AMENDMENTS

3.1 PROJECT DESCRIPTION

The purpose of the proposed OPA and ZBLA is to expand the existing Rural Employment Area at Highway 417/Boundary Road interchange to facilitate the development of the subject lands for light industrial, logistics, and distribution warehouse uses. Given the size of the site, direct access to a major transportation corridor, and location within an existing cluster of industrial uses, the subject lands present an excellent opportunity to accommodate users in the logistics sector who require large sites, direct highway access, and separation from sensitive land uses/areas.

A demonstration plan has been prepared in support of the proposed OPA and ZBLA to demonstrate the ability and suitability of the site for the intended uses. As shown on Figure 6 the demonstration plan proposes six industrial buildings each intended to accommodate light industrial/warehouse users. Each of the buildings would consist of general warehousing space, along with associated office and other administrative space. Based on the intended users, the site could easily accommodate several hundred employees.

Development of the lands would generally be broken into three distinct areas:

- **Area 1**, with the largest development area, would accommodate four (4) warehouse facilities having a combined overall footprint of 37,165 m², heights ranging from 6.1m to 7.3m, 48 oversize truck docks, and parking for 281 vehicles (plus 8 barrier free spaces). An open storage area is planned to be situated in the centre of the four buildings, which allows for considerable screening from Thunder Road and adjacent properties – this location will also contain water storage cisterns for firefighting purposes. The site's central stormwater detention pond would be situated north of the developed area here, serving as an overall catchment/management centre for the entire site.
- **Area 2**, the second largest development area, would accommodate a second, smaller light industrial/warehouse facility having a building footprint of 5,545 m² and a height of 7.0 m, with 1 truck dock, and 82 parking spaces (plus 4 barrier free spaces).
- **Area 3**, the smallest development area, would accommodate a third light industrial/warehouse facility with a building footprint of 4,460 m² and a height of 6.1 m, with 12 truck docks and 34 parking spaces (plus 2 barrier free spaces).

A private internal road would serve Areas 1 & 3, allowing allow truck/employee traffic to enter the site from one of two entrances on Thunder Road and/or a new Boundary Road entrance. The internal road network would assist in separating

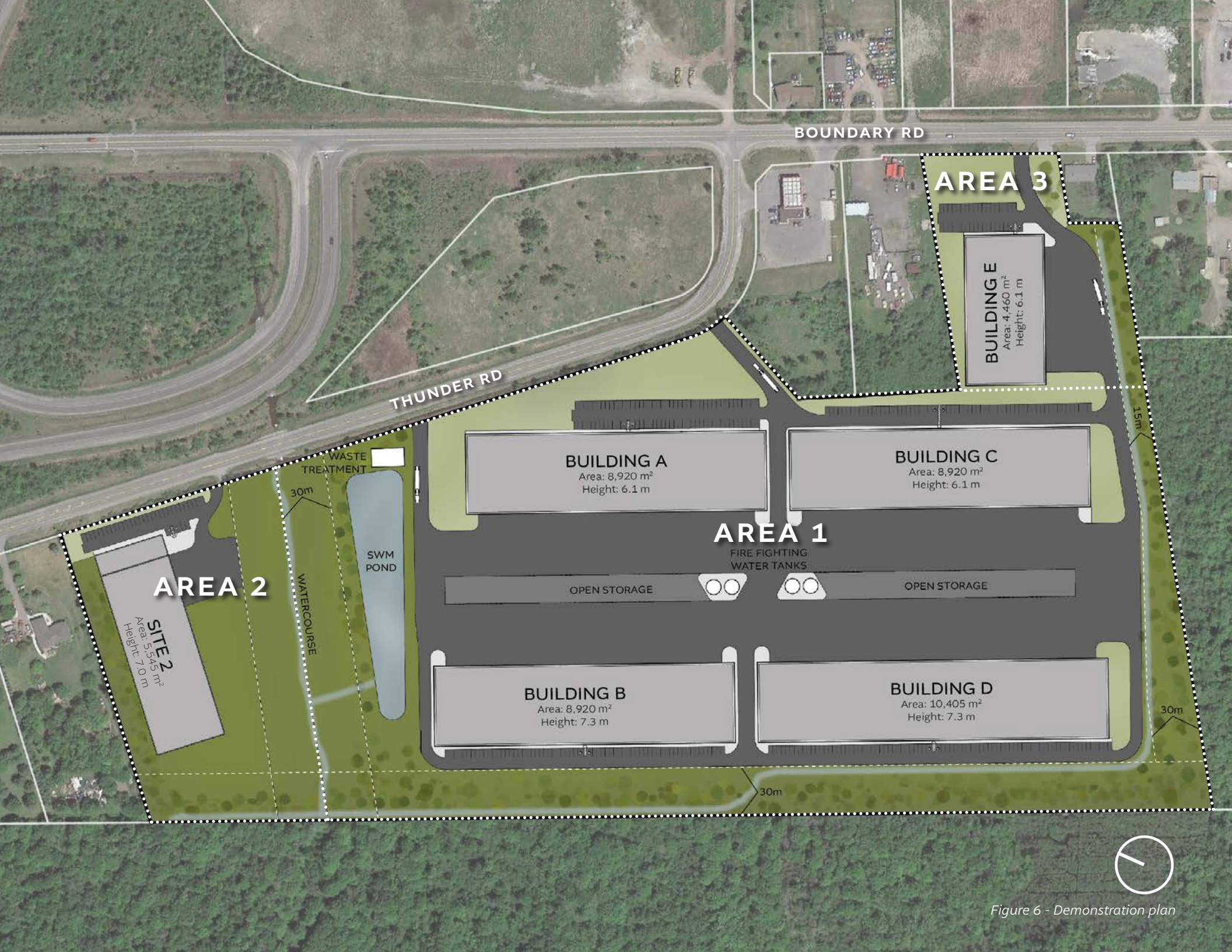
employee/truck traffic, as well as circulation on site, while providing driveways and parking areas appropriately suited to the size of the vehicles. Area 2 would be accessed via an independent entrance from Thunder Road not connected to Areas 1 and 3 due the unnamed drain dividing the two areas.

The significant size of the site allows for adequate setbacks from the unnamed drain as well as separation from adjacent rural land uses to the southeast and north (particularly the residential uses on Thunder Road) and allows for a considerable amount of green space to be maintained following development. The significant amount of tree cover around the site will further assist with buffering and mitigating potential impacts due to noise, lighting, and/or the visual presence/scale of the buildings and operations. As detailed in Section 6.0, an Environmental Impact Statement (EIS) was carried out to ensure that the future development of the subject lands does not negatively impact and/or affect the natural heritage or other features on and around the site.

The proximity of the site to Highway 417 as well as the design capacity of the existing road network in the immediate area would serve to benefit the future users of the site who would rely on this connection for their operations. As outlined in Section 5.0 of this report, a Traffic Impact Assessment (TIA) is being carried out in support of the proposal to ensure that the impacts on the transportation network are appropriately considered and/or mitigated through design. Considering the existing industrial design capacity of Boundary Road and the minimal travel distance to access Highway 417, only minor improvements to the existing network are anticipated in order to accommodate future development on the site.

The site does not have access to municipal storm, sanitary, or traditional water service as the infrastructure does not exist on Boundary Road or Thunder Road; however, the site is within the service boundary of the Carlsbad Springs trickle-feed water system. The subject lands will therefore employ partial services: municipal water via the Carlsbad Springs Trickle Feed System from Thunder Road and/or Boundary Road; and private individual on-site sewage treatment systems. The proposed servicing arrangements for the site are detailed further in the Functional Serviceability Report prepared by LRL Engineering in Section 5.0.

Considering the scale and nature of the proposed development, it will also be important to consider the applicant's obligation for undertaking public consultation in accordance with the City of Ottawa's requirements. Public consultation will be undertaken with the community once the applications have been circulated by the City and deemed complete to ensure that any comments or concerns can be addressed. The date, location, and form of the consultation as part of the proposal will be developed in close coordination with the City of Ottawa to ensure all requirements are met.



BOUNDARY RD

AREA 3

THUNDER RD

BUILDING E
Area: 4,460 m²
Height: 6.1 m

BUILDING A
Area: 8,920 m²
Height: 6.1 m

BUILDING C
Area: 8,920 m²
Height: 6.1 m

AREA 1

FIRE FIGHTING
WATER TANKS

OPEN STORAGE

OPEN STORAGE

AREA 2

SITE 2
Area: 5,645 m²
Height: 7.0 m

WASTE
TREATMENT

SWM
POND

WATERCOURSE

BUILDING B
Area: 8,920 m²
Height: 7.3 m

BUILDING D
Area: 10,405 m²
Height: 7.3 m

Figure 6 - Demonstration plan

3.2 PROPOSED OFFICIAL PLAN AMENDMENT

The overall purpose of the proposed amendment is to provide a suitable location for users in the logistics sector who require a large site, direct highway access, and separation from sensitive land uses/areas. These three criteria are becoming increasingly difficult to satisfy in the City of Ottawa considering the current supply of undeveloped employment land. However, in order to achieve this, it is necessary to change the underlying designation of the subject lands as City Staff are of the opinion that the scale of the proposed development does not reflect the intent of the General Rural Area designation. The area around the Highway 417-Boundary Road Interchange continues to grow as a rural employment node, and few opportunities remain for large-scale employment uses here without an expansion to the area.

The proposed development reflects the growing rates of logistics-focused economies, industry, and inventory management, and the need for larger tracts of industrial lands situated at or near major transportation corridors like the 417. Furthermore, the subject lands present an good opportunity to provide for larger tracts of additional needed employment lands in an established Rural Employment Area adjacent to a 400-series interchange that are not feasible to find or situate inside the urban area. As clearly demonstrated by the rapid rates of development of the employment lands on the east side of Boundary Road, the west side of Boundary Road is well-positioned to provide for a logical expansion of employment lands to satisfy market demands, while making efficient use of existing transportation, hydro, and water infrastructure.

The proposed Official Plan Amendment is as follows:

- Re-designate the entirety of the subject lands (17.75 ha) from “General Rural Area” to “Rural Employment Area” on Schedule A, as shown in Figure 7

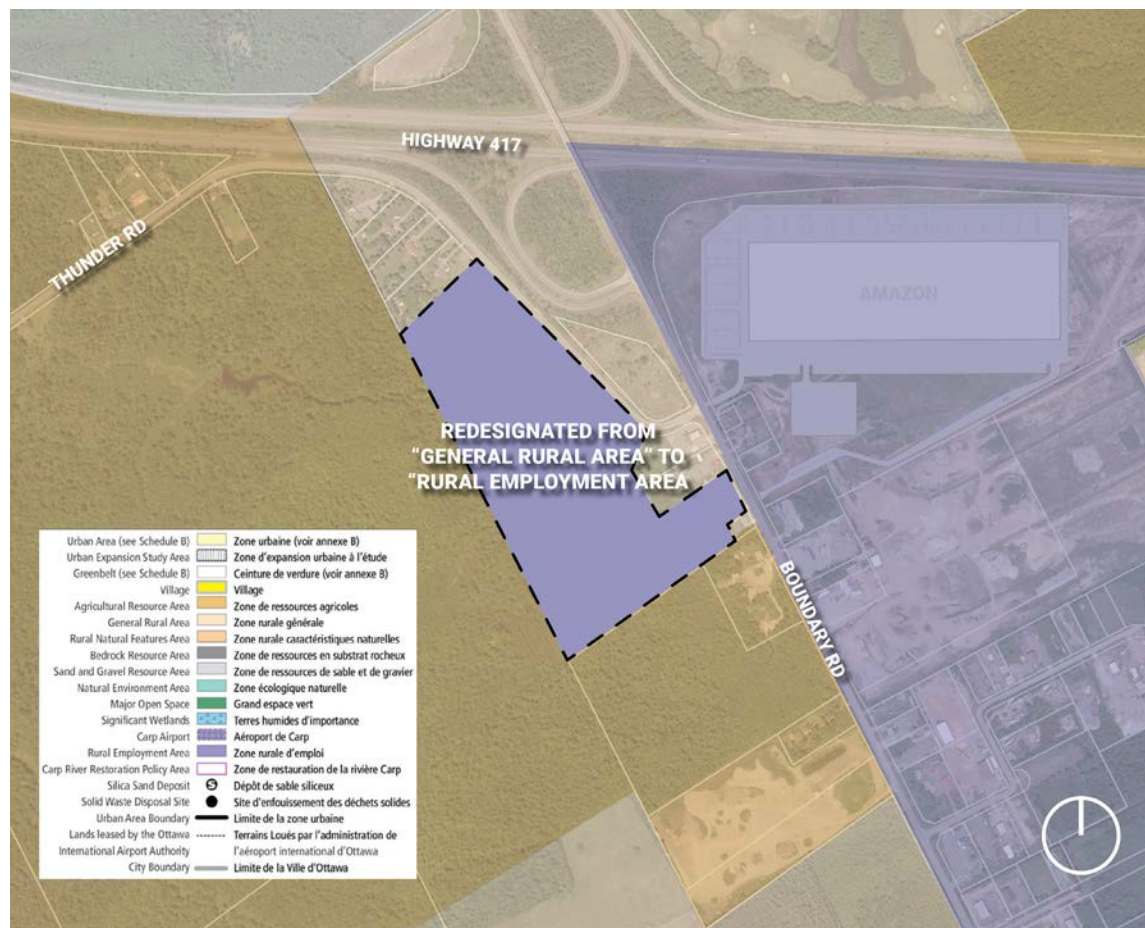


Figure 7 - Proposed Amendment to Official Plan Schedule A

3.3 PROPOSED ZONING BY-LAW AMENDMENT

Pursuant to the City of Ottawa Zoning By-law No. 2008-250, the subject lands are currently zoned “Rural Countryside (RU) Zone”.

To conform with the proposed official plan amendment redesignating the lands from “General Rural Area” to “Rural Employment Area”, the proposed Zoning By-law Amendment seeks to rezone the lands from “Rural Countryside (RU) Zone” to “Rural General Industrial (RG) Zone” in order to accommodate the proposed development. The proposed Zoning By-law Amendment is shown in Figure 8.

The effect of the amendment would be to accommodate the proposed development of the lands for industrial warehouse uses in general accordance with the demonstration plan through site plan control approval. In our opinion, the site can meet and/or exceed the minimum provisions of the RG Zone - as evidenced in the zoning performance review carried out for the demonstration plan and provided in Section 4.0.

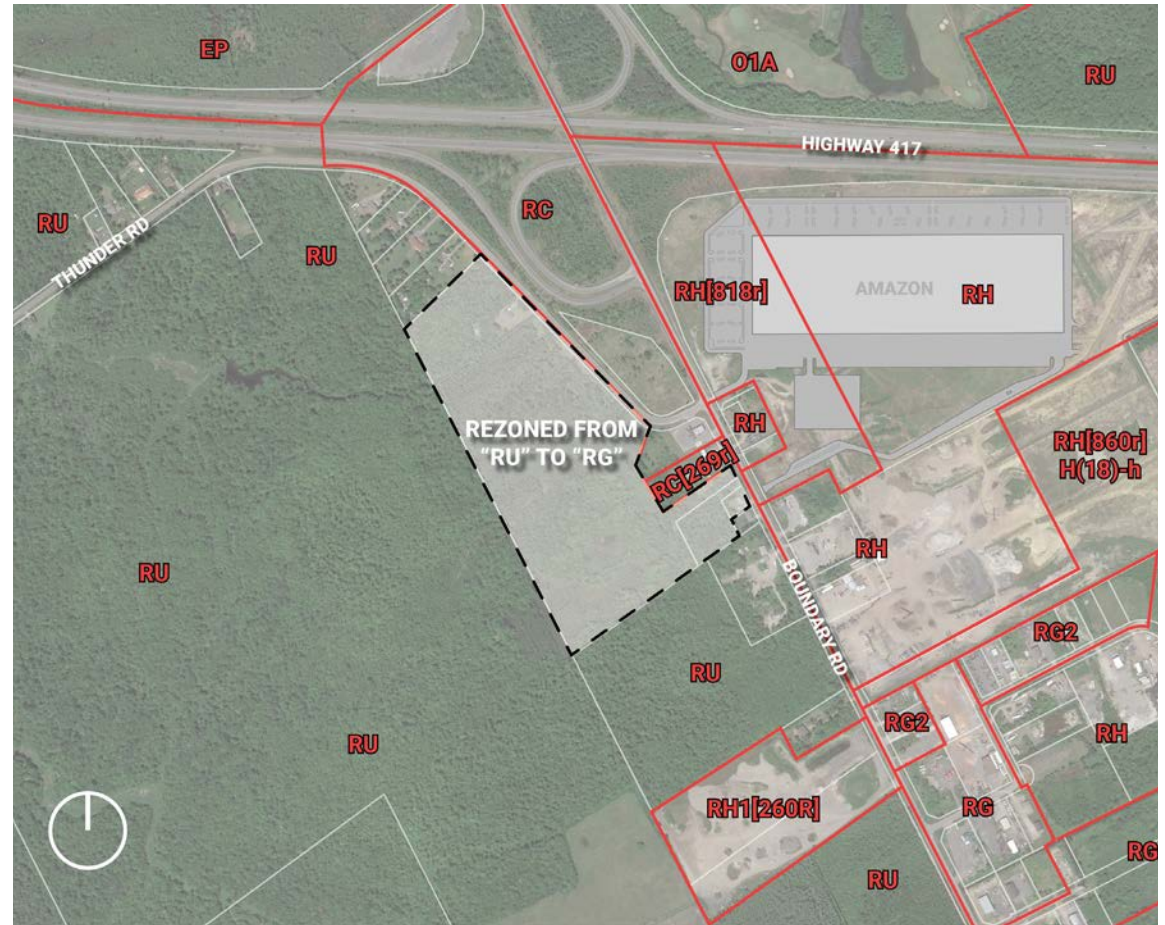


Figure 8 - Proposed Amendment to Zoning By-law No. 2008-250

4.0 POLICY FRAMEWORK & RATIONALE

This section contains an analysis of all relevant policies, regulations, and guidelines applicable to the subject lands and the development. *Italicized text* summarizes the relevant planning directive, followed by an analysis and rationalization of the directive in plain text.

4.1 PROVINCIAL POLICY STATEMENT (2020)

The Provincial Policy Statement (PPS) is the Province's policy statement on land use planning and Section 3 of the Planning Act requires that decisions affecting planning matters 'be consistent' with policy statements issued under the Act. The purpose of the PPS is to promote more effective and efficient approaches to land use planning that protect resources of provincial interest, public health and safety, and the quality of the natural and built environment, in order to help build resilient and sustainable communities across the province.

Section 1.1.1 states that Healthy, liveable and safe communities are sustained in part by:

- *promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term; and,*
- *accommodating an appropriate range and mix of residential, employment, institutional, recreation, park and open space, and other uses to meet long-term needs*

The proposed development seeks to expand an established employment area at a 400-series highway interchange to support the logistics sector in the City and the broader region. Specifically, the proposal would provide an opportunity for larger logistics use to establish at a key gateway to the City with regional connections assisting in provision of an appropriate mix of land uses to meet long-term needs. Further as the proposed development would form part of a larger contiguous existing employment area, it would efficiently expand upon the existing land use pattern of the area minimizing inefficient infrastructure expansion and maintenance.

Section 1.1.2 states that sufficient land shall be made available to accommodate an appropriate range and mix of land uses to meet projected needs for a time horizon of up to 25 years, and further that employment areas may be planned beyond a 25-year time horizon.

The findings of the 2016 Employment Lands Review undertaken by the City of Ottawa (detailed further herein) concluded that the City's overall employment lands supply is sufficient to meet long term demand to 2036 and possibly to 2041. However, the Review also notes that with current use permissions there are

few urban locations within the City that can meet highway-dependent industrial development such the logistics operations and other heavy industrial users that require large sites, and immediate / close access to major highways. Given the lack of appropriately sized and located employment lands within already designated employment areas it is appropriate to plan and consider additional employment lands, particularly adjacent to existing employment areas.

Section 1.1.4.1(e)(f) state that Healthy, integrated and viable rural areas should be supported in part by:

- *using rural infrastructure and public service facilities efficiently*
- *promoting diversification of the economic base and employment opportunities through goods and services, including value-added products and the sustainable management or use of resources*

The proposal seeks to take advantage of the site's proximity to an existing and upgraded highway interchange and the area's existing water supply system and road system without the need for major upgrades or expansions (as confirmed by the accompanying TIA information). Further the industrial / logistics uses would assist in diversifying the City's employment base and providing additional employment opportunities, particularly in the City's east end and eastern rural area.

Sections 1.1.5.4 & 1.1.5.5 state that Development that is compatible with the rural landscape and can be sustained by rural service levels should be promoted, and that development shall be appropriate to the infrastructure which is planned or available, and avoid the need for the unjustified and/or uneconomical expansion of this infrastructure

The proposed development would be an expansion to the existing employment area to the east of the subject lands and developed at a similar density to the existing area. Landscaping and retention of mature vegetation on-site will ensure compatibility with the existing employment area and surrounding rural area. The domestic water demands of the site would be intended to be met using the flow provided by the Carlsbad Springs trickle-feed water system in conjunction with building-specific water tanks or cisterns to meet peak instantaneous demands.

Section 1.3.1(a)(b) states that Planning authorities shall promote economic development and competitiveness in part by:

- *providing for an appropriate mix and range of employment, institutional, and broader mixed uses to meet long-term needs*
- *providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a*

wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses

The subject development present an opportunity for the City to increase its inventory of employment lands suitable to those industrial users requiring larger sites and easy highway access, given the limited opportunities in the City's existing employment areas. With the continued growth and importance of the logistics sector, this proposal provides an for the City to continue to support a diversified economic base that takes into account the needs of existing and future businesses.

Sections 1.3.2.6 states that planning authorities shall protect employment areas in proximity to major goods movement facilities and corridors for employment uses that require those locations, and that major goods movement facilities and corridors shall be protected for the long term, and that freight-supportive approaches should be used in the development of lands within or adjacent to these facilities or corridors.

The east side of Boundary Road was identified for a Rural Employment Area designation following the 2016 Employment Lands Study, in order to protect this area for future employment uses/users requiring highway access. This proposal would represent an expansion to this existing highway-adjacent employment area and further solidify the planned function of the area as supporting logistics operations, freight and goods movement.

Section 1.6.6 establishes the provincial policies respecting sewage, water, and wastewater servicing arrangements for development. This section further establishes the following servicing hierarchy, in order of preference: municipal; private communal; individual on-site; wherein selection criteria is based on whether the most preferred service arrangement is available, planned, or feasible. Section 1.6.6.4 states that where municipal sewage services and municipal water services or private communal sewage services and private communal water services are not available, planned or feasible, individual on-site sewage services and individual on-site water services may be used provided that site conditions are suitable for the long-term provision of such services with no negative impacts. Section 1.6.6.5 also permits the use of partial services in circumstances where the proposal would constitute a rounding out of existing development, and where it would represent a logical and financially viable connection to the existing partial service.

As detailed in Section 4.2 of this report, Policy 2.3.2(14) of the City of Ottawa Official Plan states where no provision for public services exists, the City may permit development on private services in defined Public Service Areas if (among other conditions) full servicing is not technically or financially feasible and the proposed servicing arrangements are adequate. Future development on the subject lands

will employ partial services, with municipal water connections via the Carlsbad Springs Trickle Fee System (located on Thunder Road and Boundary Road) and private on-site individual sewage systems. Onsite sewage treatment and collection facility(ies) will be designed in detail to release treated effluent to the unnamed drain running through the property - specific details of these systems will be revisited at the site plan control stage. Based on the information provided in the Functional Serviceability Report prepared by LRL Engineering, it is in our opinion that the site conditions are suitable for the long term provision of these arrangements a, which will be further revisited and clarified through the site plan control process.

Section 1.6.6.7 states that planning for stormwater management shall: be integrated with planning for sewage and water services; minimize/prevent increases in contaminant loads; minimize erosion and changes in water balance; mitigate risks to human health, safety, property and the environment; maximize the extent and function of vegetative and pervious surfaces; and, promote stormwater management best practices, including stormwater attenuation and re-use, water conservation and efficiency, and low impact development.

Stormwater runoff currently flows uncontrolled to the South & West borders of the property. The property is mostly pervious area, and in developing the lot into a "light industrial" lot, further impervious areas will be introduced on the property. The increase in impervious area, along with City of Ottawa design requirements, will require the site to implement a stormwater quantity and quality management system. As detailed in the Functional Serviceability Report prepared by LRL Engineering, a combination of an on site sewer network, detention areas, quality treatment units, best management practices and low impact development principles are to be implemented to ensure the proposed development will meet the City's stormwater quantity and quality requirements. Stormwater management for the site will be further developed as part of the site plan control process for the main building, will meet the minimum requirements of the City of Ottawa, and achieve a high level of conformity with section 1.6.6.7 of the PPS.

Section 1.6.8.2 and 1.6.8.3 states that new development proposed on adjacent lands to existing or planned corridors and transportation facilities should be compatible with, and supportive of, the long-term purposes of the corridor and should be designed to avoid, mitigate or minimize negative impacts on and from the corridor and transportation facilities.

The intended users for the site are logistics-oriented, and require high-capacity roadways, easy access to highways, and separation from more dense/incompatible urban areas typically observed in villages/settlement areas. The proposal is compatible with and supportive of the long-term purposes of the Highway 417

corridor as an important regional / inter-provincial corridor.

Section 1.7.1(a) states that Long-term economic prosperity should be supported in part by promoting opportunities for economic development and community investment-readiness.

The City's 2016 Employment Lands Review noted that since the supply of vacant employment land within the Greenbelt is limited, and most available parcels are constrained by their size, shape or accessibility, there is a need to maintain vacant Employment Lands outside the Greenbelt, particularly for industrial businesses and employers requiring large sites. The most attractive and suitable Employment Lands likely will be those adjacent to highway interchanges. The proposal will allow for the City to expand its inventory of vacant employment lands supporting investment-readiness.

Section 1.8.1(d) states that planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and preparing for the impacts of a changing climate through land use and development patterns which focus freight-intensive land uses to areas well served by major highways, airports, rail facilities and marine facilities.

The subject site is situated directly south of a 400-series highway interchange and is well-served by the existing local arterial road network, reducing the higher fuel consumption rates and emissions associated with urban travel for larger vehicles. Further sustainable site/building design is planned to be incorporated into the site plan control submission for the proposed development of the lands.

Section 2.1 establishes policies respecting the protection of Natural Heritage features.

Natural heritage features (namely woodlands) have been identified on and adjacent to the subject lands pursuant to Schedule L1 of the City of Ottawa Official Plan. In order to address these features, an Environmental Impact Statement (EIS) was carried out by Kilgour & Associates Ltd. in accordance with the requirements of the PPS and the City of Ottawa Official Plan. The EIS found that while a portion of significant woodland is proposed to be removed (approximately 4.1 ha forest and 0.8 ha of thicket swamp), they are part of small area of regrowth on former farm fields extending out from the main, more-mature forest block to the west. This area to be cleared represents 3% of the broader forested area, and the impacts anticipated to the Significant Woodland are considered to be minor.

Section 2.2 establishes policies respecting the protection of Water.

There is an unnamed drain that bisects the northern part of the subject lands. As shown on the demonstration plan, every effort will be made to ensure that the future development of the subject lands respect minimum setbacks from this water feature. Based on the demonstration plan, all development on the lands (aside from the stormwater works) would be capable of achieving a minimum

60 metre setback from the top of bank of the unnamed drain. Furthermore, the Environmental Impact Statement (EIS) carried out by Kilgour & Associates Ltd. for the proposed development outlines a number of mitigation measures to be implemented through further site planning/development to protect the unnamed drain, including but not limited to: multi-faceted approaches to erosion and sediment control; retention of existing vegetation where possible; and maintaining overland sheet flow to avoid concentrated flows. Future stormwater management plans prepared for the site will take the presence of this unnamed drain into consideration, and the design/location of the future detention pond will allow for runoff to be managed so as not to overload this receptor.

Section 2.6 requires that planning authorities conserve and protect cultural heritage resources including archaeological resources.

As described further in Section 4.2 of this report, a Stage 1 Archaeological Assessment of the subject lands was carried out by Paterson Group Inc., which concluded that there was low potential for pre-contact Aboriginal and low-medium potential for historic Euro-Canadian archaeological resources within the study area. A Stage 1 site visit confirmed that the entire property is either wet and low-lying or significantly disturbed and thus meets the criteria for exclusion from Stage 2 survey.

Section 3.2 establishes policies to reduce the potential for public cost or risk to residents from human-made hazards

Phase I & II Environmental Site Assessments (ESAs) were carried out by Paterson Group Inc. The presence of a former gas station situated immediately east of the site triggered the requirement for a Phase II for further investigation. The Phase II ESA concluded that soil sampling results and groundwater analysis comply with the selected MECP Table 2 Industrial Standards for potable-water conditions. No further concerns were raised, and no further investigation was required following the Phase II ESA, and as such, there are no concerns regarding compliance with Section 3.2 of the PPS.

4.2 CITY OF OTTAWA OFFICIAL PLAN (2003, AS AMENDED)

The Official Plan (OP) of the City of Ottawa (2003, As Amended) establishes the vision and policy framework to guide the physical growth of the City's urban and rural areas to the year 2036.

Section 2 outlines the strategic directions with which the City will pursue to meet the challenges of growth, which include the following as they relate the proposed development:

- *Managing Growth, specifically by ensuring Infill and redevelopment will be*

compatible with the existing context or planned function of the area and contribute to the diversity of housing, employment, or services in the area; and,

- *Building Liveable Communities, specifically by providing for a wide range of economic activities in suitable locations to provide a balance of jobs both inside and outside the Greenbelt*

The proposed development is directly aligned with the City's strategic directions for managing growth, as the proposed development would be compatible with the range of existing industrial/commercial uses in the immediate area and would further diversify the existing employment area and provide additional employment opportunities. As noted previously, opportunities for larger sites with good highway access are very limited within the Greenbelt – furthermore, the immediate Highway 417 / Boundary Road Employment Area does not currently have any vacant lands available for the proposed scale of development.

Policy 2.3.1(43) states that the City will preserve strategic locations with superior access to major highways, the airport, railroads and the arterial road network for distribution centres that intercept goods transported long distances by air, rail or truck and transfer them to smaller, more energy efficient vehicles for distribution within the city. The centres reduce the cost and increase the speed of deliveries within the city and divert heavy truck traffic from local roads.

In addition to their size, the location of the subject lands adjacent to and easily accessible from Highway 417 and an existing employment area at a major gateway to the City the lands constitute a strategic location for employment and logistics uses. Redesignating the lands for employment uses would fulfill the intent of the said policy to preserve such locations for employment and logistics uses.

Policy 2.3.2(11) speaks to the extension of the Carlsbad Public Service Area (PSA) [water] south from Village of Carlsbad Springs and east of Thunder Road to service the existing 22 lots that front onto Boundary Road, and to service those rural industrial areas east of Boundary Road. This policy specifically states that applications for the creation of new lots or a change of use requiring a zoning amendment must be accompanied by an assessment of the residual capacity of the whole system taking into consideration existing service commitments.

The proposed official plan amendment would extend the Carlsbad Springs public service area to the subject lands, and allow for the connection of future development. Accordingly, a Functional Serviceability Report was prepared by LRL Engineering in support of the proposal, which outlined a conceptual water demand of 35,441 L/day, based on the demonstration plan prepared for the site. This conceptual demand exceeds the pre-set allocated flow rate to the subject lands of 8,100 L/day. However, based on the available City of Ottawa documentation prepared during the extension of the Carlsbad Springs trickle-feed system, it is understood that monitoring does take place to assess the performance and

consumption of properties relying on the water network. As outlined in the report titled "Feasibility Study - Extension of Carlsbad Springs Trickle Feed Water System – Area East of Carlsbad Springs (Russell Road, Carlsbad Lane, Sabourin Road & Boundary Road Industrial Park)" Prepared by Stantec in 2014, the City's available monitoring data will provide a further understanding of the actual peak demands in the overall Carlsbad Springs system, which may conclude that additional equivalent units are available for the subject property. Notwithstanding the above, further demonstration of sufficient water capacity in the network will be required as part of the site plan control stage, and based on a specific design/user.

Further to the above, Policy 2.3.2(14) states where no provision for public services exists, the City may permit development on private services in defined Public Service Areas provided that it can be demonstrated to the satisfaction of the City that such development:

- *Is proposed in a circumstance where public services are not currently technically or financially feasible*
- *Can adequately be serviced by private individual services in accordance with Section 4.*

It is recognized that the site is not located within the City of Ottawa sanitary service area, and that on-site private sewage collection and treatment will be required for the proposed development. For this reason, public sewage services are not feasible for implementation on the site. However, the Carlsbad Springs Trickle Feed System located on Thunder Road and Boundary Road is intended to serve the proposed development on the site. Further information is provided in the summary of the Functional Serviceability Report in Section 5.0.

2.3.3(1) states that development will be in accordance with the system capacity for drainage and will implement stormwater management and where relevant, will conform to stormwater site management plans, the Infrastructure Master Plan and community design plans practices necessary to protect, improve or restore the quality and quantity of water in the receiving watercourse.

As detailed in the Functional Serviceability Report prepared by LRL Engineering, a combination of an on site sewer network, detention areas, quality treatment units, best management practices and low impact development principles are to be implemented to ensure the proposed development will meet the City's stormwater quantity and quality requirements. Stormwater management for the site will be further developed as part of the site plan control process for the main building, will meet the minimum requirements of the City of Ottawa, and achieve a high level of conformity with section Policy 2.3.3(1). Further information is provided in the summary of the Functional Serviceability Report in Section 5.0.

2.4.2(3) states that regardless of whether the features are designated in this Plan, an Environmental Impact Statement is required for development proposed within or

adjacent to features described in policy 1 above, with the exception of surface and groundwater features. Development and site alteration within or adjacent to these features will not be permitted unless it is demonstrated through an Environmental Impact Statement that there will be no negative impact on the feature or its ecological functions.

Natural heritage features have been identified on and adjacent to the subject lands, which largely consist of woodlands. Accordingly, pursuant to Policy 2.4.2(3) above, as well as the requirements of the PPS, an Environmental Impact Statement was carried out by Kilgour & Associates Ltd. The findings of the EIS are briefly outlined in Section 5 of this report, which demonstrates that no negative impacts are anticipated to the natural heritage features and/or their ecological functions. The EIS further addresses the additional policies in 3.2.4 of the OP respecting rural natural heritage features.

Section 3.7.5 states that Rural Employment Areas are intended to support and encourage clustering of primarily industrial uses not suitable in the Urban Area or General Rural Area, and add to the diversity of opportunities for economic development and those seeking large sites and proximity to the urban area and further, Those rural employment areas located in close proximity to 400 Series Highway interchanges are uniquely suited to transportation facilities such as truck terminals, warehouses, courier and freight facilities that support inter – and intra-provincial movement of goods.

The industrial logistics/distribution uses intended for the site are not reasonably capable of be located within an urban area, due to their requirements for large parcels and access to high-capacity transportation infrastructure. However, the location of the subject lands at a major gateway to the City still allows for proximity to the urban area.

Policy 3.7.5(2)(b) states that uses permitted within rural employment areas include, but are not limited to new transportation, warehouse and storage operations; these uses are encouraged to locate on sites in close proximity to arterial roads and highway interchanges where they would not be more appropriately located within a village or settlement area.

The proposed uses intended for the site would conform to the uses intended for the Rural Employment Area designation. The proposed development will also generate a large amount of vehicle traffic that would not be appropriate within a village, and is more suitably accommodated by the provincial and regional road infrastructure that serves the site/immediate area. Furthermore, the proposed development is consistent with the industrial character of the surrounding area to the east of Boundary Road and south of the subject lands, wherein a mix of “Rural Heavy Industrial (RH)” and “Rural General Industrial (RG)” Zones are in place. The proposed “RG” zoning for the subject lands would be consistent with the Rural Employment Area designation policies in the OP.

Policy 3.7.5(4) states that all new development must be supportable on individual well and septic systems unless the City agrees to the development of a number of sites on the basis of a small water and wastewater works as described in Section 4.4.2.4. Policy 4.4.2.4(4) states that the proponent of any development that includes a small water or wastewater works is required to submit the following additional information at the time of application:

- *Hydrogeology and terrain analyses that demonstrate the long-term sustainability of water supply and wastewater disposal;*
- *A vulnerability assessment in accordance with the terms of reference as specified at the time of a pre-application consultation;*
- *A Reasonable Use Study to determine the impact from the sewage system(s) on the groundwater, as described by the Ministry of the Environment guidelines; and*
- *The identification of any risk to the water supply and the mitigation necessary to protect that supply.*

The Functional Serviceability Report prepared by LRL Engineering in support of the proposed amendments recognizes the requirement for further investigation and design considerations for the servicing arrangements proposed. The above information was not required by the City to form a complete application in support of the proposed OPA and ZBLA; however, this information will be prepared and submitted as part of any future applications for site plan control approval. Based on the preliminary conclusions of the Functional Serviceability Report, no concerns have been identified with respect to the ability for future development to conform with Policies 3.7.5(4) & 4.4.2.4(4) of the OP.

Section 4.2 outlines the general policies respecting adjacent land use designations and the potential triggers for further investigations on potential impacts.

Notwithstanding the current “General Rural Area” and proposed “Rural Employment Area” designations, the lands immediately adjacent (west) of the subject lands are designated “Rural Natural Features Area” on Schedule A and contain natural heritage system feature(s) (woodlands), as identified on Schedule K. This triggered the requirement for the completion of an EIS to investigate the potential impacts on these features, as well as to demonstrate there will be no negative impacts to the natural heritage feature and/or their ecological function. Accordingly, an EIS was carried out by Kilgour & Associates Ltd. in support of the proposal, the findings of which are generally summarized in Section 5.0. Further environmental investigation/impact assessment will be required and carried out as part of subsequent applications for site plan control.

Section 4.3 outlines the policies with respect to walking, cycling, transit, roads, and parking lots.

Pursuant to Policy 4.3(6), as the proposal has the potential to impact transportation network(s) in the immediate area, a Transportation Impact Assessment (TIA) is required in support of any proposed development, in order to ensure that potential impacts on the transportation network are evaluated and addressed. Furthermore, the subject lands are situated within the Ministry of Transportation of Ontario (MTO) Permit Control Area; therefore, any proposed development is subject to review and approval from MTO.

In order to address the above, Crozier & Associates Inc. were retained to prepare a TIA in support of the proposal, in accordance with the City of Ottawa's "Transportation Impact Assessment Guidelines (2017)" and MTO's "Traffic Impact Study Guideline (2014)". As part of this process, a Screening and Scoping Report was submitted to and approved by the City and MTO in November 2020. The December 2020 Forecasting Report prepared by Crozier is the next step required in the TIA process, and forms the basis for forecasting to be used in the eventual TIA. The TIA is currently being undertaken by Crozier as of the time of writing, and will be appended to this rationale upon completion. In discussions with Crozier and considering the existing industrial design capacity of Boundary Road and the minimal travel distance to access Highway 417, only minor improvements to the existing network are anticipated in order to accommodate future development on the site, and no concerns have been identified with respect to the ability for future development to conform with Policy 4.3.

Section 4.4 outlines the policies with respect to Water and Wastewater Servicing, in order to ensure that there is a reliable supply of good quality water and safe disposal of wastewater. More specifically, Policy 4.4.2(1) states that anywhere development is proposed on the basis of private individual services and requires an application for an Official Plan or Zoning By-law amendment or involves a plan of subdivision, plan of condominium, severance or site plan approval, the City will require sufficient information with the application to assess the likelihood that the operation of the on-site wastewater system on the new lot(s) will not adversely impact a well to be constructed on the proposed lot(s) and on the wells of neighbouring properties

In addition to the Functional Serviceability Report, a Groundwater Impact Assessment (GIA) was prepared by Paterson Group Inc. in support of the proposed amendments, in order to address the requirements of policy 4.4.2(1) respecting the use of private individual services. Among other conclusions contained in this report, it specifically concluded that; the subject site is an ideal location for the proposed treated effluent surface discharge due to the lack of potential downstream receptors and the industrial nature of the neighbouring properties; the use of the planned private sewage treatment system for the site will not result in negative impacts on the till or Carlsbad Shale bedrock aquifers; and, the proposed treated effluent surface discharge to the unnamed drain is not expected to negatively impact the surface water in the area. Further information on the GIA is provided in Section 5.0.

Section 4.6.2 outlines the policies respecting cultural heritage resources. Specifically, Policy 4.6.2(2) states that when reviewing plans of subdivision and condominium, site-specific official plan amendments and site plans involving large parcels of undisturbed land, the City will determine whether any portion of a proposal has the potential for the discovery of archaeological resources.

Pursuant to the above, a Stage 1 Archaeological Assessment of the subject lands was carried out by Paterson Group Inc. to assess the archaeological potential of the property and determine whether further archaeological study was required. The assessment concluded that there was low potential for pre-contact Aboriginal and low-medium potential for historic Euro-Canadian archaeological resources within the study area. A Stage 1 site visit confirmed that the entire property is either wet and low-lying or significantly disturbed and thus meets the criteria for exclusion from Stage 2 survey. Therefore, no further work was recommended.

Section 4.6.4 outlines the policies respecting "Scenic-Entry Routes" to the City of Ottawa, which form a network that links major tourist, recreation, heritage and natural environment destinations in and beyond the City. Signage along these roads must orient travelers and provide direction to the City's attractions, while the overall pattern of development along the routes must create a favourable first impression of Ottawa. Policy 4.6.4(2) states that development applications adjacent to scenic entry routes will be assessed against the following criteria:

- *The creation of a safe and attractive environment for travelers including, where appropriate, such amenities as lay-bys, scenic lookouts, information, and directional signs to important urban and rural cultural, heritage, environmental and tourism destinations;*
- *Attention to such matters as building orientation, outside storage, access and egress, landscaping, fencing, lighting and signage to create an aesthetically pleasing streetscape;*
- *The protection of views to natural and cultural heritage features, mature trees, and roadside vegetation along and beyond the right-of-way;*
- *Coordination of landscaping, berming, pathways and other features within the rights-of-way with the creation of such features on adjacent land, including the potential to locate these features on adjacent property;*
- *Any other items determined by the City.*
- *The intended users on the subject lands are similar in scale and nature to those situated on the east side of Boundary road. Additionally, the subject lands are heavily screened from those traveling on Highway 417 by mature vegetation incorporated into the Boundary/417 interchange*
- *Notwithstanding this, it is the intent that this will be addressed through future site plan control applications wherein entrances and building design/orientation will be considerate of the above criteria*

The subject lands are situated in the vicinity of Highway 417, which is a designated Scenic-Entry Route to the City of Ottawa on Schedule J of the OP. The site is largely screened by heavy vegetation situated around the site and adjacent to Highway 417. Even if a significant amount of this vegetation was removed from the lands and/or surrounding area, the distance (approximately 200 metres at closest) and orientation of the site in relation to highway travelers would result in minimal negative visual impacts on the Highway 417 gateway. Notwithstanding this, a high level of site and building design will be employed in the site planning stage of the development to ensure that the development embodies the values of this policy.

Section 4.7.3 requires the protection of rivers, streams, lakes, and other surface water features.

There is an unnamed drain that bisects the northern part of the subject lands. As shown on the demonstration plan, every effort will be made to ensure that the future development of the subject lands respect minimum setbacks from this water feature. Based on the demonstration plan, all development on the lands (aside from the stormwater works) would be capable of achieving a minimum 60 metre setback from the top of bank of the unnamed drain. Furthermore, the Environmental Impact Statement (EIS) carried out by Kilgour & Associates Ltd. for the proposed development outlines a number of mitigation measures to be implemented through further site planning/development to protect the unnamed drain, including but not limited to: multi-faceted approaches to erosion and sediment control; retention of existing vegetation where possible; and maintaining overland sheet flow to avoid concentrated flows. Future stormwater management plans prepared for the site will take the presence of this unnamed drain into consideration, and the design/location of the future detention pond will allow for runoff to be managed so as not to overload this receptor. The Groundwater Impact Assessment prepared in support of the proposal further concluded that treated effluent from the site is not expected to negatively impact the natural systems west of the subject lands.

Section 4.7.8 states that an Environmental Impact Statement is required for development and site alteration proposed within and adjacent to natural heritage features designated as Rural Natural Features and adjacent to land designated as Urban Natural Feature, Significant Wetland, and Natural Environment Area.

Rural Natural Features have been identified on Schedule K of the OP; therefore, an Environmental Impact Statement was carried out by Kilgour & Associates Ltd., the findings of which are generally summarized in Section 5.0. No concerns with respect to potential impacts on these features was identified.

Section 4.8.4 outlines policies respecting contaminated sites and the protection of public health and safety.
Phase I & II Environmental Site Assessments (ESAs) were carried out by Paterson

Group Inc. The presence of a former gas station situated immediately east of the site triggered the requirement for a Phase II for further investigation. The Phase II ESA concluded that soil sampling results and groundwater analysis comply with the selected MECP Table 2 Industrial Standards for potable-water conditions. No further concerns were raised, and no further investigation was required following the Phase II ESA, and as such, there are no concerns regarding compliance with Section 4.8.4 of the OP.

Section 4.11 establishes the policies respecting City-wide urban design and compatibility, and include policies to provide direction on matters such as, but not limited to: views; building design; and outdoor amenity areas.

The location of the site at a "Scenic-Entry Route" will be an important consideration in the final design of the development for building orientation and massing. Notwithstanding this, the generous amount of vegetation around the subject lands provides a significant visual buffer between highway travelers and the subject lands. The urban design direction provided in Section 4.11 will be incorporated into the future site plan control submission to the City.

4.3 CITY OF OTTAWA ZONING BY-LAW NO. 2008-250

The purpose of the RG – Rural General Industrial Zone is to:

- *permit the development of light industrial uses in areas mainly designated as General Rural Area, Village and Carp Road Corridor Rural Employment in the Official Plan;*
- *accommodate a range of light industrial uses and limited service commercial uses for the traveling public; and,*
- *regulate development in a manner that respects adjacent land uses and will have a minimal impact on the surrounding rural area.*

Based on the review of the permitted uses of under the Rural General Industrial (RG) Zone, the proposed uses of the site fall within the existing list of permitted uses and no exceptions to the existing list of permitted uses is sought through this application.

A zoning performance review was carried out based on the demonstration plan prepared in support the subject applications. The following tables outline the zoning performance reviews carried out for each of the three industrial buildings depicted on the demonstration plan which is intended to provide a "proof of concept" for the intended development/users on the subject lands.

Considering the zoning performance review (opposite) based on the demonstration plan, the subject lands are suitably sized and appropriate to maintain a high level of land use flexibility and accommodate the intended uses. It should be not-

ed that as part of any future development proposals on the site requiring site plan control approval, a further performance review will be carried out.

Areas 1 & 3 Zoning Performance

Building/Site Details		
Site Area		15.34ha
Gross Floor Area	Building A	8,920 m ²
	Building B	8,920 m ²
	Building C	8,920 m ²
	Building D	10,405 m ²
	Building E	4,460 m ²
	TOTAL	41,625 m²
Proposed Uses		Light Industrial / Warehouse
Rural General Industrial (RG) Zone Provisions		
		Required Provided
Lot Width (min)		30m 280m (Thunder Rd) 81m (Boundary Rd)
Lot Area (min)		4,000m ² 153,400m ²
Yard Requirements (both)	Front	15m +15m (east)
	Rear (abutting natural heritage feature)	30m 44.2m (west)
	Interior Side (abutting RG, RH, or RG Zone)	3m +3m (east)
	Interior Side (abutting any other Zone)	8m +8m (south) +8m (north)
Building Height (max)	Buildings, A, C, E	15m 6.1m
	Buildings B & D	15m 7.3m
Lot Coverage (max)		50% 27.1%
Zoning Provisions - Parking		
		Required Provided
Number of Parking Spaces	Building A	55 + 1 BF 83 + 2 BF
0.8 per 100m ² for first 5,000m ² GFA	Building B	55 + 1 BF 59 + 2 BF
0.4 per 100m ² after 5,000m ²	Building C	55 + 1 BF 62 + 2 BF
	Building D	61 + 1 BF 77 + 2 BF
	Building E	35 + 1 BF 34 + 2 BF
	TOTAL	261 + 5 BF 315 + 10 BF
Number of Loading Spaces	Building A	2 Oversize 12 Oversize
	Building B	2 Oversize 12 Oversize
	Building C	2 Oversize 12 Oversize
	Building D	2 Oversize 12 Oversize
	Building E	2 Oversize 12 Oversize
	TOTAL	10 Oversize 60 Oversize
Zoning Provisions - General		
		Required Provided
Setback from Watercourse (Buildings A & B) - Top of Bank		15m +60m

Area 2 Zoning Performance

Building/Site Details		
Site Area		2.41 ha
Gross Floor Area	Office & Retail (footprint only)	585 m ²
	Warehouse (footprint only)	4,960 m ²
	TOTAL	5,545 m²
Proposed Uses		Office / Retail / Warehouse
Rural General Industrial (RG) Zone Provisions		
		Required Provided
Lot Width (min)		30m 141m
Lot Area (min)		4,000m ² 24,100 m ²
Yard Requirements (both)	Front	15m +15m (east)
	Rear	30m +30m (west)
	Interior Side (abutting an industrial zone)	3m +30m (south)
	Interior Side (abutting a non-industrial zone)	8m 8m
Building Height (max)		15m 7m
Lot Coverage (max)		50% 23%
Zoning Provisions - Parking		
		Required Provided
Number of Parking Spaces	2.4 per 100m ² of GFA (Office)	14 82 + 4 BF
	3.4 per 100m ² of GFA (Retail)	20
	0.8 per 100m ² of GFA (Warehouse)	40
	TOTAL	74 + 2 BF 82 + 4 BF
Number of Loading Spaces	1 per 2,000 m ² – 4,999 m ² GFA	1
Zoning Provisions - General		
		Required Provided
Setback from Watercourse - Top of Bank		15m +60m

4.4 ONTARIO MINISTRY OF ENVIRONMENT, CONSERVATION, AND PARKS (MECP) D-SERIES LAND USE PLANNING GUIDELINES

The Ontario Ministry of Environment, Conservation, and Parks (MECP) maintains a series of environmental land use planning guides - the “D-Series Guidelines” - to address land use compatibility considerations and requirements for industrial land uses, sensitive lands, sewage and water services, as well as private wells. The subject proposal involves a change in land use on the subject lands from General Rural Area to Rural Employment Area, wherein industrial lands would abut non-industrial lands. Specifically, Guideline D-6: Compatibility between Industrial Facilities provides guidance for both land use planning authorities and proponents in determining what types of land uses are appropriate near industrial facilities, and how to evaluate and address potential impacts due to incompatibilities. A context map on page 25 (Figure 9) has been prepared to supplement the following discussion.

Classification of Permitted Uses and Influence Areas

Guideline D-6 provides a categorization of industrial facilities into three distinct classes based on the nature of their emissions, their physical size/scale, their production volumes, and/or the intensity and scheduling of their operations. Appendix A of Guideline D-6 provides a definition and examples of each of the three classes of industrial uses, and the Guideline further defines recommended minimum separation distances and potential influence areas for each of the defined classes (shown in the Table below), as they relate to adjacent sensitive uses. These classifications and recommended separation distances/influence areas are only a guide in helping mitigate/eliminate potential adverse impacts that may result between industrial and sensitive land uses. It is pertinent to note that Guideline D-6 was also last updated by the Ministry in 1995 and therefore does not take into account advancements in construction techniques and technology; improved environmental regulation and standards; and / or changes to manufacturing techniques and technologies which would have the impact of reducing potential conflicts.

D-Series Classification	Recommended Minimum Separation from Incompatible Use	Potential Influence Area
Class I	20 metres	70 metres
Class II	70 metres	300 metres
Class II	300 metres	1,000 metres

The following factors were reviewed in accordance with Guideline D-6 to determine an appropriate classification as it relates to the proposed rezoning: *outputs, scale, process, and operational intensity*.

Following a review of the proposed RG Zone and the submitted demonstration plan, it was determined that, at their greatest intensity, the permitted uses of the RG Zone would be considered Class II Facilities while some of the permitted uses are more appropriately considered Class I facilities.

Adjacent Sensitive Land Uses

There are a total of seven (7) dwellings or 'residential receptors' located within the 300m potential influence area of the site; three (3) of which are located within the recommended minimum separation distance of 70m. These receptors have been identified on Figure 9 (opposite page). As the site does not currently contain any industrial facilities, these distances are measured from the boundary of the lands.

Observations & Discussion

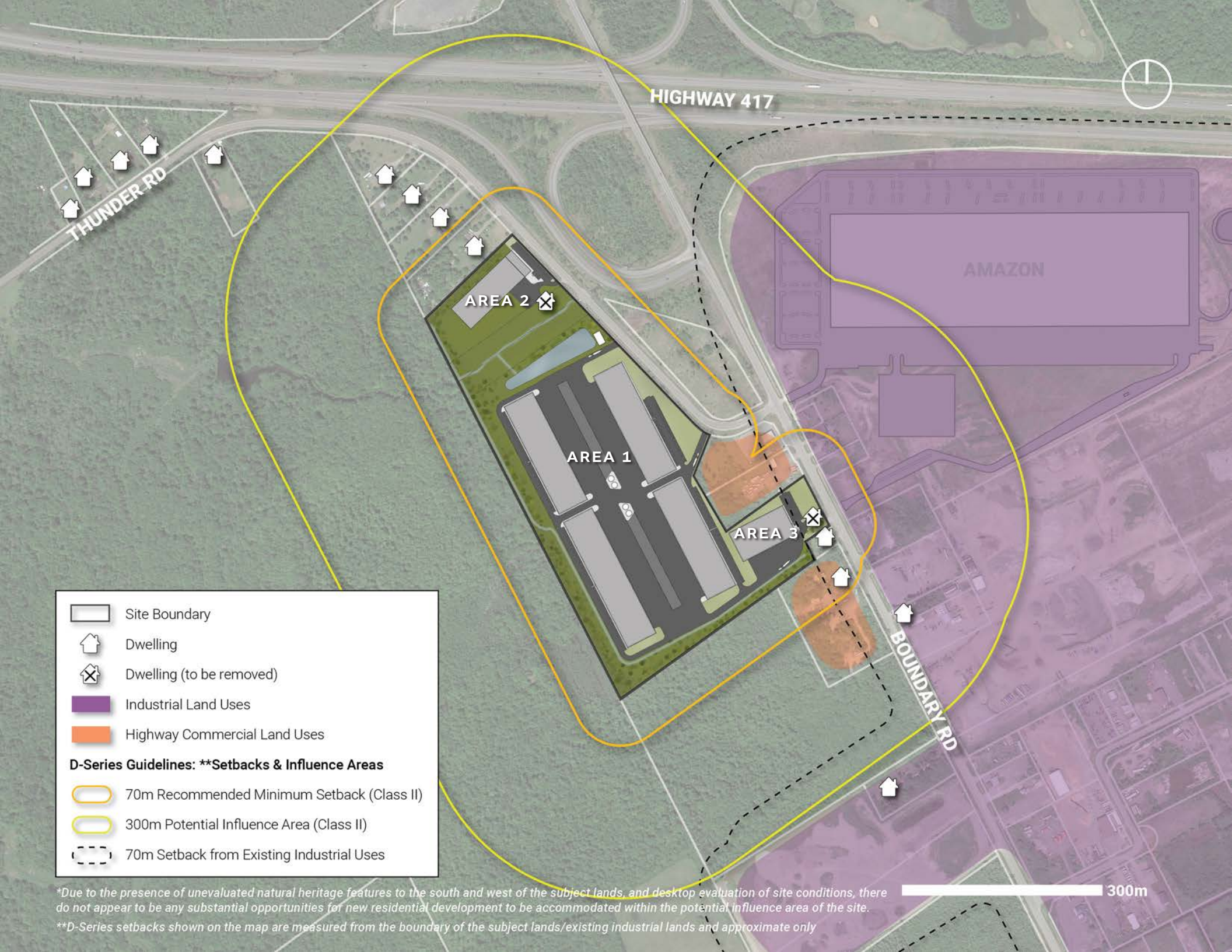
On a vacant or underdeveloped site, the recommended separation distances are typically measured from the boundary of the industrial zone to the boundary of the zone which would accommodate the sensitive use or "receptor". In this case, the majority of adjacent "sensitive" lands around the site contain existing dwellings, and a demonstration plan has been submitted to provide an accurate depiction of the intended uses and areas of development on the site. Accordingly, the site review took into account the existing locations of dwellings in relationship to the areas intending to be developed.

Areas 2 and 3 (indicated on Figure 9) have the highest potential to impact adjacent sensitive uses. Regarding Area 2, there is a dwelling situated within the 70m buffer located at 6140 Thunder Road, immediately north of the subject lands. The dwelling is associated with commercial / industrial activity on the lands, as evidenced by the notable area of outdoor storage at the rear half of that property. Regarding Area 3, it should be noted that the two dwellings (5384 & 5376 Boundary Road) located south east of the subject lands within the 70m buffer are currently situated immediately adjacent to the existing Rural Employment Area and built-out Industrial Park serviced via Boundary Road. Furthermore, the dwelling at 5384 Boundary Road is also associated with a contracting/landscaping located on the same property.

There is an existing industrial park and associated industrial uses, some of which could be considered Class II & Class III Facilities, located immediately east of Boundary Road (including an asphalt plant, major logistics centre, and heavy construction contractors). Furthermore, there are a handful of commercial uses located on the west side of Boundary Road, some of which contain dwellings, or abut residential properties. The industrial-focused nature of the area as an evolving employment hub is evidenced in these existing and expanding uses and the proximity of this node to Highway 417.

Due to the existing intensity of industrial/commercial activity in the south and east fringes of the site around Boundary Road, it is unlikely that the proposed development of the lands would further exacerbate any existing/potential impacts that may already be experienced by the dwellings around Area 3, given their location.

Given its size and distance from adjacent residences, the development of a Class II Facility in Area 1 would be able to meet and/or exceed the minimum recommended separation distance of 70m, as detailed in the guidelines. The development of a Class II Facility in Areas 2 or 3 would likely not be able to meet the minimum recommended separation distance of 70m. Notwithstanding this, as noted previously, the existing dwellings adjacent to Areas 2 and 3 are already used for commercial / industrial purposes and site design and appropriate mitigation measures can be implemented through Site Plan Control to reduce / eliminate potential impacts and could include a combination of separation distances, building/site design elements, berming/landscaping, and/or operational procedures.



	Site Boundary
	Dwelling
	Dwelling (to be removed)
	Industrial Land Uses
	Highway Commercial Land Uses
D-Series Guidelines: **Setbacks & Influence Areas	
	70m Recommended Minimum Setback (Class II)
	300m Potential Influence Area (Class II)
	70m Setback from Existing Industrial Uses

*Due to the presence of unevaluated natural heritage features to the south and west of the subject lands, and desktop evaluation of site conditions, there do not appear to be any substantial opportunities for new residential development to be accommodated within the potential influence area of the site.

**D-Series setbacks shown on the map are measured from the boundary of the subject lands/existing industrial lands and approximate only

300m

4.5 ADDITIONAL SUPPORTING INFORMATION

4.5.1 CITY OF OTTAWA DRAFT OFFICIAL PLAN & POLICY DIRECTIONS (2020)

The City of Ottawa is currently in the process of developing a new Official Plan with the adoption expected the latter half of 2021. A draft of the Official Plan, including preliminary policy directions and mapping schedules, was released on November 20, 2020. While it is fully understood that the proposed development must conform to the current OP, the draft OP was reviewed in order to gain some insight as to the City's direction for future economic growth.

In terms of preliminary policy directions outlined by the City of Ottawa, the City has expressed an intent and commitment in the draft new Official Plan to evaluate strategic locations along 400 series highways for future Traditional Industrial, Freight, Storage (TIFS), including servicing considerations. It is understood that this new Rural TIFS designation is intended to replace the existing "Rural Employment Area" designation. Strategic Direction 7 as outlined in Section 2.2.2 of the new Draft Official Plan furthers this sentiment in seeking to "Protect locations for activities related to goods movement including freight, storage, and logistics". Furthermore, in Section 9.3 of the new Draft OP, the City has outlined the following objectives they want to achieve with respect to Rural TIFS lands:

- Permit a range of industrial activity and functions to make the best use of rural locations
- Maintain clusters of industrial uses to reduce incompatibilities with the goods movement area

Based on the policy directions in the new draft OP, the subject proposal is aligned with the vision for rural employment development around 400-series interchanges. The subject lands would constitute a "strategic location along a 400-series highway", considering the immediate proximity of the site to a major interchange, location adjacent to an existing built-up industrial area, and relative proximity/access to the urban area. Furthermore, with the already limited number of employment land parcels that could accommodate the scale of development proposed, the current "General Rural Area" does not allow for the necessary protection of these lands for a more appropriate use. We further believe that due to the lack of natural hazards, or development/land use constraints present on the site, the subject lands offer an excellent opportunity to expand the existing Highway 417/ Boundary Road industrial cluster to accommodate users in the goods movement sectors.

4.5.2 OTTAWA EMPLOYMENT LAND REVIEW – FINAL REPORT (2016)

The Employment Land Review carried out in 2016 by Hemson Consulting Ltd. & Urban Strategies Inc. built on the previous review undertaken by the City in 2013, related to employment area planning. The purpose of the review was to:

- Take a fresh look at the City's objectives for location of jobs and Official Plan policies for employment and employment land;
- Estimate future employment land demand in rural and urban area designations;
- Identify key issues, opportunities and strategies for achieving the City's employment and economic development goals; and
- Recommend priority actions and an implementation plan.

Rural interchanges were a key component of the study, including the Highway 417/Boundary Road Rural Employment Area, wherein it was concluded that [rural interchanges] are well positioned to accommodate rural industrial growth since they are:

- Home to an existing cluster of employment uses;
- Close to a 400-series interchange and/or major arterial roads;
- Close to the Urban Boundary; and
- Not constrained by Agricultural Resource Areas or environmental features.

One of the highlights of the review, as it relates to the subject proposal, included the finding that Industrial lands along Highway 417 are the most attractive to the market, but despite the overabundance of employment land supply in the City of Ottawa, the supply of available employment land properties along the 417 is low. More specifically, it was noted that too much land is being planned for employment in the City but not all in the best locations. (p.3, *Hemson Consulting Ltd. & Urban Strategies Inc.*)

The study identified two key conclusions/opportunities for the City to consider in their planning for future economic growth on employment lands, which in our opinion relate to and support the proposed development and conversion of the subject lands to employment uses. These include:

- Protecting vacant employment areas with good highway access
"Since the supply of vacant Employment Land within the Greenbelt is limited, and most available parcels are constrained by their size, shape or accessibility, there is a need to maintain vacant Employment Lands outside the Greenbelt, particularly for industrial businesses and employers requiring large sites. The most attractive and suitable Employment Lands likely will be those adjacent to highway interchanges." (p.54 *Hemson Consulting Ltd. & Urban Strategies Inc.*)
- Reinforcing existing rural business parks as the preferred location for rural industrial uses
"Since many Employment uses prefer locations with easy access, some may seek to locate near one of the highway interchanges in Ottawa's rural area. Applying a Rural Employment Area designation to the other three would acknowl-

edge the current uses and highlight the areas as destinations for new rural industrial uses.” (p.54 Hemson Consulting Ltd. & Urban Strategies Inc.)

The above conclusions formed part of an eventual Official Plan Amendment to formally designate these areas as Rural Employment Lands in the Official Plan (Amendment 150). Notwithstanding this, however, it is of note that much of the evaluation of these areas was based on the existing conditions of employment uses/clusters located at interchanges, and did not present a substantial look at future growth/specific user needs (i.e. logistics users requiring larger sites). Again, while the 2016 study did conclude that the City’s overall employment land supply would be more than sufficient to meet demands in the long term (2036, possibly to 2041), the report does note that with current use permissions there are few urban locations within the City that can meet the highway- oriented development needs. (p.52 Hemson Consulting Ltd. & Urban Strategies Inc.) The proposal on the subject lands would meet highway-oriented industrial development needs of larger-scale users alluded to, while upholding the main criteria for well positioned sites in existing clusters of employment uses.

Considering the absence of available employment lands to meet certain high-oriented/larger scale needs, the study also investigated surrounding jurisdictions and found that some of the demand for these lands at strategic locations adjacent to highway interchanges is being met in surrounding municipalities. (p.80 Hemson Consulting Ltd. & Urban Strategies Inc.) As such the proposed re-designation of the subject lands to a Rural Employment Area designation would help address this “gap” in the employment land market in Ottawa and prevent further “leakage” of employment opportunities to nearby municipalities. This would assist in contributing to creating more opportunities for economic drivers to locate in the City, also contributing to a further diversification of the economy as well.

In conclusion, based on the review of the 2016 Employment Land Review and resulting actions undertaken to address the recommendations coming out of this study, it is understood that despite the abundant supply of employment lands, the suitability of such lands (in terms of size and location) may come into question as different economic drivers seek to locate in Ottawa (i.e. logistics centres / warehousing etc.) and the subject proposal is aligned with the City’s vision for protecting employment lands at strategic highway locations.

4.5.3 FREIGHT-SUPPORTIVE GUIDELINES – MTO (2016)

The Ministry of Transportation published the Freight Supportive Guidelines in 2016 to assist Ontario municipalities, planners, engineers, and developers creating safe and efficient “freight-supportive” communities. The guidelines generally seek to accomplish this by providing guidance for land use and transportation planning, site design, and implementation tools that can be used. A brief review of these guidelines was undertaken to assist with the rationalization of the subject proposal in relation to the 2016 Employment Land Review and the City’s consid-

eration of the new draft Official Plan.

Guideline 2.2.1 states that “it is very important for municipalities to consider freight when undertaking new long-range planning exercises, such as when undertaking a new or updated official plan, secondary plan, transportation master plan, or zoning by-law drafting or review. Incorporating freight into planning documents is part of planning for complete communities. Consider establishing links between the freight movement needs and that of the future or existing employment areas as identified in local planning documents.”

Through the undertaking of the 2016 Employment Land Review and the creation of the new Draft Official Plan, there is no doubt that the City has considered transportation, freight, and the interconnected relationships that these matters have with the economy, society, and environment. We believe that the proposed development would complement the City’s goals and embody the very type of development that municipalities must account for in long range planning exercises for freight.

With respect to the proposed development of the site, Section 3.0 of the guidelines outline the site design considerations and strategies for freight users.

Section 3.1 outlines the design elements that are common for all freight sites, and generally addresses topics associated with:

- *Crime prevention through environmental design (CPTED);*
- *Site access;*
- *Fire truck access;*
- *Loading docks; and*
- *Garbage facilities.*

While the demonstration plan submitted with the proposal will be further revisited as part of future application(s) for site plan control, the proposed development outlined therein sufficiently addresses the guidelines listed above for freight users. The lighting, security, and building layout requirements for the proposed users allow the site to naturally accomplish the goals of CPTED and maintain high visibility. The three site entrances and associated driveways are suitably sized to accommodate both large-scale freight vehicles and personal automobiles alike, and effectively separate these users in the distribution of parking on the lands. Further to this, fire truck access routes have been incorporated in the preliminary design of the site – the +9 metre wide driveways will allow for sufficient fire truck access in accordance with the Ontario Building Code. The site has been designed to accommodate large-scale freight users and therefore, loading docks/yard space has been adequately planned for in a way which allows for ease of vehicular movement, loading/unloading, as well as sufficient screening from adjacent rural

users. The preliminary site design allows for internal and/or external accommodation of garbage facilities, which will comply with City of Ottawa Zoning By-law Requirements.

Section 3.2 outlines the design elements for industrial sites, and generally addresses topics associated with:

- *Access to the loading dock yard;*
- *Staging area with storage length for trucks queuing to access the loading dock yard;*
- *Sidewalks for pedestrians away from the path traveled by trucks and other vehicles;*
- *Separate truck access or truck-only designated areas; passenger cars should be parked away from the loading area;*
- *Adequate space for truck turning maneuvers;*
- *Sufficient space to accommodate the expected number of trucks;*
- *Landscaping and buffering to ensure that the noise of trucks and lighting of the yard do not impact surrounding land uses;*
- *Height clearances; and*
- *Security considerations.*

The subject lands would constitute an industrial site under the guidelines. As shown on the demonstration plan submitted with the proposal, the above considerations have been addressed in the site design. Access to the loading docks/yard is provided via internal roadways and allow for adequate separation from non-truck traffic – the large size of the site and length of the driveways would allow for staging areas to be formally designated. Pedestrian impacts on the site are anticipated to be very minimal, given the separation of truck/small-vehicle parking areas and building entrances for employees. While landscaping details will be finalized as part of a future site plan control application(s), there is a considerable amount of tree cover on the north, west, and south sides of the site, which provide natural screening of the building/activities that will be taking place on the lands. Site security can be accommodated within the existing planned buildings and the size of the site allows for guard/gatehouses to be located on site if required, all while maintaining a high level of conformity with the Zoning By-law.

Section 3.10 outlines the design elements for rural sites and is generally focused on maintaining the rural character of the surrounding uses, appropriate setbacks from main roads, designated building colours that match the surrounding landscape, and adequate use of landscaping buffers to integrate larger buildings/freight users into the locale.

As mentioned, the subject lands are abutted by an industrial park to the east, rural/industrial users to the south, vacant forested rural lands to the west, and low-density residential uses to the north (along with the Highway 417 / Boundary Road Interchange). The size of the site, location directly adjacent to compatible industrial uses, and presence of major transportation infrastructure will allow for the proposed development to maintain the character of the surrounding uses without threatening the non-industrial/rural uses in the vicinity. The existing tree cover on adjacent lands and future landscaping of the site will also allow for a high level of buffering of the building to mitigate negative visual impacts associated with a larger building-mass, noise associated with freight traffic, and site lighting. These design elements would all be further reviewed as part of a future site plan control application(s).

4.5.5 OTTAWA INDUSTRIAL REAL ESTATE – POISED FOR GROWTH: A CITY IN NEED OF INDUSTRIAL REPOSITIONING (CBRE, 2020)

In their 2020 report “*Ottawa Industrial Real Estate – Poised for Growth: A City in Need of Industrial Repositioning*”, CBRE found that Ottawa is significantly underserved from an industrial viewpoint, noting that very little if any of the existing inventory (buildings and land) could be considered best in class given modern use requirements (*p.11, Hamilton, CBRE Ltd.*). Shifting trends in the market requirements for light industrial, freight, and logistics users, particularly in their need for larger buildings and sites located in close proximity to major corridors (i.e. Amazon), further highlight the lack of available sites in the City to accommodate these users. As alluded to by CBRE, the genesis for this trend is based on three main industry desires: to reduce transportation costs; to increase efficiencies/levels of service; and, to serve the greatest number of people. The current inventory of industrial lands in the City is simply unable to fulfill these criteria for larger users/buildings.

Notwithstanding the above, CBRE notes that (in terms of industrial distribution) Ottawa maintains a distinct competitive advantage when it comes to distribution and freight, even when compared with larger centres like Montreal and Toronto. This is largely due to the ability for Ottawa-based distributors to serve a population of approximately 17 million within a 400km drive, as well as the presence of the existing network of 400-series highways with connections to the United States and other international trade routes via the St. Lawrence Seaway (*p.10, Hamilton, CBRE Ltd.*). For this reason, the City is beginning to see a rise in the market demand for suitable sites to accommodate new growth in the distribution/freight sectors. One of the ways in which the City can address this demand is through support for additional growth of existing nodes of employment such as the Boundary Road / Highway 417 Rural Employment Area.

4.5.6 DESKTOP GIS ANALYSIS – RE: PUBLIC URBANISM (2020)

In considering the lot size and transportation infrastructure requirements for distribution/logistics-focused users, as well as the conclusions of the CBRE report, a desktop analysis was undertaken by the project team to evaluate the existing stock of existing lands within designated Urban and Rural Employment Areas that are currently perceived to be vacant, easily accessible to a 400 series highway, and meet a minimum lot area of 15 ha. This desktop review was carried out in an effort to provide additional quantitative details to rationalizing the need for more large-lot employment lands with access to 400-series highways, complementary to the policy review undertaken.

In consultation with the Official Plan Land Use Schedules A and B, as well as the online geoOttawa GIS portal, the desktop GIS review examined all parcels of land in the City which are:

- Designated employment
- Situated strategically to a 400-series interchange (1 km or less)
- +15 hectares in size
- Appear to be undeveloped/vacant

A total of 5 parcels were identified as meeting the above criteria in the City of Ottawa (generally shown as yellow dots on Figure 9, opposite). It should be noted that the parcel with the highest level of conformity with the above criteria is currently in the process of being developed for logistics uses on National Capital Commission Lands

(Russell Road, National Capital Business Park). Furthermore, while the remaining four parcels technically met the above criteria, upon a review of specific location/adjacent land uses, the sites would likely not be as attractive for freight/logistics users due to the presence of incompatible development (residences, waste management, and/or other future known plans for lighter industrial/employment uses.

Based on the findings of the desktop review, existing options for larger parcels to accommodate logistics/warehouse users requiring access to major roadways/highways was found to be quite limited throughout the City. In particular very few options existing on the Highway 416 corridor as well as the 417 past Highway 174. It can further be argued that the site in question presents one of the best opportunities/locations to accommodate a user of this nature due to being vacant, located immediately adjacent to a 400-series interchange and in an existing employment area, with an approved servicing scheme.

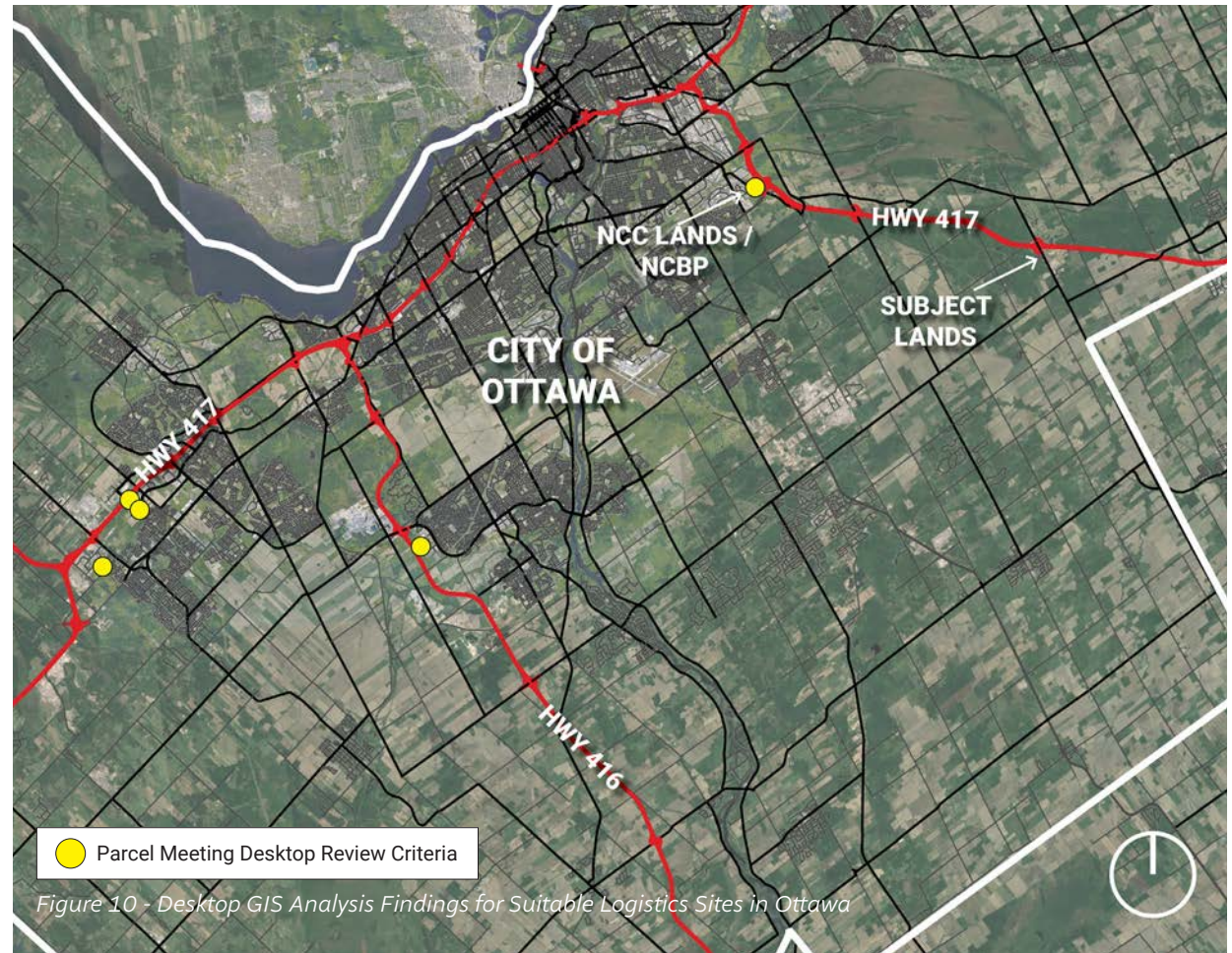


Figure 10 - Desktop GIS Analysis Findings for Suitable Logistics Sites in Ottawa

5.0 SUPPORTING STUDIES & TECHNICAL INFORMATION

The following studies and supporting information were identified in consultation with City of Ottawa Staff as being required to constitute a complete application. A brief overview of each document and the conclusions/recommendations, where applicable, is provided in this section. Full copies of the reports have been provided as part of the submission of the OPA and ZBLA application.

5.1 DEMONSTRATION PLAN – MCROBIE (JUN 2021)

This demonstration plan was prepared in support of the official plan amendment and zoning by-law amendment as a “proof of concept” for future development on the site. A further refined and final site plan will be prepared as part of a future site plan control application to the City of Ottawa.

5.2 STAGE 1 ARCHAEOLOGICAL ASSESSMENT – PATERSON GROUP INC. (JAN 2020)

Paterson Group undertook a Stage 1 archaeological assessment of the subject lands. This assessment is in accordance with the Ministry of Heritage, Sport, Tourism, and Culture Industries’ Standards and Guidelines for Consultant Archaeologists (2011). The objectives of the investigation were to assess the archaeological potential of the property and determine whether further archaeological study was required. This archaeological assessment was required by the City of Ottawa on the study area prior to development activities in accordance with the Planning Act.

The Stage 1 assessment included a review of the Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries archaeological sites database, relevant environmental, historical and archaeological literature, primary historical research, and a site visit. The subject property was identified as having archaeological potential based on its proximity to a water source (Bear Brook). Additionally, portions of the study area were identified as having potential as indicated by the City of Ottawa archaeological management plan (Archaeological Services Inc. and Geomatics International Inc. 1999). A subsequent site visit revealed that the entire property is either deeply disturbed or is low-lying and permanently wet. Based on the results of the investigation it was recommended that no further archaeological study is required for the subject lands.

5.3 GEOTECHNICAL INVESTIGATION - PATERSON GROUP INC. (AU 2020)

Paterson Group conducted a geotechnical investigation for the proposed development. The objectives of the investigation were to:

- Determine the subsoil and groundwater conditions at this site by means of boreholes.
- Provide geotechnical recommendations for the design of the proposed

development including construction considerations which may affect the design.

The investigation concluded that the subject site is considered satisfactory for the proposed development, and it is expected that the proposed buildings can be supported on conventional shallow footings. The report provides further recommendations on topsoil/fill, foundation design and footings, grade raising, design for earthquakes, slab on grade construction, and pavement structure. No concerns were raised.

The investigation also presented design and construction precautions with respect to foundation drainage and backfill, protection of footings against frost action, excavation of side slopes, pipe bedding and backfill, groundwater control, winter construction, corrosion potential and sulphate, and tree planting restrictions. These recommendations will be incorporated into the future final site design and site plan control submissions.

5.4 TRANSPORTATION IMPACT ASSESSMENT: SCREENING & SCOPING REPORT – CROZIER & ASSOCIATES INC. (NOV 2020)

Crozier & Associates Inc. (Crozier) was retained to prepare a Transportation Impact Assessment in support of the proposed development. Per the City of Ottawa’s “Transportation Impact Assessment Guidelines (2017)”, a Screening and Scoping is required to be submitted to the City of Ottawa (the City) prior to commencing the Transportation Impact Assessment (TIA). This report is to fulfill that requirement. The subject property is within the Ministry of Transportation of Ontario (MTO) Permit Controlled Area and thus will be subject to MTO review and approval, including conformance to the MTO’s “Traffic Impact Study Guideline” (September 2014).

The City’s TIA Guidelines contain a screening form that must be reviewed and completed to determine if a TIA is required for the proposed development. There are three triggers as part of the screening analysis: trip generation trigger, location trigger and safety trigger. The trip generation and safety triggers were satisfied, therefore necessitating a TIA.

This report pre-emptively establishes the scope for the required Forecasting Report (outlined below) and eventual TIA, and determined that:

- The study area for the TIA will consist of the following study intersections:
 - » Highway 417 and Westbound Terminal
 - » Highway 417 and Eastbound Terminal
 - » Thunder Road and Boundary Road / Amazon Way

- » Boundary Road and South Amazon Access / future site access
- » Boundary Road and Mitch Owens Road
- The TIA will use existing January 2020 traffic volumes as the base traffic volumes for analysis. The TIA will analyze the weekday a.m. and p.m. peak hours to reflect the employment nature of the proposed development.
- The TIA will analyze traffic safety at the intersection of Boundary Road and Mitch Owens Road to address the identified angle and SMV/other collision patterns at the intersection.
- Assuming full build-out of the proposed development by 2025, the TIA will analyze the 2025, 2030 and 2035 horizon years to reflect full build-out, five-year and ten-year horizons.
- The exemptions review has concluded that the TIA will require analysis of: circulation and access, parking supply and demand, Transportation Demand management, and Network Concept (changes to Transportation Master Plan concepts for auto and transit use).

This report was reviewed and approved by the City of Ottawa and Ministry of Transportation of Ontario (MTO).

5.5 TRANSPORTATION IMPACT ASSESSMENT: FORECASTING REPORT – CROZIER & ASSOCIATES INC. (DEC 2020)

Crozier & Associates Inc. (Crozier) was retained to prepare a Transportation Impact Assessment in support of the proposed development. Per the City of Ottawa’s “Transportation Impact Assessment Guidelines (2017)”, a Forecasting Report is required to be submitted to the City of Ottawa (the City) prior to commencing the Transportation Impact Assessment (TIA). This report is to fulfill that requirement, and the methodology was based on the Screening & Scoping Report described above. The subject property is within the Ministry of Transportation of Ontario (MTO) Permit Controlled Area and thus will be subject to MTO review and approval, including conformance to the MTO’s “Traffic Impact Study Guideline” (September 2014).

Based on the findings of the Forecasting Report, the full build-out of the proposed development is expected to generate:

- approximately 91 and 103 total two-way passenger car trips during the weekday a.m. and p.m. peak hour, respectively;
- approximately 23 and 25 total two-way heavy truck trips during the weekday a.m. and p.m. peak hour, respectively;
- approximately 148 and 162 total person trips during the weekday a.m. and

p.m. peak hour, respectively; and

- approximately 15 and 17 total non-auto trips during the weekday a.m. and p.m. peak hour, respectively.

The report found that the assumed existing mode share for the study area is 97% auto and 3% non-auto (reflecting minimal transit services in the area). It was further noted that a heavy reliance on auto travel is still expected in the future given the warehouse distribution nature of the proposed development and the auto reliant nature of the study area. However, there are potential opportunities for the proposed development to reduce single-occupant vehicle (SOV) trips by promoting carpooling (e.g. provide preferred carpool parking spaces) and co-ordinating with the City to extend the existing transit service from Boundary Road (north) to service the subject property, thus increasing transit opportunities for employees of the proposed development.

The report also concluded that employee trips generated by the proposed development will be distributed to the road network based on origin-destination data and the population of surrounding communities per Statistics Canada. Heavy truck trips generated by the proposed development will be distributed to the road network based on expected catchment areas and logical routing assumptions for heavy trucks.

5.6 FUNCTIONAL SERVICEABILITY REPORT - LRL ENGINEERING (DEC 2020)

LRL Engineering prepared a functional serviceability report in support of the proposed OPA and ZBLA. The report investigated servicing options for potential future development on the subject lands for uses such as light industrial, logistics and/or a distribution warehouse, and was prepared in consideration of the demonstration plan prepared by Ware Malcomb. The site does not have access to municipal storm, sanitary or traditional water service as the infrastructure does not exist on Boundary Road or Thunder Road; however, the site is within the service boundary of the Carlsbad Springs trickle-feed water system.

While more specific details will be required at the time of building/site plan design, the following conclusions/considerations were presented in the Functional Serviceability Report, based on the demonstration plan:

Water

- *Domestic demands will be required to be supplied by the Carlsbad Springs trickle-feed supply system. However, based on an assumed buildout scenario, demands are higher than previously allocated equivalent water units.*
- *Considering potential buildout concepts, approximate average daily demands*

are expected to be in the range of 27 000 – 37 000 L/day.

- Since the trickle-feed water supply system was installed in 1997, the City has monitored water use patterns and confirmed that actual concurrent use is lower than originally planned. As a result, there is a potential for more connections which may prove to accommodate the domestic demands of the subject site.
- A storage tank and pressure system to provide the water required for fire suppression is required to meet the fire demands of development on the subject property.

Sanitary Sewage

- An onsite sewage treatment and collection facility will be designed in detail to release treated effluent to the unnamed drain running through the property.

Stormwater

- Currently stormwater runoff flows uncontrolled to the South & West borders of the property.
- The property is mostly pervious area in existing conditions. In developing the lot into a “light industrial” lot, the development will increase the impervious area of the property. The increase in impervious area, along with City of Ottawa design requirements, will require the site to implement a stormwater quantity and quality management system.

5.7 PHASE I ENVIRONMENTAL SITE ASSESSMENT – PATERSON GROUP INC. (NOV 2018 – ORIGINAL) / (SEPT2020 - UPDATE)

Patterson Group conducted a Phase I ESA for the subject lands originally in 2018. An update to the 2018 ESA was submitted in September 2020 to address the proposed development. The purpose of the Phase I was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

Adjacent properties were developed between 1976 and 1991 for mixed residential and commercial use, including a retail fuel outlet that neighbours the site (which is considered a potentially contaminating activity (PCA)). The results of the records review, previous reports, and site inspection indicated that there was a potential environmental concern on the subject lands, largely resulting from the former retail fuel outlet that neighbours the site. Based on the results of this Phase I ESA, a Phase II Environmental Site Assessment was required for the subject property (as outlined below).

5.8 PHASE II ENVIRONMENTAL SITE ASSESSMENT – PATERSON GROUP INC. (SEPT 2020)

Patterson Group conducted a Phase II ESA for the subject lands. The purpose of the Phase II ESA was to address the potentially contaminating activity (PCA) that

was identified during the Phase I ESA Update and considered to result in an area of potential environmental concern (APEC) on the Phase II Property and update the current site conditions. The initial subsurface investigation was carried out in conjunction with a Geotechnical Investigation in September 2019, and consisted of drilling three (3) boreholes, all of which were constructed with groundwater monitoring wells. The more recent subsurface investigation conducted in June 2020, consisted of drilling seven (7) boreholes.

Soil samples were obtained from the boreholes and screened using visual observations and organic vapour measurements. Groundwater samples from monitoring wells were also recovered and analysed for benzene, toluene, ethylbenzene and xylenes (BTEX) and petroleum hydrocarbons (PHCs, F1-F4). No detectable BTEX or PHC concentrations were identified in the boreholes or groundwater monitoring wells. All soil and groundwater results were found to be in compliance with the MECP Table 2 Standards.

Based on the findings of the Phase II ESA, no further environmental investigation was required.

5.9 ENVIRONMENTAL IMPACT STATEMENT – KILGOUR & ASSOCIATES LTD. (DEC 2020)

Kilgour & Associates Ltd. prepared an EIS in support of the proposed development on the subject lands. The purposes of this EIS are to identify:

- natural heritage features on or adjacent to the Site
- potential impacts of the proposed development to those features, and
- mitigation measures to minimize or eliminate those impacts.

The EIS noted that the site is adjacent to and includes areas identified by the City as being potentially part of the Natural Heritage System per Schedule L of the City's Official Plan (OP; City of Ottawa, 2020b). The EIS therefore examined potential impacts to the Natural Heritage System and to species at risk (SAR) that may potentially occur on or adjacent to the site. Following this examination, a number of recommendations are presented to guide the development of the lands in accordance with the requirements of the City and findings of the EIS.

The EIS concluded that no significant negative impacts are anticipated to species-at-risk (SAR) and/or significant wildlife habitat (SWH) present in the broader vicinity under the proposed project if all mitigation recommendations provided within the report are followed. Mitigation measures include standard ESC measures, general wildlife management for construction Sites (City of Ottawa, 2015), and tree planting, the latter of which is to be detailed in the site landscape plan as part of a future site plan control submission to the City. Impacts to the Significant Woodland are minor, affecting only 3% of the area of the broader woodland feature. The impacted area represents the youngest portion of the extended

feature, which includes no uncommon vegetation coverage and does not provide functionality as SWH.

5.10 GROUNDWATER IMPACT ASSESSMENT – PATERSON GROUP INC. (DEC 2020)

Patterson Group conducted a GIA for the subject lands in support of the proposal, with particular focus on the proposed use of a private wastewater treatment facility and the potential impacts related to a surficial discharge of the highly treated sewage effluent within the unnamed drain and associated surficial surface connections on the site. To inform the report, Paterson approached a manufacturer of Modified Sequencing Batch Reactor (MSBR) package plants and Membrane Bioreactor (MBR) package plants for the design, supply and commissioning of a sewage treatment solution for the proposed development.

The following general conclusions/findings were identified in the GIA report:

- the proposed direct discharge of treated sewage effluent is anticipated to meet and/or exceed the MECP guidelines for direct surface discharge;
- as the Bear Brook Municipal Drain is located approximately 1.3 km downstream (west) of the discharge location, and treated effluent is expected to meet the MECP guidelines for direct discharge, it is not expected to negatively impact the natural systems within the Drain downstream;
- based upon the deep silty clay stratum (>20 m) underlying the site; which provides isolation between the proposed treated effluent surface discharge, there will be no negative impacts on the till or Carlsbad Shale bedrock aquifers from the proposed discharge at the subject site;
- the proposed treated effluent surface discharge to the unnamed drain is not expected to negatively impact the surface water in the area considering that the proposed MSBR or MBR package plants will provide effluent quality design values at less than half of the regulatory limit for the parameters: BOD5, TSS, Ammonia, Total Phosphorous and E. Coli;
- the subject site is an ideal location for the proposed treated effluent surface discharge due to the lack of potential downstream receptors and the industrial nature of the neighbouring properties.

6.0 CONCLUSION

As outlined in this report, the proposed amendments are intended to address the market needs of a growing logistics/ freight sector in the City of Ottawa, particularly with respect to available industrial sites suitably sized and located for these users. The current inventory of industrial/employment lands in the City need to be expanded to help foster a diversifying economy and get ahead of shifting trends in the logistics/freight sector - the subject lands will satisfy this need, and ensure that new jobs and economic growth are kept in Ottawa. The lands themselves are appropriately located adjacent to an existing established Rural Employment Area cluster and 400-series interchange, representing an excellent opportunity for large logistics users given the:

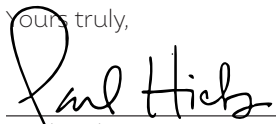
- Immediate access to Highway 417;
- Size of the site, proposed layout of the buildings, and presence of screening around the site;
- Low number of incompatible or sensitive land uses in the vicinity;
- Ability for the proposed development to be adequately serviced via municipal water and private on-site sewer;
- Ability for the existing transportation network to accommodate the proposed development;
- Inclusion of site design elements intended to protect and conserve natural features and buffer adjacent land uses; and,
- Potential that exists for new efficiencies (improved servicing, public transit opportunities) and synergies (co-locating similar users, complementary service providers) to be realized by strengthening the Boundary Road / Highway 417 interchange as an important employment node in the City.

As demonstrated in this rationale through a review of the subject lands and surrounding context, analysis of applicable planning policy and related frameworks, and with support from the associated technical studies, it is respectfully submitted that the proposed amendments to:

- change the official plan designation of the lands from “General Rural Area” to “Rural Employment Area”; and,
- change the zoning of the lands from “Rural Countryside (RU) Zone” to “Rural General Industrial (RG) Zone”;

are consistent with the Provincial Policy Statement; conform to the City of Ottawa Official Plan; and represents good planning aligned with the City’s vision for protecting employment lands adjacent to major 400-series highway interchanges, and provides an excellent opportunity to satisfy the market demand for larger industrial sites to accommodate logistics/ distribution users. It is in the opinion of the undersigned that the proposal constitutes an appropriate and complementary development within an existing employment node, bolstering a major economic gateway to the City.

Yours truly,



Paul Hicks, MCIP, RPP
Urban Planner | Principal
Re: public Urbanism



Figure 10 - Photo by Marcin Jozwiak on Unsplash

