URBAN DESIGN BRIEF

3054 Homestead Drive, 9174 & 9166 Airport Road West Hamilton, ON



Prepared for:

FENGATE PROPERTY MANAGEMENT

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DISCLAIMER:

The text, images, and conceptual designs within this document are representations of the intended vision and character of the development. They are not literal interpretations of design decisions and should not be seen as the only method in which the design intent can be implemented. Refinements to the concepts contained herein will occur based upon the City of Hamilton's review.

PART 1

BACKGROUND & EXISTING CONDITIONS

1.0 INTENT OF DOCUMENT

This Urban Design Brief has been prepared on behalf of Fengate Property Manageent as a component of the planning approval process and to amend the Official Plan and Zoning By-law for their subject lands at 3054 Homestead Drive, and 9174 & 9166 Airport Road West, located between Airport Road West, Upper James Street, and Homestead Drive.

The intent of the application is to amend the Official Plan and Zoning By-law to permit an industrial subdivision including nine (9) blocks. Proposed uses include warehouses, offices, and limited accessory commercial ground floor uses. Other land use blocks include Natural Heritage Offsetting Compensation, 1 foot reserve and temporary culde-sac.

The Urban Design Brief provides a direction for the implementation of the development vision identified for the subject lands within the Urban Hamilton Official Plan (UHOP), the City of Hamilton Site Plan Guidelines, the urban design policies outlined in the Airport Employment Growth District, as well as Urban Design Guidelines and Eco-Industrial Guidelines prepared by the City for this Secondary Plan area.

This document will provide an illustrated explanation of how the overall design responds to the physical site and its surroundings. It will provide urban design guidance for development review authorities, and illustrate how the proposed development achieves key urban design principles and initiatives to comply with the City's vision of creating new employment areas, improve live-work ratios in the city, and support long term prosperity.

Based on the UHOP the site has been carefully designed with the following urban design principles (Section B.3.3 - Urban Design Policies) in mind:

 Respecting existing character, development patterns, built form, and landscape;

- Organizing space in a logical manner through the design, placement, and construction of new buildings, streets, structures, and landscaping;
- Providing adequate green space, landscaped buffering, and storm water management facilities;
- Service and loading areas buffered by landscape to reduce visual and noise impacts.

2.0 DESIGN VISION, GUIDING PRINCIPLES & OBJECTIVES

The goal in developing the subject site is to create a high quality industrial development which adheres to best practices in architecture and urban design, based on design guidelines outlined by the City of Hamilton's strategic development documents.

The Urban Hamilton Official Plan, with it's Section B.3.3 - Urban Design Policies and the Airport Employment and Growth District Secondary Plan promote policy directions and ensure high standards in the physical design of the built and natural environment in the areas of Hamilton.

Major guiding principles of the proposed development include:

- Providing and creating quality spaces in all public and private development;
- Balance a high intensity of use with large conserved natural areas;
- Ensure transportation infrastructure and connections allow for efficient movement of goods and people to, from and within the employment lands;
- Create a prosperous and prestigious employment centre which contributes wealth to the entire region;
- Emphasize airport related employment while maintaining diversity;

3.0 SITE CONTEXT

3.1 Zoning

The subject lands are located in the M9-Airport Reserve and C6-District Commercial Zones in the City of Hamilton Zoning By-law No. 05-200, refer to Figure 1.

3.2 Existing Built Form and Surrounding Land Use

The subject site is located at 3054 Homestead Drive, and 9174 & 9166 Airport Road West. The total lot area is approximately 313,822.42m² (77.54 acres). The site is currently occupied by a farming field, and single family residential dwellings at 9174 and 9166 Airport Road West.

The subject lands fall within the "Employment Areas" and "Neighbourhoods" designation within the Urban Hamilton Official Plan, Schedule E - Urban Structure (Figure 2), the "Airport Employment Growth District" and "District Commercial" designation within the



Fig. 1 Zoning (City of Hamilton Zoning Mapper)

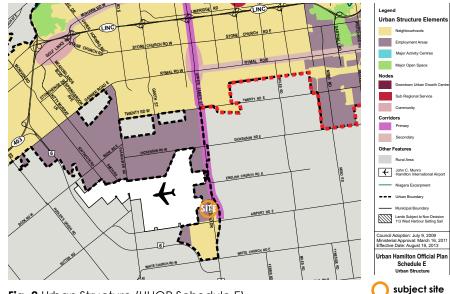


Fig. 2 Urban Structure (UHOP Schedule E)

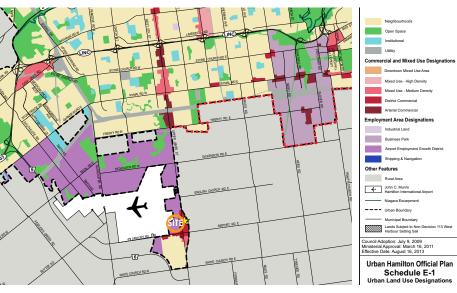
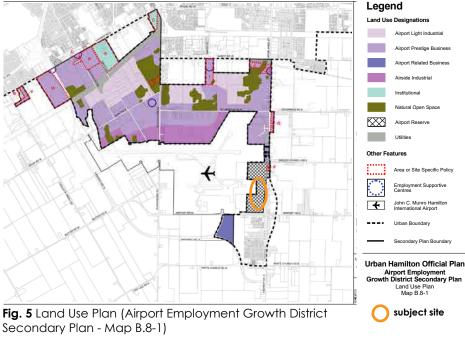


Fig. 3 Urban Land Use Designations (UHOP Schedule E-1)

Urban Hamilton Official Plan – Schedule E-1 Urban Land Use (Figure 3). In addition, the subject lands are designated as "District Commercial" designation in the Mount Hope Secondary Plan (Figure 4) and "Airport Reserve" designation in the Airport Employment Growth District Secondary Plan, see Figure 5.

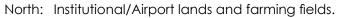
3.3 Surrounding Context

The site is immediately adjacent to the John C. Munro Hamilton International Airport and surronded by agricultural and rural lands, additional industrial uses, private and public recreational spaces, and residential neighbourhoods. Figure 6 and related images illustrate the areas surrounding the site, and highlight significant green spaces, institutions, commercial buildings, and neighbourhood amenities.



Secondary Plan - Map B.8-1)

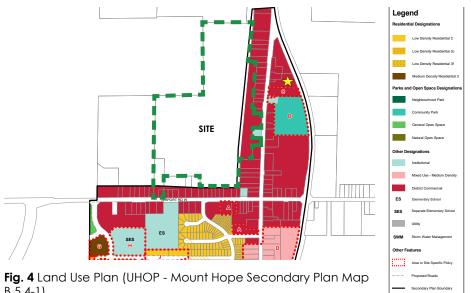
The property is surrounded by:



District commercial along Homestead Drive, commercial East: amenities include local restaurants/takeouts.

South: Mixed use - Medium density. Established single family detached homes. Institutional, Hamilton fire department station 19 located along Homestead Drive.

West: Airport lands.



B.5.4-1)



Fig. 6 Context Map with Proximities of Surrounding Amenities



Mt. Hope Public School



Nearby Residential



Canadian Warplane Heritage Museum



John C. Munro International Airport



Mount Hope Library



Mount Hope Park



Hamilton Fire Station 19



Hamilton Public Library



Amazon



10

Willow Valley Golf Course



Southern Pines Golf & Country Club



Southampton Estates Park

3.4 Site Context

The site is nestled between the Airport lands, and the exisiting commercial district and residential properties alongside Homestead Drive and Airport Road West. The site is located within the community of Mount Hope and in close proximity to a school, a library, a few parks and some small commercial units. See the Context Map on page 6. The proposed development will be accessed via the existing E Cargo Road.

Major transportation connections include Highway 6 approximately 1.2 km north-west and Upper James Street approximately 0.3km southeast. Additionally, Highway 403 and the Lincoln M. Alexander Parkway are easily accessible from the site. Refer to Figure 7.

3.5 Existing Topography, Vegetation and Structures

Two residential dwellings located at 9174 and 9166 Airport Road West are present on the subject site. These structures are proposed to be demolished. The majority of the subject site is currently a farming field, and has a wooded area on the north-east side. The topographic survey indicates that the site gently slopes towards the north-eastern corner.

There are no heritage structures or elements on or near the site.

3.6 Views from and to the Site

The subject property is surrounded by residential, commercial, and institutional development. The proposed development will be visible from the surrounding neighbourhood context. Refer to Figure 4 - Context Map on page 4.

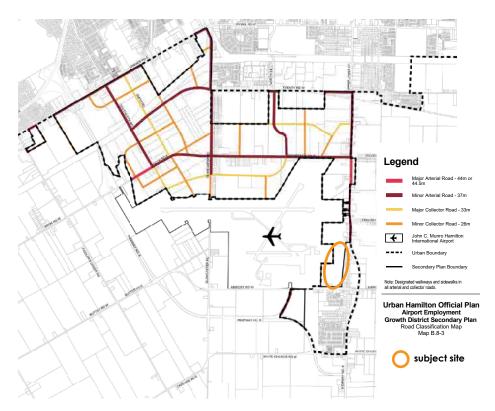


Fig. 7 Road Classification Map (Airport Growth District Secondary Plan, Map B.8.3).

3.7 Transportation Networks

Due to the site's proximity to major and minor arterial roads, the proposed development will be easily accessible from surrounding neighbourhoods and will be well integrated within future transportation initiatives that have been outlined in The City of Hamilton's Transportation Master Plan: City in Motion (TMP).

The site is located within walking distance of the 'potential rapid transit line (B.L.A.S.T.) ' that will connect the airport to downtown Hamilton (refer to Figure 8 and Figure 9). This connection will facilitate the use of public transportation between the proposed development and important transportation hubs such as the Go train.

The TMP intends to "provide a comprehensive and attainable transportation blueprint...that balances all modes of transportation to become a healthier city." (City of Hamilton Transportation Master Plan, 2018). The City is experiencing and will continue to experience changing demographics as well as population growth which further emphasizes the need to incorporate large developments within areas that are able to easily connect with future transportation networks.

This development would align with the TMP's three desired outcomes that function to prioritize:

- 1. Sustainable and Balanced Transportation Systems
- 2. Healthy and Safe Communities
- 3. Economic Prosperity and Growth

In addition, the site is located within the City of Hamilton Airport Employment Growth District (AEGD), this location is identified as one of the main areas to develop employment lands in the AEGD Transportation Master Plan (June, 2011).

The proposed development would allow the City's vision to continue by helping to respond to future growth and promote the Airport as a significant employment node.



Fig. 8 Major Transport Facilities and Routes - Enlargement (TMP 2013)

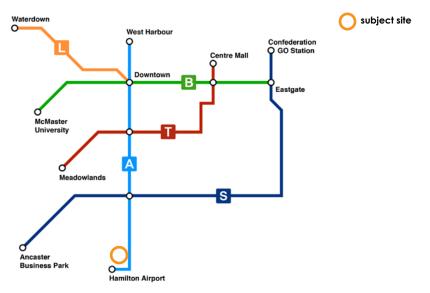


Fig. 9 Future BLAST network (Railway Technology)



Fig. 10 Major Transport Facilities and Routes (TMP 2013)

subject site

3.8 Airport

The John C. Munro Hamilton International Airport is sited adjacent to the proposed development on the west side of the property (Figure 11). The subject site is designated as "Airport Employment Growth District" in the Urban Hamilton Official Plan, and is subject to the Airport Employment Growth District Secondary Plan (OPA35).

In general terms, these lands are outlined in the OPA35 as intended to offer employment and employment-related land uses in a way which integrates and complements Hamilton's International Airport.

The proposed development of industrial park aligns with the city's vision for the area, and brings a range of employment opportunities which supports the economic growth of the airport, long-term prosperity, improves the live-work ratios in the city, and integrates architecture and landscaping to enhance the visual appeal of the existing surroundings.

The proposed development was guided by the following principles outlined by the OPA35 Sections 8.2.2 – 8.2.8:

- Balance high intensity of use with large conserved natural areas;
- Encourage a distinct character for the district (e.g. airport theme);
- Create walkable places that provide employees an opportunity to come together;
- Use native species in landscaping;
- Encourage high intensity of buildings and employees and reduce the overall environmental footprint per employee;
- · Create attractive and well designed grounds and landscaping;
- Maximize efficiency of lot layout to take advantage of natural features;
- Ensure transportation infrastructure and connections allow for efficient movement of goods and people to, from and within the employment lands;

- Create a sense of continuity when connecting the employment district to its surroundings;
- Provide goods movement connections to the Hamilton Port area;
- Create a variety of distinct entrances to the employment district that minimize the impact of heavy traffic on the surrounding community;
- Integrate streets, trails, and open space systems with neighbouring developments;



Fig. 11 Airport grounds and proposed development area (Google Earth)

3.9 Relationship to Public Open Space

The City of Hamilton has an extensive natural heritage system. There are at least two municipal parks within a 1.5km radius, all offering slightly different amenities and features.

Parks and other green open spaces are identified on Schedule B - Natural Heritage System of the UHOP. Most notably, the Mt. Hope Park is approximately 260 metres, or a 3 minute walk away and includes a tennis court, play structure, and a baseball diamond.

Another small park is located at 185 Thames Way, 1.5km or a 17 minute walk from the proposed development and includes amenities such as play structures, a basketball court, shade structure, and a looped trail with QR fitness trail check in.

One of the most prominant green open space is the Chippewa Trail located 3.5km to the east, or a 11 minute bike ride from the subject site. Chippewa Trail is part of the Niagara section of the Trans Canada Trail running from Hamilton to Caledonia. Trail activities might include biking, hiking, and cross-country skiing in the winter months. The trail offers access to many natural areas and rolling farm land along its extension. Points of interest includes the old rail bridge and Mount Albion Conservation Area.



Fig. 12 City of Hamilton park locations and trails



Fig. 13 Chippewa Trail intersection with Airport Rd

4.0 RELEVANT POLICIES & GUIDELINES

The development of the subject site is guided by the Urban Hamilton Official Plan (UHOP).

The subject site falls within the 'Employment Area Designations', 'Airport Employment Growth District', 'Commercial and Mixed Use Designations, and 'District Commercial' of the Urban Hamilton Official Plan, Schedule E-1.

The subject site falls into the Airport Employment Growth District Secondary Plan (Chapter B-8, Volume 2, Urban Hamilton Official Plan), and Mount Hope Secondary Plan

RELEVANT POLICIES

Key policies relating to the development are listed in the following sections

Urban Hamilton Official Plan

• Section E.3.0 Neighboourhoods

• Section E.5.0 Employment Area Designations

• Section E.5.5 Employment Area - Airport Employment

Growth District Designation

Airport Employment Growth District Secondary Plan (OPA 35) Volume 2, Chapter B-8

Section 8.3 General Policies

• Section 8.4 Employment Area Policies

Section 8.8 Airport ReserveSection 8.10 Transportation

Glanbrook Secondary Plans

• Section 5.4 Mount Hope Secondary Plan

City of Hamilton Site Design Guidelines

• Section 6.0 Specific Building Items

Urban Design Guidelines

Eco-Industrial Design Guidelines

The development details and how each fit within the policies and guidelines are outlined in Section 2: SITE DESIGN AND ANALYSIS.

PART 2

POLICY REQUIREMENTS & DESIGN GUIDELINES

5.0 SITE SPECIFIC DESIGN GUIDELINES

5.1 Urban Hamilton Official Plan Chapter E - Urban Systems and Designations

Chapter E of the UHOP - Vol1 outlines the specific design guidelines for the urban area of the City. Design guidelines include urban design goals, general policies and principles for developing within the urban structure. Pertinent design guidelines include:

Neighbourhoods policy goals (Section E.3.0)

- Develop neighbourhoods as part of a complete community, where people can live, work, shop, learn, and play;
- Promote and support design which enhances and respects the character of existing neighbourhoods while at the same time allowing their ongoing evolution.

Employment policy goals (Section E.5.0)

- Recognize and support the contribution of older industrial areas and existing and newly developing business parks, such as the West Hamilton Innovation District and the Airport Employment Growth District (OPA 35).
- Maintain an adequate supply of zoned and serviced employment lands of varying parcel sizes in various locations to meet the City's projected employment growth forecast and to promote economic development and competitiveness.
- Support the industry clusters, identified by the City's Economic
 Development Strategy, such as manufacturing, biosciences, goods
 movement, and environmental technologies.
- Protect lands designated Employment Area from non-employment uses and to support the employment functions of the City's Downtown, nodes and corridors. New major retail uses shall be prohibited and office uses shall be restricted in function and scale.
- Design and develop lands designated Employment Area to be easily accessible with a high degree of connectivity between all modes of transportation such as transit, active transportation, and automobiles.
- Facilitate the movement of goods in Employment Areas through

- an integrated goods movement network which includes efficient access to provincial highways, the City's road network, rail, John C. Munro International Airport, and the Port of Hamilton, where such facilities exist and are feasible and appropriate for moving goods.
- Employment Areas within proximity of John C. Munro International Airport, and their expansion through amendment to this Plan, shall be promoted by ensuring a range of uses that create synergies and by providing adequate servicing.

General Policies and Principles (Section E5.2.7)

The proposed development takes into consideration the general provisions outlined for the Employment Areas – Airport Employment Growth District within Schedule E-1 – Urban Land Use Designations (OPA 35), where the proposed development:

- Enhances the quality of the public realm along all public roads between lands designated Employment Area and lands designated Neighbourhoods or Institutional within older industrial areas. The design and placement of buildings, structures, parking, loading, outside storage and assembly areas, lighting and landscaping, shall provide a safe, functional and visually attractive environment for pedestrians and vehicles.
- Addresses 'Sensitive land uses' within the Neighbourhoods, Institutional or Commercial and Mixed Use designations shall be protected from the potential adverse impacts of heavy industrial uses within the lands designated Employment Area, and industrial uses shall be protected from sensitive land uses as follows:

This is addressed by the proposed development by providing a 9.0m wide landscape buffer between the development and neighbouring properties on Homestead Drive and Airport Road West, and mitigating potential adverse impacts by providing an appropriate landscaping and screening barrier where the property abuts sensitive land uses. The proposed development complies with all provincial standards respecting noise, vibration, air contaminants, water, wastewater, storm water and other environmental issues.

Scale (Section 5.5.3)

- The size of the offices within the Employment Area Airport Employment Growth District designation shall be determined by the Zoning By-law but shall be less than 10,000 square metres per free standing building. (OPA 64)
- Ancillary uses shall only be permitted at strategic locations and may contain a gross floor area restriction, as identified in the Airport Employment Growth District Secondary Plan

Other Policies (Sections 5.5.5 - 5.5.9)

- The Airport Employment Growth District shall be developed in phases, as described in the Airport Employment Growth District Secondary Plan.
- The Airport Employment Growth District shall be developed in a
 coordinated and comprehensive manner. Wherever possible,
 development shall have regard to reducing the number of access
 points to the major boundary and major internal roadways, and to
 providing efficient internal traffic circulation, adequate off-street
 parking and loading facilities, adequate restrictions and screening
 of outside storage, and adequate landscaping and buffering
 requirements.
- All existing residential uses within the Airport Employment Growth
 District shall be ultimately be redeveloped in compliance with the
 use permitted in Policy E.5.5.1, and all other relevant policies of this
 Plan.
- All development in the Airport Employment Growth District shall be adequately separated, screened and buffered from existing residential and institutional uses in or abutting the Airport Employment Growth District.
- All development in the Airport Employment Growth District shall comply with Sections B.3.6.3 – Noise, Vibration and Emissions and C.4.8 – Airport. (OPA 128)

Airport Reserve (Section E.7.0)

 The lands designated as Airport Reserve shall be subject to the policies of Volume 2 - Section B.8 - Airport Employment Growth District.

5.2 Airport Employment Growth District Secondary Plan OPA 35, Volume 2 - Chapter B-8

The Airport Employment Growth District (AEGD) Secondary Plan establishes the phasing, specific land uses, the transportation network, infrastructure requirements, design principles and development standards to guide the development and/or redevelopment of lands in the Airport Employment Growth District Secondary Plan Area.

VISION AND PRINCIPLES

The proposed development aligns with the following vision and principles outlined for the AEGD:

- Supports a working community that attracts a range of airport related and other businesses providing both conventional and knowledge-based services.
- Encourages a distinct character for the district (e.g. airport theme).
- Create walkable places that provide employees an opportunity to come together;
- Integrate innovative storm water management infrastructure; and, use native species in landscaping;
- Create well detailed, human scaled buildings which front the street and help shape the public realm;
- Create attractive and well-designed grounds and landscaping;
- Provide convenient connections between the John C. Munro Hamilton International Airport and the employment district;
- Create a prosperous and prestigious employment centre which contributes wealth to the entire region;
- Ensure that employment uses and design at the edge of the AEGD transitions to residential and agricultural areas in a respectful and complementary manner, and consider how agricultural areas within the Greenbelt can continue to function;
- Create a variety of distinct entrances to the employment district that minimize the impact of heavy traffic on the surrounding community;

The following policies are relevant to the proposed development:

General Policies (Section 8.3)

Employment Area Policies (Section 8.4)

Infrastructure (Section 8.11)

- In addition to the policies of Section C.5 Infrastructure of Volume
 1, development of the Secondary Plan Area shall be on full
 municipal services in accordance with the Storm Water Master
 Plan, the Water and Wastewater Master Plan, and the policies of
 the City.
- The infrastructure provided in the Airport Employment Growth
 District shall be sized, located and designed to the City of
 Hamilton engineering standards, guidelines and criteria to ensure
 that acceptable levels of service, such as minimum fire flows for
 employment areas and acceptable flow and velocity capacities
 for pipes, are maintained.

Natural Heritage System (Section 8.12)

 This aspect of the Secondary Plan will be addressed by the Natural Heritage System Design Brief prepared by Savanta, a subdivision of GEI Consultants.

Heritage (Section 8.13)

There are no existing heritage buildings on site.

Archaeological Assessment (OPA 142)

 Prior to approval of development applications, a Stage 2 archaeological assessment shall be completed to the satisfaction of the City.

Note that a stage 1 & stage 2 archaeological assessment has been prepared for the subject site by Detritus.

 Until such time as the Stage 2 archaeological assessment and any subsequent required archaeological assessment, has been cleared

- by the City, no grading or other disturbance shall take place on any site within the Airport Employment Growth District.
- The City may also require a higher standard of conservation, care and protection for archaeological resources based on prevailing conditions and circumstances within the City and the results of any dialogue with First Nations and their interests.

Eco-Industrial Design and Urban Design Policies (Section 8.14) Please refer to Section 6.0 of the Urban Design Brief.

Storm Water Guidelines (Section 8.14.15)

- Water resources and environmental criteria addressing the following shall be met throughout the area:
- Protection and maintenance of stream corridors to address flood control and fish habitat regulatory requirements;
- Flow requirements designed to prevent increases in flooding and erosion within and downstream of the study area;
- Water balance criteria to protect groundwater infiltration requirements and local groundwater supplies; and,
- Runoff reduction requirements to address water quality requirements necessary to meet provincial water quality objectives for receiving waters consistent with Level 1 / 2 treatment.

Note that a Stormwater Management Report is being prepared by Odan Detech.

Site Development, Disturbance, Natural Corridors and Greenways (Section 8.14.27)

 Site disturbance should be minimized and replanting to compensate for tree removals and to provide cooling and shade for streets, building and open spaces shall be encouraged.

Site Access and Driveways (Section 8.14.36)

 Access to development lots from local streets is encouraged whenever possible.

Recommended Building Setbacks (8.14.38 & 8.14.39)

- Building setbacks to provide separation from adjacent land uses and to create a consistent street wall and pedestrian areas including consistent street frontages and build-to lines is encouraged.
- Building setbacks to ensure landscaped screening of loading and service areas and landscape buffers at the extent of sites is encouraged.

Vehicular Parking (8.14.40 & 8.14.41)

- Parking areas that are safe, functional, attractive and comfortable as well as reducing their environmental and visual impact are encouraged.
- A high quality of pedestrian paving materials to minimize the impact of asphalt paving on development and create a more comfortable and attractive environment for pedestrians within parking areas is encouraged.

Storage, Service and Loading Areas (Section 8.14.43)

 The appropriate placement and screening of storage, service and loading areas shall be required.

Site Lighting and Safety (Section 8.14.44)

 The appropriate illumination of all pedestrian and parking areas to promote safety, security and comfort without over-illumination is encouraged.

Building Orientation (Section 8.14.51)

 Buildings are encouraged to have an orientation that provides street definition, pedestrian realm definition, and helps manage cooling and heating loads.

Building Height and Massing (Section 8.14.52)

 Buildings are encouraged to have a height and massing that supports the efficient use of land and appropriate transitions to adjacent land uses.

Building Design (Sections 8.14.53, 8.14.54 & 8.14.56)

- Buildings are encouraged to have the primary entrance or office space appropriately oriented towards municipal streets and intersections.
- Buildings are encouraged to have facades with significant architectural features.
- Buildings are encouraged to have architectural articulation in form and materials. Large blank wall surfaces along street frontages are discouraged.

Signage (Sections 8.14.63, 8.14.64 & 8.14.65)

- Well-designed and legible signage that is compatible with the building and site furniture is encouraged.
- Signage for multiple occupant buildings is encouraged to be an integral component of the building facade.
- Well-designed monument or free-standing signage, where deemed to be appropriate, is encouraged.

Landscape Requirements at Road Frontages, Gateways and Enhanced Transit Stops (Section 8.14.66)

 High standards for high quality, continuous landscaping at road frontages throughout the main road network are encouraged

Landscape Quality (Section 8.14.70)

• Distinctive, high-quality thematic landscape elements to create a unifying visual quality or identity to each land use are encouraged.

Energy and Environmental Assessment Report (Section 8.15)

• Notwithstanding Section F.3.2.9 of Volume 1, the sustainability of development shall be evaluated at the time of development approval for a Plan of Subdivision or Site Plan and an Energy and Environmental Assessment Report demonstrating how the development meets or exceeds the sustainability provisions of the Eco-industrial Design Guidelines and Urban Design Guidelines shall be required prior to development approval.

- The degree to which a development meets or exceeds the sustainability provisions of the Eco-industrial Design Guidelines and Urban Design Guidelines as described by the Energy and Environmental Assessment Report may be used as a basis by the City to prioritize development applications, including the assignment of servicing allocation and the issuance of draft plan approval under the Planning Act, R.S.O., 1990 c. P.13.
- The Eco-industrial Design Guidelines and Urban Design Guidelines may incorporate an evaluation system which would provide specific criteria for the assessment of development applications through the Energy and Environmental Assessment Report. The evaluation system may be revised from time to time to respond to technology advancement and design innovation without an amendment to this Secondary Plan. The evaluation system may include criteria including but not limited to:

Green building materials;

- Energy efficient building design;
- Vehicle trip generation, access to public transit;
- cycling, and walkability;
- Water conservation:
- Diversity of use and availability of community services and public amenities;
- Waste reduction, reuse and recycling (during construction and during operation);
- On-site storm water management;
- Grey water reuse;
- Light pollution management;
- "Urban heat island" effect management;
- On-site renewable energy generation; and,
- Use of a district energy system.

Site Specific Policies (Section 8.17)

• There is no area or site specific policy for the subject site.

5.3 Mount Hope Secondary Plan

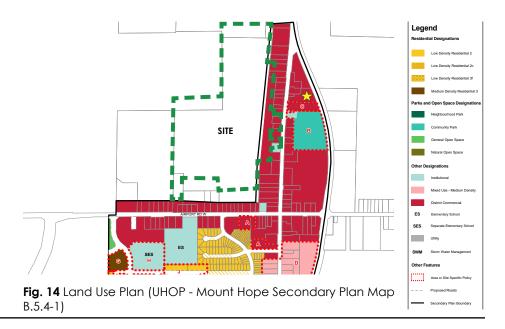
A small portion of the subject lands on the east side of the property falls within the Mount Hope Secondary Plan, and are identified as District Commercial on the UHOP Mount Hope Secondary Plan, Land Use Plan - Map B.5.4-1, refer to Figure 14.

The following policies are relevant to the proposed development:

General Policies (Section 5.4.1)

- Uses permitted in the Mount Hope Urban Settlement area shall not be polluting, hazardous or obnoxious due to matters such as noise, flammability, heat, glare, vibration, air pollution, water pollution, sedimentation, smoke, dust and/or odour. In this regard the requirements of the Province and any other pertinent agencies shall be satisfied.
- Development shall be encouraged to be designed in such a manner as to incorporate existing significant vegetation as a natural and aesthetic component of the development.

Commercial and Mixed Use Designations (OPA 69) - Section 5.4.4



District Commercial Designation (Section 5.4.4.1) In addition to Section E.4.7 – District Commercial of Volume 1, the following policies shall apply to the lands designated District Commercial on Map B.5.4-1 – Mount Hope – Land Use Plan:

- Existing and future commercial uses within the District Commercial designation are intended to serve the existing and future residents of the Mount Hope Secondary Plan areaas well as the surrounding rural area, the Hamilton Airport and the Airport Industrial-Business Park.
- In addition to the uses permitted in Policy E.4.7.2 of Volume 1, permitted uses in the District Commercial designation shall include retail and service commercial, personal and business services, recreational and entertainment facilities, restaurants, taverns, hotels, and motels. Cultural facilities, community facilities/ services, and institutional uses may also be permitted provided they do not interfere or conflict with the satisfactory development and operation of the District Commercial designation for the predominant general commercial uses.
- Lands with District Commercial designation shall be encouraged to be redeveloped for District Commercial uses. It is recognized that the redevelopment of the existing residential lots for commercial uses will occur over a relatively lengthy period of time.
- Development of commercial uses shall be planned and coordinated to limit the establishment of a continuous strip of individual developments.
- Redevelopment shall consider and be sensitive to existing
 residential development and ensure that the bulk, scale, height
 and design of commercial developments and other permitted uses
 are compatible with adjacent residential uses.
- The District Commercial designation adjacent to Airport Road West and Homestead Drive enjoys a high degree of visibility and provides a gateway to the John C. Munro International Airport. To ensure this area develops in a coordinated, well-designed and aestheticallypleasing manner with adequate infrastructure and amenities, and to provide funding eligibility, the City shall investigate the designation of these lands as a Community Improvement Project

Area.

 All outdoor lighting shall be oriented away from residential areas and adjacent public roads, and shall not interfere with airport operations.

Transportation Policies (Section 5.4.8)

- In addition to Section C.4.0 Integrated Transportation Network of Volume 1, the following policies shall apply to the Mount Hope Secondary Plan area:
- The internal public road system shall provide an efficient, practical
 and safe transportation network to accommodate the movement
 of people and goods within the Mount Hope Secondary Plan area
 and accommodate a limited number of intersections with the
 existing public roads adjacent to Mount Hope.
- All lands required for new internal public roads, road widenings for existing public roads and daylighting triangles, shall be dedicated free of charge and free of all encumbrances to the City.
- The costs related to the design and construction of all new public roads and the upgrading of the adjacent existing public roads required as a result of the development of the Mount Hope Secondary Plan area shall be at the expense of the developer(s). The details regarding these works and costs shall be established in the subdivision agreement(s) and/or the development, maintenance and use (site plan) agreement(s) to be approved by the City and executed by the City and the developer(s).
- An overall preliminary traffic study to assess the impact of development on adjacent provincial highways and roads, shall be required to the satisfaction of the Province and the City, prior to the formal submission of any draft plan of subdivision.

Note that a Traffic Impact Study has been prepared for the subject site by Nextrans.

Noise and Other Airport Impacts (Section 5.4.9)

 Mount Hope Secondary Plan area is in the vicinity of John C. Munro International Airport, Highway 6, and the Airport Employment Growth District. All of these uses have the potential to cause negative impacts onnearby sensitive land uses. To ensure that negative impacts on sensitive land uses are minimised and the operations of John C. Munro International Airport, Highway 6, and the Airport Employment Growth District are not compromised: (OPA 142)

Sections B.3.6.3 – Noise, Vibrationand Other Emissions and C.4.8 – Airport of Volume 1, shall apply to the Mount Hope Secondary Plan area;

- all new development and redevelopment shall conform to all relevant legislation, policies, standards and guidelines;
- future residents of residential development shall be advised of the
 potential for noise nuisance through appropriate warning clauses
 included in lease or rental agreements, agreements of purchase
 and sale, and within required development agreements; and,

Infrastructure (Section 5.4.10)

- In addition to Section C.5.0 Infrastructure of Volume 1, the following policies shall apply to the Mount Hope Secondary Plan area:
- Any new development south of the oil pipeline must be connected by new local roads to the existing development north of the pipeline, as well as to White Church Road.
- Storm drainage facilities shall comply with all requirements of the City, including the Master Stormwater Management Plan for the Mount Hope Secondary Plan Area.
- Lands required for the storm water drainage channels shall be dedicated free of charge and free of all encumbrances to the City by the developer(s).
- Costs attributable to the design and construction of the storm water drainage channels shall be paid for by the developer(s) and shall be identified in the subdivision agreement(s) and/or development, maintenance and use (site plan) agreement(s) to be approved by the City and executed by the City and the developer(s).

Area and Site of Specific Policies (Section 5.4.11)

• There is no area and site of specific policy for the subject site.

5.4 City of Hamilton Site Plan Guidelines

The City of Hamilton Site Plan Guidelines outlines the City's design preferences and expectations for site design. The following design guidelines address broad urban design topics and are meant to provide guidance for the site planning process.

The proposed development consists of an industrial site and proposed uses will include warehouses, offices and limited accessory commercial ground floor uses. The following highlights the principal guidelines found in Section 6.0 - Specific Building Types - from the City of Hamilton Site Plan Guidelines that apply to the proposed development:

Specific Building Types - Section 6.0

6.2 Business Parks and Industrial Buildings

The proposed developments should enhance the streetscape, provide efficient site circulation and parking, establish high quality building design particularly at gateways, and corber lots, and minimize impacts to sensitive lands. The propose site plan takes these guidelines into consideration and successfully address them as described below.

Site Layout

- 1. Building placement is close to the street edge as the dominant and consistent element in the business park;
- 3. Building is sited to complement the visual quality of the streetscape;
- 6. Buildings are sited to ensure adjacent properties are protected from new development's site illumination, noise, and odour where possible.

Circulation and Parking

- 3. Suffient area is provided on site for truck movements;
- 4. Parking areas between building frontages and street line have been minimized whenever possible;
- 5. The majority of parking areas are located at the side and rear of proposed buildings;
- 6. A landscaped strip is provided between parking areas and the street

7. Curbing is used to separate all driveways and parking areas from landscaped areas, and curb cuts are to be provided at pedestrian crossings if applicable;

Loading and Service Areas

- 2. Loading is located in the rear and interior side yard;
- 4. All loanding and servicing areas are located away from the street frontages and effectively screened and buffered from public views and from adjacent residential propoerties by landscape features;

Building Design

- 2. Office and entrance elements are oriented toward the street;
- 4. The main entrance of the buildings are emphasized through the use of canopies and other treatments that will provide both visual indentification as well as weather protection for pedestrians.

Landscaping and Buffers

- 1. Landscaping is used throughout the site as a major visual element that unifies the streetscape and softens long expanses of blank walls;
- 3. Landscape treatments are used to screen parking areas that are visible from the street;
- 4. Landscape buffer along property lines meets or exceeds the required 3.0m width;
- 7. Noise attenuation measures such as planting buffers are incorporated where necessary to ensure that adjacent properties are not disrupted by activity on site.

6.0 URBAN DESIGN GUIDELINES & ECO-INDUSTRIAL DESIGN GUIDELINES

This section reviews the *Urban Design Guidelines* and the *Eco-Industrial Design Guidelines*, and highlights the relevant sections/guidelines that apply to the proposed development site.

Urban Design Guidelines - Hamilton AEGD, 2010

SECTION 2.1 RELATIONSHIP TO NATURAL EDGES

Guidelines 04 & 05

Native species of trees, woody shrubs, groundcovers and perennials have been selected for the site where appropriate. Given space requirements some cultivars of native species have been selected to better suit the site. If the species is not native then it is a non-invasive species that thrives in the given urban conditions (drought, salt and pollution tolerant). A diverse selection of vegetation is proposed to create seasonal interest and heighten the awareness of the environment.

Guideline 09

The development implements the use of infiltration-based LID source and conveyance to address storm water run-off which is consistent with the eco-industrial development concept. This includes but is not limited to the proposed channel to the site's north property line. Further refinement of LID features will be addressed through the grading plan during SPA. Refer to Functional Servicing Report prepared by Odan Detech.

SECTION 2.2 ROAD DESIGN

Guideline 07

Entry features will be provided at appropriate locations to highlight entry/exit points, this will be achieve through a combination of built elements such as feature wall/signage and enhanced landscape treatment.

Guideline 08

The landscape along proposed Street "A" use native planting where appropriate. Some cultivars, as well as non-native species might be included that are better addapted to urban conditions (drought, salt and pollution tolerant).

SECTION 2.3 SITE ACCESS AND DRIVEWAYS

Guideline 01

The access to the proposed development will be through proposed Street 'A' which will connect to Airport Road West and in alignment with existing E Cargo Road.

SECTION 2.4 RECOMMENDED BUILDING SETBACKS

Guidelines 01 & 02

Building setbacks from the property line vary, the smallest yard abutting Street 'A' is 3.0m for buildings B, C and D on the west side of proposed buildings. The biggest setback provided is 94.84m between building B and Homestead Drive. These setbacks provide adequate separation from adjacent land uses. Whenever possible, building setbacks provide landscaped screening of loading and service areas. Intensive buffer planting is provided at critical interfaces on the south-east and northeast sides of the property.

Guideline 03 & 04

Buildings A and D have been placed as close to the street edge as feasible in order to create a dominant and consistent element in the business park. The facades of Buildings A and D face the proposed Street "A", and the office components of Buildings A and D have been located close to the street/vehicular entrance to be visible from the street and prominent as you enter to the site. Buildings B and C have been oriented toward the parking lot as well as the office components to create a greater user face presence.

Guideline 05

Minimum setbacks to adjacent land uses have been achieved as per the Zoning By-Law.

Guideline 06

A minimum 4.0m wide planting strip has been provided along the facade between proposed buildings A and D, and proposed municipal pedestrian sidewalk and/or multi-use trail along Street 'A'. These planting strips are to be planted with deciduous trees 10.0m O.C., woody shrubs, groundcover and perennials while taking into consideration the location of the buildings' signage.

SECTION 2.5 VEHICULAR PARKING AREAS

Guideline 01

The parking area for the entire site has been developed as safe,

functional, attractive, comfortable, and in a way to reduce their visual impact. Whenever possible, planting strips and/or planting islands have been provided to screen the parking from the street. Parking areas are immediately adjacent to the proposed buildings and concrete sidewalks are provided to connect parking areas and buildings.

Guideline 04

Barrier-free parking spaces are proposed to be located near the office entrances.

Guideline 05

Where parking areas are adjacent to streets, a minimum 4.0m wide planting strip has been provided between the street and municipal sidewalk and/or multi-use trail in order to screen the views.

Guidelines 06&07

The cast-in-place concrete pedestrian connection between parking areas and proposed buildings are continuous and differentiated from the asphalt for both safety and accessibility. Where appropriate, pedestrian connections from parking areas to buildings shall be barrier -free.

Guideline 08

Landscape islands within parking areas were incoorporated in accordance with the City of Hamilton zoning by-law.

Guideline 09

Permeable paving materials have not been proposed at this site due to low permeability rates of existing soil.

SECTION 2.6 STORAGE, SERVICE AND LOADING AREAS

Guidelines 01,03,04,and05

All doors to storage units are located internal to the site. The buildings have been arranged in such a way that none of the storage, service or loading areas are highly visible from the street.

Guideline 02

Waste storage locations will be defined during SPA phase.

Guideline 08

The location of utility equipment, hydro transformers, and switching boxes will be addressed during the SPA phase. The placement of these

structures will be incorporated into the design of the building and site landscape. Screening of utility equipment shall be considered along accessibility requirements for maintenance purposes.

Guideline 09

All service and refuse areas have been proposed as asphalt.

SECTION 2.7 SITE LIGHTING AND SAFETY

Guidelines 01-04

A photometric plan is not required at the OPA/ZBA/DPOS stage. When one is completed it will take into consideration appropriate illumination levels on all pedestrian, parking and architectural areas. Light spill over will not occur, and if possible, energy efficient fixtures will be used.

Guideline 06

There is no landscaping that would impede eye-level views across the parking lot toward the buildings' entrances.

Guideline 07

Noise attenuation measures such as berms, planting and/or acoustic walls will be incorporated in locations deemed required by the acoustic report. A noise fence is being proposed on top of the berm along the south-east and north-east perimeter of the site.

SECTION 2.8 PEDESTRIAN AND CYCLIST MOVEMENT

Guideline 07

An adequate amount of bicycle parking will be provided within the proposed development.

Guideline 10

A minimum 1.5m wide concrete walkway has been provided between parking areas and proposed buildings.

Guideline 11

Adequate pedestrian level lighting will be addressed during SPA.

Guideline 12

Adequate street furniture near the office building components will be addressed during SPA.

Guideline 14

The landscape design has given form and visual structure to the street edges with repetitive street tree spacing and planting strips.

SECTION 3.1 SUSTAINABLE BUILDING DESIGN

Guidelines 04&05

The building design will incorporate all standard energy reduction methods such as insulation that meets building code. Strategies to achieve this are discussed in further detail in the report prepared by Ecovert.

Guideline 10

The building design will incorporate water reduction measures through the use of low flow toilets and low flow faucets. Strategies to achieve this are discussed in further detail in the report prepared by Ecovert.

SECTION 3.2 BUILDING ORIENTATION

Guidelines 01&02

Buildings A and D have been oriented to provide street definition, a consistent street wall, and define the pedestrian realm.

Guideline 03

Buildings B and D frontage have an eastern orientation, and buildings A and C frontage have an western orientation and take advantage of passive solar heat and daylight.

Guideline 04

The offices and entrance elements have been oriented to articulate with proposed Street 'A', internal roads and parking lots.

SECTION 3.3 BUILDING HEIGHT & MASSING

Guidelines 01&02

Proposed building heights range from 36 to 40 feet. Buildings height and mass support an efficient use of the land. All building heights comply with the Hamilton Airport Zoning (Height) Regulations established with Transport Canada.

Guidelines 03 & 04

Office components are located along the frontage of buildings and oriented toward proposed R.O.W and internal streets. The frontage of Building D is oriented toward the proposed created wetland.

SECTION 3.4 BUILDING DESIGN

Guideline 01

Entrances for building A have been oriented toward proposed Street 'A'. There are no transit stations in the area.

Guideline 02&03

Main office facades, and facades facing onto public frontages will be upgraded with additional window glazing and variation of building materials to include aluminum panels, horizontal fluted metal panels and spandrel tinted glazing. Charcoal grey vertical elements flanked with spandrel glazing are used to break up the long wall expanses and will assist in enhancing the corner massing elements.

Guideline 05

Given the industrial nature of the proposed development, the site plan does not anticipate any significant areas of pedestrian activity near the site.

Guideline 06

The main entrances to the buildings will be clearly defined by the use of white coloured massing elements, which warp around the corners of the buildings.

Guideline 08

Acceptable wall cladding materials such as vertical and horizontal architectural precast wall panels and metal panels of various texture, shapes and colours together with spandrel glazing have been incorporated into the building's design.

Guidelines 12&14

Acceptable level of glazing is proposed for this type of development. Guideline 14 does not apply as none of the buildings have a frontage adjacent to an arterial road.

Guideline 13

Main office facades, and facades facing onto public frontages will be upgraded with additional window glazing

Guideline 17

Operable windows are not a possibility on these buildings given the proposed use.

Guidelines 18&21

All new construction materials will be aesthetically compatible with the proposed requirements of the Airport Employment Growth District area. <u>SECTION 3.7 ARCHITECTURAL LIGHTING AND LIGHT POLLUTION</u>
MANAGEMENT

Guidelines 01-04

A photometric plan is not required at the OPA/ZBA/DPOS stage. When one is completed it will take into consideration appropriate illumination levels on all pedestrian, parking and architectural areas. Light spill over will not occur and lighting will accentuate building features.

SECTION 3.8 SIGNAGE

Guidelines 01-09

The signs associated to this site meet the City of Hamilton's Sign By-Law. Future signage will be integrated into the building façade above the canopy entrances as required by future tenants. Signs will be designed to complement the building's architectural style, to be legible and scaled appropriately for their location.

SECTION 4.1 LANDSCAPE REQUIREMENTS AT ROAD ENTRANCES, GATEWAYS AND TRANSIT HUBS

Guideline 1

The landscape treatment for the proposed development adheres to the standards prescribed by this guideline by proposing a high quality, continuous landscaping at road frontages and is guided by Section 2.1 - Guidelines 04&05, and Section 2.2 - Guidelines 07&08, as described below:

Whenever possible, the landscape design proposes the use of a diverse selection of native species that are suitable for industrial/urban conditions, and drought resistant. Plantings are placed in a relatively dense arrangement to reduce maintenance requirements, and the need for fertilizer and irrigation. Landscape anchors are proposed to define entrances to the site.

Guideline 02

All municipal rodways include a landscaped strip of 3.0m wide or greater on the property's side of the road, or both sides where applicable.

SECTION 4.2 LANDSCAPE QUALITY

Guidelines 01-03

The trees, shrubs, groundcover and perennials along the buildings' facades have been selected to create a distinctive, high-quality visual identity to the site. The proposed planting, natural heritage area, and conveyance swale enhances and support ecology efforts. The proposed landscaping improves comfort by providing shelter and

microclimate.

SECTION 4.4 PAVED SURFACE MATERIALS

Guideline 01

Appropriate planting buffers are proposed to address the interface and edges between the development and adjacent land uses. This include street trees and planting strips along road interfaces, buffer planting borders where the property abuts residential and small commercial properties, and adequate buffer between the development and proposed Natural Heritage Areas.

SECTION 4.5 OUTDOOR AMENITY SPACE

Guidelines 01&02

Location of amenity area will be addressed during the SPAstage.

<u>SECTION 5.0 DESIGN GUIDELINES FOR SPECIFIC DESIGNATIONS</u> To be revised after OPA/ZBA/DPOS stage.

Eco-Industrial Design Guidelines - Hamilton AEGD, May 2010

SECTION 2.1 TRANSPORTATION

Public transit amenities have been considered on this project, however, transit passenger demands generated by the proposed development is low, and the impact on existing transit service is negligible. We anticipate that no improvements are required. The closest transit stop to the proposed development is the bus route 20 located at the Airport Road W/Canadian Warplane Heritage Museum driveway, approximately 700m (10-minute walk). Sidewalks are absent on some sections of Airport Road West connecting to the site. Proposed Street 'A' includes municipal sidewalks on both sides of the R.O.W.

Bike racks will be provided for employee's use. Plan includes roads and bike lanes but connections to the City's trail system is not feasible.

Adequate weather-protected bike storages will be explored during the SPA stage. The building design will incorporate changing/shower facilities for employee's use.

As outlined within the "City of Hamilton Eco-Industrial Guidelines Analysis" report prepared by Ecovert, the project will allow for 10% of parking spaces to be electric vehicle (EV) ready in the future.

Most of the parking areas are situated at the interior, rear and side of built areas to minimize impact on the streetscape. Where parking areas are visible from the street, appropriate screening with planting is provided. Sustainable features such as permeable pavement were considered, however, they were deemed unfeasible. Pedestrian connections and landscape screening are provided.

Loading docks are located in areas of low visibility.

SECTION 2.2 ENERGY, RENEWABLES, AIR QUALITY AND GHG REDUCTION

As outlined within the "City of Hamilton Eco-Industrial Guidelines Analysis" report prepared by Ecovert, the project intends to achieve at least 50% efficiency improvement over the Model National Energy Code for Buildings (MNECB). This approach surpasses the requirements outlined by the City of Hamilton. The specific design features are discussed in the report prepared by Ecovert and include:

Energy efficient insulation of the building envelope;

Improved mechanical ventilation and main heating;

High-efficacy LED interior lighting with motion sensors;

LED exterior lighting with photocells.

Plan orients and designs buildings and infrastructure to take advantage of passive solar heating, natural lighting, ventilation and shading for cooling (See Urban Design Guidelines).

The project intends to construct a solar ready roof.

Construction plans will ensure minimum air and dust emissions during construction to preserve air quality. As described in the report prepared by Ecovert, a Indoor Air Quality (IAQ) plan will be prepared and implemented for the construction and preoccupancy phases of the building.

The project intends to exceed the requirement for low-emitting building materials of (at least 45% of the material cost), as outlined in the "City of Hamilton Eco-Industrial Guidelines Analysis" report prepared by

Ecovert.

SECTION 2.3 WATER AND WASTEWATER CONSERVATION/EFFICIENCY

The landscape plan proposes trees, shrubs and perennial species that are drought resistant and low-maintenance to minimize water use. The project does not propose to install a permanent irrigation system beyond the 2-year establishment period.

Buildings will incorporate water reduction measures through the use of low flow toilets and low flow faucets. As described in the report prepared by Ecovert. All newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling will be WaterSense labeled.

SECTION 2.4 STORMWATER MANAGEMENT

As identified within the EIS prepared for this application, stormwater quality measures for the proposed development will required a "train treatment approach" and will include a variety of LID features. Preliminary discussions are presented within the Odan/Detech report prepared for ZBA and detailed designs, location and capacity of these features will be explored at the site plan application stage.

There are no stream corridors associated with this site.

SECTION 2.5 MATERIALS, RESOURCES, AND SOLID WASTE

Construction will employ waste management best practices as referenced in The Public Works and Government Services Canada (2000) The Environmentally Responsible Construction and Renovation Handbook, Chapter 8 - Construction, Renovation and Demolition Waste, as well as, the Best Management Practices Resource Guide, Chapter 4 - Construction and Demolition Waste Management and Building Design.

As outlined the report prepared by Ecovert, the proposed development intends to target by cost, between 15% to 30% of all building materials to contain recycled content.

The proposed development intends to prioritize products and materials that have environmentally, economically, and socially preferable lifecycle impacts documented by Environmental Product Declarations.

In addition, the project itends to use products and materials with published manufacturer inventory, health product declation, certified crade-to-crade basic or bronze levels, and declare label with disclosed ingredients.

Where feasible, the proposed development intends to source materials from local manufacturers. Material sourcing is described in the "City of Hamilton Eco-Industrial Guidelines Analysis" report prepared by Ecovert.

The project itends to divert at least 75% of the total construction and demolition material. Strategies to accomplish this goal will be explored in the construction waste management (CWM) prepared for this project.

SECTION 2.7 SOCIAL SUSTAINABILITY

As identified in the report prepared by Ecovert. The proposed development is located within 800 metres walking distance to 4-8 diverse uses. This includes access to amenities such as to parks, Hamilton airport, museum and local library branch.

SECTION 2.8 SITE DEVELOPMENT, DISTURBANCE, NATURAL CORRIDORS AND GREENWAYS

The project will develop a Erosion and Sediment Control (ESC) plan to reduce pollution from construction activities by controling soil erosion, waterway sedimentation, and airborne dust.

The plan provides replanting plan to compensate for removals, and to provide shade and cooling for streets and buildings.

Native species of trees, woody shrubs, groundcovers and perennials have been selected for the site where appropriate. Given space requirements some cultivars of native species have been selected to better suit the site. If the species is not native then it is a non-invasive species that thrives in the given urban conditions (drought, salt and pollution tolerant).

The proposed development includes the creation of 1.11 ha of compensation wetland area and associated 10.0m buffer to be located on the north-east corner of the property.

Plan includes 100% native species in all stormwater facilities planting.

In addition, the proposed development intends to implement strategies to reduce the heat island effect by incorporating white TPO roofing membrane with a minimum SRI value of 82. Hardscape strategies to help to reduce heat island effect will be explored as necessary in order to meet LEED v4 credit requirements for LEED certification.

PART 3

SITE DESIGN & ANALYSIS

7.0 SITE DESIGN AND ANALYSIS

7.1 DETAILED DESIGN DIRECTION

The site plan design has been guided by the relevant policies and guidelines aforementioned in Sections 5 and 6 of the Urban Design Brief.

The overarching vision for the proposed development is the creation of an Industrial Park which supports the City's vision of creating local employment opportunities and economical growth, while delivering an aesthetic pleasing development that fits the surrounding context.

The site plan design aims to achieve the following goals:

- Provide high quality architectural design within the development
- Ensure that pedestrian circulation throughout the site is safe and adequate for the proposed use
- Create an attractive street frontage
- Provide quality landscape edge along building frontages

7.2 SITE DESIGN

The development for 3054 Homestead Drive, and 9174 & 9166 Airport Road West proposes an Industrial Park to include four (4) one-storey buildings. Proposed uses will include warehouses, offices and limited accessory commercial ground floor uses. Buildings will vary in size, ranging from 26,562.68m2 to 38,268.75 m2. Development statistics are provided in Figure 15.

Where office spaces are provided, these are located closer to street frontages and provides accessible entrance. Continuous sidewalks are provided which connects parking areas and building entrances, as well as providing adequate connection between the proposed buildings and municipal sidewalks to promote safe pedestrian movement and access. The interface of buildings 'A' and 'D' with proposed Street 'A'

is buffered by a double row of parking area, 4.0m wide landscape strip in addition to proposed 11.15m wide municipal boulevard with multiuse path and 7.85m wide municipal boulevard with sidewalk. Where the proposed development is adjacent to existing or proposed streets, landscape buffers are planted with medium/large canopy street trees, shrubs and perennials to enhance the streetscape character.

DEVELOPMENT STATISTICS: GFA			
Item	Proposed		
Building 'A'	33,468.93 m ²		
	(360,257 ft2)		
Building 'B'	38,268.75 m ²		
	(411,921 ft2)		
Building 'C'	26,562.68 m ²		
Building	(285,918 ft2)		
Building 'D'	31,250.96 m ²		
	(336,382 ft2)		
Total	129,551.32 m ²		
	(1,394,478 ft2)		

DEVELOPMENT STATISTICS Airside Industrial (M7) Zone			
Item	Required	Proposed	
Permitted Uses	Warehouse & Office	Warehouse & Office	
Min. Lot Area	4,000.00 m ²	313,822.42 m ²	
No. of Buildings	N/A	4 Buildings	
Min. Yard Abutting a Street Max. Building Height Landscaping	3.0 m TBD 10%	New Service Road: 56.22 m (Building A) East Cargo Road: 33.00 m (Building A) Homestead Road: 94.84 m (Building C) Street 'A': 3.00 m (Building Nos. A-C) TBD 11.87% (Excluding ROW & NHS Compensation)	
Min. Landscaped Strip	3.0 m	3.0 m	
Parking	0.011	5,011	
Warehouse	1 space/ 30m ² of Office Use = 3,485.90 m ² /30 =116 spaces	911 Typical Spaces 243 Truck Level Doors 30 Trailer Parking Spaces Total: 1,184 spaces	
Long Term Bicycle Parking	5% of Required Spaces = 5.8 spaces	TBD	

Fig. 15 Development Statistics by Urban Solutions

7.3 LOCATION OF BUILDING ENTRANCES AND ACCESSIBILITY

The proposed buildings are oriented in relation to Street 'A' whenever possible, buildings A and D were oriented to face the street, and entrances were located adjacent to the parking area. Entrances to the buildings located in the interior of the site are located close to parking areas, and opposite to loading docks. Entrances are accessible through concrete sidewalks that envelope the buildings where pedestrian access is required, dropped curbs are provided to ensure that municipal accessibility guidelines are met.

7.4 STREETSCAPE

The proposed Street 'A' was designed to meet the guidelines outlined within the City of Hamilton AEGD Transportation Master Plan, which provides direction for the planning and design of roadways within the AEGD area. Street 'A' is proposed to be a two-lane collector roadway which incorporates vehicular, pedestrian, and cycling needs, as well as low impact stormwater management within the boulevard. Refer to Figure 16.

Sidewalk Utilities Travel Multi Travel Curb Turn Lane Ditch/Swale Ditch/Swale Lane Use Path Lane 2 0.5 1.8 5.25 5.25 30.0 m

Two Lane Collector Road - Conceptual Cross-section Design

NOTE: The cross section configuration is conceptual, context sensitive and, where applicable, subject to refinements at phases 3 & 4 of the Municipal Class Environmental Assessment or Planning Applications. All cross-section elements shall conform to the City master plans, policies and standards, including street lighting, stormwater, landscaping etc.

Fig. 16 Lane Collector Cross-Section (AEGD Transportation Master Plan)

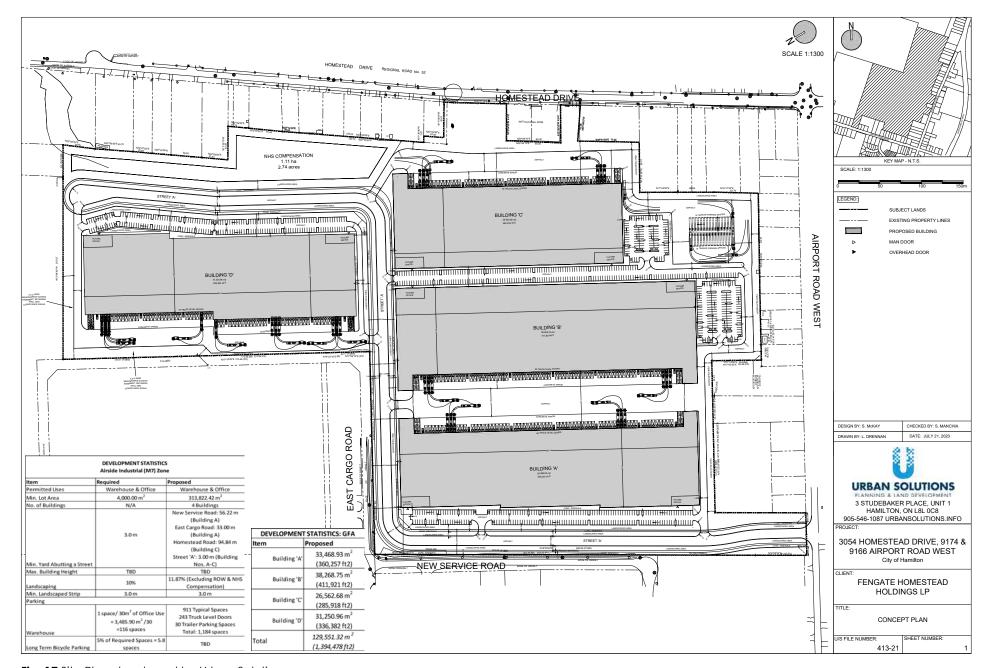


Fig. 17 Site Plan developed by Urban Solutions

7.5 BUILDING DESIGN ELEMENTS

The buildings within this development will create a street presence due to their proximity and visibility to Street 'A' and designed architectural facades. The buildings will be situated on site, at the permitted yard setbacks, as per applicable zoning by law provisions. Main office facades, and facades facing onto public frontages will be upgraded with additional window glazing and variation of building materials (horizontal and vertical in nature) to articulate wall planes and building entrances. Various materials, colours and textures are also proposed to break up the built form (See Figure 18 - Concept Building Elevations).

Spandrel and tinted glazing will be utilized to break-up the use of grey insulated metal panelling around the perimeter of the building. Charcoal grey and white plated aluminum panels and horizontal fluted metal panels, together with tinted glazing are used to enhance corner features of the buildings within this development.

The main entrances to the buildings will be clearly defined by the use of white coloured massing elements, which warp around the corners of the buildings. Future signage will be designed and placed above the canopy entrances as required by future tenants and in accordance with City of Hamilton's Sign By-Law. Municipal addresses will be clearly visible from the street and scaled appropriately for their location.

Additional corners and stepping added to the façade of the buildings will further enhance their form, allowing for increased landscaping directly in front of the building and assisting in articulating the street facade, creating strong streetscape along road frontages.

The buildings will bring a sense of cohesiveness to the entire site. They will provide an enhanced vibrancy to the street presence with the introduction of higher architectural parapets at various heights to break up the overall roof line of the buildings.

Charcoal grey vertical elements flanked with spandrel glazing are used to break up the long wall expanses and will assist in enhancing

the corner massing elements; while lesser articulating charcoal grey components assist in diffusing the overall main facade and bring a level of unity to the development.

The buildings are one storey in height and are compatible with the adjacent residential uses. Landscape buffers with deciduous trees, coniferous trees and coniferous shrubs are proposed adjacent to residential uses to reduce visual site lines to parking areas and industrial buildings.

The buildings have been designed in accordance with EAGD Secondary Plan guidelines, the City of Hamilton Site Plan Guidelines (Section 4.0 – Buildings), and the Urban Design Guidelines (2010) as follows:

- Building height and massing support the efficient use of the land and provide appropriate transitions to adjacent land uses.
- Primary building entrances and office components are oriented towards the street.
- Building facades have significant architectural features that enhances the streetscape
- Primary entrances are the focal point of the building which are visible and defined by canopies.
- Building façade includes stepping/jogs
- Acceptable wall cladding materials such as vertical and horizontal architectural metal panels of various texture, shapes and colours together with spandrel glazing have been incorporated into the building's design.

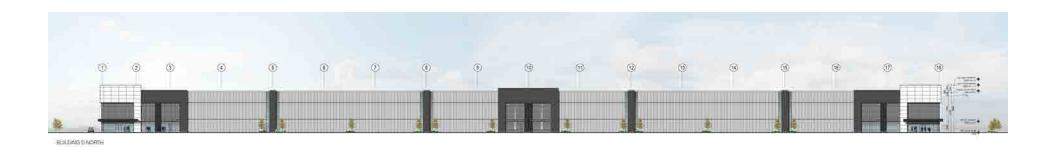




Fig. 18 Concept Building Elevations prepared by Baldassarra Architects

7.6 PARKING AND CIRCULATION

A total of 1,184parking spaces are provided throughout the site. This includes 911 typical parking spaces, 243 truck level doors, and 30 trailer parking spaces. All parking spaces are provided at ground level. The amount of parking spaces exceeds the minimum Zoning By-law No. 05-200 requirement of vehicle parking spaces, and is adequate to the proposed use. Vehicular access is provided via proposed Street 'A'.

The principal forms of transportation applicable to the site are represented within the proposal. Pedestrian and vehicular circulation are illustrated on Figure 19, which are interpreted as follows:

- Dashed pink lines represent the exisiting vehicular circulation on adjacent roadways.
- Dashed red lines represent areas of heavy vehicular use (trucks and large vehicle)s, and demonstrates the ease of access users will have when navigating the site, parking or docking.
- Dashed orange lines represent vehicular path of travel, and demonstrated the ease of access users will have while accessing, navigating throughout the site, and parking.
- Dashed green lines represent cycling lanes, which are incorporated in the multi-use trail along the proposed Street 'A'. While the current proposal shows Street A terminating on site (cul-de-sac), there is potential for further expansion.
- Dashed blue lines represent pedestrian circulation throughout the site. The proposed sidewalks provide connection between parking areas and building entrances, as well as connection between the proposed buildings. No pedestrian connection is provided to connect with the existing E Cargo Road as sidewalks are absent.



Fig. 19 Site Circulation Analysis by Adesso Design Inc.

7.7 LANDSCAPE DESIGN

The landscape design for the proposed developed was guided by the relevant policies and guidelines provided by the UHOP's Chapter E vision of enhancing the quality of the public realm along all public roads within the EAGD, and protecting and mitigating potential adverse impacts on neighbouring properties. In addition, the landscape design takes direction from the Environmental Impact Study (EIS) prepared by GEI Consultants, Savanta Division, in December 2022.

The landscape along proposed municipal Street 'A' will receive typical landscape treatment to include large canopy deciduous trees within the boulevard. Trees are conceptually shown planted every 10.0 metres. Street tree species are generally selected by the City of Hamilton.

A 4.0 metre landscape strip is proposed to buffer the parking lots of building 'A' and 'D'. These will be planted with large/medium deciduous canopy street trees, shrubs and perennials, the planting strip in these areas provide a soft break between the built areas and roadways, as well as screening the proposed parking areas from adjacent sidewalks/roadways. Planted islands are provided throughout the parking area to soften the use of hardscape whenever possible. These islands are to be planted with deciduous trees and shrubs/sod.

A 9.0 metre wide landscape buffer is provided along the north-east and south-east property lines. The buffer will include the creation of a vegetated berm with noise fence incorporated at the top of the berm to minimize vehicular noise and light polution to adjacent residential. Areas of heavier vehicular traffic i.e., truck loading areas, are proposed to be densely planted with coniferous trees to provide a year-round green barrier.

Foundation planting is proposed along blank walls whenever feasible. Larger expanses of blank wall at the intersection of buildings 'B', 'C', and 'D' and proposed Street 'A' are proposed to be planted with a variety of large and medium coniferous trees, mostly shown in clusters.

This will help to soften the transition between proposed building masses and the pedestrian realm. Plant species will be selected to provide all-year-round interest.

Where possible, office entrances are going to show upgraded landscape treatment to highlight entrances and provide opportunities for seating. These areas will be planted with ornamental trees, shrubs and perennials, and will feature street furniture appropriate for the proposed uses.

Conveyance swale

A conveyance swale is proposed along the northern extent of the property, adjacent to proposed building 'D'. The conveyance swale will direct off-site drainage from the Airport lands towards Homestead Road at the north corner of the property. A thorough discussion of the functions of proposed features are discussed in the Functional Servicing Report. Planting of the conveyance swale will be discussed in greater detail at the SPA stage. The landscape plan will take direction from the EIS prepared for the subject site, and work in consultation with GEI Consultants, Savanta Division to define the planting list at the detailed design phase.

Created Wetland

In addition to the landscape areas described above, a 1.11ha created wetland and associated vegetated buffer is being proposed on the eastern side of the property. The creation of the wetland feature is guided by the Environmental Impact Study (EIS) prepared by GEI Consultants, Savanta Division, in December 2022. Further refining of planting species and habitat structures are expected at the SPA stage. Preliminary discussions within the EIS recommends the recreation of the wetland feature to offset the loss of the existing wetland habitat. The created wetland proposes to maintain and enhance existing functions, and provide greater floral diversity and biodiversity. A conceptual restoration approach is provided in the EIS.

A 10.0m vegetated buffer is required to protect the proposed constructed wetland. The landscape design follows the

recommendations provided in the EIS to determine plant species (native, salt-tolerant, thorny plants to discourage human interactions. The planting list will be refined during detailed design stage in consultation with GEI Consultants, Savanta Division. Other strategies, such as the placement of a noise barrier fence along the northeast property line, have been incorporated to reduce the impacts from human-related activities. The vegetated buffer will extend the biodiversity opportunities of the site and provide a green barrier to protect the proposed created wetland.

The following pages emphasize the landscape design concept for the proposed development.

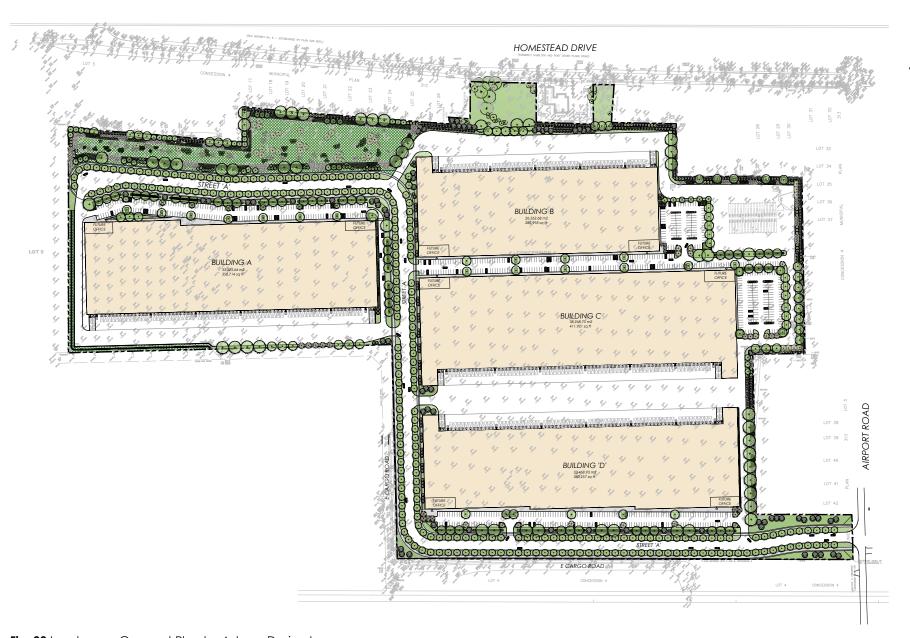


Fig. 20 Landscape Concept Plan by Adesso Design Inc.

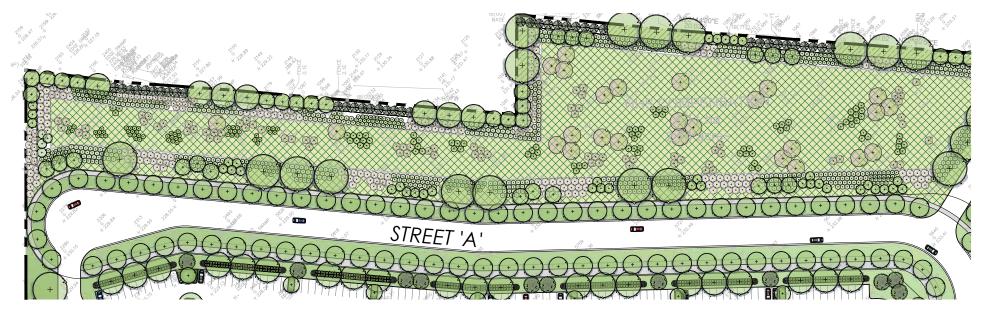


Fig. 21 Created Wetland and Vegetated Buffer by Adesso Design Inc.

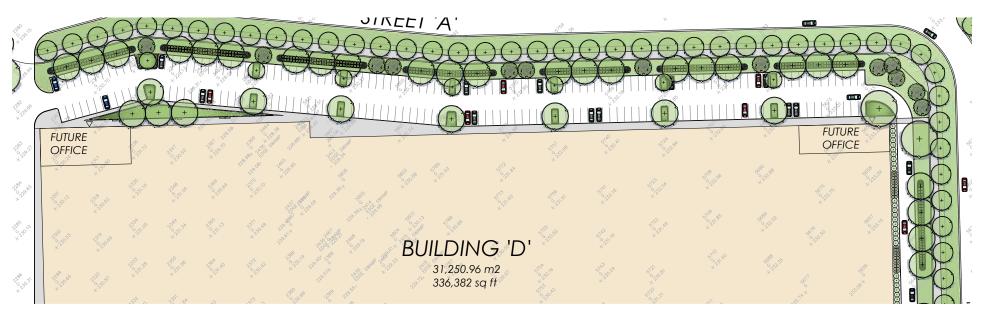


Fig. 22 Landscape Concept Building 'D' Frontage by Adesso Design Inc.



Fig. 23 Landscape Buffer adjacent Building 'C' by Adesso Design Inc.

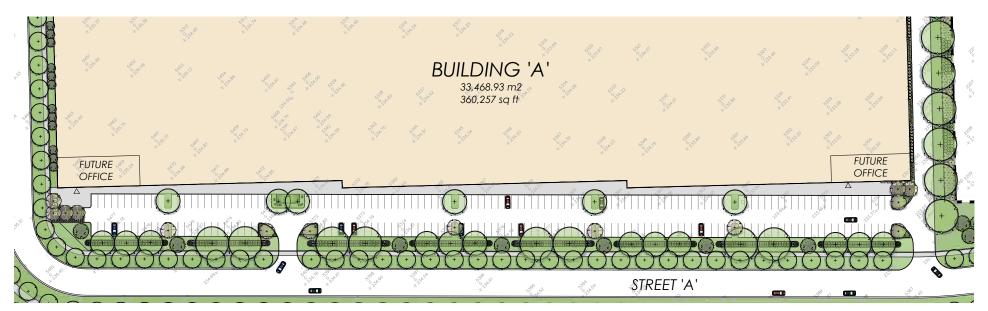


Fig. 24 Landscape Strip and Street Tree Planting along Building 'A' by Adesso Design Inc.

8.0 CONCLUSION

The proposed development for 3054 Homestead Drive, and 9174 & 9166 Airport Road West has merit and can be supported for the following reasons:

- It aligns with the intended designation of 'Employment Areas' of the UHOP-Schedule E, and 'Airport Employment Growth District' of the UHOP-Schedule E-1.
- It aligns with the City's vision for the area of supporting the economic growth of the airport and providing employment opportunities.
- The development is well supported by a diverse transportation network to include the Hamilton International Airport, major and minor arterial roadways, and strategic connection to Highway 6 and Highway 403.
- The proposed development increases work density within walking distance of the proposed rapid transit line.
- The proposed buildings respect the surrounding building heights and general context of the area.
- The proposed buildings incorporate sustainable design features and intend to pursue LEED Certified certification. The proposed development demonstrate commitment to sustainability practices and green building design, and where feasible, exceed the Eco-Industrial Design Guidelines set by the City of Hamilton.
- The pedestrian realm has been improved with street facing entrances, adequate site circulation, softscape buffering of parking areas, and naturalized areas and LID features.

The development is designed in accordance with the City's vision for the EAGD of promoting the Airport as a significant employment node, and will contribute to the ongoing transformation of the area by enhancing a distinct character for the district.

The purpose of the Urban Design Brief is to guide the proposed development on the basis of good site planning, focusing specifically on urban structure, streetscape design and built form. This document helps to identify and highlight significant Urban Design Policies and Guidelines and Eco-Industrial Guidelines outlined by the City of Hamilton for the subject lands.

Subject to completion of the planning approvals process and refinement of the development concept, detailed design will be implemented through the final site plan approvals process.

adesso design inc.

per:

Matthew Madigan, OALA, CSLA Landscape Architect MM/cd