

City of Brampton

Socio-Economic Environment Report

**Intermodal Drive & Region of Peel Watermain
Extension to Gorewood Drive**

Municipal Class Environmental Assessment

September 12, 2025

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Intermodal Dr. & ROP Watermain Extension to Gorewood Dr.
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Prepared for City of Brampton

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1 Introduction

Arcadis was retained by the City of Brampton to prepare a Socio-Economic Environment Report in support of the Schedule 'B' Municipal Class Environmental Assessment (MCEA) for the Intermodal Drive and Region of Peel watermain extension to Gorewood Drive.

1.1 Background

Intermodal Drive is presently a four-lane industrial collector road with a posted speed limit of 50km/h which terminates approximately 160 metres west of Gorewood Drive, a two-lane local road with a rural cross-section. The existing portion of Intermodal Drive provides access to adjacent large-scale logistics businesses and is located in one of the largest warehousing and light manufacturing hubs in Canada. On the west side of Gorewood Drive, there are single-family residential properties which are zoned Residential Rural Estate 2 ('RE2') under the City of Brampton's Zoning By-law. The lands to the east and north are bound by the Claireville Conservation Area (CCA), a significant natural area that is managed by the Toronto Region and Conservation Authority (TRCA).

1.2 Objectives

The primary objective of this report is to identify whether Intermodal Drive should be extended to Gorewood Drive from a socio-economic perspective and, if so, whether one of the alternative alignments developed as part of this EA process is preferred. Consideration was given to guidance from a range of policy documents across various levels of government to better understand the vision and planning context within the EA Study Limits. Implications for health, safety, accessibility, inclusivity and community cohesiveness were considered, while also weighing the importance of goods movement as a key driver of the local economy.

The EA Study Limits, which included the upper block of the Gorewood Drive estate properties, was generally used for the development of alternative alignments, while the Broader Study Area was referenced to gain a more fulsome understanding of the surrounding area. Both the EA Study Limits and Broader Study Area are delineated in **Figure 1** below.

The map illustrates the project area for the Highway 407 ETR. The **EA Study Limits** are shown in orange, covering a section between Gorewood Drive and Intermodal Drive. The **Broader Study Area** is outlined in purple, extending from Goreway Drive to Steele Avenue East. The map includes labels for Gorewood Drive, Intermodal Drive, Highway 407 ETR, Goreway Drive, and Steele Avenue East. It also shows Nattress Pond, Simon Grant Ponds, and the Parkshore Golf Club. A north arrow is in the top right corner.

The City of Brampton's and Region of Peel's primary objective of undertaking this EA process is to address the lack of direct, multi-modal and public access between the eastern terminus of Intermodal Drive and Gorewood Drive. This disconnect among adjacent, complementary land uses results in the following transportation and infrastructure network deficiencies under existing conditions:

- Imposes barriers for active users
- Poses challenges for efficient goods movement circulation
- Inhibits optimal routing of City transit/maintenance vehicles
- Does not allow for the necessary redundancy in the transportation network in case of an emergency
- Compromises the performance of underground infrastructure (i.e. gap in watermain)

2 Planning Policy & Context

At the onset of this EA, and in collaboration with City staff, the project team undertook an extensive review of City of Brampton policy documents that were determined to have relevance for this study. The key findings of this review are described below:

2.1 Brampton Plan (2024)

The recently adopted City-wide Official Plan (referred to as the 'Brampton Plan') evolved from the results of a pivotal visioning exercise published in 2018 entitled the 'Brampton Vision 2040: Living the Mosaic'. The Brampton Plan guides the City's planning and development to the year 2051.

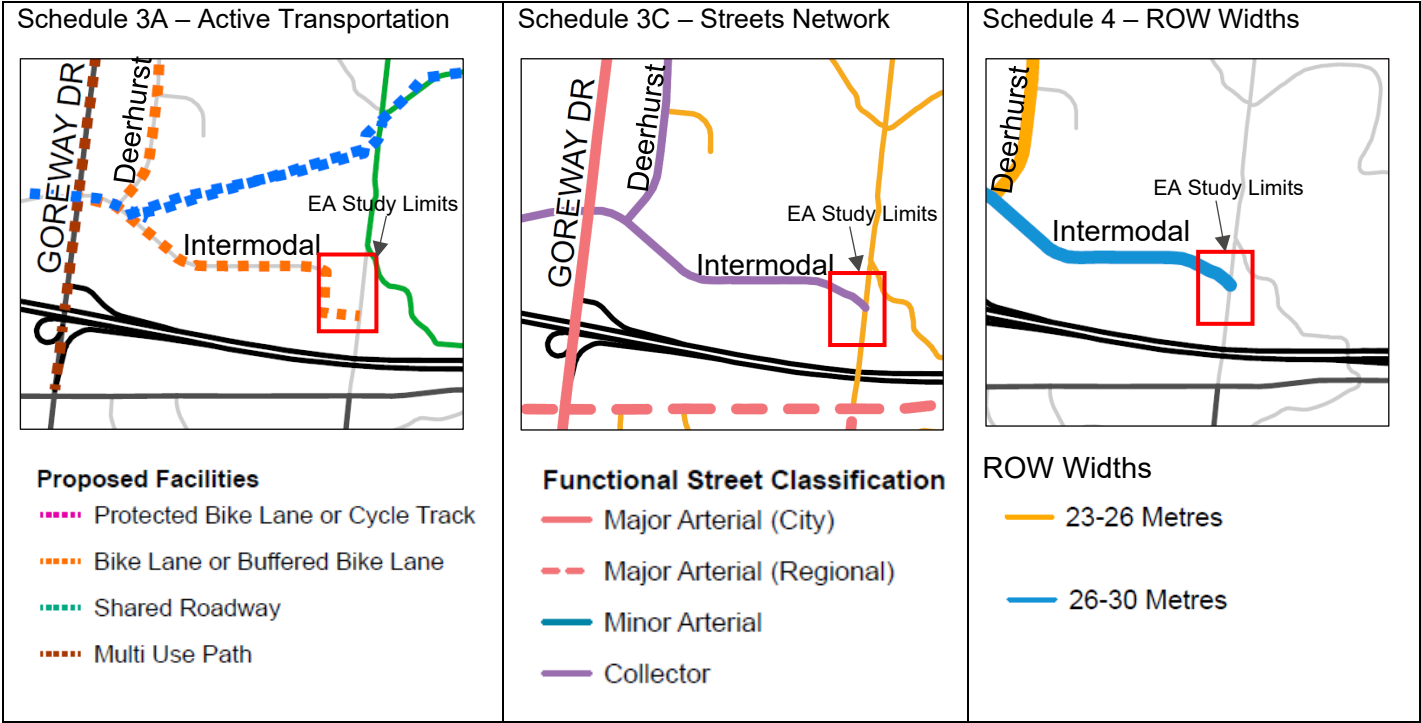
Within Brampton Plan, the EA Study Limits are generally classified as an 'Employment' area which is bound by a Natural Heritage System to the north and east, encompassing the Claireville Conservation Area.

The following specific references to the Intermodal Drive extension were observed through a review of this document:

- The Brampton Plan identifies the extension of Intermodal Drive to Gorewood Drive in Schedule 3C – Streets Network. The alignment appears to be curved; however, this plan is intentionally conceptual and does not include any property fabric for reference.
- Schedule 4 indicates a right-of-way range of 26 to 30 metres is appropriate for Intermodal Drive, given its classification, context and overall function within the City's transportation network. This range is consistent with the existing section of Intermodal Drive west of the EA Study Limits which has a 30m ROW.
- Schedule 3A identifies a potential active transportation link in the form of bike lanes or buffered bike lanes along Intermodal Drive east of Goreway Drive and through the existing private access at 835 & 845 Intermodal Drive; however, it is understood that this link is highly conceptual and subject to further review to determine appropriate active transportation facilities. It is assumed that any extension of Intermodal Drive would also be required to accommodate active users within a consolidated ROW to maximize development potential of adjacent lands and conform to the City's complete streets policies.
- Schedule 3A also identifies the expansion of the Claireville Conservation Area trail network with a connection near the Deerhurst Drive & Intermodal Drive intersection. Both of these transportation linkages aim to achieve the City's objectives of creating a more compact, walkable City which can also serve the municipality's significant industrial and goods movement needs.

Relevant extracts from Schedules 3A, 3C and 4 of the Brampton Plan (2024) are provided in **Figure 2** below.

Figure 2 – Relevant Images from Brampton Plan (2024) Schedules



2.1.1 Population Assessment

As indicated in the Brampton Plan, Brampton’s population is expected to increase significantly by 2051 to reach 1 million residents, representing roughly 40% growth over existing conditions. With this significant increase in population, it is recognized that there needs to be substantial investment in sustainable transportation infrastructure to reduce reliance on the private automobile as the primary means of transportation, especially given that vehicle emissions were determined to be the largest contributor of greenhouse gases within Brampton.

The City has also established ambitious sustainable mode share targets which are described further in Section 2.3 to help guide this modal shift incrementally.

2.1.2 Employment Areas

According to Brampton Plan, approximately 60% of jobs within Brampton are related to industrial sectors such as manufacturing, transportation and warehousing, while the remaining 40% consist mostly of small-scale industrial employment opportunities such as commercial service uses.

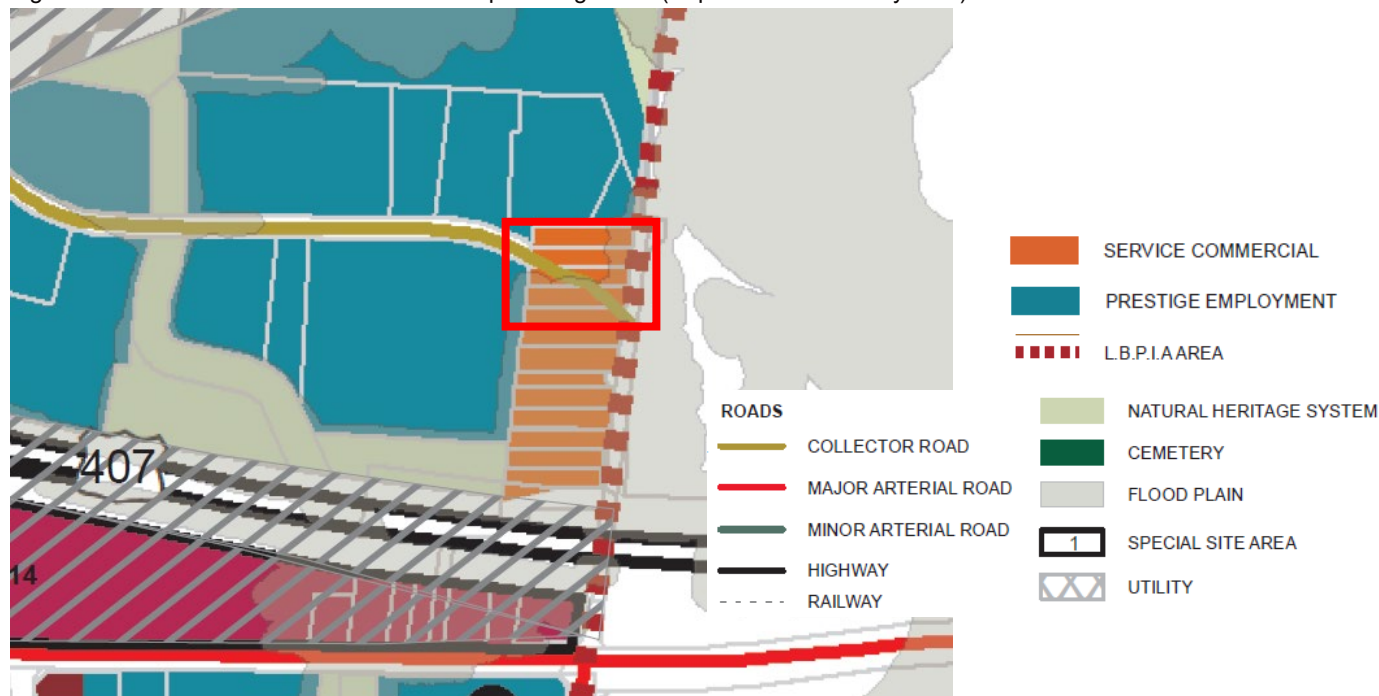
These employment statistics help to underscore the importance of industrial sectors as part of Brampton’s economy and, by extension, the need for an efficient and accessible transportation network to service these vital areas employment hubs, including the area within the EA Study Limits.

2.2 Airport Intermodal Secondary Plan (Area 4)

The EA Study Limits fall within the Airport Intermodal Secondary Plan (Area 4) policy area, a supporting document to the Brampton Plan which was passed by City Council in December 2021 and provides strategic direction to guide the long-term development within this significant industrial area in the City of Brampton.

The Secondary Plan Schedule identifies the Intermodal Drive extension to Gorewood Drive within the upper block of the Gorewood Drive estate properties, as shown in **Figure 3** below. Although this link is purely illustrative, it provides an indication that the extension of Intermodal Drive to Gorewood Drive would be beneficial to support the long-term economic viability but that its property impacts should be limited.

Figure 3 – Intermodal Drive Extension Conceptual Alignment (Airport Rd. Secondary Plan)



Source: Airport Intermodal Secondary Plan (Area 4) Schedule

2.3 Brampton Transportation Master Plan Update (2015)

The City of Brampton Transportation Master Plan (TMP) Update, published in 2015, defines ambitious City-wide targets for sustainable modes which include a more than two-fold increase in the walk, bike and transit proportion of overall trips from 2011 to 2041, as below:

- Walk & Bike Share – increase from 3% (2011) to 10% target (2041)
- Transit Share – increase from 9% (2011) to 20% target (2041)

It should be noted that the Brampton Plan (2024) has provided updated targets to align with the City's ultimate planning year of 2051, consisting of 11% for active transportation and 25% for transit.

As described in the TMP, achieving these targets requires filling gaps in the active transportation network to create a more fine-grained network and a shift in mindset to prioritizing sustainable modes over private automobiles, while also recognizing that Brampton's economy is heavily dependent on efficient and reliable goods movement operations. As such, the Brampton TMP Update alludes to the need for increased multi-modal connectivity to achieve the City's aggressive mode share targets and strengthen economic growth.

Consistent with the Brampton Plan (2024) as shown previously in **Figure 2** above, Figure 4 of the Brampton TMP Update identifies the specific need for an active transportation connection between Intermodal Drive and Gorewood Drive.

2.4 Brampton Active Transportation Plan (2019)

The Brampton Active Transportation Plan was developed as a short-term recommendation of the Brampton TMP Update (2015) to help achieve the City's ambitious 10% active transportation mode share targets by 2041.

In concert with the Brampton Plan (2024) and Brampton TMP Update (2015), the AT Plan (2019) identifies the need to close gaps in the cycling network and provide a formal extension of the active facilities between the eastern terminus of Intermodal Drive and Gorewood Drive.

This document indicates a long-term plan to implement active transportation facilities along both sides of the existing section of Intermodal Drive west to Goreway Drive; however, given that it is classified as a collector street and not an arterial, it received an overall low priority ranking for any retrofit upgrades. As such, there is significant uncertainty as to the nature and timing of any future potential upgrades along this corridor west of the EA Study Limits.

2.5 Brampton Complete Streets Guide (2023)

The City of Brampton is in the later stages of establishing guidelines to support the development of new streets or the retrofit of existing streets to allocate more space for sustainable modes. The existing Intermodal Drive cross-section west of the EA Study Limits includes just a 1.5-metre sidewalk on the north side and no dedicated cycling facilities along the corridor, therefore this configuration does not align with the complete street vision in its current form.

Demonstration cross-sections are included for a variety of road widths and contexts to demonstrate what is possible within a given ROW. For example, if Intermodal Drive was extended with a consistent 30m ROW through the EA Study Limits, there are opportunities to accommodate active transportation facilities on both sides of the road to support both pedestrians and cyclists which would significantly improve connectivity for vulnerable road users, while providing access to newly-created development blocks

within the Gorewood Drive properties. With a narrower right-of-way width, there may need to be some compromises to prioritize cross-section elements that are considered most important.

This policy document also discusses the importance of a context-sensitive approach in which the design speed is equal to the posted speed. To that end, Employment Collector Streets such as Intermodal Drive should be designed to accommodate a reduction in design and posted speeds of 40km/h to support the City of Brampton and Region of Peel's shift towards achieving Vision Zero. The Brampton Complete Streets Guide provides direction on potential cross-section elements and facility widths to demonstrate the level of transformation that would need to occur for streets of varying contexts to be considered 'complete' such as dedicated space for active users on both sides. In an industrial context, overall active usage is typically low enough that a sidewalk or a multi-use path can operate without significant mobility restrictions for users.

It is noteworthy that future iterations of the Brampton Complete Streets Guide are also expected to include a framework to support the development of locally specific Multi-Modal Level of Service (MMLOS) criteria to highlight and evaluate deficiencies, as well as address gaps in the transportation network in a consistent manner.

3 Land Use Assessment

3.1 Indigenous Lands

The EA Study Limits are located within the Treaty Lands and Territory of the Mississauga's of the Credit First Nation, referred to as the Head of the Lake Treaty. This agreement was formalized through the signing of Treaty 14 on September 5, 1806 and also includes Oakville, Mississauga and part of Burlington.

3.2 Existing Land Uses

The single-family detached homes which currently exist along Gorewood Drive were mostly constructed in the 1950s, according to publicly available aerial imagery, while development on Intermodal Drive east of Goreway Drive and the development of adjacent large-scale logistics uses, including light manufacturing and warehousing, began around 2004. The development of the industrial area followed the expansion of the surrounding road network to support increased truck traffic and the opening of key highway linkages such as the Highway 407 ETR in 1997.

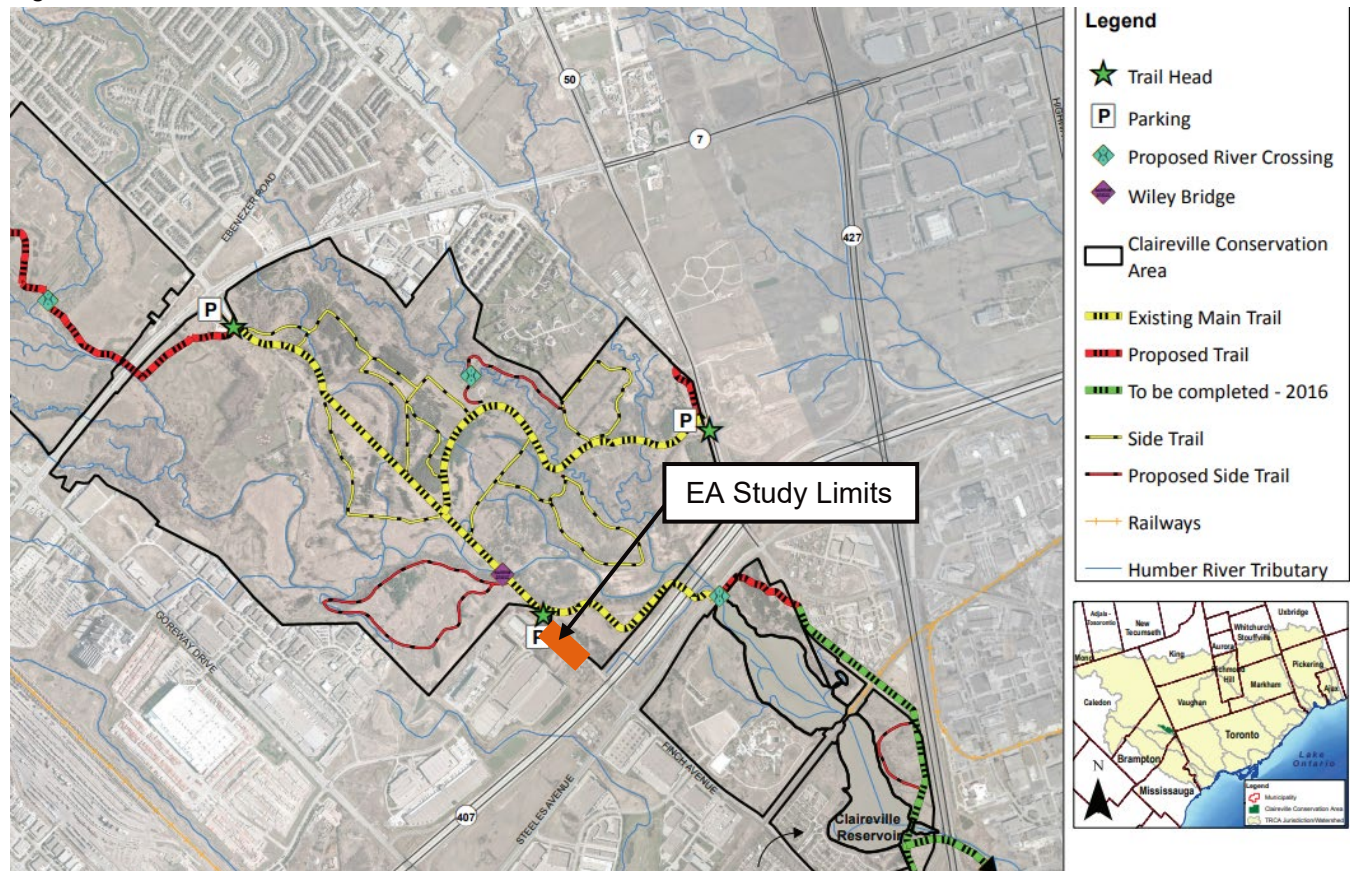
The Claireville Conservation Area located to the north and east of the EA Study Limits is an approximate 540-hectare protected area which was acquired by Toronto Region and Conservation Area (TRCA) in 1957 to allow for the construction of a reservoir after destruction caused by Hurricane Hazel and is one of the largest areas of land owned by TRCA. One of the three trail heads providing access to the main

pathway system within this significant natural area is located at the north end of Gorewood Drive, as shown in **Figure 4** below.

3.3 Proposed Land Uses

As alluded to previously in Section 2.2, within the EA Study Limits, the Secondary Plan established a land use framework to support the incremental rezoning of the Residential Rural Estate 2 (RE2) properties on Gorewood Drive to Service Commercial uses in order to facilitate a broad range of development types which would complement the existing Prestige Employment (e.g. manufacturing/logistics) development along Intermodal Drive to the west and the Claireville Conservation Area to the north. As defined in the Secondary Plan, the Service Commercial umbrella of zoning permissions could include small-scale retail, convenience stores, service uses, restaurants, recreation facilities, hotels, banquet halls, small offices and financial institutions.

Figure 4 – TRCA Trail Network



4 Alternative Solutions

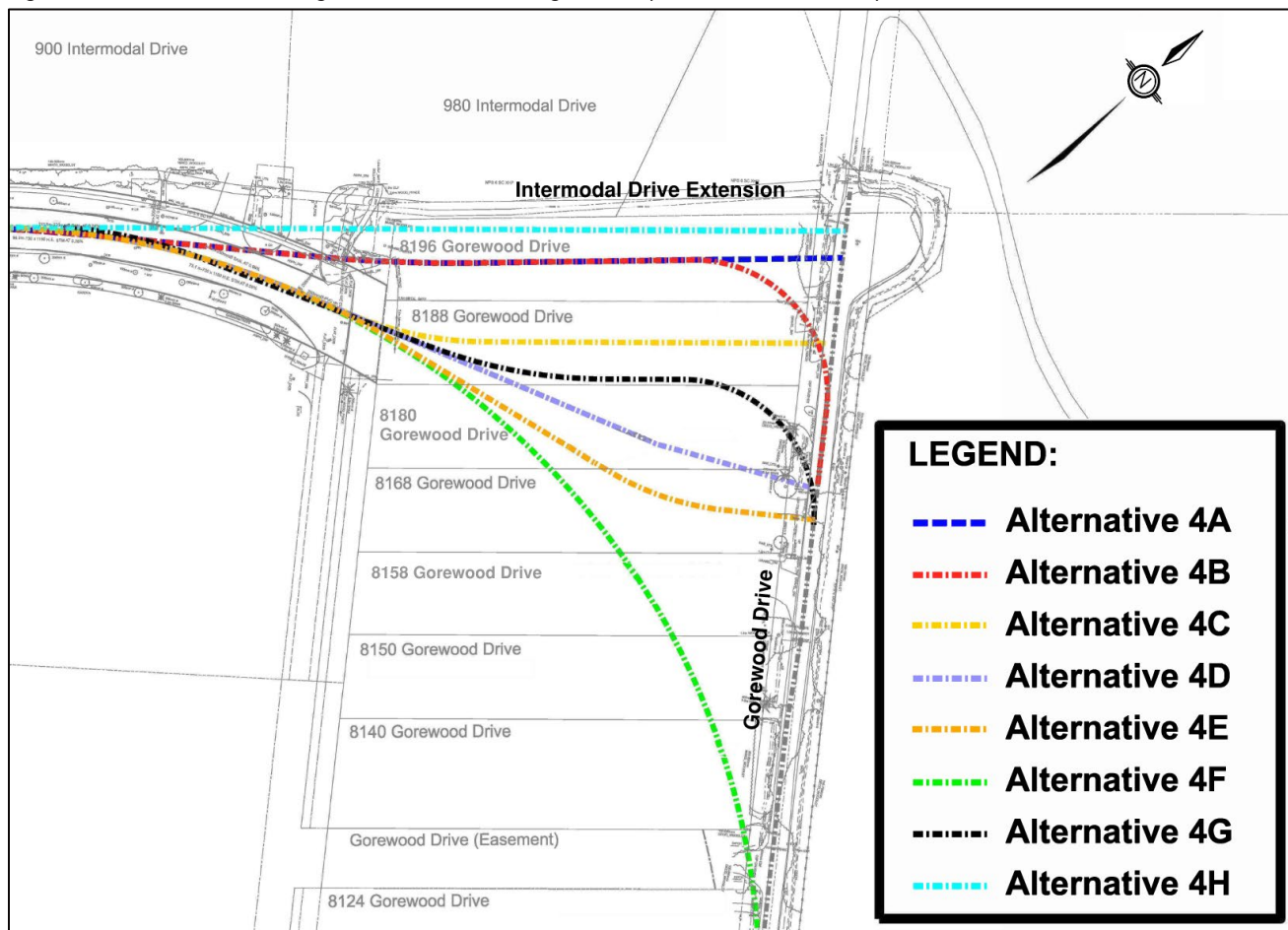
In order to address the deficiencies identified through the EA Problem Statement outlined in Section 1.3, four (4) high-level alternative solutions were developed as part for this EA study and are provided below, along with a brief rationale for options that are being ruled out as part of this initial screening exercise from a socio-economic perspective:

- **Alternative 1 - 'Do Nothing' ✖**
 - Alternative 1 was not carried forward, as it does not align with the key City planning policy documents, allow for the efficient circulation for goods movement, nor does it resolve existing active transportation barriers that are present between the existing industrial/ logistics uses along Intermodal Drive, the Claireville Conservation Area to the north and the future service commercial uses envisioned within the Gorewood Drive properties.
 - This option is also not compatible with the Region of Peel's desire to close the loop in the watermain network which currently exists between Intermodal Drive and Gorewood Drive and is identified as one of the primary objectives of this EA study.
- **Alternative 2 - Isolated Transportation improvements (No Extension) ✖**
 - Alternative 2 proposes isolated geometric and signal phasing modifications at the key study area intersections to alleviate bottleneck conditions experienced along Goreway Drive, including the implementation of a dual eastbound left-turn and overlapping signal phasing with the westbound right-turning movements at the Goreway Drive & Steeles Avenue East intersection. Please refer to the Traffic Analysis Report for more information.
 - Similar to Alternative 1, this alternative does not align with the key City planning policy documents of establishing a multi-modal connection between Intermodal Drive and Gorewood Drive, allow for the efficient circulation for goods movement or City maintenance vehicles, nor does it resolve existing active transportation barriers between the existing industrial/ logistics uses along Intermodal Drive, the TRCA lands to the north and the Gorewood properties. This option is also not compatible with the Region of Peel's desire to close the loop in the watermain network which currently exists between Intermodal Drive and Gorewood Drive and is identified as one of the primary objectives of this EA study.
- **Alternative 3 - Active Transportation Link Only ✖**
 - This alternative is an improvement over Alternatives 1 and 2 in terms of achieving more cohesive pedestrian and cycling linkages; however, it does not resolve existing issues with respect to efficient circulation for goods movement or accommodating redundancy in the transportation network.
- **Alternative 4 – Intermodal Drive Extension to Gorewood Drive ✔**
 - Eight (8) sub-options of Alternative 4 were developed to further investigate the potential extension of Intermodal Drive to Gorewood Drive, as shown in **Figure 5** below.

- It should be noted that any of these alignment options would require the implementation of some minor isolated intersection modifications which are much less invasive and costly in comparison with those outlined in Alternative 2, as outlined below:
 - Introduce a southbound left-turn protected-permitted phase at the Goreway Dr. & Intermodal Dr. intersection as a result of the moderate increase in attractiveness of Intermodal Drive as its role and function within the broader transportation network would evolve to permit through-traffic. Please refer to the Traffic Analysis Report for more information.

Based on the evaluation of alternative solutions developed as part of this study which considered a broad range of factors beyond social impacts alone, Alternative 4 was carried forward for further evaluation as part of this EA process. Further analysis of alternative alignments is supported by numerous key policy planning documents published by both the City of Brampton and Region of Peel, as indicated in the preceding section of this report.

Figure 5 – Alternative 4 – Long List of Alternative Alignments (Alternatives 4A to 4H)



5 Alternative Alignments

As indicated in the preceding, Alternative 4 (extend Intermodal Drive) was carried forward for the development of eight sub-options and, based on an initial screening exercise, five alignments underwent a more detailed evaluation as part of the EA process:

- **Alternative 4A – Realign Intermodal Dr. to a Tight 80-degree Turn (Elbow)**
 - Realign the eastern terminus of Intermodal Drive to match the north property line of 8196 Gorewood Drive and transition to Gorewood Drive with an ‘elbow’ configuration.
- **Alternative 4B – Realign Intermodal Dr. to a Tight Curved Alignment**
 - Realign the existing eastern terminus of Intermodal Drive to match the north property line of 8196 Gorewood Drive and transition to Gorewood Drive with a continuous 45-metre centreline radius.
- **Alternative 4D – Extend Intermodal Drive to a T-intersection**
 - Extend Intermodal Drive extension along its existing tangent with a slight deflection west of Gorewood Drive to accommodate an approximate 80-degreed intersection.
- **Alternative 4F – Extend Intermodal Dr. to a Large Curved Alignment**
 - Alternative 4F accommodates an approximate 250-metre radius, allowing for a continuous transition from Intermodal Drive to Gorewood Drive.
 - This alternative was based on the 2003 subdivision design plans developed for Intermodal Drive and adjacent lands.
- **Alternative 4G – Extend Intermodal Dr. to a Tight Curved Alignment**
 - Extend Intermodal Drive, straddling the shared property boundaries of 8188 and 8180 Gorewood Drive and transition to Gorewood Drive with a continuous 45-metre centreline radius.

Alternatives 4A, 4B, 4D, 4F and 4G are shown in **Appendix A**.

6 Socio-Economic Evaluation of Alternative Alignments

A review of the social implications of implementing Alternatives 4A, 4B, 4D, 4F and 4G is provided below:

6.1 Streetscape Elements

All 5 alignments could potentially accommodate sustainable streetscape elements to encourage and promote the use of active or sustainable forms of transportation. Based on the demonstration cross-

sections provided in the Brampton Complete Streets Guide (2023), a 26-metre ROW could support in-boulevard active transportation facilities that meet the minimum clear widths, vehicle lanes wide enough to accommodate WB-20 tractor trailer design vehicles, as well as a mature tree canopy along most of the corridor.

In order to ensure the health and well-being of active users and encourage use of non-auto modes of travel, a healthy tree canopy is essential. Appropriate tree species planted within the corridor will help to achieve the City's overall objective of planting 1 million trees in City-owned parks, greenspaces and public ROWs. These trees should be native, salt-resilient species to increase their chances of survival adjacent to vehicle travel lanes and mitigate the impacts of the 'heat island' effect.

Alternative 4F promotes higher operate speeds which could potentially impact the survivability of tree plantings within the ROW boulevard in the long-term due to increased adverse environmental impacts such as higher exposure to salt spray and exhaust fumes, thereby jeopardizing the creation of a mature tree canopy to support a pleasant environment to encourage active mobility.

6.2 ROP Healthy Development Assessment

The Region of Peel Healthy Development Assessment (HDA) User Guide for Institutional, Commercial and Industrial (ICI) uses was published in 2023 and evolved from the Peel Healthy Development Index (2009), an academic paper which considered the correlation between physical activity and various features of the built environment. It is noteworthy that the HDA ICI User Guide shares a similar vision as the City of Brampton's Sustainability Community Development Guidelines (2013) which aims to establish eco-friendly best practices and goals to ensure healthy and livable communities.

The HDA Industrial, Commercial and Institutional (ICI) Scorecard was last revised in 2023 and is included in **Appendix B**. Specifically within the HDA ICI User Guide, the following core elements were reviewed against the 5 alternative alignments for the Intermodal Drive extension, as detailed below:

➤ **Density**

- Resulting properties for Alternatives 4A, 4B, 4D and 4G are generally anticipated to be of sufficient size and depth to support a variety of Service Commercial uses, as envisioned by the Secondary Plan. Alternative 4F, however, has more significant property impacts which may result in remnant/undevelopable property parcels and impacts its ability to achieve any specific density targets.
- Exact details regarding the density will need to be determined in consultation with the City of Brampton through future potential development application processes for the Gorewood Drive properties.

➤ **Service Proximity**

- With the extension of Intermodal Drive to Gorewood Drive, walking distances between complementary uses will decrease significantly to make active transportation options safer

and more attractive, as well as potentially accommodate more efficient transit circulation and coverage within the EA Study Limits and broader Study Area.

- Accommodating active transportation facilities such as a sidewalk or MUP on both sides of the Intermodal Drive extension allows for the installation of safe and accessible transit stops and coverage in both directions and would be generally achievable with all 5 alternatives, although Alternative 4F would create barriers in implementing north-south pedestrian crossings as a result of higher operating speeds which are not compatible with the Brampton Complete Streets Guide (2023).

➤ **Land Use Mix**

- Land use mix will consist of a broad range of compact Service Commercial uses, as dictated by the Airport Intermodal Secondary Plan (Area 4).
- Allows for synergy between adjacent large-scale logistics uses to the west and Claireville Conservation Area to the north and increases feasibility of shorter trips which are more likely to occur using active modes.
- Any of the five alternatives can generally support a land use mix, although Alternative 4F may limit property parcel size and developability through the creation of more remnant parcels.

➤ **Street Connectivity**

- The extension of Intermodal Drive would close the existing gap in the transportation network, thereby improving connectivity for all modes.
- A straighter alignment and formation of a grid-like pattern Alternatives 4A or 4B, would help to provide a more direct connection to the Claireville Conservation Area for active users to/from the west on Intermodal Drive, thereby helping to encourage the use of alternative forms of transportation.
- Alternative 4A ranks lower in terms of vehicular connectivity due to potential traffic operational and safety concerns between eastbound left-turning traffic and through traffic transitioning from Gorewood Dr. to the Intermodal Dr. extension as a result of poor sightlines. Given the potential safety implications to road users associated with an 'elbow' configuration, it is generally recommended not to carry forward Alternative 4A.
- Alternative 4D provides opportunities to maximize active transportation connectivity within the vicinity of the Gorewood Drive TRCA trail network entrance and strengthens multi-modal connections with existing and future adjacent land uses by providing controlled crossings at natural desire lines. Alternatives 4A, 4B and 4D generally achieve the objective of improved active transportation connectivity, with a slight reduction in their respective scores relative to Alternative 4D since the implementation of the north-south crossing would be required to be offset away from the tight curved alignment to avoid potential conflicts between road users.
- Alternative 4F would act as a barrier to crossings on Intermodal Drive within the vicinity of its extension due to the significant curved radius which would be expected to limit

sightlines and induce higher operating speeds, creating a more hostile and unsafe environment for active users.

➤ **Streetscape Characteristics**

- Sidewalks with a width of 2.1m are being proposed on both sides of Intermodal Drive through its extension to Gorewood Drive in accordance with Brampton Complete Streets Guide (2023), thereby exceeding the industrial area requirement of at least 2.0m. For reference, a sidewalk with a width of at least 2.0m is designed to accommodate two pedestrians side-by-side, thereby promoting the social aspects of walking.
- Opportunities to incorporate street furniture within the boulevard space on either side of the roadway will be considered during the design stages and could potentially be achieved for all five alternative alignments.
- Tree plantings within the boulevard areas to provide shade and create a safer and more comfortable environment for active users.
- Traffic Calming – Alternatives 4B and 4G provides opportunities to introduce traffic calming measures:
 - A localized reduction in the curb-to-curb width of Intermodal Drive at this proposed Pedestrian Crossover (PXO) is proposed to serve as a traffic-calming measure for oncoming motorists and facilitate increased comfort and safety for vulnerable road users.
 - A tight 45-metre centreline radius was selected to help achieve the City's objective of reduced operating speed on industrial collector roads to 40km/h and introducing natural traffic calming through the horizontal alignment.
 - Alternatives 4A and 4D could accommodate similar traffic calming elements, with a similar level of effectiveness. Alternative 4F would likely pose the greatest challenges in implementing effective traffic calming measures due to its large curved alignment.
- Destination-oriented Cycling Network – A proposed multi-use path on the north side of the Intermodal Drive extension would afford all active users with a direct link to the Claireville Conservation Area.
- Illumination – Based on discussions with City technical staff, it was determined that dedicated pedestrian-level lighting will not be required along this corridor; however, fixtures will accommodate backlight spillage to provide lighting on the active transportation facilities.

➤ **Efficient Parking**

- Consistent with the existing cross-sections of Intermodal Drive and Gorewood Drive, no on-street parking is proposed along the extension of Intermodal Drive.
- The exact location and orientation of off-street parking will be determined through future potential development applications for the resulting Gorewood Drive properties and therefore cannot be determined as part of this EA process.

Based on a review of the core elements and scoring system provided above, Alternatives 4B, 4D and 4G would afford opportunities to satisfy the overall criteria outlined above and defined in the HDA ICI Scorecard.

It should be noted, however, that this scoring system is typically used for development applications, Block Plans or Secondary Plans. With respect to its relevance in this EA process, it is understood that the City has not received any formal applications for rezoning or Site Plan Control within the Gorewood Drive properties and these are more likely to be initiated after the EA process is complete.

Nevertheless, it is recognized that the selection of a preferred alignment (if deemed appropriate) is an important step in establishing property parcels within the Gorewood Drive properties and would serve as a framework for future development opportunities.

6.3 Property Impacts & Development Potential

The property impacts associated with each alternative alignment carried forward for the detailed evaluation are summarized below:

- Alternative 4A
 - Generally impacts 4 properties (minor)
 - 900 & 980 Intermodal, 8196 & 8188 Gorewood Dr.
- Alternative 4B
 - Generally impacts 5 properties (minor to moderate)
 - 900 & 980 Intermodal, 8196, 8188 & 8180 Gorewood Dr.
- Alternative 4D
 - Generally impacts 4 properties (minor)
 - 8196, 8188, 8180 & 8168 Gorewood Dr.
- Alternative 4F
 - Generally impacts 8 properties (significant)
 - 8196, 8188, 8180 & 8168, 8158, 8150, 8140 & 8124 Gorewood Dr.
- Alternative 4G
 - Generally impacts 4 properties (minor)
 - 8196, 8188, 8180 & 8168 Gorewood Dr.

As indicated above, Alternatives 4A, 4D & 4G would result in minor potential property impacts, while Alternative 4F results in significant property impacts. Further, Alternative 4F also results in the creation of more remnant or undevelopable parcels due to the significant curvilinear alignment, encroaching on 8 of the Gorewood Drive estate lots. Alternatives 4A, 4B and 4G would allow for the gap in the transportation network to be closed with a grid-like pattern connection which is often favourable from both a property impact and developability perspective. Aligning more closely with the existing lot fabric ensures property parcel size and depth is adequate to serve as a framework for redevelopment and support the long-term economic viability of the surrounding area.

The property impacts of Alternative 4D fall in between Alternatives 4A/4B/4G and 4F and can be considered moderate, while its overall development potential is comparable to the three former alternatives listed.

The impact to development land is similar with Alternatives 4D and 4G, as both provide double-loaded street frontage north and south of the Intermodal Drive extension. The remaining alternatives either restrict future development to one side of the alignment (Alternatives 4A and 4B), or have a higher potential to create significant remnant property parcels.

6.4 Emergency Access

As discussed previously, Intermodal Drive terminates in a cul-de-sac approximately 160 metres prior to its connection with Gorewood Drive. A private access presently exists through the properties at 835-845 Intermodal Drive and 8140 Gorewood Drive; however, this access is for emergencies only and is not appropriate to accommodate the consistent flow of vehicular traffic which was observed using this private connection during the project team's site visit on Friday, April 12, 2024.

Once fully implemented, any of the 5 alternatives represent an improvement over existing conditions. The implementation of a public ROW connection between Intermodal Drive and Gorewood Drive would provide a formal, redundant connection to facilitate direct access from arterial/regional road network, resulting in reduced response times in the event of an emergency.

6.5 Construction Impacts

Construction impacts associated with Alternatives 4A, 4B, 4D and 4G are expected to be relatively minor. Alternative 4G is expected to have the lowest overall construction impact, based on the retention of the existing alignment of Intermodal Drive at its easternmost terminus and the number of properties impacted.

Alternative 4F has the highest property impacts by a significant margin. The ROW protection associated with this alternative would encroach on the private connection between Intermodal Drive and Gorewood Drive and could be problematic in the interim stages of construction and prior to the roadway's substantial completion in the event of an emergency. Furthermore, this option would likely present access challenges for Gorewood Drive properties further north of the Intermodal Drive connection during construction. As such, Alternative 4F would result in the highest potential construction impacts.

For any of the 5 alternative alignments, it should be noted that the property at 980 Intermodal Drive only has one access driveway, therefore it will be important to maintain safe and unencumbered access to accommodate all modes of travel into this site throughout construction.

6.6 Monitoring Requirements

In accordance with industry best practices, the project team shall ensure compliance with vibration and settlement monitoring, pump flow rate monitoring for Permits to Take Water (PTTW), water quality

Socio-Economic Environment Report

Intermodal Dr. & ROP Watermain Extension to Gorewood Dr. Municipal Class Environmental Assessment

Prepared for City of Brampton

reporting, as well as noise and dust studies as required. Detailed monitoring plans for any stress and strain related measurements of existing structures such as buildings or retaining walls along any sanitary sewer and watermain routes that will potentially be impacted by construction will also be prepared if required. The above noted monitoring best practices are expected to help appropriately mitigate impacts during and after construction for existing property owners, tenants or business owners, as well as users of the Claireville Conservation Area facility.

7 Conclusion

With significant increases in Brampton's population growth projected to 2051, coupled with the City's desire to achieve ambitious sustainable mode share targets and growth in the industrial sector, providing safe, comfortable, accessible and efficient multi-modal transportation connections between complementary uses and improved access to the Claireville Conservation Area trail network will be even more important for ensuring that this future development can be designed in a manner that promotes health and wellness through the City's emerging complete streets design practices and 15-minute communities.

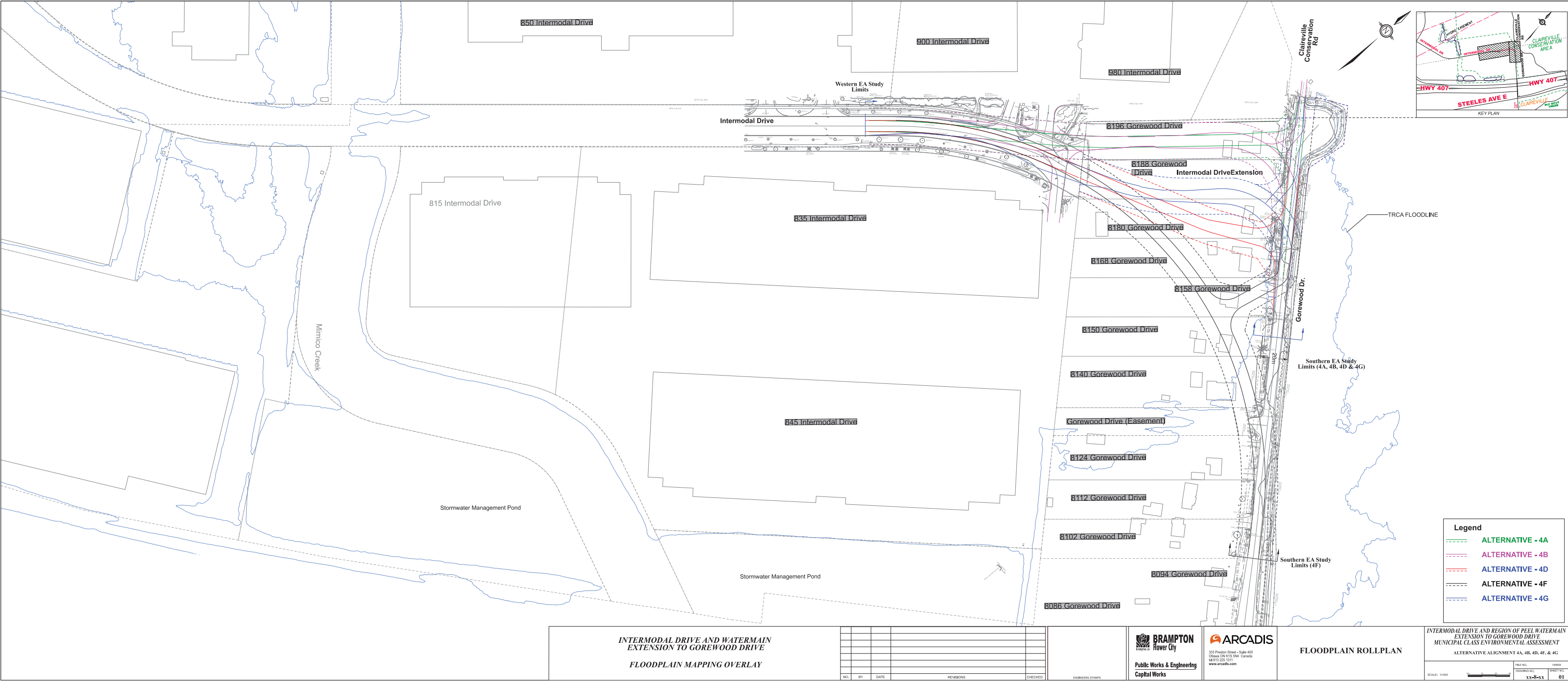
Based on the evaluation of alternative solutions developed as part of this EA, the extension of Intermodal Drive to Gorewood Drive is the only alternative solution that is fully supported by key policy direction adopted by the City of Brampton and Region of Peel. This alternative is capable of satisfying the primary objectives of this EA with respect to improved transportation connectivity, comfort and safety for road users, as well as optimizing goods movement operations within the EA Study Limits and Broader Study Area. Monitoring best practices, as described in this report, will mitigate the impacts of this road extension project during and after construction.

With respect to the five alternative alignment options carried forward from the initial screening exercise, Alternative 4F is consistently the least favourable from a social-economic standpoint as a result of higher potential property impacts, as well as elevated safety risks for active users. This alternative would also likely result in the highest level of disruption to the surrounding area during construction phase through its encroachment on the private access route between Intermodal Drive and Gorewood Drive and impact access to existing Gorewood estate properties north of the connection. In general, Alternative 4F is not compatible with the project vision of fostering a cohesive pedestrian environment that links existing and future uses to improve quality of life.

Alternative 4D provides opportunities to maximize active transportation connectivity within the vicinity of the Gorewood Drive TRCA trail network entrance and strengthens multi-modal connections with existing and future adjacent land uses by providing controlled crossings at natural desire lines. Alternatives 4A, 4B and 4G generally achieve the objective of improved active transportation connectivity, with a slight reduction in score relative to Alternative 4D since the implementation of the north-south crossing would be required to be offset away from Gorewood Drive Claireville Conservation Area entrance to avoid potential conflicts between road users within the elbow/tight radius configuration.

Alternative 4A generally achieved a similar ranking to Alternatives 4D and 4G in terms of property impacts; however, the former was ruled out due to potential traffic operational and safety concerns between vehicles through and turning vehicles within the 'elbow' configuration Gorewood Drive to the Intermodal Dr. extension as a result of poor sightlines. Any sightline issues associated with Alternative 4B or 4G can be mitigated within the inner curved boulevard through restrictions in the placement of obstructions and regular maintenance of vegetation. As such, it is recommended to carry forward Alternative 4B, 4D or 4G from a social-economic perspective.

Appendix A – Alternative Alignments



INTERMODAL DRIVE AND WATERMAIN
EXTENSION TO GOREWOOD DRIVE
FLOODPLAIN MAPPING OVERLAY

NO.	BY	DATE	REVISIONS	CHECKED	ENGINEER'S STAMPS



FLOODPLAIN ROLLPLAN

Legend

- ALTERNATIVE - 4A
- ALTERNATIVE - 4B
- ALTERNATIVE - 4D
- ALTERNATIVE - 4F
- ALTERNATIVE - 4G

INTERMODAL DRIVE AND REGION OF PEEL WATERMAIN
EXTENSION TO GOREWOOD DRIVE
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
ALTERNATIVE ALIGNMENT 4A, 4B, 4D, 4F, & 4G

SCALE: 1:1000	FILE NO. 140800
DRAWING NO. XX-00-XX	SHEET NO. 01

Appendix B – Healthy Development Assessment (HDA) Scorecard

Application Submitted

☐ Site Plan Control

☐ OP/Zoning By-law Amendment

☐ Draft Plan of Subdivision

☐ Block Plan

☐ Secondary Plan

Office Use Only

Municipality:

☐

Brampton

☐

Caledon

☐

Mississauga

Date Received: _____

Planner: _____

Application No.: _____

Is this HDA revised from an earlier submission?

☐

Yes

☐

No

Property and Applicant

Address of Subject Land (Street Number/Name): _____

Applicant

Name: _____ Telephone: _____ E-mail: _____ Registered Owner: _____

Proposal Description

Gross Floor Area: _____ Number of Storeys: _____ Number of Units: _____

Project Summary (describe how the project contributes to a healthy community)

PEEL ICI HEALTHY DEVELOPMENT ASSESSMENT (LARGE-SCALE)

Please indicate where and how a standard is met or exceeded in the Demonstration of Standard column with reference to a policy, plan, map or illustration of some kind in the Document/Policy Reference column. Please also tabulate points in the Score column based on whether the development proposal meets or does not meet a community design standard. For further instruction, refer to “How to Use this User Guide” on pages 2 and 3.

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual Score
DENSITY				
<p>1. All development on Designated <i>Greenfield Areas</i> shall achieve a minimum overall density target as prescribed by the Regional Official Plan in policies 5.4.19.6 and 5.4.19.7.</p> <p>Where the local municipality has established higher density targets, these higher targets will apply. Employment (commercial, retail, light industrial) and institutional areas/ developments shall consider a higher density target than the established local municipality, if feasible.</p> <p>If the large-scale employment or institutional area/ development application does not contain details about density considerations,</p>			5	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual Score
DENSITY				
provide written detail about how density standards could be achieved at the site plan.			5	
<p>2. All development in Designated <i>Urban Growth Centres</i> in the Region of Peel (i.e., Downtown Brampton, Downtown Mississauga and Intensification Areas) achieves a minimum overall density target of 200 people and jobs per hectare.</p> <p>Where the local municipality has established higher density targets, these higher targets will apply. Employment (commercial, retail, light industrial) and institutional areas/developments shall consider a higher density target than established by the local municipality, if feasible.</p> <p>If the large-scale employment or institutional area/development application does not contain details about density considerations, provide written detail about how density standards could be achieved at the site plan.</p>				

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
SERVICE PROXIMITY				
Transit				
3. 100% of the functional entries in the proposed development are situated within a 400-meter walking distance of an existing or planned transit stop (as identified by Brampton Transit, MiWay or Go Transit) or 800-meters of higher order transit stop.			2	
4. Areas within 800m of a <i>Higher Order Transit</i> stop are developed to meet <i>Major Transit Station Area</i> density targets.			1	
5. Access to transit from the proposed development is safe, attractive and direct for pedestrians: •Pathway to transit site is paved (or equivalent measure) and provides direct access to pedestrians (1 point) •Pathway to transit site contains pedestrian scaled lighting (1 point) •Pathway to transit site incorporates landscape treatments (including but not limited to, permeable paving for pathway connections, deciduous/coniferous trees) that improve the environment for pedestrians (1 point)			3	
Services and Retail				

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
<p>6. At least 75% of the proposed functional entrances are situated within 800m of 6 or more diverse uses, including:</p> <ul style="list-style-type: none"> • Grocery Store or Supermarkets (1 point) • Full Service restaurant, cafe, or diner that does not provide a drive-thru (1 point) • And any of the four from the following categories (4 points): <p>Community Service Retail:</p> <ul style="list-style-type: none"> • Convenience store • Hardware Store • Pharmacy • Other retail <p>Services:</p> <ul style="list-style-type: none"> • Bank • Family Entertainment venue (e.g. theatre, sports) • Gym, health club, exercise studio • Hair care • Laundry, dry cleaner <p>Civic and Community Facilities:</p> <ul style="list-style-type: none"> • Adult or senior care (licensed) • Child care (licensed) • Community or recreation centre • Cultural or arts facility • Educational facility • Government office that services the public on site • Medical Centre or office that treats patients • Place of worship 			6	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
<ul style="list-style-type: none"> • Post Office • Public Park • Public library • Open community spaces such as squares or plazas 			6	
7. The functional entry of the proposed development is within 800-meter walking distance of a planned or proposed natural open space, green space, or public square that contains pedestrian infrastructure (e.g. walking path).			2	
8. <i>Convenience commercial</i> uses are present in key locations, including <i>greyfield</i> areas, <i>intensification areas</i> and <i>corridors</i> and <i>greenfield areas</i> .			2	
Cycling Infrastructure				
9. At least 75% of the project's functional entrances are within 400 meters of an existing or planned cycling network that is connected to higher order transit.			1	
LAND USE MIX				
10. Where permitted, employment lands include small scale amenity retail services, are serviced by transit and have infrastructure which encourages pedestrian and cyclist movement.			2	
11. Retail uses on the ground floor are provided in institutional, commercial and light industrial buildings.			1	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
12. The proposed development contains a mix of allowable land uses as per zoning regulations and includes a minimum of three different uses on the project site (e.g., retail, commercial, office, light, industrial, institutional, hospitality, park or recreation) or other additional uses as permitted under the zoning designation.			3	
STREET CONNECTIVITY				
13. The proposed development contains complete streets, designated for safety and security of all users, including pedestrians, cyclists, motorists and transit riders of all ages and abilities. Street-networks and off-road paths are multi-modal and separated by mode to provide safety and choice to pedestrians and cyclists and make clear connections (signage should be incorporated) to existing routes and facilities.			1	
14. Cul-de-sacs, crescent streets and loop roads are not utilized unless they are located near significant infrastructure, including highways and railways, or near natural features. If these features are present, then pedestrian paths are established to allow for a cut-through in the middle of the longer blocks.			2	
15. Reverse frontage streets are not utilized.			1	
16. Commercial, retail, institutional or light industrial blocks in the proposed development do not exceed 80x180m in size.			3	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
17. Intersections are frequent (75/sq.km), with street blocks decreasing in size as density increases.			3	
18. Sidewalks, bike lanes and multi-use paths connect to street networks, community amenities and transportation nodes and are available for general public use.			n/a	
STREETSCAPE CHARACTERISTICS				
On-site Amenity Areas				
19. On-site common outdoor amenity, social gathering or recreation spaces are provided and contain: <ul style="list-style-type: none"> • Appropriate green space of natural open space, • Adequate amount of seating, • Covered all-weather seating, • Mixed-used space and street furniture, • Weather protection and shade along pedestrian pathways, • Waste baskets 			1	
Pedestrian Amenities				
20. All streets in industrial areas have sidewalks on each side of the street which are at least 1.8 m wide. Where is it only possible to include a sidewalk on one side of the street, ensure it is a minimum of 2.0 metres. All streets in medium- and high-density institutional, retail and commercial areas have sidewalks on each side that are at least 2.0 m wide, or wider than the minimum local municipal standard and are on both sides of the street.			1	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
21. Functional building entrances for institutional, commercial, and industrial uses are oriented towards the street and are clearly identifiable and prominent with direct access to public sidewalk, pedestrian connections and transit facilities.			2	
22. A variety of street trees that are hardy, resilient, and low maintenance are planted at regular intervals (as specified by the municipality) adjacent to all streets and provide increased shading on the pedestrian path.			1	
23. All major pedestrian routes, transit stations and major transit stations have the following features, which are adequate to meet the projected demand on-site: <ul style="list-style-type: none"> • weather protection • seating • waste baskets • lighting • route information • bicycle parking 			1	
Lighting				
24. Streets in employment areas and institutional areas have pedestrian-scaled lighting and are limited to a height of 4.6 meters.			1	
25. Lighting and light standards in public outdoor areas, such as pedestrian walkways, pathways to transit stops, common amenity or recreation spaces, plazas and parking areas relate to the pedestrian and are limited to a height of 4.6 meters.			1	
Cycling Amenities				

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
<p>26. A connected and destination-oriented cycling network is provided throughout the proposed development, including a variety of on- and off-street bikeway facilities. These provide an appropriate degree of separation from motorized traffic, taking into account the speed and volume of traffic on the street. These on-street bikeway facilities must include:</p> <ul style="list-style-type: none"> • bicycle lanes • sharrows • signed routes • multi-use paths on the boulevard <p>In areas where the anticipated higher truck volume, on-street bikeway facilities should provide a greater degree of separation from motorized traffic.</p> <p>Where there is a local Bicycle Plan, the bikeway network proposed in the Plan is implemented in the development area, and opportunities to enhance, or connect, the proposed bikeway network are identified.</p>			1	
Traffic Calming				
<p>27. Traffic calming elements are designed to increase comfort and safety for means of active transportation, so as not to unduly create hazards or obstacles for pedestrians or cyclists.</p>			N/A	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
<p>28. In greenfield development, or where new streets are introduced through infill (re)development, traffic calming is achieved by using any of, but not limited to, the following:</p> <ul style="list-style-type: none"> • Minimum traffic lane widths • Minimum number of traffic lanes in the roadway • Separated and protected bike lanes • Traffic Islands • Curb extensions to visually highlight pedestrians and slow traffic • Pedestrian-priority streets, woonerfs or home-zones (i.e., the speed limit is under 15km/hr and vehicles must yield to pedestrians and cyclists) 			3	
EFFICIENT PARKING				
<p>29. Limit Automobile parking in industrial, commercial and institutional project sites through:</p> <ul style="list-style-type: none"> • Adhering to minimum parking requirements as per the local parking by-law, or • A parking reduction approved through a minor variance on the site. 			2	
<p>30. Efficient use of parking is promoted by identifying systems for sharing parking spaces by two or more user groups at different times of the day or week (e.g., weekday use by office staff and evening/weekend use by restaurant clientele).</p>			1	
<p>31. Where zoning by-laws permit provide reduced automobile parking ratios for buildings and other facilities within 800 meters of a higher order transit stop.</p>			1	

Standard	Demonstration of Standard	Document/Policy Reference	Potential Score	Actual score
32. For institutional and employment uses, parking is located away from the street to the rear or to the side or is located underground.			2	
33. For commercial, industrial and institutional areas within 400m of higher order transit, provide at least 10 additional publicly accessible, short term bicycle parking spaces per building on the project site or within the public boulevard in addition to the bicycle parking required from the local bicycle parking standards.			N/A	
34. Where surface parking is provided, it is designed to minimize negative aesthetic and environmental impacts. This can be achieved by incorporating the following into the parking lot design: <ul style="list-style-type: none"> • pedestrian access, connectivity and circulation • tree planting • landscaping • stormwater management • porous/permeable surfaces • light-coloured materials instead of black asphalt 			2	

HEALTHY DEVELOPMENT ASSESSMENT SCORECARD

DENSITY

Density targets

(Tick correct box)

- ☐ Greenfield targets
☐ Urban Growth Centre targets

SERVICE PROXIMITY

Transit proximity

Major Transit Station Area targets

Safe & comfortable transit access

Proximity to public services and retail

Proximity to park, square or open space

Convenience commercial in key locations

Proximity to cycling network

LAND USE MIX

Employment Lands

Retail uses on ground floor

Mix of land uses

STREET CONNECTIVITY

Complete Streets

Non-grid streets avoided

Reverse-frontage streets avoided

Active transportation connectivity

Small blocks

Frequent intersections

/5

/5

/17

/2

/1

/3

/2

/6

/2

/1

/6

/2

/1

/3

/10

/1

/2

/1

N/A

/3

/3

STREETSCAPE CHARACTERISTICS

/12

/1

/2

/1

/1

/1

/1

/1

/1

/3

N/A

EFFICIENT PARKING

/8

/2

/1

/1

/2

/2

N/A

TOTAL*:

/58

GOLD:

80-100%

SILVER:

70-79%

BRONZE:

60-69%

PASS:

50-59%

*Should certain standards not apply, the total score will be reduced accordingly.

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