4103 Palladium Way, Burlington, ON

Update D-6 Land Use Compatibility Assessment

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Project Name:
Update D-6 Land Use Compatibility Assessment – Air Quality Study

4103 Palladium Way, Burlington, ON

Project Number:

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Revision History

Version	Date	Description	Author	Reviewed by
1	December 20, 2021	Draft	Emily Woronchuk	Ron Taylor
1.1	October 10, 2024	Draft updated plan	Scott Grant-Hose Amir Bahadori	Ron Taylor
1.1	November 21, 2024	Final incorporating Site Plan revisions	Scott Grant-Hose Amir Bahadori	Ron Taylor

1 Legal Notification

This report was prepared by EXP Services Inc. for the account of *2669006 Ontario Inc. c/o Better Life Living*.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

2 Introduction

EXP Services Inc. (EXP) was retained by *2669006 Ontario Inc. c/o Better Life Living* to update the D-6 Land Use Compatibility Assessment – Air Quality Study /EXP December 20, 2021/ on the compatibility of the proposed residential development at 4103 Palladium Way in Burlington, ON, hereinafter referred to as the 'Subject Site'. The proposed residential property is a retirement home. The update is required due to the change in building design and Site Plan which increases the height of the building to eight (8) stories and any changes in Regional Terms of Reference, Official Plan if relevant. This report has been prepared to support the Local Official Plan Amendment (OPA) and Zoning By-Law applications with respect to Provincial policies/guidelines and other relevant planning criteria associated with proposed sensitive land uses in the proximity of potentially incompatible non-residential (industrial and commercial) land uses.

The Site is municipally known as 4103 Palladium Way, located on the west side of Palladium Way, east of Walkers Line, and south and east of Highway No. 407 in the central east area of the Alton Community. The Site is 14,883 square metres (m^2) in area, with 80.7 m frontage on Palladium Way, and is occupied by ongoing construction of the long-term care facility. The Site is bound by light industrial followed by Highway 407 and vacant land to the north, community followed by commercial and residential properties to the south, parkland, institutional, residential, and commercial to the east, and Highway 407 and vacant properties to the west. A Site Plan and land zoning within 1,000 m of the Subject Site are shown in Figures 1 and 2.

The development plan, surrounding industrial activities and provincial regulations and guidelines have been considered in this assessment. This report assesses the potential impact of industrial facilities and major transportation corridors on the air quality on the proposed development and potential compliance issues on nearby industry.

The study is limited to the impact on air quality.

3 Scope of Work

The scope of work for the D-6 Land Compatibility Study – Air Quality consisted of:

- Determine the nature of the development to establish land use compatibility requirements:
  - Review available site plan drawings and applications;
  - Conduct a Site visit;
  - Conduct MECP database review to identify land use compatibility conflicts and confirm major air quality impact sources; and
  - Review history of odour complaints, if available.
- Assess potential adverse effects attributable to the influence of proposed land use and adjacent land use in accordance with MECP Guideline D-6 including but not limited to:
  - Determine adequacy of separation distance or other measures between source and receptors to assess incompatible land use areas based on classification of sources and receptors; and
  - Assess compatibility of receptors based on potential and actual area of adverse influence and separation distances between incompatible land use areas.

4 Method

To complete the above scope of work the following approach was conducted:

- A site visit to the area by EXP personnel.
- Review of satellite imagery.
- Review of City of Burlington Official Plan and zoning for the surrounding area and Provincial Policy Statements.
- Review of existing and pending MECP Environmental Compliance Approval (ECA) approvals and Environmental Activity Sector Registry (EASR) registrations for industries within 1000 m of Site through the Ontario Access Environment database.
- Review of National Pollutant Release Inventory data through Environment and Climate Change Canada of facilities within 1,000 m through ECCC's Single Window Information Manager (SWIM) online reporting system.
- Recent complaint history available from the applicable MECP District Office regarding air quality.
- Meteorological data for the study area.

The information obtained was then assessed in accordance with the MECP Guidelines D-1 (Land Use Compatibility) and D-6 (Compatibility between Industrial Facilities).

5 Provincial/Regional Guidelines and Regulations

The Ministry of the Environment, Conservation and Parks (MECP) D-series of guidelines are meant to identify potential compatibility issues between land uses. In the case of proposed sensitive uses in proximity to industrial uses, the initial assessment determines if there are any potential adverse effects of nearby industrial operations on the proposed location of the sensitive use. Where the potential for compatibility issues is identified a more detailed assessment may be performed.

5.1 D-Series of Guidelines

The MECP guideline, "D-6 Compatibility between Industrial Facilities" (the Guideline) is intended to be applied in the land use planning process to prevent or minimize future land use problems due to the encroachment of sensitive land uses and industrial land uses on one another. The Guideline recommends minimum separation distances of new developments from industrial facilities. These industrial facilities are defined as follows:

- Class I facilities are generally described as a small-scale, self-contained plant or building which produces/stores a product which is contained in a package and has low probability of fugitive emissions.
- Class II facilities are generally described as a medium-scale processing and manufacturing plant with outdoor storage of wastes or material (i.e. has an open process) and/or there are periodic outputs of minor annoyance.
- Class III facilities are generally described as a place of business for large-scale manufacturing or processing, characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. They have a high probability of fugitive emissions.

The recommended minimum separation distances for new developments from Class I, II and III facilities are shown in Table 1.

Table 1. D-6 Separation Distances

Class	Potential Area of Influence	Minimum Separation distance
I	70	20
II	300	70

Class	Potential Area of Influence	Minimum Separation distance
III	1000	300

The guideline allows less than the minimum separation distance based on an evaluation of the industrial processes and the potential for off-site impacts (this study).

5.2 Ontario Planning Act

The Ontario Planning Act (Section 2.1) sets the ground rules for land use planning in Ontario and describes how approval authorities and Tribunals must have regard to matters of provincial interest including orderly development, public health, and safety.

5.3 Provincial Policy Statement

The Provincial Policy Statement ("PPS"), 2024 is a province-wide land use planning policy framework that replaces both the Provincial Policy Statement, 2020 and A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019. It provides municipalities with tools and flexibility to build more homes. The PPS provides policy direction on matters of provincial interest related to land use planning and development. The Provincial Planning Statement is a policy statement issued under the authority of section 3 of the Planning Act and came into effect on October 20, 2024. The Provincial Planning Statement applies to all decisions in respect of the exercise of any authority that affects a planning matter made on or after October 20, 2024.

Provincial plans, such as the Greenbelt Plan and the Oak Ridges Moraine Conservation Plan, build upon the PPS take precedence over the policies of the Provincial Planning Statement to the extent of any conflict, except where the relevant legislation provides otherwise.

The PPS Section 3.5 of the PPS provides guidance similar to the D-6 guidelines and states the following:

"1. Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.

2. Where avoidance is not possible in accordance with policy 3.5.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other major facilities that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses is only permitted if potential adverse affects to the proposed sensitive land use are minimized and mitigated, and potential impacts to industrial, manufacturing or other major facilities are minimized and mitigated in accordance with provincial guidelines, standards and procedures."

In addition, Section 3.3 of the PPS further 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, or where avoidance is not possible, minimize and mitigate negative impacts on and adverse effects from the corridor and transportation facilities."

The City of Burlington is identified as under Schedule 1 of the PPS as a large and fast-growing municipality.

The Official Plan for the Regional of Municipality of Halton includes provisions of these Plans as well as the Provincial Policy Statement. The City of Burlington's Official Plan was prepared to conform to the Provincial land use plans and regulations and was approved by the Regional Municipality of Halton.

5.4 Risk Assessment Guidelines

Some municipalities require a risk assessment to further assess compatibility with existing industrial facilities in the area. This assessment is based on the Canadian Environmental Protection Act (CEPA) list of hazardous substances and thresholds and the Conseil pour la réduction des accidents industriels majeurs" (CRAIM) list of hazardous substances which was developed using a multi-stakeholder process that reviewed and adopted all the hazardous substances from the Risk Management Program (RMP) developed by the U.S. Environmental Protection Agency (EPA) and a selection of chemicals from the Major Industrial Accident Council of Canada (MIACC) lists. The revised CRAIM List of 174 substances contains: 63 inflammables (RMP), 77 toxics (RMP), 10 inflammables (MIACC / Occupational Safety and Health Administration (OSHA) or National Fire Protection Association (NFPA)), 20 toxic (MIACC / OSHA or NFPA), 3 explosives and 1 miscellaneous. It was designed to take into account the List of hazardous substances from the EPA Risk Management Program (RMP) while also retaining the most hazardous substances from MIACC List 2: (CRAIM 2001). An E2 plan is required for facilities with charge, management or control of a listed substance that is at or above the quantity set out in column 3 of Schedule 1 of the E2 Regulations.

5.5 Ontario Regulation 419/05 – Air Pollution – Local Air Quality

5.5.1 Contaminants

Under Ontario Regulation 419/05 – Air Pollution – Local Air Quality (O. Reg. 419/05) of the Environmental Protection Act, a facility is required to meet prescribed standards for air quality contaminants at any location off-site.

For new developments near industrial sources, the existing land uses, and their approvals, must be considered and an industry has the right to object to a land use which may impact their ability to operate under their existing provincial approval. A developer can support compliance through design (e.g. removing elevated receptors), mitigation (e.g. sealed windows, filtration systems, etc.) or collaborating on at-source mitigation with the industry.

5.5.2 Dust

Under Ontario Regulation 419/05 – Air Pollution – Local Air Quality (O. Reg. 419/05) of the Environmental Protection Act, a facility is required to meet prescribed standards for particulates (dust) at any location off-site.

For new developments near industrial sources, the existing land uses, and their approvals, must be considered and an industry has the right to object to a land use which may impact their ability to operate under their existing provincial approval. A developer can support compliance through design or mitigation (e.g. sealed windows, filtration systems, etc.) or collaborating on at-source mitigation with the industry.

5.5.3 Odour

Odour is the sensation when receptors in the nose are stimulated. Individual response to odour varies and is subjective. Whilst some contaminants are specifically regulated based on odour effects, there is no formal regulation with respect to mixed odours. The MECP applies odour-based standards to locations “where human activities regularly occur at a time when those (odour emitting) activities regularly occur,” such as residences and public meeting places. Most odours do not pose a health risk, but exposure to some can lead to headaches, nausea and other symptoms. They are generally only considered and regulated by the MECP in the presence of persistent complaints. Typically, odours are assessed against the following five criteria:

- Frequency – how often a receptor is likely to be exposed to an odour;
- Intensity – strength of the odour;
- Duration – the length of time the odour is likely to be detected by a receptor;
- Offensiveness – subjective character of odour – pleasantness or unpleasantness (hedonic tone); and

- Location – where the odour is likely to occur and with respect to land use. For example, rural smells would be more accepted in rural areas versus urban areas.

5.6 Transportation

The Subject Site is located 130 m east of Highway 407. The impact of transportation related air pollutants (TRAP) is well recognized in urban centres, including many existing buildings and sensitive communities in the Greater Toronto Area. The health risk from TRAP is higher within 500 metres of highways with an average daily traffic volume (ADTV) of 100,000 vehicles or more, and within 100 metres of arterial roads with an ADTV of 15,000 vehicles or more (Toronto Public Health, 2017).

Given that Toronto Public Health considers TRAP to be a major local contributor to air pollution and of amplified adverse health impacts due to air pollution, developers should consider reducing exposure to TRAP by implementing on-site mitigation measures for developments residing in close proximity to highways and roads. Highway 407, a highway with significant traffic volumes, is located within 500 m of the Site. Given that the proposed development is located within 125 m of a high traffic volume, mitigation measures should be considered. As such, a review of TRAP emissions or implementation of mitigation measures is warranted at this time.

6 Description of Development and Surrounding Area

6.1 Proposed Development

The proposed development will consist of adding an additional two (2) storeys to the previously approved 6-storey retirement home building. The proposed 8-storey retirement home will have 147 units with a gross floor area of approximately 12,767 m^2. The approved 5-storey long term care facility building is currently under construction and will remain unchanged, which includes 256 beds and a gross floor area of approximately 17,344 m^2.

6.2 Nearby Industries – Database Searches

A search of environmental risk databases (National Pollutant Release Inventory (NPRI), Environmental Activity and Sector Registry (EASR) and Environmental Compliance Approvals (ECAs)) identified no addresses of interest from an air quality perspective that are located within 1,000 m of the proposed development.

Facilities with approvals for water and sewer systems only are not listed as they are not anticipated to contribute to air emissions.

The following one (1) facility identified in the database searches were considered insignificant from an air quality perspective. These are summarized in Table 2, below:

Table 2. Identified Facilities Considered Insignificant or Not Applicable

Location	Facility	Approval	Description/Assessment
4100 Dundas Street	Corporation of Burlington Fire Station No. 7	EASR – Standby Power System	Insignificant, emergency power equipment only.

6.3 Site Visit Observation

A site visit was conducted by Scott Grant-Hose of EXP on October 2nd, 2024. The site visit comprised a walk through within a one-kilometer (1,000 m) radius (Study Area) of the Subject Site to characterize the operations of facilities in the area and identify odours and potential emissions which may affect the proposed development. Meteorological conditions during the site visit (approximately 8:00 am to 1:00 pm) were partly cloudy, with temperatures ranging from 13 to 15°C, with wind ranging between approximately 14 to 21 km/h from the northwest. The Site is occupied by ongoing construction of the long-term care facility.

The Subject Site is surrounded by residential, institutional, parkland, and community facilities. During the site visit, no significant odours were detected within the 1 km Study Area radius of the Site, with the exception of odours typical of an urban environment (traffic and restaurant activity). An Odour Screening Assessment was completed as part of the D-6 Land Compatibility Study completed by EXP in 2021. No odours were detected above the Nasal Ranger's measurable threshold level, illustrated in Figure 5 (Appendix A). (see section 6.4). A 2024 Nasal Ranger survey was not warranted given no change in significant sources were identified.

The nearest off-site residences are located 75 m east of the Subject Site on the west side of Steeplechase Drive. No residential property in the early stages of development were observed during the Site reconnaissance. In addition, a review of the City of Burlington's online Development Application Map application viewer indicated no nearby development applications within the 1 km study area.

Table 3 lists commercial, light industrial, and industrial facilities that were observed within the Study Area but not identified in the database searches.

Table 3. Industrial/Commercial Facilities Observed during Site Visit Not Identified in Database Searches

Location	Facility	Description/Assessment	Potential issue?
4040 Palladium Way	Black Swan Pub & Grill Rajdhani Sweets & Restaurant Alton Physiotherapy Palladium Dental Walkers Line Veterinary Hospital Truly Salon and Spa The Petway Pet Hotel & Spa Golf Home Simulator & Lounge	Restaurant Restaurant Physiotherapist office Dental office Veterinary office Salon Pet Day Care and Grooming Indoor golf	No, based on inferred operations
4050 Palladium Way	Alton Kids Child Care Center	Child care center	No, based on inferred operations
4085 Palladium Way	Halton Court Services – Provincial Offences Office	Courthouse	No, based on inferred operations
4131 Palladium Way	Neelands Group Limited	Commercial refrigeration/HVAC equipment supply, installation and service	No, based on inferred operations
4551 Palladium Way	Bos & Co	Shoe wholesaler corporate office	No, based on inferred operations
4585 Palladium Way	UltraStor	Self-storage facility	No, based on inferred operations
4265 Thomas Alton Blvd	Walk-In Clinic Family Practice Pharmasave 20/20 Eye Care Burlington Village Dental Centre Lazeez Shwarma iButcher and iGrocery Beauty Mark Salon and Spa Bombay Chili City South Pizza Flair Cleaners Alton Village Convenience Kidsville Thiara Supermarket Burlington Skin & Wellness Derma Skin Institute Poblano Mexicana All-Risks Insurance Brokers	Medical clinic Pharmacy Eye care facility Dental office Restaurant Butcher Beauty salon Restaurant Restaurant Dry cleaner Convenience store Childcare center Grocer Spa Laser & Medical Spa Restaurant Insurance office	No, based on inferred operations

Location	Facility	Description/Assessment	Potential issue?
3105-3185 Walkers Line	Real Estate Boutique Brokerage Company (#3185) Basket Tree (#3173) Shore Capital (#3171) KM Legal & Immigration (#3167) Bliss Medical (#3163) Saurin Patel CPA (#3159) Margaret's Alterations and Dry Cleaning (#3155) Peter Galopoulos Sterling Mutuals Inc. (#3153) Ultimate Length Hair Extensions (#3145) JD Osteopathy Burlington (#3141) Minrate Realty Inc. (#3137) A Furry Affair Dog Grooming (#3131) StillOsteo (#3127) Dr. Loan A. Bui (#3123) Rose's Nail Care (#3105)	Real estate office Gift shop Real estate office / mortgage broker Law office Spa (permanently closed) Accountant Alterations and dry cleaning Financial planning office Hair extension technician Osteopathy office Real estate office Dog grooming Human and animal osteopathy Chiropractor Nail salon	No, based on inferred operations
3061 Walkers Line	Farm Boy Pedi N Nails The Bone & Biscuit Halton Medix Walk-in Clinic Beavertails Best Brains Learning Centre Yoga Tastic Le Diperie	Grocer Nail salon Pet supply store Medical office Restaurant Tutoring Yoga studio Restaurant	No, based on inferred operations
3051 Walkers Line	Shoppers Drug Mart Meridian Credit Union iCare & Wear Children's Dental Healthcare Define Hair Design and Spa Pita Pit Starbucks Domino's Pizza Camila Iconic Mexican Food	Retail pharmacy Credit union Eye care centre Dental office Beauty salon Restaurant Restaurant Restaurant Restaurant	No, based on inferred operations
3041 Walkers Line	LCBO	Liquor store	No, based on inferred operations
2991 Walkers Line	McDonald's	Restaurant	No, based on inferred operations

Location	Facility	Description/Assessment	Potential issue?
2971 Walkers Line	Esso Circle K Tim Hortons	Gasoline service station Convenience store Coffee shop	No, based on inferred operations
2951 Walkers Line	Halton Family Health Centre Walk-In Clinic Dynacare Laboratory and Health Service Centre Shoppers Simply Pharmacy Dental Health Group Doctors Naturae Halton Physiotherapy Cente Urogen Erectile Dysfunction Hometown Hearing Centre	Doctor's office Medical lab Pharmacy Dental office Practice/Dispensary Medical clinic Medical clinic Hearing clinic	No, based on inferred operations
2931 Walkers Line	TD Canada Trust	Bank	No, based on inferred operations
3650 Dundas Street	Burlington Aligned Chiropractic Dundas Family Dental Navi's Beauty Salon China Taste Gino's Pizza	Chiropractor office Dental office Beauty salon Restaurants	No, based on inferred operations
3600 Dundas Street	Booster Juice Halibut House Credit Valley Oral Surgery Burlington Brewery	Restaurant Restaurant Dental clinic Restaurant	No, based on inferred operations
3550 Dundas Street	H&R Block Jenny Spa Nails Global Pet Foods Dollar & More Party @ Discount Tommy Gun's Original Barbershop Bab Korean Food & BBQ The Orchard Children's Centre	Tax preparation service office Beauty salon Pet food store Discount store Discount store Barber Restaurant Daycare	No, based on inferred operations
3505 Dundas Street	Sundial Homes	Sales office	No, based on inferred operations
3500 Dundas Street	Variety Plus Headon Forest Animal Hospital Stacked Pancake & Breakfast House Subway	Convenience store Veterinary office Restaurant Restaurant	No, based on inferred operations

Location	Facility	Description/Assessment	Potential issue?
	Harveys	Restaurant	
	Tim Hortons	Restaurant	
	KFC	Restaurant	
	Soul Bowl Eats	Restaurant	
3450 Dundas Street	Play It Again Sports	Sporting goods store	No, based on inferred operations
	Arcadia Academy of Music	Music school	
	Orthodontist	Orthodontist office	
	Omac Martial Arts	Martial arts studio	
	Crock A Doodle	Children's party service	
	Scholars Education Centre	Education centre	
	Millcroft Physiotherapy	Physiotherapist office	
	Orange Theory Fitness	Fitness studio	
	Vision Clinic	Eye care centre	
	Edward Jones	Stock broker	
	Cobs Bread	Restaurant	
	Baskin Robbins	Restaurant	
	BarBurrito	Restaurant	
	Pita Nutso	Restaurant	
	Bombay's Chutney	Restaurant	
	Doma Sushi	Restaurant	
	Hangry Chicken	Restaurant	
	Gong Cha	Restaurant	
2900 Dundas Street	Longo's	Supermarket	No, based on inferred operations
4631 Palladium Way	Guidance Financial Services	Financial office	No, based on inferred operations
	White Rose Dental Studio	Dentist office	
	GCW Ventures	Outdoor sports equipment designer	
	Rimkus	Forensic consulting	
	Alton Village Medical Clinic	Medical office	
	Endorphins Health & Wellness Centre	Chiropractor/physio therapy office	

6.4 Odour Screening Assessment

During the Site visit the only odours noted by human senses were odours typical of an urban environment (traffic).

An odour screening assessment was conducted in conjunction with the previous D-6 site visit by EXP on August 02, 2021, to assess any potential off-site odour sources at the Subject Site.

At that time the Subject Site was a vacant lot with overgrown vegetation. Odour measurements were taken using a St. Croix Nasal Ranger Field Olfactometer at three (3) locations from approximately 10:50 am to 11:00 am, illustrated in Figure 4 (Appendix A). Meteorological conditions during the odour assessment were clear skies, temperature of approximately 21.8 °C, with wind ranging between approximately 2.1 to 10.5 km/h from the north/northwest. No odours were detected above the instrument's measurable threshold level at all locations. The only odours, as detected by human senses, were odours typical of an urban environment (traffic and restaurant activity), with no industrial source identified. No significant dust impacts, other odours, or off-site odours were noted at the Subject Site at the time of the site visit from approximately 10:30 am to 12:30 pm. During the site visit, no significant odours were detected within the 1 km Study Area radius of the Site, with the exception of odours typical of an urban environment (traffic and restaurant activity).

6.5 Site Meteorology

Based on five-year (August 2018 to July 2023) Environment Canada historical meteorological data from Toronto International Airport, approximately 35 km northeast of the Site, the annual resultant vector is from the northwest (288°) with an average wind speed of 3.97 m/s. Annual and seasonal wind rose diagrams showing wind direction (blowing from) and wind speed distribution are provided in Figures 1 to 5.

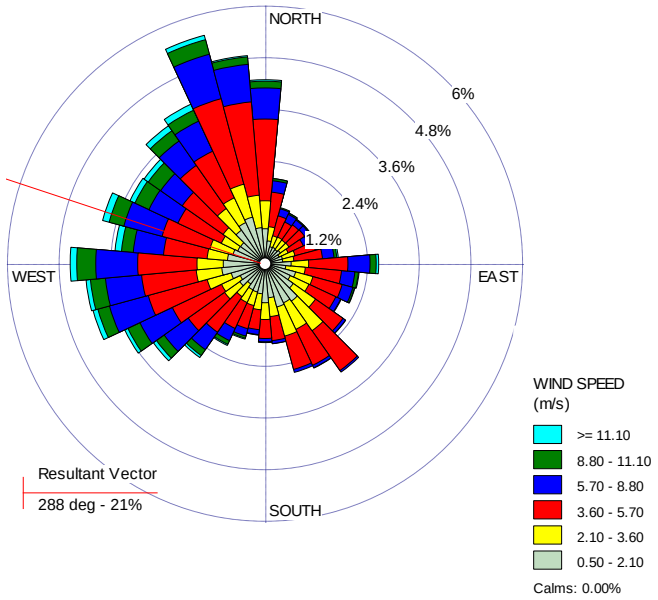


Figure 1. Annual Wind Rose – Toronto International Airport, Toronto, ON

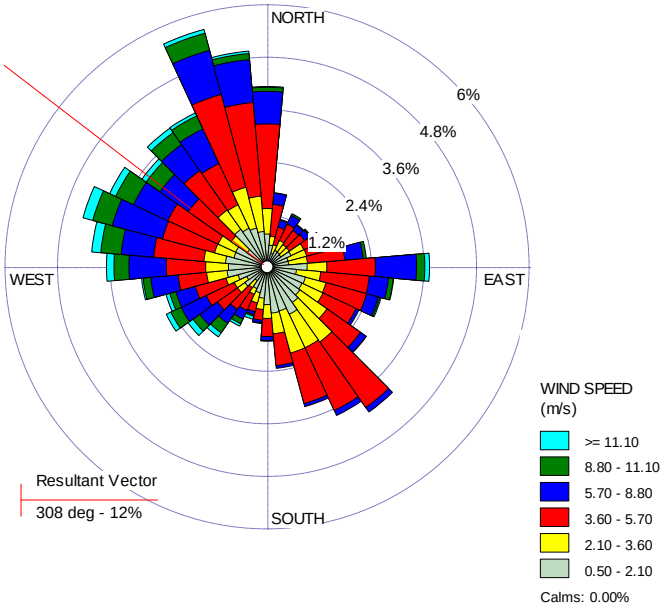


Figure 2. Spring Wind Rose – Toronto International Airport, Toronto, ON

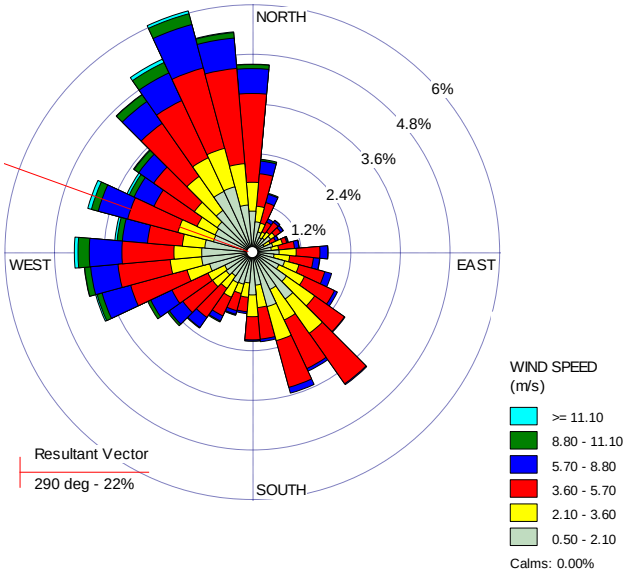


Figure 3. Summer Wind Rose – Toronto International Airport, Toronto, ON

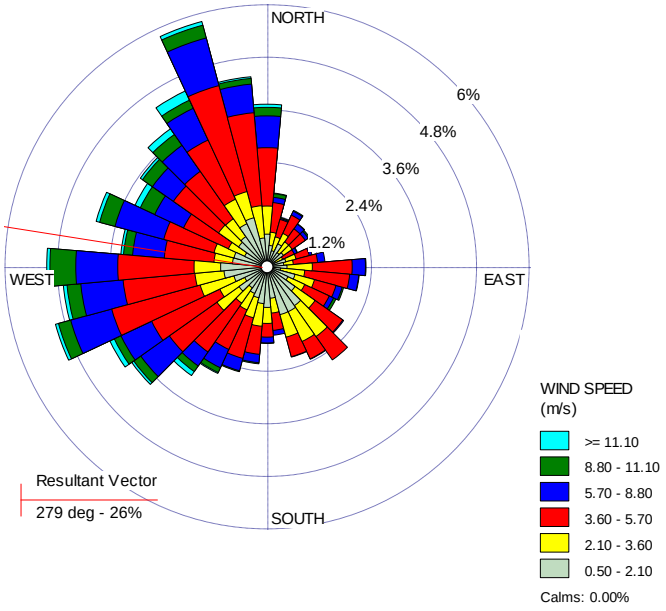


Figure 4. Fall Wind Rose – Toronto International Airport, Toronto, ON

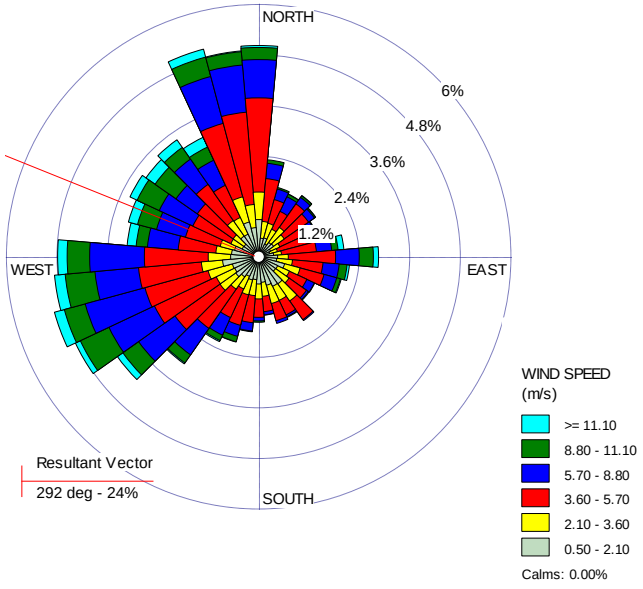


Figure 5. Winter Wind Rose – Toronto International Airport, Toronto, ON

7 D-6 Classification and Nearby Industries

Based on the database search results and the observations from the Site visit (Table 3), facilities considered for further assessment are provided in Table 4, along with their distance to the Subject Site, facility Class, potential air quality issues, and location (inside or outside) relative to the minimum separation distance and area of influence.

Table 4. D-6 Facility Classifications and Assessment

No.	Facility	Address	Distance to Site (m)	Class*	Potential Issue	Rationale for Classification	Issue Identified?**
1	Neelands Group Limited	4131 Palladium Way	40 m north	I	None. Refrigeration, HVAC and Energy design, engineering and servicing	Small scale, self-contained plant or building which produces/stores product which is contained in a package and has low probability of fugitive emissions, no outdoor storage of wastes or materials, and not an open process.	Yes, outside Minimum separation distance but inside area of influence. No odours or stack observed at the time of the Site visit.

Class I

Class II

Class III

7.1 Provincial Guidelines and Regulations for Potentially Incompatible Uses

The MECP D-6 Guideline and D-Series Guidelines and regulations used for assessing environmental compliance are used for assessing land-use compatibility. The proposed development is consistent with Provincial and Regional guidelines and policies as discussed in Section 5.4 of this study.

7.1.1 Air Quality Contaminants

Under Ontario Regulation 419/05 – Air Pollution – Local Air Quality (O. Reg. 419/05) of the Environmental Protection Act, a facility is required to meet prescribed standards for air quality contaminants at any location off-site.

For new developments near industrial sources, the existing land uses, and their approvals, must be considered and an industry has the right to object to a land use which may impact their ability to operate under their existing provincial approval. A developer can support compliance through design (e.g. removing elevated receptors), mitigation (e.g. sealed windows, filtration systems, etc.) or collaborating on at-source mitigation with the industry.

The compatibility of nearby industrial facilities was determined based on classification in accordance with MECP D-6 guidelines. The findings are summarized in Table 4 and below:

- One Class I facility was identified outside the minimum separation distance but inside the area of influence, hence further assessment or mitigation measures should be considered.

Further details are provided in Section 8.1.

7.1.2 Dust

Under Ontario Regulation 419/05 – Air Pollution – Local Air Quality (O. Reg. 419/05) of the Environmental Protection Act, a facility is required to meet prescribed standards for particulates (dust) at any location off-site.

For new developments near industrial sources, the existing land uses, and their approvals, must be considered and an industry has the right to object to a land use which may impact their ability to operate under their existing provincial approval. A developer can support compliance through design or mitigation (e.g. sealed windows, filtration systems, etc.) or collaborating on at-source mitigation with the industry. The potential impact of sources of dust are discussed in Section 8.2.

7.1.3 Odour

Odour is the sensation when receptors in the nose are stimulated. Individual response to odour varies and is subjective. Whilst some contaminants are specifically regulated based on odour effects, there is no formal regulation with respect to mixed odours. The MECP applies odour-based standards to locations "where human activities regularly occur at a time when those (odour emitting) activities regularly occur," such as residences and public meeting places. Most odours do not pose a health risk, but exposure to some can lead to headaches, nausea and other symptoms. They are generally only considered and regulated by the MECP in the presence of persistent complaints. Typically, odours are assessed against the following five criteria:

- Frequency – how often a receptor is likely to be exposed to an odour;
- Intensity – strength of the odour;
- Duration – the length of time the odour is likely to be detected by a receptor;
- Offensiveness – subjective character of odour – pleasantness or unpleasantness (hedonic tone); and
- Location – where the odour is likely to occur and with respect to land use. For example, rural smells would be more accepted in rural areas versus urban areas.

7.1.4 Traffic Related Air Pollution

The Subject Site is located 130 m east of Highway 407. The impact of transportation related air pollutants (TRAP) is well recognized in urban centres, including many existing buildings and sensitive communities in the Greater Toronto Area. The health risk from TRAP is higher within 500 metres of highways with an average daily traffic volume (ADTV) of 100,000 vehicles or more, and within 100 metres of arterial roads with an ADTV of 15,000 vehicles or more (Toronto Public Health, 2017).

Given that Toronto Public Health considers TRAP to be a major local contributor to air pollution and of amplified adverse health impacts due to air pollution, developers should consider reducing exposure to TRAP by implementing on-site mitigation measures for developments residing in close proximity to highways and roads. Highway 407, a highway with significant traffic volumes, is located within 500 m of the Site. As such, a review of TRAP emissions is warranted at this time.

TRAP mitigation strategies and good practices for residential buildings within an urban setting may include:

- Using air filtration systems to reduce contaminants in indoor air;
- Selecting fresh air intake locations and outdoor amenities away from roadways or loading docks;
- Optimizing timing and quantity of ventilation make-up air;
- Scheduling fresh air intake of HVAC units to avoid peak traffic volumes during rush hours;
- Using mechanical HVAC to create a positive pressure within the buildings (by providing more make-up air than is exhausted) to minimize air pollution infiltration;
- Placing outdoor amenities in locations with physical barriers from a TRAP source;
- Locating residential units and outdoor use areas (particularly ones for prolonged use) as far as possible from the roadways and buffered by transitional uses;
- Vegetation that is designed as a barrier (as a complement to other mitigation measures
- Installing physical barriers in areas of concern;
- Installing a vegetation buffer/barrier to block the property boundary from roadways and to filter emissions (coniferous plants are recommended for year-round efficacy;
- Management of outdoor activities;
- Consideration of prevailing winds when installing barriers or fresh air intakes.
- Including Environmentally Friendly opportunities such as, but not limited to, EV charging readiness, passive transportation, solar panel readiness, and solar lights.

In terms of land use planning at the site level, the following mitigation strategies may be considered:

- Mechanical rather than passive building ventilation with air particle filtration;
- Location of ventilation air intakes away from known pollution sources and roads; and,
- Optimizing timing and quantity of ventilation make-up air;

Based on a review of the architectural drawings for the proposed development traffic on this roadway can be compatible with the proposed development, provided mitigation measures, such as those listed above, considered during the detailed design phase.

7.1.5 Toxic (CRAIM Risk) Substances

A search of environmental risk databases (National Pollutant Reporting Inventory (NPRI), Environmental Activity and Sector Registry (EASR) and Environmental Compliance Approvals (ECAs)) did not identify any addresses located within 1000 m of the proposed development that would be considered a risk based on the revised CRAIM List of 174 substances contains. No facilities with charge, management or control of a listed substance that is at or above the quantity set out in column 3 of Schedule 1 of the E2 Regulations were identified.

8 Assessment – Potential Air Quality Impacts

8.1 General Air Quality Contaminants

4131 Palladium Way

The facility located at 4131 Palladium Way is occupied Neelands Group Limited is a commercial refrigerator and HVAC equipment supply, installation and service operation (Map Icon Number 1 on Figures 3 and 4). They provide refrigeration and HVAC services, sustainability & controls, equipment sales, energy management, and service/maintenance to support a broad range of industries from retail and commercial, industrial and institutional. It is a small scale, self-contained plant or building which produces/stores product which is contained in a package and has low probability of fugitive emissions, no outdoor storage of wastes or materials, is not an open process, and does not appear to be a waste disposal site or to generate any significant fugitive emissions or odours. As such, it has been assessed as a Class I facility. Neelands Group Limited is located approximately 70 m east of the Subject Site and is outside the minimum separation distance and inside area of influence as defined under the D6 Guidelines. During the site visit, no odour, dust, or noise emissions were detected in the vicinity of the facility.

Based on its NAICS code (42,23,42,33)it is wholesaling and rendering services to the sale of merchandise no significant emissions would be anticipated, hence no environmental permissions (EASR or ECA) were identified or anticipated for the facility. While no significant odours or air quality impacts are anticipated for this facility, air quality at the proposed Site can be protected with enforcement of the MECP approval process. It is anticipated that should operations at Neelands Group Inc. require an ECA for current or future emissions that approval would need to include assessment of the proposed development.

Based on the findings from the site visit and the inferred nature of the facilities' operation, Neelands Group Limited is not expected to pose an unacceptable air quality issue to the Subject Site.

It is noted that a large number of existing residences were observed to be present within the 1 km radius of the Subject Site, particularly to the south, east, and northeast. The nearest off-site residences are located approximately 70 m east of the Subject Site. Due to the presence of existing residential properties in the area and the requirements of facilities to meet O.Reg. 419/05, it is anticipated that, with respect to general air quality contaminants regulated under Ontario Regulation 419/05, the Subject Site is compatible with surrounding lands.

8.2 Dust

During the site visit, no significant fugitive dust emissions were observed on the Subject Site or within the 1 km Study Area radius. In addition, the surrounding road network is paved within the Study Area.

8.3 Odour

Odours are only required to be assessed at locations where human activity (receptors) is likely to occur. Nearby identified industries would not have been required to assess odours outside of their boundaries as a condition of their provincial Environmental Compliance Approval (ECA) applications if receptors did not exist at the time of their approval.

During the Site visit the only odours detected by human senses were odours typical of an urban environment (traffic). During the 2021 Odour Screening Assessment (refer to Section 3.4) conducted by EXP, no odours were detected above the Nasal Ranger's measurable threshold level. No significant dust impacts, other odours, or off-site odours were noted at the Subject Site at the time of the site visit from approximately 8:00 am to 1:00 pm. During that Site visit, no significant odours were detected within the 1 km Study Area radius of the Site.

8.4 Transportation Sources

Given that the Subject Site is located 130 m east of Highway 407, mitigation measures should be considered. TRAP mitigation strategies and good practices for residential buildings within an urban setting may include:

- Using air filtration systems to reduce contaminants in indoor air;
- Selecting fresh air intake locations and outdoor amenities away from roadways or loading docks;
- Placing outdoor amenities in locations with physical barriers from a TRAP source;
- Scheduling fresh air intake of HVAC units to avoid peak traffic volumes during rush hours;
- Using mechanical HVAC to create a positive pressure within the buildings (by providing more make-up air than is exhausted) to minimize air pollution infiltration;
- Installing physical barriers in areas of concern;
- Installing a vegetation buffer/barrier to block the property boundary from roadways and to filter emissions (coniferous plants are recommended for year-round efficacy; and
- Consideration of prevailing winds when installing barriers or fresh air intakes.
- Including Environmentally Friendly opportunities such as, but not limited to, EV charging readiness, passive transportation, solar panel readiness, and solar lights.

The closest railway, located approximately 2.3 km east to the Subject Site, is a CN main track freight rail line. This is outside the standard building setbacks (15m for spur and branch lines, 30 m for secondary and principle main, 300 m for Freight Rail Yard) for new residential developments recommended by the Railway Association of Canada and Federation of Canadian Municipalities Guidelines for New Development in Proximity to Railway Operations (May 2013).

9 Assessment of Elevated Receptors

Based on the above no facilities were identified with emissions that would have an increased impact on elevated receptors. It is anticipated that should emissions require an ECA for current or future emissions that approval would need to include assessment of the proposed development. No new facilities were identified that would impact elevated receptors.

Regardless, best practices of building pressurization, filtration and fresh air intake location in conjunction with TRAP mitigation measure are anticipated to be sufficient.

10 Conclusions

Based on the information obtained from the database searches, site visit, and web searches, the following findings have been obtained:

- The proposed location of the development is surrounded by light industrial, commercial, community, residential, parkland, and institutional facilities.
- During the Site visit the only odours detected by human senses were odours typical of an urban environment (traffic). During the 2021 Odour Screening Assessment conducted by EXP (refer to Section 3.4), no odours were detected at the Subject Site above the Nasal Ranger's measurable threshold level, illustrated in Figure 5 (Appendix A). During the site visit, no significant odours were detected within the 1 km Study Area radius of the Site.
- The compatibility of nearby industrial facilities was determined based on classification in accordance with MECP D-6 guidelines. The findings are summarized in Table 4, section 8.1 and below:
    - One (1) Class I facility was identified outside the minimum separation distance but inside the area of influence, hence further assessment or mitigation measures should be considered.

- The proposed development is located 130 m east of Highway 407. As such, TRAP emissions TRAP emissions strategies and good practices for residential buildings within an urban setting should be included in final design.

11 Recommendations

Based on the above, no changes to the surrounding facilities, database searches, or regulations from the previously approved assessment were identified. Similarly, there is no significant impact on the change in building height to eight (8) stories from six (6) stories. Accordingly, the proposed development is compatible with respect to air quality with the following recommendations previously approved.

While the potential impact of surrounding facilities is considered low it is recommended that:

- Best practices of building pressurization and filtration be included in the mechanical design to ensure that tenants have good air quality within the homes. Including but not limited to use of air filtration systems to reduce contaminants in indoor air and the selection of fresh air intake locations.
- Placing outdoor amenities in locations with physical barriers from a TRAP source;
- Central air conditioning is also recommended for all buildings by design to allow windows to remain closed, in order to reduce indoor sound levels and odours.
- Recommendations for TRAP mitigation measures provided in section 8.4 above to be considered as a precaution and as a general good practice for residential buildings in an urban setting.
- In addition, a warning clause be included in agreements of purchase and sale and lease/rental agreements covering potential emissions from the surrounding industrial lands as per MECP Guideline D-6-4 Mccr Bulletin No. 91003. An example is provided below:

Air Quality Warning Clause 1: “Purchasers/tenants are advised that due to the proximity of adjacent industries, odours from these facilities may at times be perceptible.”

12 References

1. Environment and Climate Change Canada, Reported Facility Greenhouse Gas Data, available at: Greenhouse Gas Reporting Program (GHGRP) - Facility Greenhouse Gas (GHG) Data - Open Government Portal (canada.ca)
2. Environment, Conservation and Parks Greenhouse Gas Emissions Reporting by Facility, available at: Greenhouse gas emissions reporting by facility - Datasets - Ontario Data Catalogue
3. Environment and Climate Change Canada, National Pollutant Release Inventory (NPRI), available at: Environment and Climate Change Canada - NPRI Data Search
4. Ontario Ministry of the Environment and Climate Change, Environmental Registry, available at: http://www.ebr.gov.on.ca/ERS-WEB-External/
5. Ontario Ministry of the Environment and Climate Change, Access Environment, available at: http://www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action
6. Environmental Compliance Approvals (ECA) database, available at https://www.ontario.ca/page/list-environmental-approvals-and-registrations
7. Ministry of the Environment and Climate Change (MECP). 1995. D-6 Compatibility between Industrial Facilities, July. Available at https://www.ontario.ca/page/d-6-compatibility-between-industrial-facilities
8. Major Industrial Accidents Council of Canada (MIACC). 1994. MIACC Lists of Hazardous Substances, October 1994.
9. Major Industrial Accidents Council of Canada (MIACC). 1994. Risk-based Land Use Planning Guidelines, June 1995.
10. Federation of Canadian Municipalities, The Railway Association of Canada (FAC/RAC) and DIALOG J.E. Coulter Associates Limited. 2103. Guidelines for New Development in Proximity to Railway Operations, Prepared for The Federation of Canadian Municipalities and the Railway Association of Canada.
11. City of Toronto. 2017. Reduced Health Risks form Traffic-Related Air Pollution (TRAP) in Toronto, prepared by Medical Officer of Health and Deputy City Manager, Internal Corporate Services. Available at: Reducing Health Risks from Traffic-Related Air Pollution (TRAP) in Toronto
12. D-2 Compatibility between Sewage Treatment and Sensitive Land Use, available at https://www.ontario.ca/page/d-2-compatibility-between-sewage-treatment-and-sensitive-land-use.
13. City of Toronto. Avoiding the TRAP: Traffic-Related Air Pollution in Toronto and Options for Reducing Exposure. Technical Report. October 2017.
14. Railway Association of Canada Railway Association of Canada, Canadian Rail Atlas, available at: RAC Canadian Rail Atlas (jmaponline.net)
15. MECP Guideline D-6-4 Mccr Bulletin No. 91003, available at: https://www.ontario.ca/page/d-6-4-mccr-bulletin-no-91003
16. EXP Services Inc., 2021, 4103 Palladium Way, Burlington, ON D-6 Land Use Compatibility – Air Quality Feasibility Study, December 12, 2021
17. Ontario Ministry of Municipal Affairs and Housing, Provincial Planning Statement,2024. Available at https://www.ontario.ca/files/2024-10/mmah-provincial-planning-statement-en-2024-10-23.pdf
18. Regional Municipality of Halton, The Regional Plan, May 16, 2024. Available at https://www.halton.ca/Repository/ROP-Office-Consolidation-Text

13 General Limitations

The information and conclusions in this report are considered to be privileged and confidential and have been prepared exclusively for *2669006 Ontario Inc. c/o Better Life Living*. The purpose of this report is to provide *2669006 Ontario Inc. c/o Better Life Living* with an assessment of the potential impacts from operations of commercial and industrial facilities where the proposed developments fall within the industrial facility Potential Influence Area.

The information presented in this report is based on information provided by others and visual observations as identified herein. Achieving the objectives stated in this report has required us to arrive at conclusions based upon the best information presently known to us. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. Professional judgment was exercised in gathering and analyzing the information obtained and in the formulation of the conclusions. Like all professional people rendering advice, we do not act as absolute insurers of the conclusions we reach, but we commit ourselves to care and competence in reaching those conclusions.

Any use which a third party makes of this report, or any part thereof, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Air quality conditions at various times may differ from those assessed. In addition, any changes to the proposed design or the introduction of new processes and/or sources may render the conclusions of this report inaccurate or invalid. In the event of any such changes, EXP should be contacted to re-evaluate the conditions within the assessed areas and make appropriate revisions to the original conclusions of this report.

We trust this summary report is satisfactory for your purposes. If you have any questions regarding our submission, please do not hesitate to contact this office.

Sincerely,

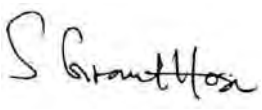
EXP Services Inc.



Amir Bahadori, M.Sc., P.Eng.
Senior Air Quality Engineer
Environmental Services

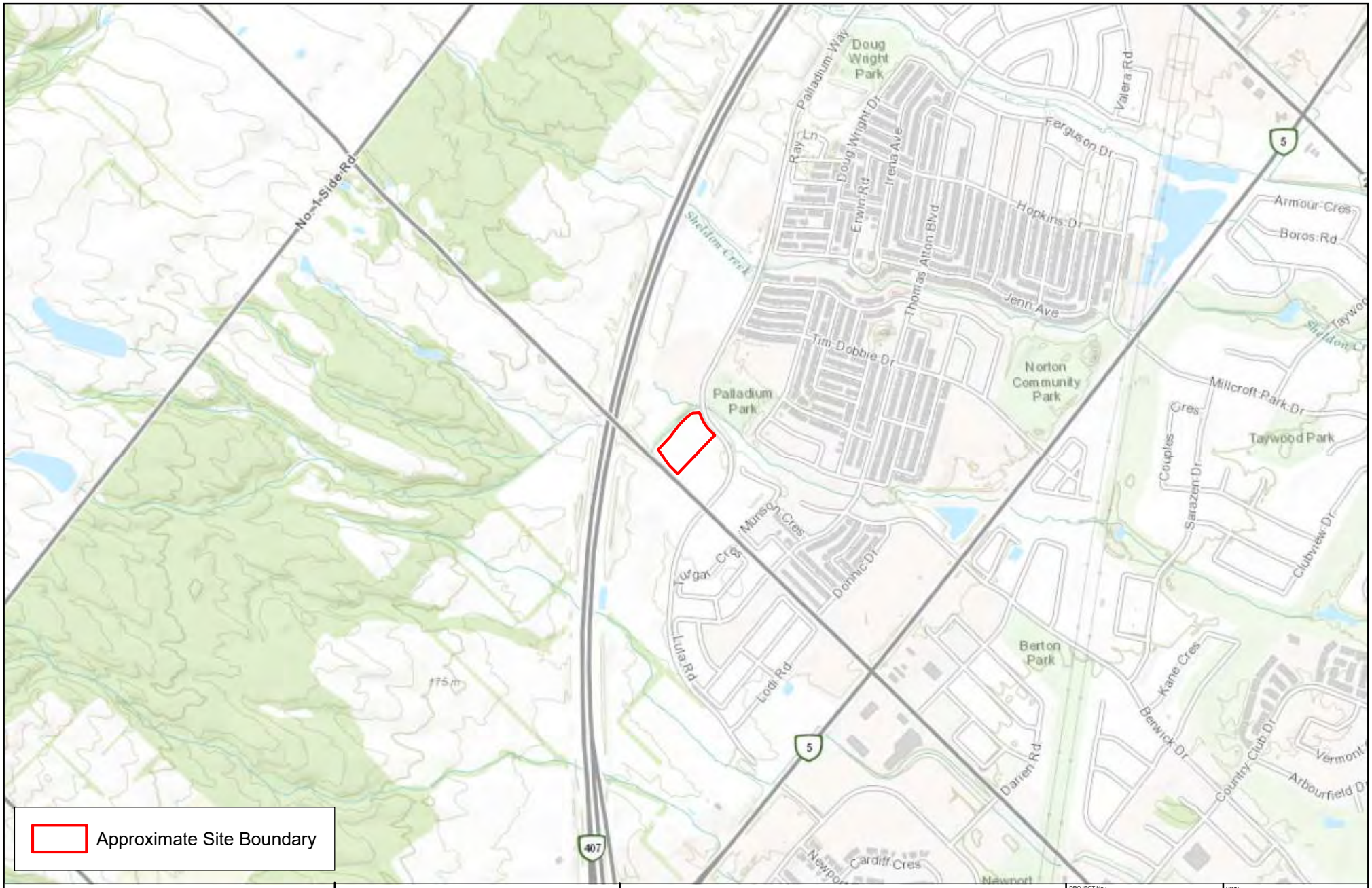


Ron Taylor, M.Sc., C.Chem., CIH
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Scott Grant-Hose
Environmental Specialist
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Appendix A – Figures



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www.exp.com

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• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

N

0 150 300 450 600 750 m

TITLE AND LOCATION:

SITE LOCATION PLAN
D-6 Air Study
4103 Palladium Way
Burlington, Ontario

PROJECT No.:	DWN:
GTR-00801656-H0	AC
SCALE:	CHKD:
AS NOTED	RT
DATE:	FIG. No.:
OCTOBER 2024	1



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TITLE AND LOCATION:

ZONING SURROUNDING PROPOSED DEVELOPMENT
D6 Air Study
4103 Palladium Way
Burlington, Ontario

PROJECT No.: GTR-00801656-H0	DWN: AC
SCALE: AS NOTED	CHKD: RT
DATE: OCTOBER 2024	FIG. No.: 2



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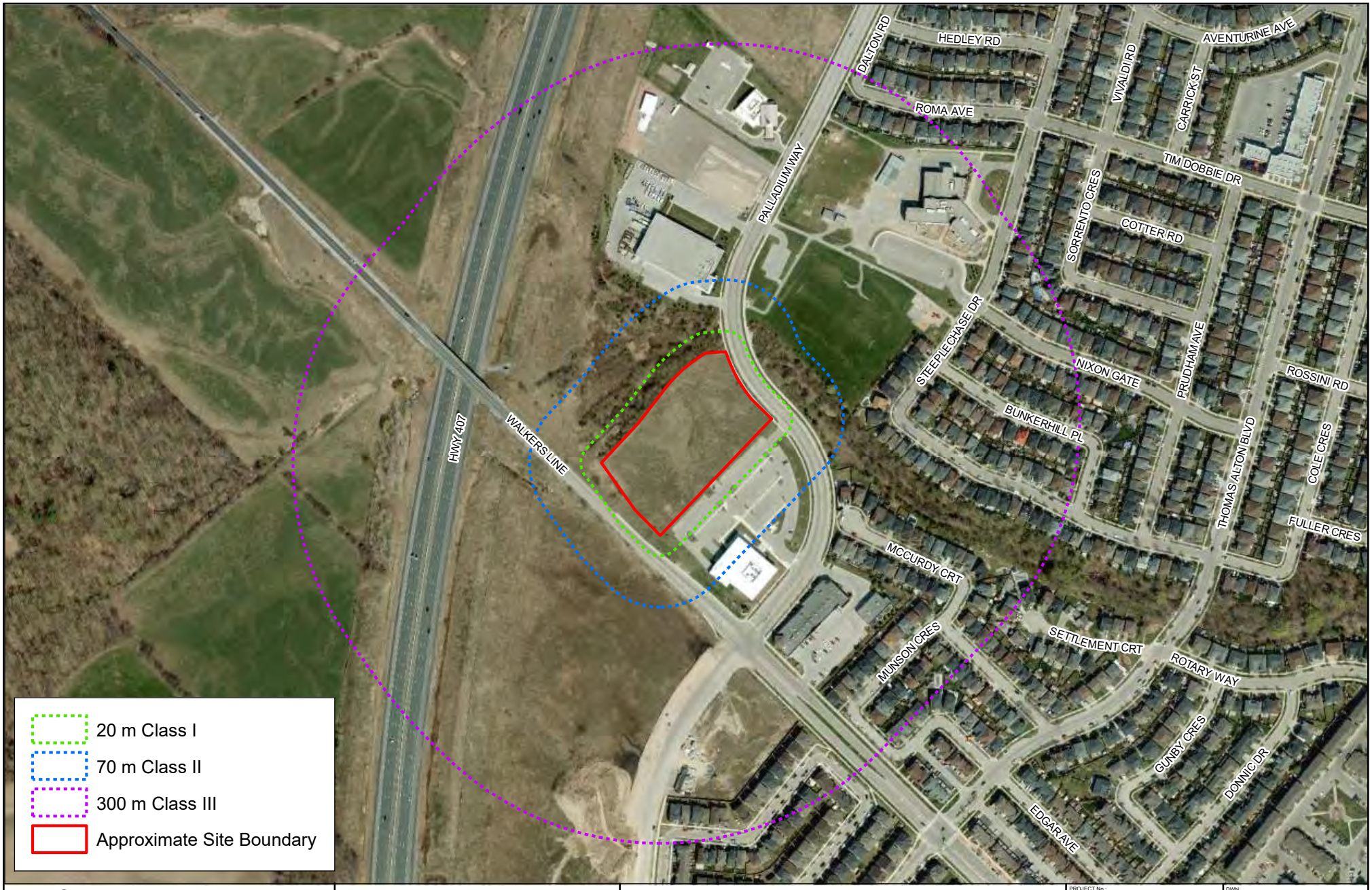
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0 100 200 300 400 500 m

TITLE AND LOCATION:

AREA OF INFLUENCE
D6 Air Study
4103 Palladium Way
Burlington, Ontario

PROJECT No.: GTR-00801656-H0	DWN: AC
SCALE: AS NOTED	CHKD: RT
DATE: OCTOBER 2024	FIG. No.: 3



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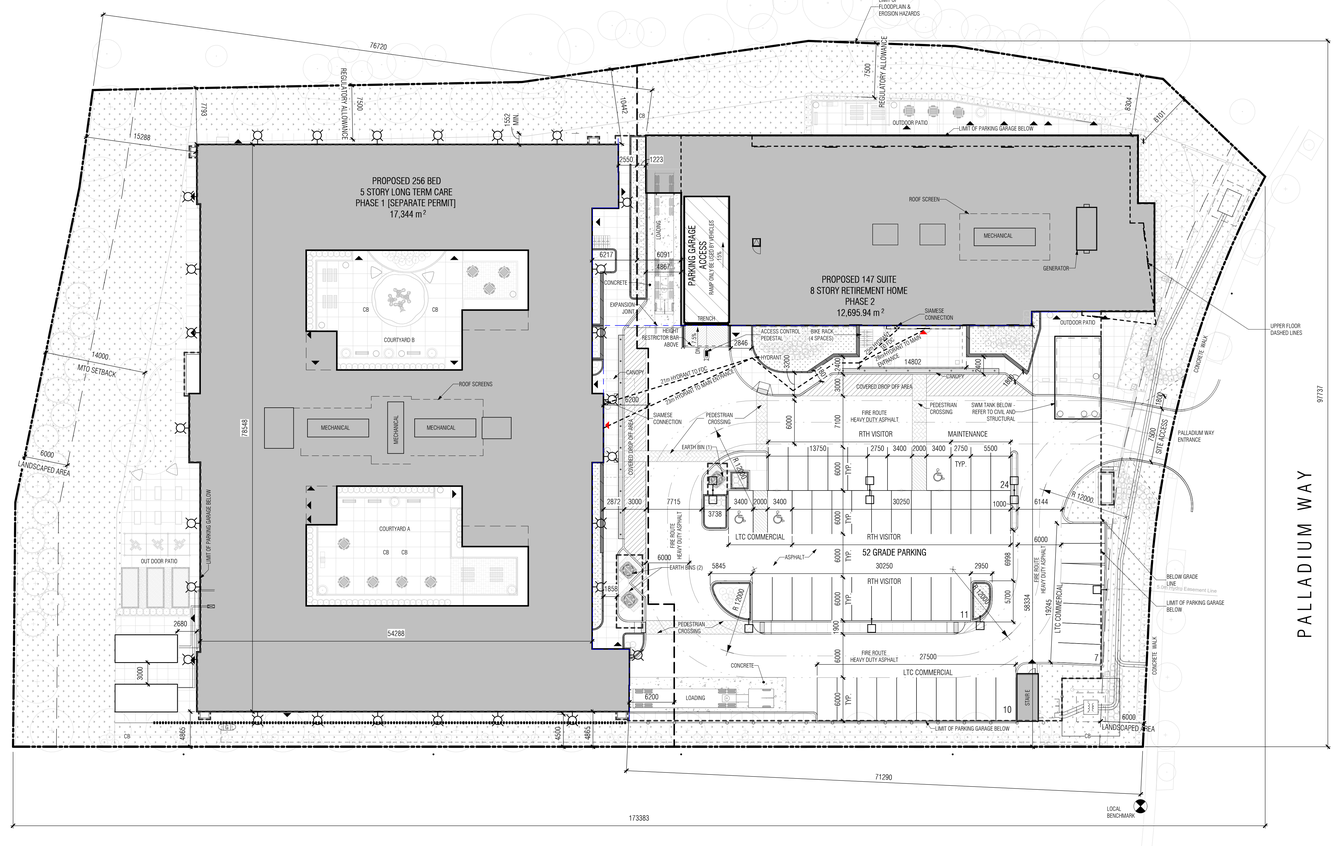
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TITLE AND LOCATION:

MININUM SEPARATION
D6 Air Study
4103 Palladium Way
Burlington, Ontario

PROJECT No.: GTR-00801656-H0	DWN: AC
SCALE: AS NOTED	CHKD: RT
DATE: OCTOBER 2024	FIG. No.: 4

Appendix B – Site Plan Drawings



1 A100 SITE PLAN

1 : 300



2 A100 LOCATION MAP - NTS

1 : 50

SITE STATISTICS

	REQUIREMENTS	PROPOSED	CONFORMS TO MUNICIPAL BY-LAW
ZONING DESIGNATION	BUSINESS CORRIDOR, EMPLOYMENT ZONE, BC1-005	BUSINESS CORRIDOR, EMPLOYMENT ZONE, BC1-XXX	YES
MINIMUM LOT AREA	0.4 ha	OVERALL SITE = 14.833 m² / (1.48 HECTARES)	YES
MINIMUM LOT FRONTAGE	45 m	80.7 m	YES
MINIMUM LOT WIDTH	45 m	97.7 m	YES
MINIMUM LOT DEPTH	N/A	173.4 m	YES
MINIMUM LOT COVERAGE	N/A	35% (USING BUILDING AREA)	YES
BUILDING AREA	N/A	LTC: 3,510 m² RETIREMENT: 1,694.95 m² TOTAL: 5,204.95m²	YES
MAXIMUM GROSS FLOOR AREA	LT: 3,509.76 m² L2-L5: 3,459.68 m² x 4 FLOORS = 13,834.72 m² LTC=17,344.5 m² LT: 1,691.26 m² L2-L5: 1,564.98 m² x 5 FLOORS = 7,824.9 m² RETIREMENT = 9,516.2 m² TOTAL = 26, 860.7 m² F.A.R. 26,861 m² / 14,833 m² = 1.82:1	LT: 3,509.76 m² L2 - L5: 3,408.68 m² x 4 FLOORS = 13,634.72 m² LTC = 17,344.5 m² R1: 1,694.95 m² R2 - R8: 1,571.57 m² x 7 FLOORS = 11,000.99 m² RETIREMENT = 12,695.94 m² TOTAL = 30,040.44 m² F.A.R. 30,040.44 m² / 14,833 m² =2.03	NO
MAXIMUM LOT COVERAGE	N/A	35% (USING BUILDING AREA)	YES
MINIMUM YARD REQUIREMENTS	FRONT YARD (E) = 6m - 9m REAR YARD (W) = 14m SIDE YARD (S) = 4.5m SIDE YARD (N) = 7.5m	LTC FRONT YARD (E) = 71.2m REAR YARD (W) = 15.2m SIDE YARD (S) = 4.8m SIDE YARD (N) = 7.8m RETIREMENT FRONT YARD (E) = 6.8m REAR YARD (W) = 70.7m SIDE YARD (S) = 58.3m SIDE YARD (N) = 8.3m	YES
MAXIMUM BUILDING HEIGHT	LTC: 5 STOREYS RETIREMENT: 6 STOREYS	LTC: 5 STOREYS RETIREMENT: 8 STOREYS	NO
MINIMUM LANDSCAPED OPEN SPACE	25% OF LOT AREA	25% OF LOT AREA	YES
MINIMUM LANDSCAPED BUFFER	6m ABUTTING A STREET GREATER THAN 26m (MAY 2m WALKWAY)	6m ABUTTING A STREET GREATER THAN 26M (ABUTTING PALLADIUM WAY: MAX 2m WALKWAY WITHIN BUFFER	YES
PARKING	MIN SIZE = 2.75m + 6 m 1LTC: 0.35 x 256 BEDS = 90 1RETIREMENT (1.6UNIT = 0.25VISITOR) =0.85 x 147 UNITS = 125 1MAINTENANCE SPACES = 3 1MED. OFFICE (150m²/100) x 6 = 9 1PHARMACY/RETAIL (100m²/100) x 3.5 = 4 1DAYCARE/PRO (705m²/100) x 4 = 29 TOTAL = 260 REQUIRED	MIN SIZE = 2.75m x 6m 52 AT GRADE 184 UNDERGROUND PARKING AT GRADE PARKING - 30 RECD VISITOR SPOTS - 3 MAINTENANCE SPOTS - 19 COMMERCIAL PARKING GARAGE - 164 LTC & RTH RESIDENTS - 20 COMMERCIAL TOTAL 236 SPACES PROVIDED	NO
DESIGNATED BARRIER FREE PARKING SPACES	TYPE A: (3.4m WIDE + 2m ACCESS) MIN 4 RECD TYPE B: (2.75m WIDE + 2m ACCESS) MIN 3 RECD	4 TYPE A PROVIDED (VAN ACCESSIBLE) 3 TYPE B PROVIDED TOTAL 7 BF SPACES PROVIDED WITH 2000 ACCESS AISLES	YES
MIN. DRIVING LANE WIDTH	6m	6m	YES
MIN. DRIVING LANE WIDTH	6m	6m	YES
MIN. NO OF LOADING SPACES	N/A	2 LOADING SPACES PROVIDED	YES
MIN. NO OF BICYCLE PARKING SPACES	4 SPACES RECD	8 SPACES PROVIDED	YES

GENERAL NOTES :

1. ALL WORK INVOLVED IN THE CONSTRUCTION, RELOCATION, REPAIR OF MUNICIPAL SERVICES FOR THE PROJECT SHALL BE TO THE SATISFACTION OF THE DIRECTOR OF PLANNING, PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT.

2. FIRE ROUTE SIGNS AND 3-WAY FIRE HYDRANTS SHALL BE ESTABLISHED TO THE SATISFACTION OF THE CITY FIRE DEPARTMENT AND AT THE EXPENSE OF THE OWNER.

3. MAIN DRIVEWAY DIMENSIONS AT THE PROPERTY LINE BOUNDARIES ARE PLUS OR MINUS 7.5 m UNLESS OTHERWISE STATED.

4. ALL DRIVEWAYS FROM THE PROPERTY LINES FOR THE FIRST 7.5 m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADES.

5. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING: BUILDING PERMIT, SEWER AND WATER PERMITS, ROAD CUT PERMITS, RELOCATION OF SERVICES, APPROACH APPROVAL PERMITS, ENCROACHMENT AGREEMENTS (IF REQUIRED), COMMITTEE OF ADJUSTMENT.

6. ABANDONED ACCESSES MUST BE REMOVED AND THE CURB AND BOULEVARD RESTORED WITH SOD AT THE OWNER'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC AND ENGINEERING SECTION, PUBLIC WORKS DEPARTMENT.

7. FOR VISIBILITY TRIANGLES AT THE VEHICULAR ACCESS POINTS, THE FOLLOWING NOTE TO BE PROVIDED: "5 METRE BY 5 METRE VISIBILITY TRIANGLES IN WHICH THE MAXIMUM HEIGHT OF ANY OBJECTS OR MATURE VEGETATION IS NOT TO EXCEED A HEIGHT OF 0.70 METRES ABOVE THE CORRESPONDING PERPENDICULAR CENTERLINE ELEVATION OF THE ADJACENT STREET."

8. ALL SIGNS SHALL COMPLY TO SIGN BY-LAW No. 10-197

9. ALL FENCES SHALL COMPLY TO FENCE BY-LAW No. 10-142

10. "CAUTION: NOTWITHSTANDING CURRENT SURFACE CONDITIONS, THE PROPERTY HAS BEEN DETERMINED TO BE AN AREA OF ARCHAEOLOGICAL POTENTIAL. ALTHOUGH AN ARCHAEOLOGICAL ASSESSMENT IS NOT REQUIRED BY HALTON REGION, THE PROPONENT IS CAUTIONED THAT DURING DEVELOPMENT ACTIVITIES, SHOULD DEERY'S BURIED ARCHAEOLOGICAL MATERIALS BE FOUND ON THE PROPERTY, THE MINISTRY OF HERITAGE, SPORT, TOURISM AND CULTURE INDUSTRIES (MHSTCI) SHOULD BE NOTIFIED IMMEDIATELY (416.314.7143). IN THE EVENT THAT HUMAN REMAINS ARE ENCOUNTERED DURING CONSTRUCTION, THE PROPONENT SHOULD IMMEDIATELY CONTACT BOTH MHSTCI AND THE REGISTRAR OR DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE MINISTRY OF SMALL BUSINESS AND CONSUMER SERVICES (416-326-8392)."

NOTES:

1. SIDEWALKS SHALL BE A MINIMUM OF 1.5m WIDE THROUGHOUT THE SITE, UNLESS OTHERWISE NOTED.

2. MINIMUM PARKING SPACE SIZE SHALL BE 2.75m X 6m WITH AN AISLE WIDTH OF 6m.

3. FIRE ROUTE SHALL HAVE A MINIMUM CENTERLINE TURNING RADIUS OF 12m

4. ALL PEDESTRIAN SIDEWALKS TO HAVE A SLOPE NO GREATER THAN 5%.

5. SIGN PERMITS ARE REQUIRED FOR ALL SIGNS ON SITE, INCLUDING CONSTRUCTION OR DEVELOPMENT SIGNS.

6. BARRIER-FREE PARKING POST & SIGNAGE TO COMPLY WITH MUNICIPALITY ACCESSIBILITY DESIGN STANDARDS

7. ACCESSIBILITY PAVEMENT MARKING TO COMPLY WITH MUNICIPALITY ACCESSIBILITY DESIGN STANDARDS

8. DURABLE TRAFFIC PAINT TO BE USED FOR ALL PAVEMENT MARKINGS

9. PROVIDE TACTILE WARNING SURFACE INDICATOR AT CURB, COMPLY WITH MUNICIPALITY ACCESSIBILITY DESIGN STANDARDS. TACTILE WARNING STRIP: 'ALERTCAST CAST-IN-PLACE, DETECTABLE WARNING SYSTEM, COLOUR TBD. TRUNCATED DOME PATTERN, AS PER ADA DESIGN STANDARDS. OR APPROVED EQUAL

10. GAS METER LOCATION, REFER TO MECHANICAL DRAWINGS

11. DIRECTIONAL SIGNAGE REQUIRED.

12. BIKE RACK LOCATIONS, REFER TO LANDSCAPE DRAWINGS

13. BENCH LOCATIONS, REFER TO LANDSCAPE DRAWINGS

14. FIRE ACCESS ROUTE SIGN, GRAPHICS TO COMPLY WITH MUNICIPALITY AND FIRE DEPARTMENT STANDARDS

15. IN-GROUND GARBAGE BINS, REFER TO STRUCTURAL DRAWINGS. COORDINATE INSTALLATION AND CONCRETE PAD

16. STORM WATER, REFER TO CIVIL DRAWINGS

17. TRANSFORMER ON CONCRETE PAD, REFER TO ELECTRICAL DRAWINGS

18. EXTERIOR LIGHT STANDARD, REFER TO ELECTRICAL FOR CONCRETE BASE

19. FOR FUTURE ELECTRIC VEHICLE CHARGING STATION, REFER TO ELECTRICAL DRAWINGS

20. WATERLINE TO BE INSTALLED BEFORE GAS LINE, TO BE COORDINATED BY GC

SITE LEGEND:

SYMBOL	DESCRIPTION
	PROPERTY LINE
	NEW CONTINUOUS CONCRETE CURB
	NEW LANDSCAPE SETBACK
	BUILDING FOOTPRINT
	LANDSCAPING. SEE LANDSCAPING DRAWINGS FOR DETAILS.
	TACTILE WARNING STRIP. 'ALERTCAST CAST-IN-PLACE, DETECTABLE WARNING SYSTEM IN BLACK, TRUNCATED DOME PATTERN, AS PER ADA DESIGN STANDARDS OR APPROVED EQUAL.
	NO-PARKING PAINT
	BF PARKING ACCESS AISLE
	PEDESTRIAN CROSSWALK
	SNOW STORAGE
	PRIMARY BUILDING ACCESS LOCATION
	SECONDARY BUILDING ACCESS LOCATION
B	BOLLARD, SEE LANDSCAPE DRAWINGS FOR DETAILS.
	FIRE ROUTE.
	BICYCLE RACK. SEE LANDSCAPE DRAWINGS FOR DETAILS
	BARRIER FREE ACCESSIBLE PARKING STALL COMPLETE WITH ACCESSIBLE PARKING SIGNAGE AT THE END OF EACH STALL.
	"ONE WAY" SIGNAGE
	"FIRE ROUTE" SIGNAGE.
	AREA DRAIN (AS PER CIVIL)
CB	CATCH BASIN (AS PER CIVIL)
	UNDERSLAB DRAIN (REFER TO STRUCTURAL)
	CONCRETE SLAB SLOPES (REFER TO STRUCTURAL)
	AREA LIGHT - EXTERIOR POLE
	WALL SCONCE - EXTERIOR WALL
	DOWNLIGHT - EXTERIOR RECESSED
	PLANTER / SEATING WALL - SEATING WALL 400MM WIDE / 350MM HIGH - PLANTER WALL 200MM WIDE / 350MM HIGH - PARKING PLANTER WALLS, 200MM WIDE / HEIGHT TO BE COORDINATED WITH GRADING AS REQUIRED BY PLANTING DEPTHS ALL PLANTER WALLS TO BE COORDINATED WITH STRUCTURAL, GRADING AND LANDSCAPING

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REVISIONS

No.	For:	Date:
1	ISSUED FOR COORDINATION	2024.04.10
To: (version)	For:	Date:

Issue Table

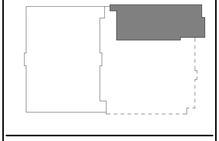
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Design Sign-Off

PRINT NAME:

CLIENT SIGNATURE:

DATE:

ARCHITECT SIGNATURE:

DATE:

Seal:

North Arrow:

PROJECT NORTH
TRUE NORTH

Architect:

Owner:

SAM ESPOSTO | ARCHITECT INC.
548 UPPER JAMES ST. HAMILTON, ON. L9C 2Y4
T. 905.383.7500 F. 905.383.5700

Project:

PROPOSED RETIREMENT HOME - BETTER LIFE MAPLE VILLA

4103 PALLADIUM WAY

Drawing Title:

SITE PLAN

DRAWN By:	HN	SCALE:	As indicated
Checked By:	MS	Plot Date:	2023.09.18
Project Date:	2023.09.18		
Project No.	23008		

Drawing No. A100

Sheet version. 1



1
A401

SOUTH ELEVATION

1 : 100



2
A401

NORTH ELEVATION

1 : 100

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No.	For:	Date:
2	ISSUED FOR COORDINATION	2024.04.10
1	ISSUED FOR COORDINATION	2024.01.31
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DATE:

ARCHITECT SIGNATURE:

DATE:

Seal:

North Arrow:



Architect:

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Project:

PROPOSED RETIREMENT HOME - BETTER LIFE MAPLE VILLA

4103 PALLADIUM WAY

Drawing Title:

EXTERIOR ELEVATIONS

DRAWN By:	HN	SCALE:	1 : 100
Checked By:	MS	Plot Date:	2023.09.18
Project Date:	2023.09.18		
Project No.	23008		

Drawing No.: A401

Sheet version.: 2



1 A402 WEST ELEVATION

1 : 100



2 A402 EAST ELEVATION

1 : 100



3 A402 PERSPECTIVE VIEW FROM LEFT HAND

1 : 1



4 A402 PERSPECTIVE VIEW FROM RIGHT HAND

1 : 1

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REVISIONS

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2	ISSUED FOR COORDINATION	2024.04.10
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Sheet version. 2