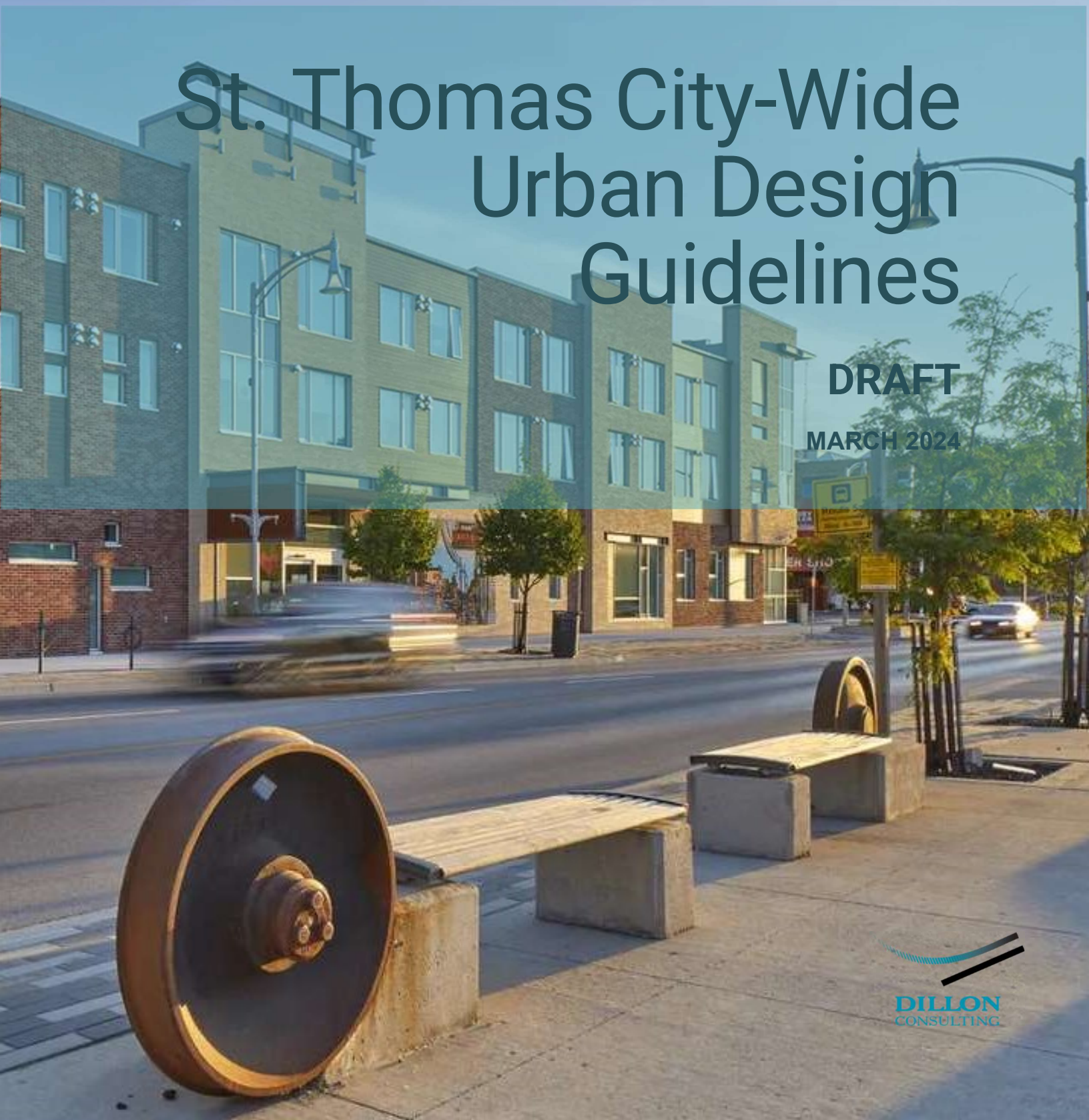
City of St Thomas

St. Thomas City-Wide Urban Design Guidelines

DRAFT

MARCH 2024



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Cover photo credit: Globe and Mail, 2021

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St. Thomas Elevated Park
Photo Credit: www.elevatedpark.ca

1.0 Introduction

Urban design represents a multi-disciplinary approach to city-building that is framed by understanding of planning policy, and its physical manifestation in the built environment, hard infrastructure, landscape, and open spaces. It describes the physical features that define the character of a street, neighbourhood, community, or city as a whole. Urban design is the visual and sensory relationship between people and the built environment, both public and private realm.

Urban Design Guidelines (UDG) are a tool that set the framework to guide functional design and place-making considerations for future developments and public investments.

The purpose of the St. Thomas City-Wide UDG is to provide a city-wide design strategy and vision for future growth and changes in the urban environment that support sustainable development, streetscapes, parks and open spaces, and connections that enable healthy, accessible, and equitable communities. The UDG will be a user-friendly document for the development community, stakeholders, and the public, and be used as a decision-making tool for municipal staff.

The City of St. Thomas (City) is a growing urban centre within Elgin County in southwestern Ontario, with the current population of 42,8401. It has a very rich multi-faceted history that is reflected in its streetscapes, significant civic buildings, lot fabric, settlement patterns and historic areas framing the central Talbot Street corridor, such as Old St. Thomas, Downtown St. Thomas Heritage Conservation District, and the Canada Southern Railway (CASO) lands. It is also the Railway Capital of Canada and future home of the world's largest Volkswagen electric vehicle battery manufacturing facility.

Since the early 2000s, the City has committed to and implemented many community improvement initiatives to enhance the cohesiveness and quality of its public realm, positively contributing and attracting the market base for both population and economic growth. St. Thomas Elevated Park (STEP) is one example advancing the relationship between cultural heritage, trails, and open space with design innovation, adaptively reusing underutilized railway infrastructure in the City while also providing an amenity space for residents and visitors. The City's Urban Design Study (2003) identified improvement recommendations for the downtown, Old St. Thomas and CASO lands.

[1] Statistic Canada 2021 Census, accessed at https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=St%2E%20Thomas&DGUIDlist=2021A00053534021&GENDERlist=1,2,3&STATISTIClist=1&HEADERlist=0

Some of the key place-making improvements completed to date are:

- Unified and consistent design across all three districts, as upgrades are completed;
- A detailed streetscape design plan for the improvements along Talbot Street;
- A new sign by-law promoting an improved pedestrian scale experience;
- Talbot Street signage strategy through the streetscape improvements and Downtown Heritage Conservation District Plan.
- Heritage streetscape routes and themed street signs for Old St. Thomas;
- Re-established connection in support of the heritage railway complex;
- A tree cutting by-law to protect mature trees, woodlots and forested ravines;
- Comprehensive parks and trails system study to evaluate how these amenities could be more effectively accessed, linked and utilized; and,
- Zoning by-law review for maximum height and rear, ground floor residential occupancies.

St. Thomas City-Wide UDG build on the design framework developed in the 2003 St. Thomas Urban Design Study and Official Plan policies, as well as other city-building master plans and Community Improvement Plan (2021).

1.1 Planning and Policy Context

St. Thomas is experiencing growth in population, development and economic investments, and in parallel growing demands for housing, transit, roads, trails and the parks and open spaces. Planning and policy review highlighted the City's commitment to invest in housing and business growth while enabling those developments to support a thriving public realm. The investments into St. Thomas' historic downtown, railway history, trails and parks has set a foundation for walkable, accessible and equitable communities, which are to be expanded on as critical community-building principles city-wide.

The importance of urban design is embedded in the City's Strategic Plan (2021-2023), promoting well-designed built form and sites, encouraging a sense of place, and providing public spaces that are of high quality, safe, accessible and vibrant. The City's current Official Plan has policies that guide the protection of architectural and natural heritage in the city, streetscape and facade revitalization, improved accessibility, enhancement of public space and the pedestrian realm (particularly in the Downtown), as well as rehabilitation and reuse of architecturally significant buildings, redevelopment of the Downtown as a civic centre and the revitalization of older industrial lands.

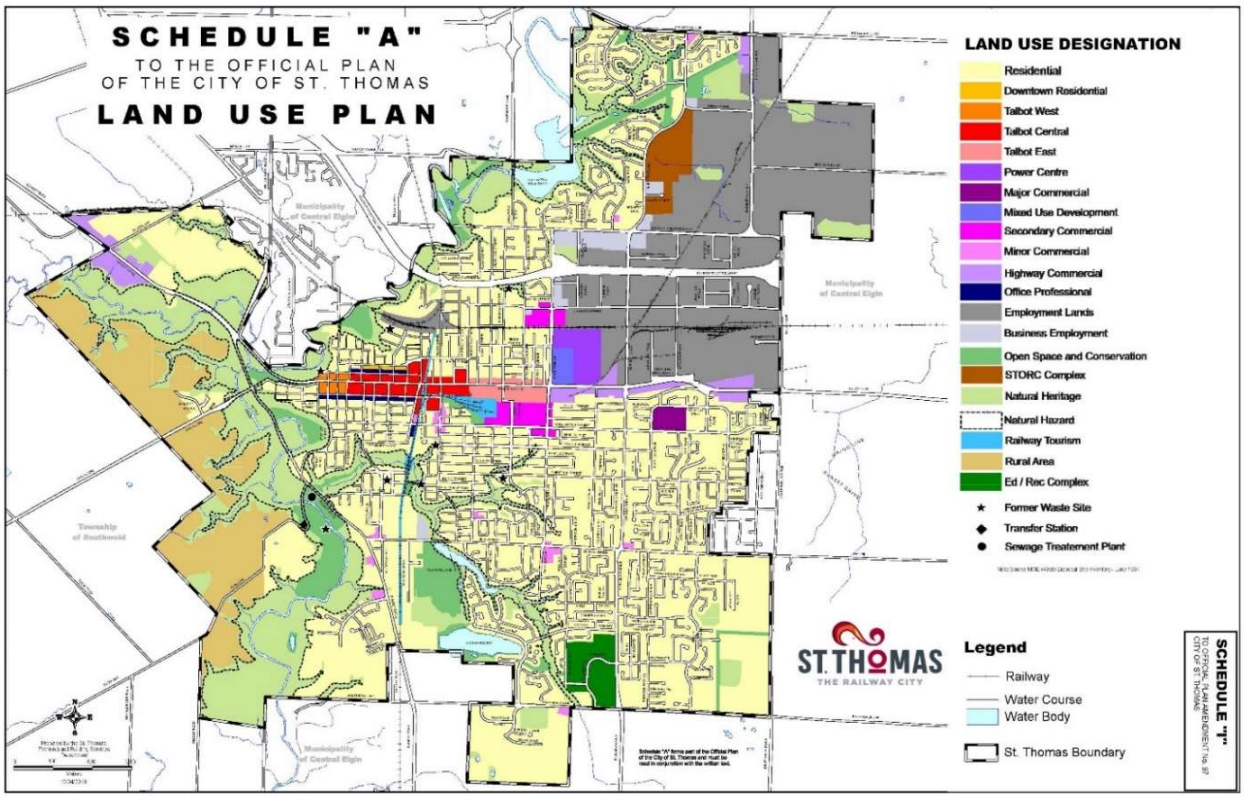


Figure 1: Land Use Plan, City of St. Thomas (2020)

In the absence of more robust policies, updated zoning regulations and city-wide design guidance, current development patterns from suburban, medium to high-density built form, new commercial/retail buildings, and redevelopment of existing lots, are at times contributing to undesirable impacts on the urban fabric, character and sense of place. The historic downtown has active street related retail but has at times faced challenges with site design that impacts the quality, character, and pedestrian experience. This highlights the importance of **block size, structure, and site layout** in creating safe and desirable walkable communities.

'Office Professional and 'Minor Commercial' land uses adjacent to the downtown, as per **Figure 1**, support re-use of existing historic building stock, and act as a transitional buffer between the downtown and the stable residential communities. On the west end of Talbot Street is Old St. Thomas, recognized as the city's historic residential core and is characterized by a variety of lot configurations, open space, streetscapes, and building types, that need special urban design consideration. This highlights the importance of **historic building re-use and compatibility of new developments through sensitive-transitional site and building designs**, maintaining the character and historical ties to the downtown.

The surrounding residential areas, primarily single-family, are experiencing medium to high-density residential developments, and redevelopment/infill developments that often spark conversations around compatibility, adequacy of design, sensitivity, and protection of stable residential neighbourhoods. Similarly, tangible standards for residential developments associated with draft plans of subdivisions have not been defined, influencing the quality of the streetscapes and the neighbourhood character. This highlights the importance of both **public and private realm,** as well as **context-sensitive transitions of building and site design** in the creation of growing **livable and equitable communities**.

St. Thomas' open space, conservation lands and natural heritage system are well-integrated into the urban landscape. The Kettle Creek valley and supporting watershed linkages span across the east end of the city, with reaches near the downtown and the norther city boundary. The city has 43 parks spread over 700 acres and an extensive trail network including the Trans Canada Trail which runs through the city with various points of interest – this is one of the most valued assets by the community. This highlights the importance of **integrated trails, natural environment, and parks** in developments, expanding on **the walkable, accessible, and equitable** assets within the city.

The 'Employment Lands' on the northeast portion of the city are adjacent to natural heritage lands, open spaces, residential, business employment, secondary commercial, power centre, highway commercial. The design quality of the employment lands does not reflect its own character, or the city's Railway Capital identity and commitment to sustainability. This highlights the importance of **site layout and sustainable development techniques** in advancing **green site design** and **character-defining elements** of the employment lands.

St. Thomas has primary and secondary transportation corridors that continuously improve the experience and access of multi-modal infrastructure. Key gateways into the city utilize signage and public art to welcome visitors and residents to the City, as well as distinct locations. These gateways include several significant areas along Talbot Street including the eastern gateway to Talbot Street, two gateways to the commercial core on Talbot, the gateway to Old St. Thomas on Talbot, as well as the "Perseverance" Train located at the intersection of Talbot Street, Sunset Drive, and Wellington Road. This highlights the importance of investment into the public realm, **creating spaces, places, and destination** within the city.

Recommended Action: City to update policy and zoning regulations to align and support the direction set out through the urban design vision, principles and priorities discussed in the Chapter 2.


Railway Feature Bench in Downtown St. Thomas


St. Thomas Consolidated Courthouse


St. Thomas Public Art and Elevated Rail Park

Talbot Street Streetscape


Jumbo the Elephant


St. Thomas Affordable Housing and Social Services Hub

CASO Lands Café


St. Thomas Street Festivals

Figure 2 Place Making Features in St. Thomas

1.2 Vision

The City of St. Thomas is committed to promoting a consistent and high standard of urban design for all development in the City, which responds to the needs of a growing and thriving community that is sustainable, inclusive, and celebrated while remaining connected to its rich cultural heritage.

1.3 Design Principles

The eight design principles listed below reflect current design best practices and principles, and are based on St. Thomas strategic directions and policies, providing high level direction on future development in the city.

1. **Place Making:** Engage in placemaking by creating memorable, flexible, and identity-strengthening spaces in both the private and public realms of the city.
2. **Human Scale within Urban Fabric:** Create built environments (i.e., building massing, scale, details) that support comfortable, desirable, and active lifestyle and pedestrian experience, while complementing the character of the existing urban fabric.
3. **Safe, Attractive and Green Streetscapes:** Create vibrant, well-designed, safe, and pedestrian-oriented streets that support mobility for cyclists, pedestrians, and vehicles. Additionally, promote higher quality landscape treatments that integrate the benefits of climate comfort, stormwater management, urban forestry, and urban ecology.
4. **High Quality Materials and Building Design:** Promote high quality features, materials, and colours that enhance the neighbourhood and streetscape character, for both residential and commercial developments. Promote urban forms and architectural design that bring interest and diversity to the public realm.
5. **Sustainable Development:** Promote sustainability at all levels of city-building through urban design: green infrastructure; green building practices; climate change resiliency; renewable and low-carbon energy and design initiatives; native plants; and material selections.
6. **Heritage Preservation, Sensitive Integration:** Protect and celebrate St. Thomas' cultural heritage resources and rail history and promote adaptive re-use of existing historic built form. Ensure new commercial and residential developments successfully contribute to the streetscape, landscape and district/site historic values and character.
7. **Natural Heritage:** Promote protection, enhancement, views, and education on St. Thomas' rich natural heritage system.
8. **Accessibility/Universal Design:** Provide designed spaces that reinforce inclusivity and allow users of all abilities to access, navigate, interact, and explore without physical and perceived barriers.

1.4 Design Priorities

The six design priorities below highlight the key urban design elements across all land uses and areas in St. Thomas.

Priority 1: Create a universally accessible and inclusive urban environment that supports residents and visitors of all abilities.

Priority 2: Encourage sustainable forms of residential, employment and commercial development that enhances the built form and prioritizes elements of placemaking.

Priority 3: Protect the heritage significance and character of the Downtown and support adaptive re-use and new built form integration that supports the heritage values.

Priority 4: Create a walkable and pedestrian-friendly city that supports modes of active transportation, and a well-connected street network that is safe, comfortable, and accessible.

Priority 5: Support a well-connected street network that is safe, comfortable, and accessible, and enhanced with place-making elements, such as gateways and public art.

Priority 6: Promote the use of green infrastructure and building practices while protecting the existing natural heritage network.

Canadian Southern Railway Station (CASO)
Photo Credit: www.stthomaschamber.on.ca/community-profile

2.0 Opportunity Areas

Nine opportunity areas are identified to highlight distinct areas of St. Thomas that have potential for significant change and enhancement in the physical environment through the implementation of the UDG vision, principles, and priorities, while also contributing the City's economic and tourism growth. Each opportunity area is described in further detail below, along with implementation recommendations.

2.1 Downtown St. Thomas and Heritage Conservation District

This area includes most of the downtown commercial core that developed between the 1870s and 1930s, and it contains urban form and architecture representative of these eras. It also includes remnants of the city's railway lands and associated buildings that, while visually different than most of the commercial core, are historically tied to development throughout the late 19th and early 20th century. Redevelopment of the west end of Talbot Street in 2018 set a new and improved complete street standard for St. Thomas. The City has implemented phase two of the infrastructure and streetscape improvements along Talbot Street in 2023, between Mary and Ross Streets – this includes new street trees, planters, benches, lighting, on street parking, pavers, bicycle racks and tactile warning plates at intersections.

The Downtown St. Thomas Heritage Conservation District (HCD) consists of properties fronting Talbot Street between Queen Street and through to the west side of Alma Street. The HCD area also includes remnants of the city's railway heritage including the north-south London and Port Stanley Railway Tracks between Kains Street and Wellington Street, the Canada Southern Railway Station lands and the former Michigan Central Railroad Locomotive shops (now the Elgin County Railway Museum).

Area Vision: To strengthen and protect the railway city identity, cultural heritage resources and the downtown core's heritage character, while enabling compatible development and high-quality streetscapes and open spaces that support the City's sustainable growth and placemaking within the downtown core and beyond.

Recommended Actions:

- Delineate an adjacency boundary for the Downtown St. Thomas HCD to set clear requirements for heritage impact assessments, and to protect and manage change around the HCD.
- Define the Downtown St. Thomas HCD adjacency boundary in the City's Official Plan.
- Assess, evaluate, and protect Old St. Thomas residential area as a heritage landscape and/or district.
- Add sustainable development policies for residential infill and intensification areas in the Official Plan.

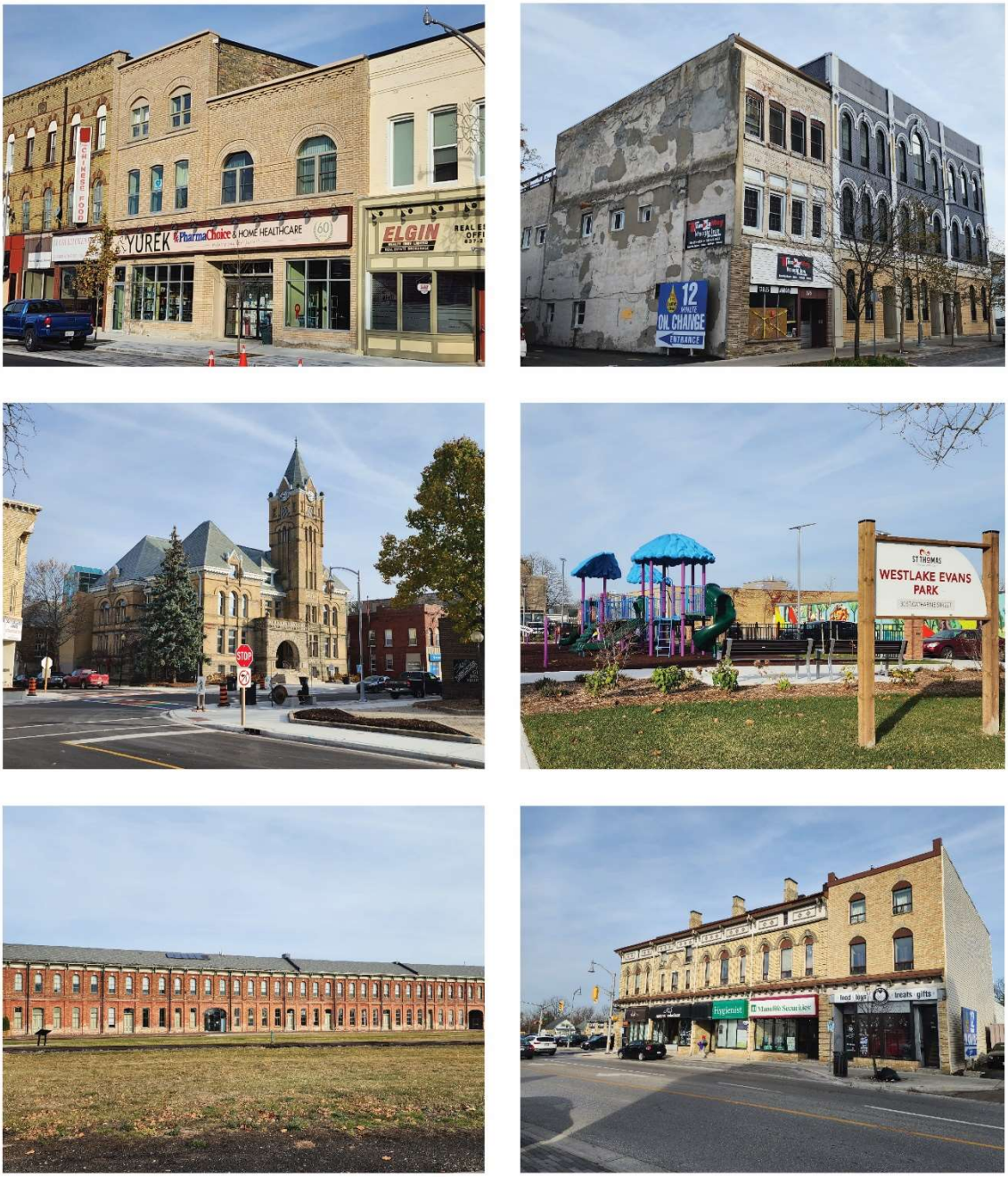


Figure 3 Downtown St Thomas and Heritage Conservation District

- Complete a parking strategy for the downtown core area to prioritize the creation of a consistent streetscape edge along Talbot Street and to maximize the development of the downtown blocks/lands facing the Centre Street Greenway.
- Complete a parks/open space master plan for the Centre Street Greenway, and adjacent public lands.

- Establish a permanent and consistent wayfinding system in the downtown with tourism and business interests.
- Consider integrating seasonal street activation opportunities along Talbot Street, such as pop-up patios, plaza-pop installations, etc.
- Invest in the enhancement of the neighborhood character through the streetscape improvements, and the inclusion of public art and gateways.

2.2 Residential Infill and Intensification Areas

Residential infill and redevelopment projects are encouraged in the downtown core and established neighbourhoods throughout the City. Much of the new development that will occur in and adjacent to established neighbourhoods will bring new types of housing, sometimes at higher densities than previous or surrounding developments. One of the challenges the City will continue to face in the years ahead will be integrating new “infill” development within existing neighbourhoods that have not seen substantial change since their initial development.

Area Vision: To adopt clear policies, zoning, and guidelines that are vetted through the community, ensuring that infill projects are positive neighbourhood additions that support managed change and advocate for complete communities, inclusive of new dwelling additions and all associated servicing.

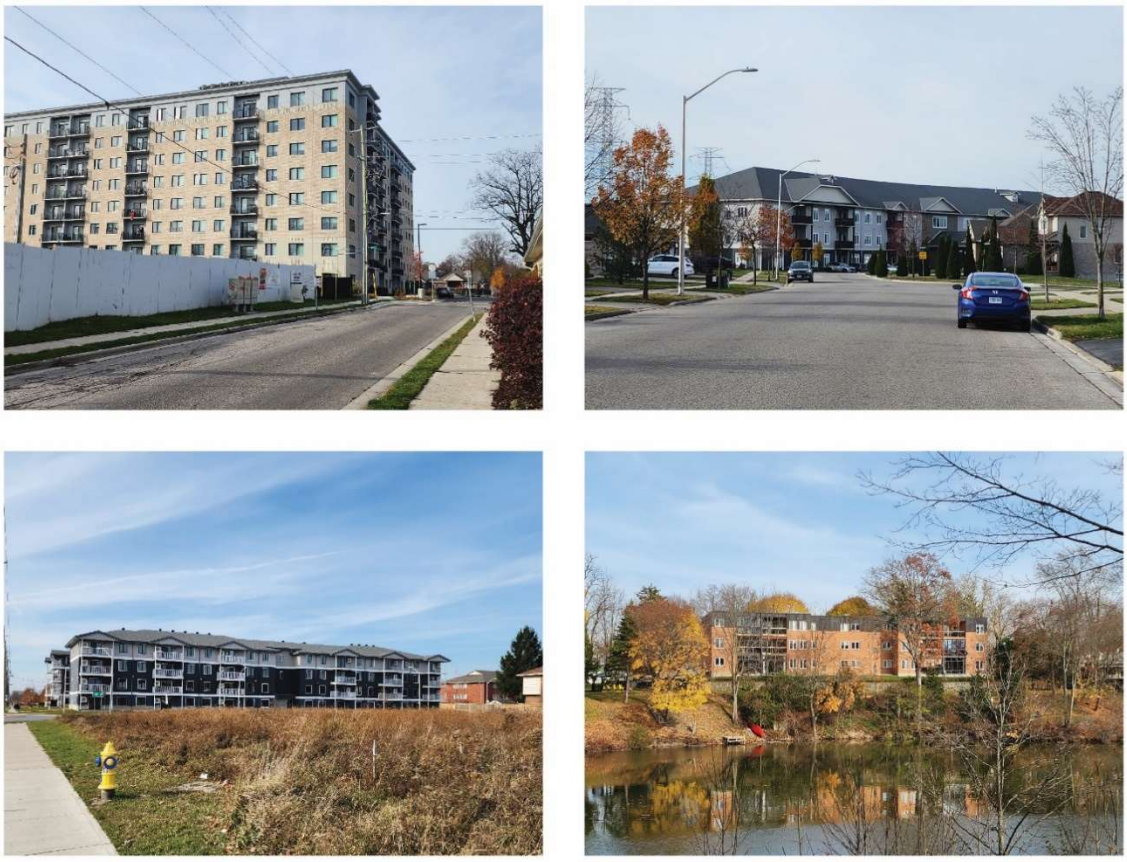


Figure 4 Existing Residential Infill and Intensification in St Thomas

Recommended Actions:

- Add sustainable development and precinct policies for residential infill and intensification areas in the Official Plan, and establish intensification corridors in the Official Plan, to support the City's ongoing transportation and transit master planning.
- Develop precinct/master plans for residential intensifications areas that are aligned with intensification corridors to guide future growth.
- Develop mid to high-rise building design guidelines.

2.3 Mixed Use and Residential Areas

As St. Thomas experiences urban expansion to accommodate its rapid growth, its new mixed use and greenfield residential areas need more careful planning and design guidance to achieve the design vision, principles and priorities discussed in Sections 1.3 to 1.5.

Area Vision: To adopt clear policies, zoning, and guidelines, that are vetted through the community, ensuring that greenfield projects are sustainably developed to support growth targets, protect, and celebrate the natural heritage, and help create more complete, accessible and vibrant communities throughout the city.

Recommended Actions:

- Add sustainable development policies for mixed-use and residential lands in the Official Plan.
- Establishing clear urban design studies and guidelines that support the City's UDGs through block planning and plans of subdivisions.

Figure 5 Existing Mixed Use Building in St. Thomas

2.4 Commercial and Office Areas

Although most of the commercial floor space will be concentrated in the downtown, there are also major commercial, secondary commercial and minor commercial areas located throughout the city. Highway Commercial is also located across three areas of the city.

Area Vision: To create commercial and office areas that are sustainable and climate-resilient developments, distinct in function and character, and integrated into the city's active transportation system. Further, Highway Commercial areas will be better integrated with the adjacent areas and linked to St. Thomas' Rail City identity.

Recommended Actions:

- Add sustainable development policies for commercial and office lands in the Official Plan.
- Amend Zoning By-law to support improved building and lot, parking, storage, fencing, landscaping, and buffering requirements for highway commercial areas.
- Amend Zoning By-law to support improved outdoor employee amenity areas in office areas.
- Consider strategies to deal with vacancy rates for commercial lands in the Downtown.

Figure 6 Example of Existing Commercial and Office Buildings in St. Thomas

2.5 Employment and Business Employment Lands

St. Thomas has developed as a manufacturing centre and has a number of positive advantages that are expected to enhance its future as an employment growth centre. Business and economic activities including manufacturing, warehousing, offices and ancillary retail and service uses are clustered in the northeast portion of the city. The lands within the City's employment areas are designated "Employment" and "Business Employment." This two-tier approach to land use designations in the Official Plan for employment areas promotes economic development on industrial lands while at the same time protecting nearby residents and businesses from potential adverse impacts associated with heavier industrial uses.

Area Vision: To create employment and business employment cluster that features sustainable and climate-resilient development, high-quality of design and active transportation linkages, while also acting as an important gateway into the city.

Recommended Actions:

- Add sustainable development and employee amenity area policies for employment and business employment lands in the Official Plan. Consider business employment office-type clusters as candidate employment types subject to site plan control.
- Amend Zoning By-law to support improved building and lot, parking, storage, fencing, landscaping, and buffering requirements for employment and business employment areas.
- Amend Zoning By-law to support improved outdoor employee amenities for employment and business employment areas.

Figure 7 Existing Employment Land Buildings in St. Thomas

2.6 Corridors and Gateways

The established road classification, as per the St. Thomas Design Guidelines, amended in 2020, is provided below:

- **Provincial Highway** (MTO's jurisdiction)
- **Country/Highway** with typical right-of-way width over 29 metres (typically two to four lanes);
- **Arterial** (Major and Minor) with typical right-of-way width of 29 metres (typically two to four lanes);
- **Collector** (Major and Minor) with typical right-of-way width of 26 metres (23 metres for minor) and typically two to three lanes; and,
- **Local** with typical right-of-way width of 20 metres in urban settlings and 18 metres in cul-de-sacs, and typical two lanes.

Gateways mark the sense of arrival to a destination or change in the urban landscape. St. Thomas features major gateways in sculptural form at the east roundabout entry to the city ('Perseverance'), as well as the south-end (agricultural themed art structure, as a joint infrastructure project by the City and Elgin County). Minor gateways are also located within the city, including sculptural artworks at 1 Password Park recreation complex and near the Doug Tarry Sport complex. There is an opportunity for additional gateways and public art inclusions through road and streetscape improvement projects in the future.

Area Vision: To create active and green streetscapes that encourage the use of safe active-transportation routes and trail linkages for all ages and abilities, with appropriate pedestrian and cycling amenities that encourage multi-modal travel (e.g., seating, sheltered bike parking, bike repair station, electric scooter parking, etc.). Gateways and public art are to be used as place-making and identity-strengthening elements of the public realm.

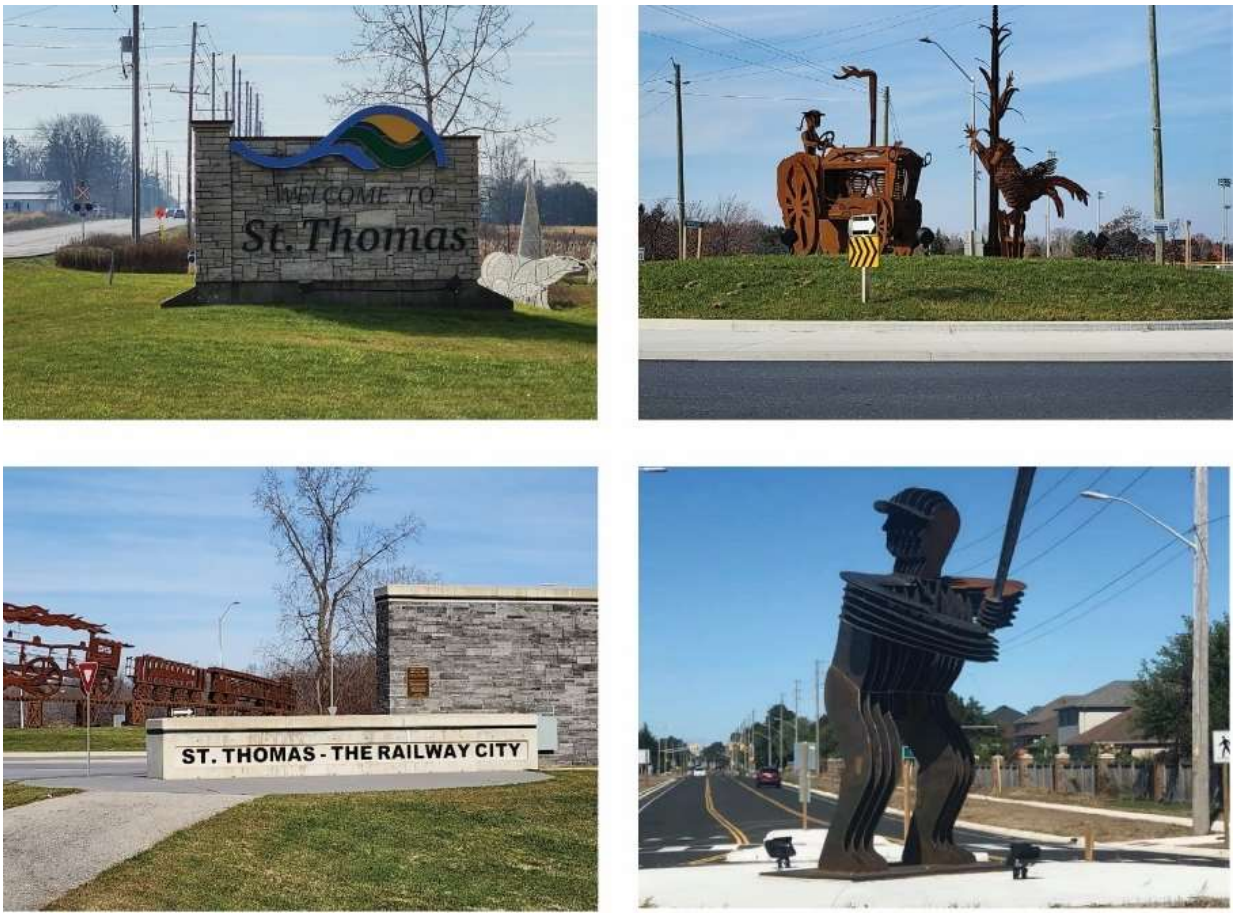


Figure 8 Examples of Existing Gateways in St. Thomas

Recommended Actions:

- Develop a standardized list of street trees that can thrive in urban environments and achieve a healthy, diverse, and sustainable urban forest.
- Invest in streetscape improvements that accommodate space for green infrastructure and complete street profiles, inclusive of gateways and public art features.
- Develop precinct/master plans for residential intensifications areas that are aligned with intensification corridors to guide future growth. Develop guidelines for public art along the public realm, such as the road rights-of-way.

2.7 Destination Landmarks

With a railway history, one of the province's leading farmers' markets, authentic downtowns and beautiful scenic parks, tourism in St. Thomas is a growing industry. The Elgin County Railway Museum, St. Thomas Elgin Public Art Centre, Old St. Thomas Church, Elgin Military Museum, Princess Ave. Playhouse, Disc Golf Parks, craft breweries and greenspaces within the City draw visitors in and provide places of interest for residents. Other tourist destinations in St. Thomas include:

- **CASO Station**: The Canadian Southern Railway Station is a restored historic railway station and major landmark located in the heart of downtown St. Thomas off of Talbot Street. The station was built by the Canada Southern Railway in 1873 as both a railway station and its corporate headquarters. It was one of the busiest stations in Canada during the 1920s. The building has been renovated and currently functions as an event space.
- **St. Thomas Elevated Park**: St. Thomas is home to Canada's first and only Elevated Park. Built in 1929, the railway stands at the western edge of the City and is recognized as an engineering marvel which at its peak carried 50 trains each day. The rail bridge was converted into a greenway with public art, seating, and planting.
- **Pinafore Park**: This park was first developed by the St. Thomas Street Railway company in the latter half of the 19th century. To this day, Pinafore Park remains a unique spot for recreation and pleasure. Century old pavilions are nestled among trees and provide an ideal setting for picnics. The park also includes hiking and cross-country ski trails, tennis courts, a playground, splash pad, a ball stadium and a bandshell.
- **Elgin County Railway Museum**: This museum is in St. Thomas and is housed within the former Michigan Central Railroad locomotive shop which was built in 1913. It is located adjacent to the CASO Railway Station off Talbot Street.
- **Dalewood Conservation Area**: This conservation area is located just outside the city and is encompassed by 25 hectares of provincially significant wetlands. The conservation area includes a 12-kilometre looped hiking trail a campground, reservoir, and swimming pool.
- **Jumbo the Elephant Monument**: This monument is a life-sized statue of Jumbo the Elephant who was killed when he was struck by a Grand Trunk Locomotive in St. Thomas. Jumbo was the star of P.T. Barnum's "Greatest Show on Earth". The monument is located on the western edge of the city near the Elevated Park.
- **Waterworks Park**: The Waterworks Park is connected to the Dalewood Conservation Area in the Kettle Creek valley which is a significant regional open space and destination recreational area. The Waterworks Park includes walking and bike trails which are connected to the conservation area as well as splash pad, picnic areas and passive recreation facilities.

Area Vision: To strengthen these tourism destinations as nodes, by providing complimentary public realm elements to support its sustained heritage and economic contributions to the City.

Figure 9 Destination Landmarks in St. Thomas

Recommended Action:

- Continue coordinating the provision of connections to attractions outside of the city boundary.

2.8 Trails, Parks, and Open Spaces

St. Thomas has a diverse range of trails, parks and open spaces within the City limits. The City currently has 43 parks spread over 700 acres of land. Trails are also a vital part of the City's open space system, connecting different areas of parkland and natural heritage areas.

Area Vision: To create public spaces that foster social connections and gatherings, celebrate local heritage, encourage healthy physical activity for all, and are well-connected to adjacent land uses and active transportation networks.

Recommended Action:

- Add policies in the Official Plan to incorporate expanded public park and trail linkages and connections within private developments, supporting a walkable and active community.

Figure 10 Examples of Existing Parks and Open Spaces in St. Thomas

2.9 Natural Heritage

The rivers, creek corridors and other natural heritage features are integral to the sustainability of the ecological systems and functions in St. Thomas and within the Dodd Creek, Upper Kettle Creek and Lower Kettle Creek watersheds. The natural heritage system also allows for linkages between various open spaces and trails.

Area Vision: To strengthen and protect the natural heritage features with sustainable development practices in the city, and to celebrate the natural heritage's health and vibrancy as an important contributor to St. Thomas' identity.

Recommended Action:

- Add policies in the Official Plan to incorporate the enhancement and protection of the natural heritage features, such as the accommodation and integration of such features into neighbourhood design.

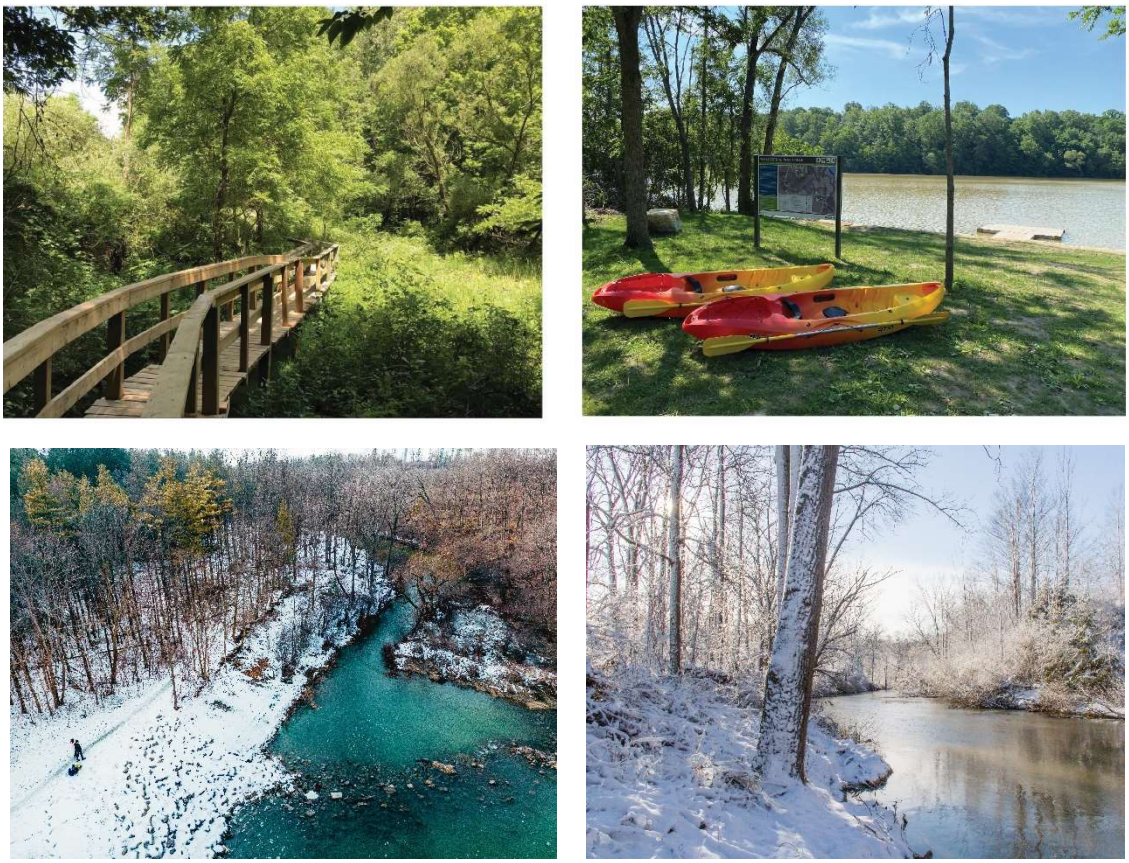


Figure 11 Natural Heritage in St. Thomas

St. Thomas Parks
Photo Credit: City of St. Thomas Facebook)

3.0 Public Design Guidelines

3.1 What is the Public Realm?

The public realm, according to the Ontario Professional Planners Institute, is defined as publicly owned spaces and places that belong to and are accessible by everyone. Design guidelines for the public realm provide guidance and recommendations on urban design best practices, principles, and standards that speak to the various elements of the public realm, including: the street network and its design; sidewalks; parks, trails, and open spaces; public art, gateways, and nodes; public buildings; and other community amenities that are accessible to the public.

Figure 12 Examples of public realm elements

3.2 Street Network and Design

3.2.1 General

1. All streets should have a designated pedestrian zone that is fully accessible, as per the Accessibility for Ontarians with Disabilities Act (AODA), that supports pedestrian activities within the City's varied rights-of-way.
2. All streets should have continuous planting/furnishing zones, and if feasible underground utilities, to improve the pedestrian comfort and experience.
3. Main active transportation corridors should allocate transitional areas located between the sidewalk and building or property line to provide a dedicated area for window shopping, spill-out retail, restaurant patios and café seating, building entrances and signage. Encourage placemaking through public art and small gathering areas.
4. Streets should be unified and accommodate street furniture, including benches, lighting, paving, waste and recycling receptacles, bicycle parking, and bus shelters, that contributes to the creation of a unique pedestrian-oriented streetscape.
5. Street furniture, bicycle parking and street trees should be clustered in areas of high pedestrian activity.
6. Permeable paving materials, street furniture, and public art, are encouraged to create a distinctive and attractive public realm that contributes to the overall character and identity of the downtown commercial area.
7. Areas with site-specific policies and plan guidance, such as the Downtown and the HCD, may have custom street furniture that enhances the place-making and cultural heritage landscape of the city.

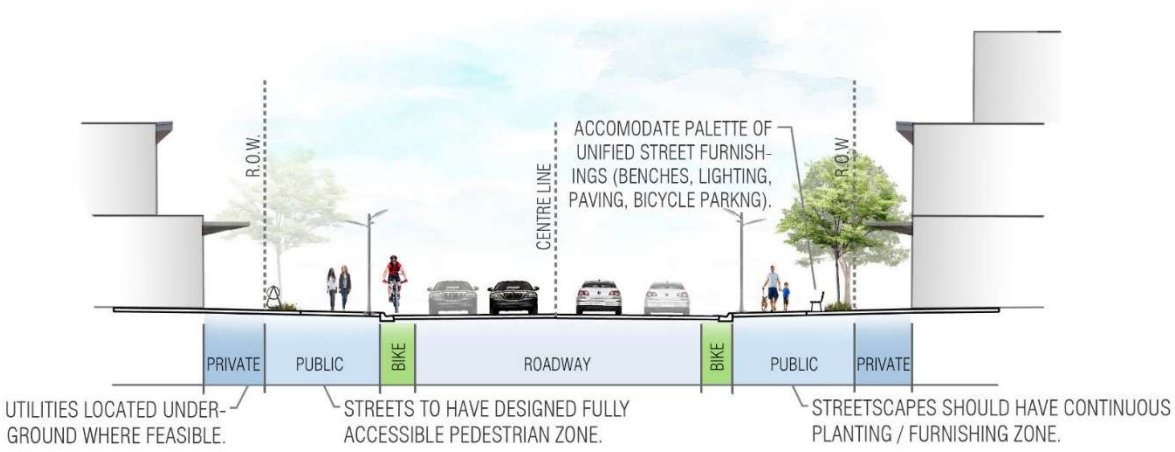


Figure 13 Cross Section Depicting General Street Design Guidelines

3.2.2 Gateways and Nodes

3.2.2.1 Major Gateways

1. Major gateways should be located at physical and symbolic entrances and transitions to the city and/or districts and land uses and celebrate the City's diverse community.
2. Gateways should be large in scale, visibility, and impact within the public realm.
3. Gateway elements should relate to the street width, building massing and be legible at the pedestrian and vehicular scale and speed of movement.
4. Gateways should combine artistic sculptural elements, topographical features, planting, intensified lighting, and signage.

Figure 14 Example of Major Gateways

3.2.2.2 Minor Nodes

1. Minor nodes should be located at physical and symbolic entrances to site-specific areas of the city while contributing to place making, including intersections at important public assets, such as the museum, courthouse, large city parks and trail connections.
2. Nodes should reflect gateways of smaller scale, depicted through the following combination of public realm features: enhanced planting, landscaping stones, public art, lighting, and appropriately scaled wayfinding cues.
3. Nodes should relate to the street width, building massing, open space vastness and be legible at the pedestrian and vehicular scale and speed of movement, as applicable.

Figure 15 Example of a Minor Gateways

3.2.3 Streetscape Planting

1. Street tree species should be tolerant to the local climate, urban soil conditions, minimal maintenance, and disease resistant, as well as preferably native to the deciduous forest region.
2. All tree plantings shall follow City of St. Thomas tree planting standards, and street trees should be located on both sides of the street to improve micro-climatic conditions for pedestrians.
3. Same species of street tree shall be planted on each side of the right-of-way, planting them in groupings to be unified and avoid random changes in species.
4. Adequate room and soil volume should be provided to enable the growth healthy and mature tree canopies.
5. Trees planted in front of grade-related retail shall be high branching with a light, transparent canopy to allow for safe pedestrian movement underneath and maintain visibility to the storefront and signage.
6. Structural technologies or engineered soils should be used, as necessary, to achieve higher soil volumes necessary for healthy street tree growth under hard surfaces and constrained underground utility areas.
7. Mature street tree canopies should be maintained, and gaps avoided, by planting companion trees; companion trees are planted adjacent to over mature trees to serve as well-established replacements should the mature trees begin to fall.
8. Street trees should generally be planted at a spacing of between 8 and 12 metres on-centre, and where possible locate trees between properties and avoid placement of trees in front of doorways.
9. Street trees shall not be located within 15 metres of an intersection to avoid obstructing vehicular site lines.
10. Tree grates shall be installed to avoid soil compaction over the root ball for the trees that are planted in pits.

11. Landscape areas shall be planted in line with Crime Prevention Through Environmental Design (CPTED) principles, avoiding entrapment areas or impeded views.
12. Low Impact Development (LID) measures shall be practiced as non-traditional stormwater source and conveyance controls, such as bioretention areas and permeable pavers where appropriate.

3.2.4 Lighting and Furnishings

1. All roadways shall follow the design of street lighting as per the City's design guideline to provide adequate and comfortable uniform lighting for vehicular and pedestrian movement.
2. All roadways should be well illuminated to improve foot traffic and sense of pedestrian safety and comfort.
3. Street lighting is to be designed to limit the amount of light directed towards the sky, to reduce light pollution.
4. Culturally significant and historic areas of the city should use lighting fixtures that compliments the heritage values and character, as outlined in respective plans.
5. Specific spacing of poles shall be considered after lighting design levels are determined.
6. Lighting of civic buildings shall feature mount floodlights on the streetlight poles where they can be directed to illuminate these buildings in the evenings.
7. Street furniture family should include benches, garbage receptacles, bike racks, bollards, bicycle racks and tree grates; they should be clustered together and designed around pedestrian circulation and movement.
8. Street furniture should be consistent and complement the style and colour of other streetscape elements chosen, such as decorative paving and light standards.
9. High quality street furniture should be selected, featuring low-maintenance, vandal-resistant and easy replacement.
10. Placement of bicycle racks should be avoided where they will conflict with pedestrians and cyclists; if possible, racks should be visible from the inside of buildings.

3.2.5 Wayfinding and Signage

1. On large sites and in areas of high pedestrian activity, such as the Downtown, banner signage on light posts should be encouraged to create a distinct identity for the site or area.
2. Educational signage should be encouraged to highlight natural heritage features, cultural heritage features, public art, or other special features.
3. Signage should be of complementary design to the character of the neighbourhood in which it is located in.
4. Signs should be constructed of durable, high-quality materials and well maintained.
5. Signs on heritage buildings should be compatible in terms of heritage character, colour, and material, and should not obscure architectural details.

6. Wayfinding and educational signage should be accessible, including providing braille or tactile signage, and visible and legible from the road right-of-way.

3.2.6 Paved Surfaces and Pedestrian Crossings

1. Paving design, colours and/or markings should be used to denote pedestrian and cycling zones across driveways and at all intersections, including pedestrian crossings where appropriate.
2. Sidewalks, multi-use paths, nodes and other hard surface areas along the green walkway and other open spaces should be designed in accordance with AODA standards.
3. Pedestrian crossing signage should be provided at every intersection, including all roundabout intersections, with AODA compliance.
4. Traffic calming measures should be considered for all public rights-of-way, including tapered tabletops, material changes, curb extensions and bump outs where appropriate.

3.2.7 Utilities

1. Opportunities should be identified for grouping above grade utilities in single locations where feasible (i.e., flanking yard of the public right-of-way); such locations should be guided by the location and hierarchy of streets, storm water management facilities, parks, and other components of the open space system as well as utility access considerations.
2. Wherever possible, utilities should be buried below grade; the use of a joint utility trench is encouraged for access and maintenance benefits, and more space to accommodate street trees.
3. Utility cabinets, transformer vaults, hydro metres and gas metres shall be incorporated into building design; where unfeasible, utilities should be placed in discreet locations and/or screened from public view.
4. New and innovative solutions for integrated utility services shall be explored to minimize street clutter; products that incorporate street lighting and telecommunication facilities within the same pole are encouraged.

3.2.8 Sustainability

1. Design for an improved public realm to provide city-building conditions that support active transportation and improved public health.
2. All planting, soils, pavers, site furniture, signage and lighting standards should be sourced locally, renewable and/or containing recycled materials, to reduce carbon footprint.
3. Consider the placement of additional tree planting within the streetscape to provide opportunities for shade and micro-climate relief in summer months, and to support stormwater management through green infrastructure.
4. Low impact development features should be integrated along major street reconstruction projects.
5. Energy efficient lighting should be installed along all roadways.

Figure 16 Examples of Sustainable Public Realm Features and Paved Surface Accents

3.3 Parks and Open Spaces Design Guidelines

3.3.1 General

1. All public park spaces should be safe, secure, accessible, and inclusive to all community members, providing high-quality spaces to foster social connections, celebrate local heritage and encourage physical activity.
2. All public parks spaces should be designed with highest standards; high quality building materials, informed planting choices and environmental sustainability are priorities.
3. All public park spaces should include high quality barrier free programmable space that can accommodate the needs of park space users and facilitate children's play, cultural gatherings, socializing, special events and both passive and active recreation.
4. All parks and open spaces should be linked to one another providing a continuous and universally accessible and safe network for pedestrians and cyclists.
5. All open spaces and connecting corridors should be visible and accessible for safety.
6. Streetscapes should be included in the network of connecting corridors in order to create a linked system with a number of circuits and loops.
7. Parkettes within the commercial core should be open to the street, and well-lit.
8. Amenities, such as seating, tables, washrooms, water fountains and waste receptacles should be of a high quality and readily available within all park spaces.
9. Bicycle storage facilities should be provided at all public parks and open spaces to encourage alternative modes of transport.
10. Public parks located adjacent to school sites or community facilities, should coordinate opportunities for shared facilities and amenities.
11. Design of the park or open space should reflect the classification, general standards and amenities set by the City of St. Thomas Parks and Recreation Master Plan.

3.3.2 Landscape

1. All tree planting should follow the City of St. Thomas tree planting standards.
2. Tree and other plant species should be appropriate hardiness zone and consider site specific microclimate conditions.
3. Trees and other plantings should be used to create a comfortable microclimate, by providing shade and mitigating wind impacts.
4. Planting of larger tree spaces should be encouraged to enhance overall tree canopy in the city.
5. Trees and other plantings should not obstruct sightlines or impede the perception of safety.
6. Trees and other plantings shall be arranged to provide maximum effect and efficiencies in maintenance and watering and consider methods to capture stormwater.
7. Detailed design for planting and landscape typologies should consider all seasons.
8. Existing trees and significant vegetation should be preserved whenever possible and incorporated into site landscaping to preserve the context of the surrounding land use.
9. Naturalized planting areas should be included where appropriate.

3.3.3 Trails

1. Trails should be located and interconnected throughout the City, connecting neighbourhoods to the Downtown, attractions, commercial areas, valley systems, parks, and open spaces, and designed as per the City's design guidelines.
2. All trails should be provided rest areas, every 5 kilometres on a recreational trail, which may include interpretive stations, lookouts, and linkages to attractions and other services.
3. Benches should be provided on both side of the trail to reduce crossing-over, at approximately 150 metres for rest areas, except in natural environments or other areas with unsuitable conditions where fewer benches may be appropriate and grouped at key trail entrances or other key areas.
4. Multi-use trails shall be a minimum of 3.0 metres, and constructed as per City's standard, with a 3.0 metre buffer on each side of the community trail to enhance public comfort and safety.
5. Deciduous trees should be planted at a minimum distance of 1.5 metres from the edge of the trail, with maintenance requirements to ensure that tree canopies are raised to a minimum of 2.2 metres and shrubs are regularly trimmed. Coniferous tree planting is not permitted.


Figure 17 Trails in St. Thomas

3.3.4 Paving

1. Paving material selection should be of high quality and provide safe walking surfaces for users, with special consideration for universal accessibility.
2. Permeable paving techniques, as appropriate, should be used to facilitate on-site stormwater mitigation and groundwater infiltration.
3. Locations should be defined where pedestrian paths intersect with vehicular routes through pavement treatments, vertical markers, signaling and clear signage.

3.4 Public Art

3.4.1 Size and Type

1. Public art should be in or near community-oriented spaces, such as parks, open spaces, public squares, plazas, and gateways, to maximize visibility. It should explore opportunities to celebrate local history and culture, including notable events and figures.
2. Significant public art pieces should be the subject of design competitions to support local artists and to promote excellence and innovation. Temporary installations, as well as permanent pieces, should be considered.
3. Public art should be durable and low maintenance, as well as be complemented by adjacent landscapes, as appropriate. Interactive public art or integrated as part of site furnishings or other infrastructure, should be encouraged.
4. Installations should be encouraged on both publicly and privately-owned lands.

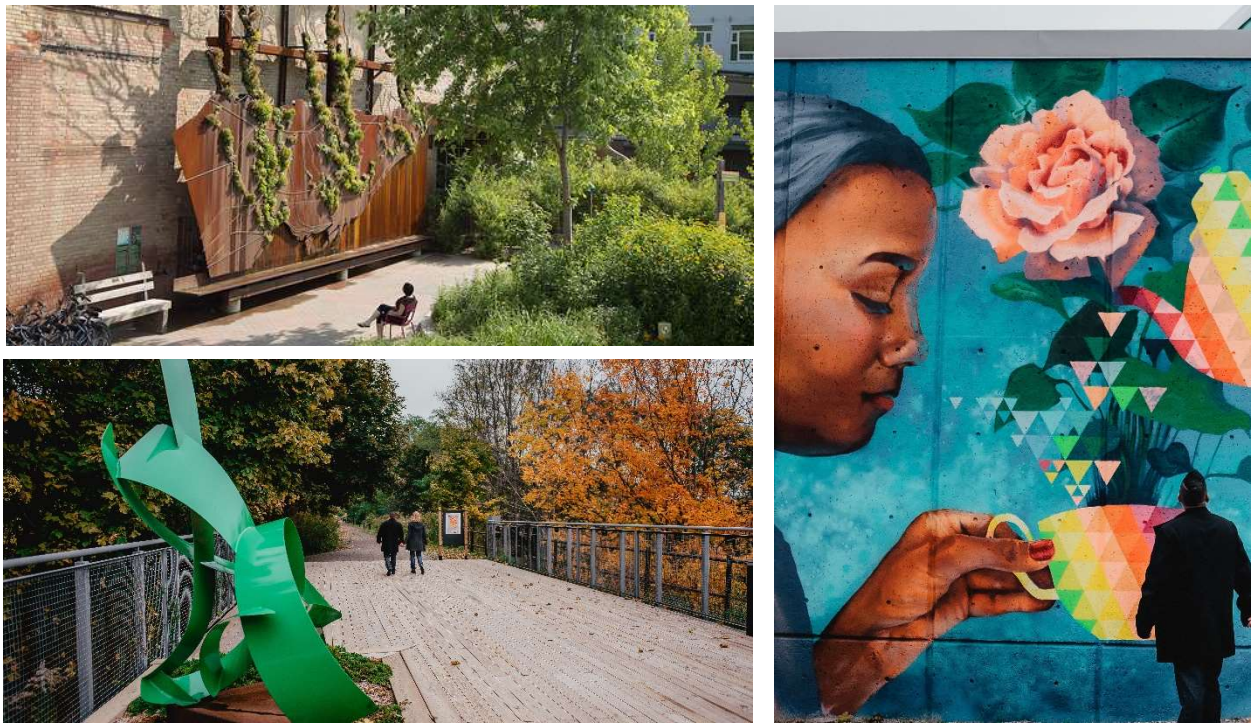


Figure 18 Public Art Integrated into the Public Realm

3.4.2 Locations

1. Public art should be place-specific and should be located at key destinations. New park spaces should include opportunities for public art.
2. Public art should be visually and physically accessible. Opportunities to incorporate public art into building design as an architectural element should be encouraged.
3. Groupings of complementary pieces, including temporary installations, should be encouraged on one site.

3.5 Public Buildings

1. Scale of public buildings should fit within the existing context, accounting for the site scale and size, adjacent land uses and surrounding building types.
2. Public buildings should be designed as landmark architectural buildings, with prominent building features and public spaces. Building design should emphasize prominent entrances, connected with outdoor plazas, forecourts or gathering areas with weather protection and significant transparency.
3. Outdoor seating, trees and landscape should compliment interior programming with outdoor gathering and amenity spaces.

4. Access to community facilities through active transportation should be emphasized, with direct pedestrian access to transit stops, cycling access and bicycle parking.
5. All surface parking should include landscaped buffers framing the street, clear pedestrian pathways to building entrances and landscaped islands throughout the parking area. In the downtown, underground parking should be considered.

Mid Size Development, North York, Ontario
Photo Credit: Sotherby's International Realty)

4.0 Private Design Guidelines

4.1 What is the Private Realm?

The private realm refers to the portion of the built environment that is under private ownership, control, and maintenance. The private realm encompasses residential, commercial, and industrial properties, as well as privately-owned open spaces, gardens, and other landscape elements. The design of the private realm can have significant impact on the experience along a streetscape, as it creates the interface of an active street edge. It is the responsibility of the property owners to adhere to urban design guidelines, ensuring that their properties are well-maintained, visually appealing, and in harmony with the surrounding environment.

Figure 19 Examples of Site Design on Various Land Uses

4.2 General Guidelines

4.2.1 Site Organization and Sustainable Design

1. All buildings should be designed in reflection of its site context, microclimate conditions, cultural and natural heritage values, connectivity to active transportation networks and site adjacencies.
2. All developments should be designed to support walking, cycling and public transit as preferred modes of transportation, as well as create visual interest, and heighten interaction between internal spaces and the public realm.
3. Residential block lengths should not exceed 150 metres; where a block extends beyond that, a mid-block pedestrian connection should be provided in the form of a minimum 6 metre walkway, or parkette and/or semi-public open space.
4. All development should be designed with the principles of compact and low impact development design, emphasizing efficient land use, and minimizing the building footprint.
5. Use of renewable energy sources, such as solar, wind, and geothermal energy, is encouraged.
6. All buildings should be oriented to maximize solar access and natural ventilation while minimizing shadow impacts on adjacent properties and public spaces.
7. Design, construction, and operation of buildings that use green building practices and adopt energy and water use efficient practices, including those that meet the Leadership in Energy and Environmental Design (LEED) rating system, are encouraged.
8. Functional use of plant material should create pleasant microclimates that allow for energy conservation by incorporating deciduous trees and shrubs that shade windows from summer sun and that allow sunlight to enter during the winter.
9. Low impact development measures for stormwater management are encouraged to filter, absorb, and/or store stormwater runoff, such as bioswales, rain gardens, permeable paving, rain barrels, and green roofs.
10. Impermeable surfaces should be limited, and strategies to reduce impermeable surfaces include shared driveways and parking areas and permeable paving for driveways and parking areas.
11. Abrupt changes in setbacks between adjacent dwellings should be avoided.
12. For alterations and renovations, the existing at-street front lot setbacks should be retained.
13. Where rear facades abut public spaces, facades should be enhanced and well-lit to create a safe and comfortable pedestrian environment.
14. Parking and loading areas should generally be in the rear yard, and where side yard parking is proposed, it should be well screened from the public realm through attractive landscaping. Front yard parking is discouraged.

15. Where large parking fields are necessary, landscape islands should be introduced to break up large asphalt areas and to delineate clear pedestrian circulation.
16. Electric Vehicle Charging facilities should be considered for operational and personal vehicles in parking lots.
17. Property access should be consolidated through shared driveways, wherever possible, to reduce the number of curb cuts and interruptions to the pedestrian realm.
18. Buildings should generally align along the street edge, strengthening the urban built streetscape.
19. Development on corner lots should front both edges with articulated facades and windows that provide views of the street and/or open space from living areas; blank walls visible from streets parks, or other public spaces are not permitted.
20. Use recycled or sustainably sourced materials with longer life cycles for paving, building materials and site furnishings.
21. Deep well garbage systems are preferred over detached garbage enclosures.
22. Development adjacent to natural heritage features should limit impermeable surfaces and integrate low impact development measures to filter and clean stormwater runoff before it enters natural heritage features.
23. Views and awareness of natural heritage features should be prioritized through appropriate placement of roads and the location, height, and orientation of buildings.
24. Single loaded roads defining the edge of natural heritage features are encouraged.
25. Backlotting is strongly discouraged, however where it is unavoidable due to issues such as significant grading, buildings shall be made to front or look onto natural heritage features, parks, open spaces and multi-use trails.
26. Encourage window streets, which occur parallel to arterial roads and are designated to mitigate views and limits access.
27. Development adjacent to a multi-use trail should provide a clearly visible, direct access to the trail and should allow for public easements where necessary to ensure trail connectivity.

Figure 20 Corner Building with articulated facade on both sides

4.2.2 Building and Massing

1. All new buildings should positively enhance and contribute to the character of the existing streetscape, cultural heritage district, cultural heritage landscape and/or historic area.
2. Architectural variety is encouraged, while still maintaining a cohesive and harmonious streetscape.
3. The design of additions, alterations or new construction having sidewalls exposed to the public realm should include massing, roof lines, apertures, detailing and materials that complement the design of the front of the building and contribute to the visual interest of the street.
4. Alterations and renovations to a building should be consistent with the form, massing and heights of adjacent buildings.
5. Where new development is fewer storeys in height than the adjacent buildings, methods to increase its height should be considered such as, increasing the floor to floor height of each storey or introducing a tall parapet with a strong cornice line.
6. Mixed use developments should locate active uses such as retail, service shops and restaurants at the street level to encourage pedestrian activity, create visual interest, and heighten interaction between internal spaces and the public realm. Residential or office spaces should be located above street level or to the rear.
7. Building facades for development with over 4 storeys should incorporate architectural elements that break up the massing and provide visual interest, such as windows, doors, and balconies.
8. Development should respect the architectural scale, proportion, rhythm and character of existing designated heritage building, and or/ heritage conservation district.
9. Abrupt changes in massing and height in new buildings should be carefully designed with building step backs to are compatible with the adjacent heights of buildings, larger side setbacks, and micro-climate considerations to minimize impacts.
10. Corner buildings should address both street frontages.
11. Consider the use of locally sourced materials to reinforce the connection to the community and support sustainable building practices.
12. High quality materials and design should be a key consideration for architectural design.
13. Commercial building and mixed-use buildings exceeding 6 storeys in high rise forms should have a massing composed of a podium, middle and top.
14. Commercial building and mixed-use buildings above 2 or 3 storeys, depending on the adjacent building heights, should incorporate a minimum step-back of 1.5 metres between the floors to ensure the appropriate scale and massing of the building.

Figure 21 Mixed Use Architectural Massing and Design

1. Where a building site abuts a low-density residential area, a transitional 45 degree angular plane should be applied at the shared property line, to ensure that the impacts of height, overlook and shadow are mitigated.
2. Where a building site abuts a medium density residential area, a transitional 45 degree angular plane should be applied beginning 10.5 metres above average grade at the required minimum setback, to ensure that the impacts of height, overlook and shadow are mitigated.

4.2.2.1 Roofs

1. Variations in roof forms, such as gable, hip, and flat roofs, are encouraged to create visual interest and break up building mass.
2. Green roofs, solar panels, or other sustainable technologies are encouraged, where appropriate, to promote energy efficiency and reduce the environmental footprint.
3. Contemporary elements within the roof area such as skylights, air conditioners and roof vents should be located so they are not visible from the public realm or detailed to suit their historical context, as applicable.
4. Building roof reconstructions, repair or maintenance within the heritage conservation district should follow appropriate design guidance established in the heritage conservation district plan.

4.2.2.2 Exterior Walls

1. Exterior walls should be designed with high quality materials that complement the architectural style of the building and are preferably locally sourced.
2. The use of synthetic building materials such as aluminum or vinyl siding and plastic wood siding sheets is not recommended.
3. Large blank walls should be avoided, especially when facing public streets or open spaces. Architectural elements, such as windows, doors, or decorative treatments, should be incorporated to break up the facade and create visual interest.

4.2.2.3 Windows, Entrances and Doors

1. Window placement should enhance natural light and ventilation, while providing visual interest and contributing to the overall building design.
2. Storefront windows should follow the line of the front face of the building and maximize the amount of glazing at street level.
3. Front entrances should be prominent, well detailed and emphasized through windows, canopies, lighting and other features.
4. Building entrances should be clearly visible, accessible, and well-lit, providing a direct connection to the public realm.
5. Accessible entrances and ramps should be seamlessly integrated into the building design, ensuring ease of use for individuals with varying mobility levels.
6. Walkways from the entrance to the street are encouraged as a means of linking street and property at a pedestrian scale.

4.2.2.4 Garages and Driveways

1. New garages should be accessed from street-oriented driveways, and either located at the rear of the premises or well integrated into the design of the dwelling with no part projecting beyond the street-facing elevation of the dwelling.
2. Driveways should be designed with appropriate materials, such as permeable paving, to minimize stormwater runoff and promote infiltration.
3. Shared driveways and rear laneway access are encouraged to reduce the number of curb cuts, minimize the visual impact of garages, and promote pedestrian-friendly streetscapes.

4.2.3 Landscape Design

1. Planting should be an integral piece of the site design and be developed to unify and enhance the overall site design.
2. High quality, durable and diverse landscape elements are encouraged.
3. Native plant materials should be used, wherever possible.
4. Landscaping should support and define a consistent and attractive street edge.
5. Selection and spacing of all plantings should relate to the street type and adjacent land use and site conditions.
6. Landscape buffers should be encouraged along surface parking lots adjacent to public streets to soften and screen parking lot edges.
7. Existing significant trees, tree stands, and vegetation should be protected and incorporated into site design and landscaping.
8. Environmentally sensitive planting schemes should be provided at the interface with watercourses and natural heritage areas.
9. Landscape design should incorporate a wide range of strategies to minimize water consumption, e.g., native species, use of mulches and comport, alternatives to grass, rainwater collection systems.
10. The width of all planting beds should be at least 2.5 metre-wide to enable plant material to be massed to create a healthy and sustainable landscape.
11. Permeable alternatives, such as permeable pavers, porous asphalt, or pervious concrete, should be encouraged and integrated into the landscape design.

Figure 22 Private Realm Street Edge Landscaping

4.2.4 Amenity Areas

4.2.4.1 Semi-Public Amenity Areas (or Privately-Owned Public Spaces (POPS))

Semi-public open space is at-grade landscaped area within private property that is publicly accessible but not classified as public parkland. Semi-public amenity areas include but are not limited to: mid-block connections; courtyards; plazas; and landscaped setbacks.

1. Semi-public amenity areas should be designed to provide accessible, inviting, and functional spaces for public use while being privately owned and maintained.
2. Semi-public open spaces should provide direct visual and physical connections to public streets and open spaces, include the provision of wayfinding signage to signal access for public use, and encourage year-round use.
3. Semi-public open spaces should establish natural surveillance elements to promote safety, and maximize universal accessibility, pedestrian-scale lighting, four season landscaping, seating, public art, and protection from wind and inclement weather.
4. Semi-public amenity areas should be provided, wherever possible, at the front, side, or rear of the building.
5. The location, dimension, design, and furnishing of semi-public open spaces should be adaptable and flexible in its programming, and furnishing should create a comfortable environment for the pedestrian.
6. Factors such as privacy and access to sunlight should be considered, when locating and designing semi-public amenity areas.


Figure 23 Example of Semi-Public Amenity Area

4.2.4.2 Private Amenity Areas

1. Patios are encouraged to be provided for at grade units.
2. Balconies are encouraged above the first floor and typically incorporated from the second or third floor and upwards of multi-unit buildings, to provide private outdoor amenity areas for residents.
3. Balconies should be positioned to minimize overlook and privacy impacts on adjacent properties, using screening, landscaping, or other design strategies.
4. Balconies should be sheltered, and weather protected.
5. Terraces should be provided above townhouses and podiums on mid- and high-rise buildings.
6. Balconies and terraces should be cohesively integrated into the building design, while adding visual interest to the streetscape.
7. Where possible, balconies should be large enough to accommodate appropriate outdoor furniture.
8. Balconies may be inset or project but should have a minimum depth of 1.5 metres for the space to be functional.
9. Where projecting balconies may encroach upon the public realm, especially along major pedestrian streets, recessed balconies should be considered.
10. Balcony designs and materials should minimize the impact on the pedestrian's view of the sky.
11. Balcony design should include high quality materials and take into consideration surrounding architecture and heritage.
12. Sunken balconies or patios are partially or fully recessed outdoor spaces that are located below the surrounding ground level.
    - 12.1. Use fencing materials that promote transparency, such as metal or wooden slats with gaps between them, glass panels, or cable railings. This allows for light penetration and visual connection to the surrounding environment.
    - 12.2. Keep fencing height to a minimum while still providing adequate privacy and security.
    - 12.3. Use planter boxes or raised beds along the fence line to incorporate greenery and add visual interest without creating a sense of enclosure.
    - 12.4. Chose fencing material and design that blend into the architecture of the building.

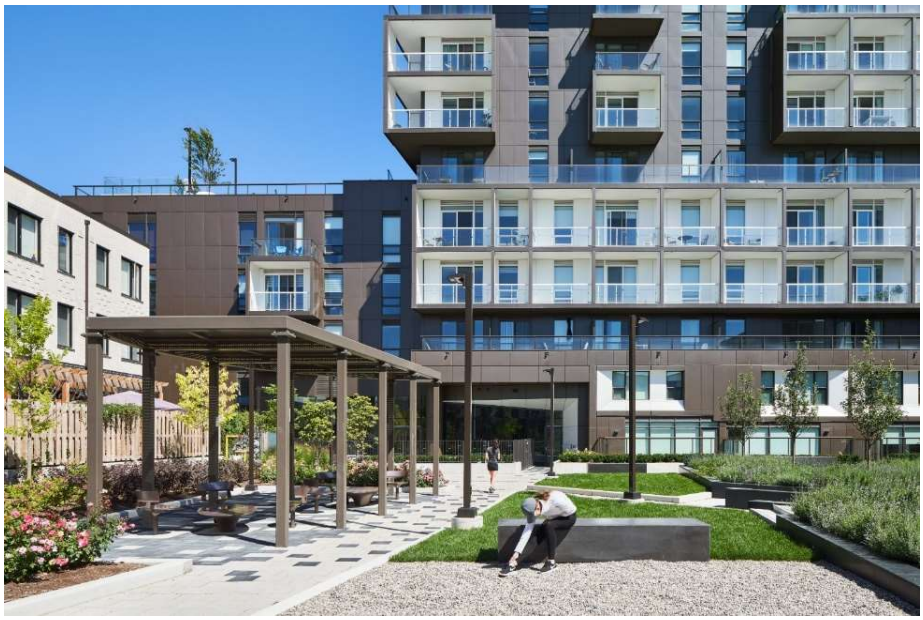


Figure 24 Private Amenity Open Space and Balconies

4.2.5 Safety, Security, and Comfort

1. Design of all new site developments should consider CPTED principles.
2. Adequate lighting illumination and continuous lighting should be integrated in the site design.
3. Security should be increased through the use of private wayfinding signage.
4. Barrier free access should be provided for emergency vehicles.
5. Higher quality fencing designs should be provided, if required for security and safety.

4.2.6 Lighting and Signage

1. Pedestrian scaled lighting should be provided in all open space areas.
2. Site and building LED lighting should be integrated into the design, reducing and minimizing light pollution and glare with full cut-off lighting.
3. Light pedestrian areas (entrances, walkways, amenity areas, service areas etc.) should be adequately lit, including pedestrian scale lighting along high traffic routes.
4. Signage and lighting should be architecturally integrated into the building facades.
5. Durable and high-quality signage and building address should be architecturally integrated into the building facades and along primary frontages.

4.2.7 Active Transportation Facilities

1. Building design should encourage at-grade and safe bicycle facilities, such as covered bicycle parking and storage facilities.
2. Well-lit and well-marked connections and linkage should be provided to and from bike facilities that are sized appropriately to the estimated demand.
3. Safe separation between vehicular and pedestrian/cycling traffic should be provided on site for safety, especially in parking lots.

Figure 25 Sheltered Bike Storage

4.2.8 Utilities

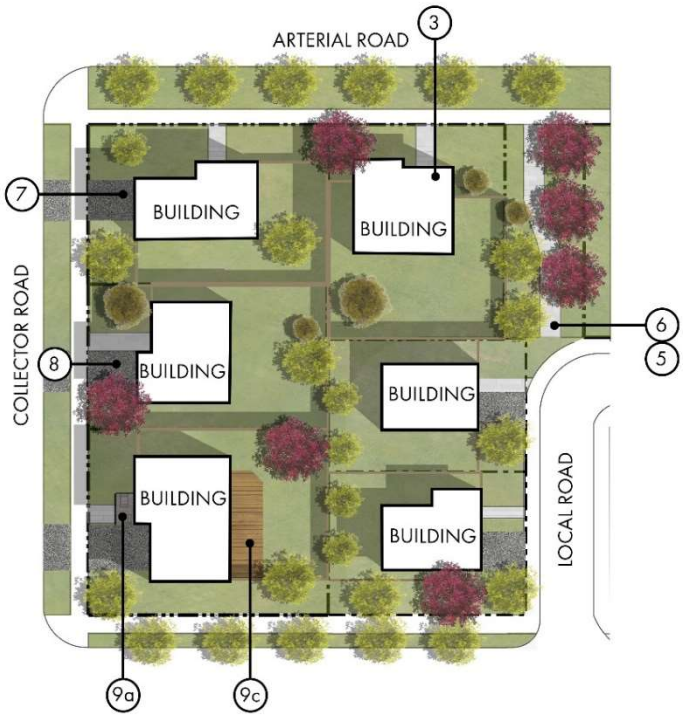
1. Above ground equipment should be located away from publicly visible areas.
2. Planting beds or murals, as appropriate, should be used to screen required above ground servicing equipment (e.g., transformer boxes, etc.).

4.3 Site Specific Design Guidelines

4.3.1 Low Rise Residential

4.3.1.1 Site Design

1. Site design should be compatible with the adjacent neighbourhood and foster a high-quality pedestrian public realm.
2. Block depths should be designed to allow for appropriate built form, adequate setbacks, outdoor amenity space, service and parking, and transitions in building heights.
3. Developments should maintain a street-fronting orientation, parallel to the street.
4. Developments on corner lots must be oriented to the higher-order street.
5. Design dwellings to create a safe, comfortable, accessible, vibrant, and attractive public realm and pedestrian environment, incorporating high quality materials.
6. Low-rise residential dwellings should be sited and oriented to overlook public streets, parks, walkways, and open spaces, without compromising the privacy of those who live in them.
7. Where some units, such as townhouses that are interior facing, do not front onto a public street, a clear, legible, and welcoming pedestrian pathway from the public street should be established.
8. Front setbacks should be maintained along the same side of the residential street.
9. If the existing front setbacks are inconsistent, use the front setback average of the four closest residential buildings oriented to the same street, within the same block, on the same side of the street.
10. Private front yard spaces, porches, or patios should be physically and/or visually delineated from the public realm, while maintaining visibility of unit entrances. Design strategies may include, but are not limited to the following:



10.1. Elevating the front entry or patio slightly above the fronting sidewalk level;

10.2. Where a change in grade is not desired to provide accessibility, delineate the space through other means such as landscaping features, low fencing, or planters; and

10.3. Patios, which are typically a landscaping treatment in the rear yard of ground-oriented built form, should not be located in front yards or side yards.

4.3.1.2 Massing and Architectural Design

1. A variety of built forms, materials, compatible housing styles and building elevations should be used to add interest to the streetscape, as well architectural details, such as porches, window trim and rooflines.
2. Within each block, dwelling units with the same elevation and colour scheme should be discouraged.
3. All design should complement the existing architectural heritage of surrounding buildings.
4. Ground-floor of residential units should be slightly raised for privacy, and porches, stoops or terraces with landscaping should be provided to offer additional privacy.

4.3.1.2.1 Garages for Single- and Semi-Detached Dwellings

1. Garages should be designed so they are not the dominant feature of the building or the streetscape.
2. Garage should not project beyond the façade of the building or porch, and the percentage of the house's façade occupied by the garage should be limited.
3. An attached garage should not be wider than half of the width of the building.
4. Detached garages, where provided, should be designed to reflect the architecture of the main building.
5. Garages accessed from a rear laneway:
    5.1. Should be set back from the lot line that separates the rear yard from the laneway;
    5.2. Should be staggered, to avoid creating a long, flat building edge along the laneway; and
    5.3. Should have a variety of roof styles to create a visual interest.
6. If no garage is being provided, a driveway should be provided to a maximum width of 3.5 metres and a maximum length of 6 metres and aligned with the side of the front entrance.

4.3.1.2.2 Porches for Single- and Semi-Detached Dwellings

1. Large, covered porches and/or verandas with generous dimensions that are appropriately proportioned to the size of the dwelling should be encouraged.
2. Porches should be deep enough to encourage its use, without them encroaching on front yard amenity space.
3. Where porches or porticoes exist, their design and quality should be integrated with the entrance and façade design.
4. Wrap-around porches should be encouraged for corner lot residential units.

5. A porch may be added to a dwelling, provided its design is consistent with the architectural style of the dwelling, complementary to the proportions of the house and harmonizes visually with the exterior elevation and building form.

Figure 26 Example of Low-rise Residential

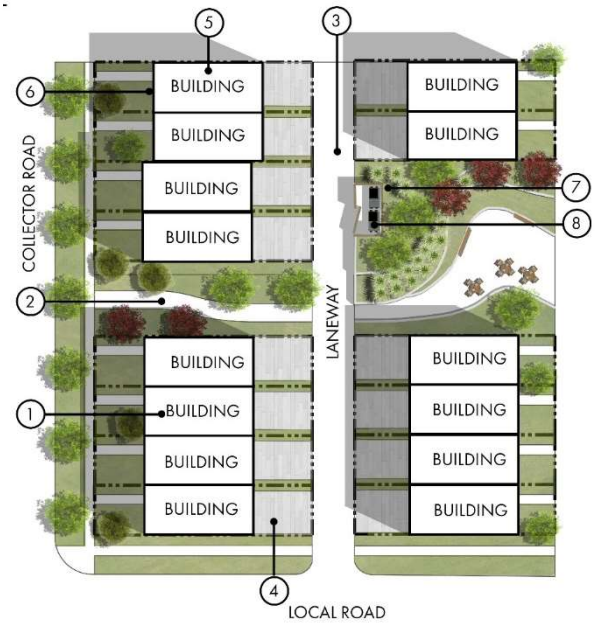
4.3.2 Townhouse Design

4.3.2.1 Site Design

1. Orient the primary facades of buildings and front doors parallel to the street to frame the edges of the streets, parks and open space.
2. Townhouse blocks should not exceed 80 metres.
3. Pathways and connections should be provided between rows to facilitate pedestrian and cyclist site circulation.
4. Rear laneways, connected rear garages, and underground parking are preferred over integrated front garages to promote habitable front facing rooms and well-landscaped front yards.
5. Organize buildings to eliminate back-to-front facing relationships such as front doors facing rear yards on the site or on neighbouring properties. Avoid a rear yard condition facing any street.
6. Provide greater building setbacks at strategic locations to avoid long, monotonous facades to improve pedestrian amenity and increased space for trees and other landscaping.
7. Limit the negative impact of a service area or elements on the public realm, units, shared open space and adjacent properties by locating the area out of view and by screening with architectural features and landscaping.
8. Provide a maximum 100 m distance to a common waste collection area.

4.3.2.2 Massing and Architectural Design

1. Maintain high visibility and direct access to front doors from the public sidewalk, especially when building entrances are not located on a public street.
2. To promote a variety of widths, no more than 50% of townhouses within a development should be built to the minimum width.
3. Apply angular planes, minimum horizontal separation distances, and other building envelope controls to transition down to lower-scale buildings, parks and open space.
4. Minimize the impact of shadow and maximize access to sunlight, sky view and privacy on neighbouring properties.
5. For sites adjacent to heritage properties, design the scale and height of the building to respect and reinforce the height established by the historic context.
6. Ensure visual privacy between residential units including balconies, porches and terraces, through the design of units such as off setting the location on of windows in facing walls and by the use of landscaping or screening devices.
7. Where there is an integrated front garage, it may occupy a maximum of 50% of the unit frontage. Driveways should be paired to consolidate landscaped front yards between units.
8. Stacked townhouses should be designed to resemble a traditional townhouse, with vertical articulation identifying each module of units.



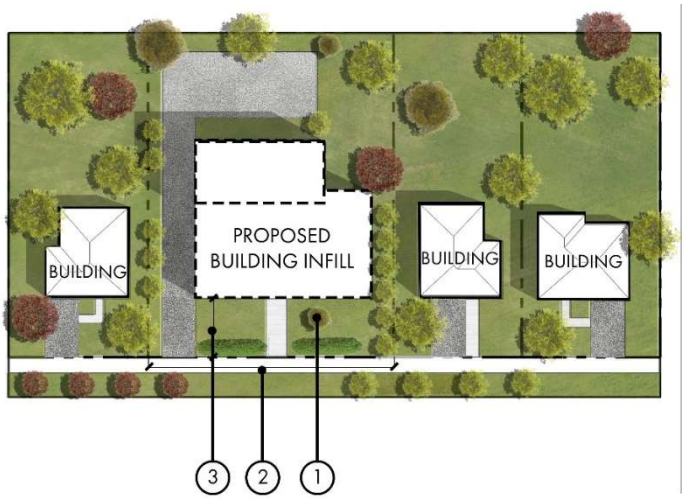
9. Where below-grade thresholds for basement townhouse units cannot be avoided, the entrance stairwell should not be a dominant element in the façade.

Figure 27 Example of Townhouse Design

4.3.3 Residential Infill & Intensification

4.3.3.1 Site Design

1. To assist bridging the gap of existing sense of place and future visions, as supported by regulations, developments should at minimum reflect the desirable aspects of the established streetscape character that relate to the existing context, and contribute to an improved and high-quality building design, landscape architecture and tree planting.
2. Existing context considerations should be a minimum of two parcels around the development, and/or 50 metre radius, whichever greater.
3. Availability and quality of public realm and open space in the context of the development should be assessed to inform and enhance site design strategies.



4. Residential Infill:
   - 4.1. Prevailing pattern of lot widths, lot depths and lot area in a neighbourhood should be maintained; subdivision of a lot to create two or more lots should only occur if the width of the new lot(s) are equal to or exceed the frontages of the adjacent and nearby lots.
   - 4.2. Infill development should reflect the existing neighbourhood pattern of development in terms of front, rear, and side yard setbacks, building height and the location and treatment of primary entrances, to both the dwelling and the street.
5. Intensification:
   - 5.1. Adaptive reuse, the conversion or expansion of existing industrial, commercial, and institutional buildings for residential use is encouraged.
   - 5.2. Introduce internal street and block patterns into larger sites to facilitate phased implementation of intensification; a tighter network of streets and blocks is encouraged supporting pedestrian friendly urban developments.
   - 5.3. Transitional built form of mid-rise and high-rise residential building blocks should be located in the rear and be sensitive to and compatible with adjacent building heights.
   - 5.4. Development should contribute to an inviting, safe and accessible streetscape by emphasizing the ground floor and street façade.
   - 5.5. Facing distances provide separation between buildings on the same site, without internal road networks, and should consider:
     - 5.5.1. Minimum 11 metres for 2 storeys,
     - 5.5.2. Minimum 13 metres for 3 storeys, and

5.5.3. Minimum 15 metres for 4 storeys.

- When facing building distances differ in height, use the average of the two.
- Provide half the facing distance when one building is side facing on the same site.

4.3.3.2 Massing and Architectural Design

1. Building massing should be designed according to the context of the surrounding neighbourhood, respecting the transect line of the build environment and consider planned heights for the neighbourhood to ensure a harmonious integration.
2. In HCD areas, avoid designing blank walls for new infill. Maintain horizontal and vertical patterns of the streetscape created by windows, doors and materials.
3. Development should be designed with gradual transitions in massing and height, particularly when adjacent to lower-scale buildings or sensitive areas, such as historic districts, to fit into existing urban fabric.
4. Developments should consider the use of height transitions, setbacks, step-backs, architectural and roofline treatments to reduce the impacts of height, as well as consider sunlight, sky views and privacy impacts on neighbouring properties.
5. Architectural design of residential infill should complement existing architectural character, within and in close proximity to a designated heritage property and/or district, as per the heritage conservation district plan design guidance.
6. Private balconies should be provided on upper levels where there is adequate sunlight and opportunity for views into the City's natural heritage, landmarks or skyline.
7. Balconies should be inset within the primary façade, wherever possible, as they increase privacy, better insulation to wind and noise, and better aesthetic appeal.
8. Cantilevered balconies should be provided where there is adequate sunlight and an opportunity for views. For medium rise building, cantilevered balconies are encouraged to be provided without ground floor support.
9. Ground-floor residential units should be raised slightly for privacy, and porches, stoops or terraces with landscaping should be provided to offer privacy between ground floor units and the public realm.

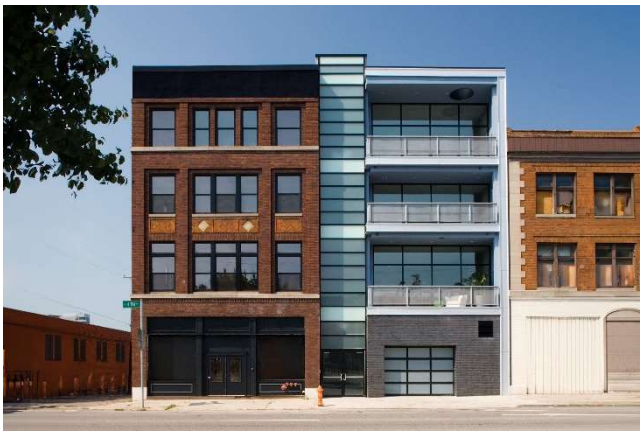


Figure 28 Urban Infill Example

4.3.4 Mixed-Use

4.3.4.1 Site Design

1. Mixed use buildings should include, where feasible, active frontages with street-related, publicly accessible shops, services and amenities adjacent to areas of high pedestrian circulation.
2. Setback measurements should vary depending on the scale and size of the street; at minimum, setbacks for mixed-use developments should have enough space for modest spill-out uses such as restaurant, cafe patios, waiting areas, planters, etc.
3. In HCD areas, setbacks should match the existing setbacks of established buildings.
4. If a building includes residential uses at grade, they should be differentiated from any active or non-residential uses through additional setbacks.

4.3.4.2 Massing and Architectural Design

1. Commercial uses are encouraged at the ground level and should have individual unit entrances accessed directly from the street; upper-level residential units – or office units, in the case of live/work buildings – may be accessed from a shared lobby entrance.
2. Ground floors should be a minimum of 4.5 meters in height and building systems should be designed to accommodate a range of uses over time, unless a continuous street wall has already been established, new buildings should align with existing ground floor height and design.
3. Building entrances should avoid grade changes from the public sidewalk to ensure that grade level retail, office and commercial units and upper-level residential units can be accessed by all.
4. Fifty percent transparent glazing should be provided within the ground floor street facing facades of commercial spaces. Reflective or heavily tinted glazing should be avoided.

5. In HCD areas, shapes and massing should be used that are compatible with the historic building and create a harmonious look with the surrounding buildings.
6. Majority of vehicular parking should be provided underground, and surface parking should be limited to convenience parking at the rear of the building for retail uses.
7. Private balconies should be provided for residential use on upper levels where there is adequate sunlight and opportunity for views into the City's natural heritage, landmarks or skyline.
8. Balconies should be inset within the primary façade.
9. Common amenity spaces should provide multiple uses and functional spaces for people of all ages, including children. They should be designed to read as distinct from the public realm but accessible to all building residents; provide a combination of outdoor amenity spaces and indoor amenity areas.

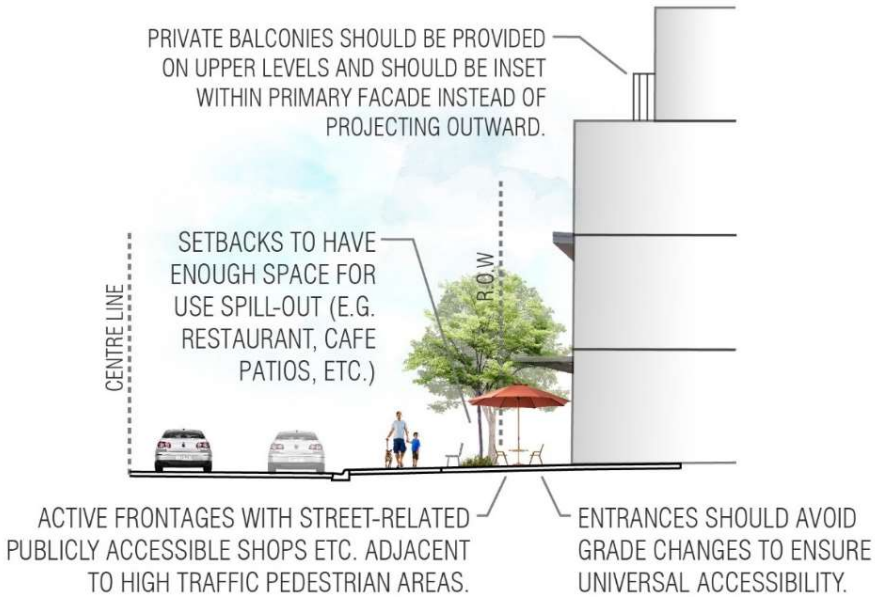


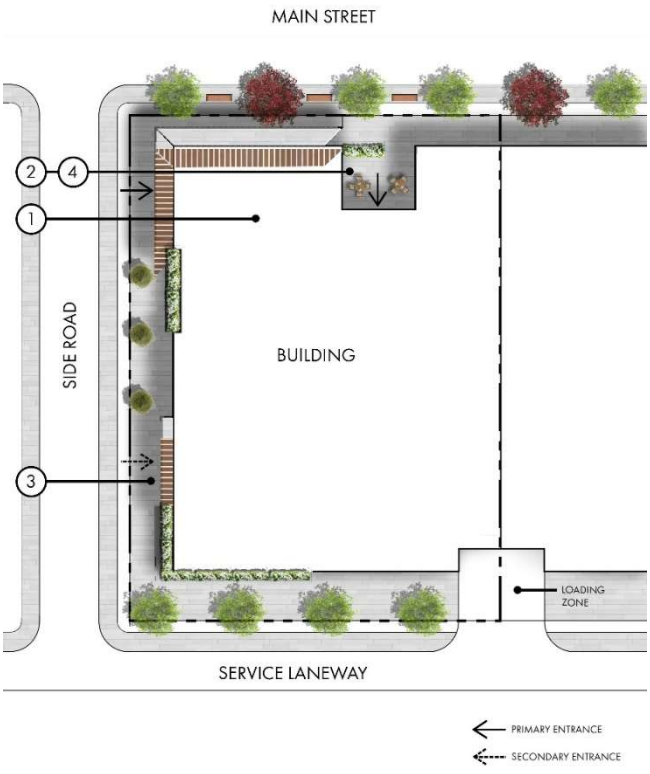
Figure 29 Diagram Depicting Typical Mixed Use Guidelines

Figure 30 Example of Mixed-Use Design

4.3.5 Downtown Commercial

4.3.5.1 Site Design

1. Buildings should be oriented to create a strong and continuous street presence, with primary entrances and facades facing public streets, promoting a sense of visual engagement and activity.
2. Within retail districts, outdoor seating, gathering spaces, pedestrian lighting and other amenities should be integrated to complement the vibrant Downtown urban character.
3. Larger format urban retail should be highly permeable and provide easy and comfortable access for transit users, pedestrians, and cyclists.
4. Small-format stores should be used to define street edges, courtyards, terraces, and other public open spaces, and have continuous pedestrian sidewalks on all sides of the building where public entrances and parking areas are located.
5. Areas not required for servicing between buildings should be well landscaped and programmed.



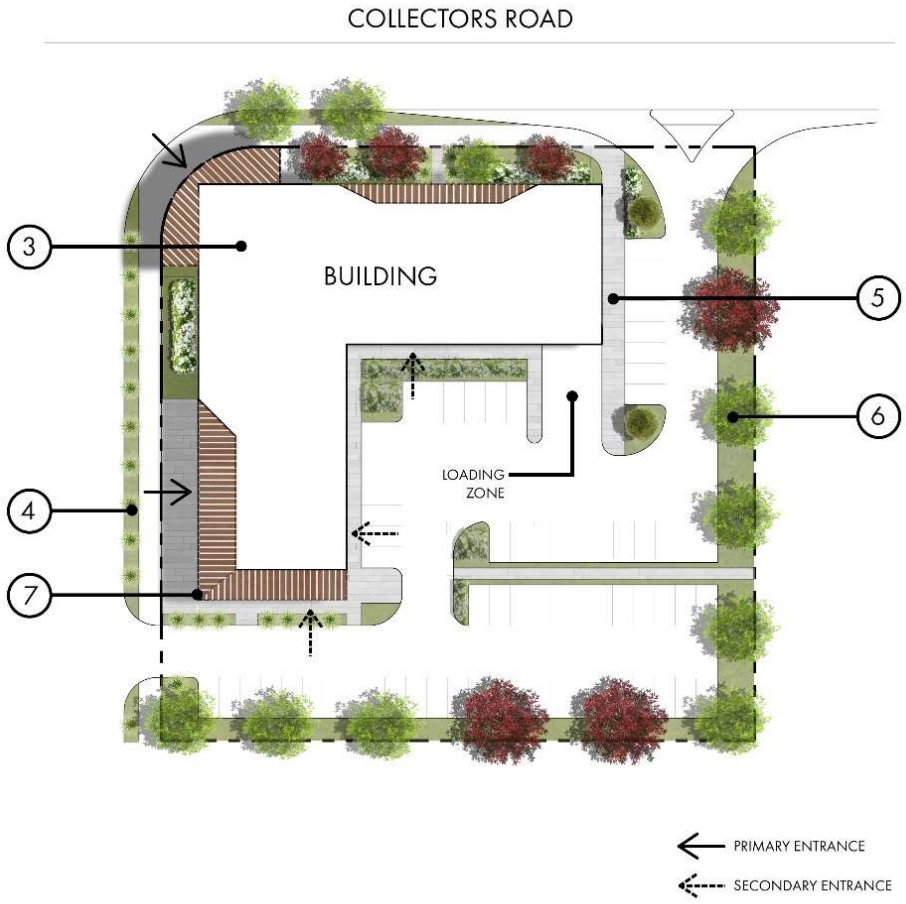
4.3.5.2 Massing and Architectural Design

1. Commercial buildings in the downtown should contribute to active and vibrant streetscapes by locating primary entrances to address public streets, visually connecting interior uses with exterior uses through glazing and spill out spaces, and providing landscape and pedestrian and cycling amenities, including bike parking.
2. Infill commercial buildings in areas with a strong, established street character should complement the existing character through massing, façade design, material use, and building form and articulation. Design of all commercial buildings and storefronts should integrate the character and identity of the community and its immediate context and may require alternative or enhanced standard of corporate or franchise design.
3. Encourage storefronts with large windows and display windows allowing pedestrian visibility. Include clear and transparent windows and/or active entrances along ground floor facades; false glazing is discouraged.
4. Co-location and close proximity of small format stores, narrow facades and the coordinated alignment of entrance doors is encouraged to facilitate sequential shopping on foot.
5. Commercial signage should be integrated with the building's architecture. For HCD areas, traditional locations should be used for signage such as above windows or doorways.
6. Long facades should incorporate architectural relief and detailing, entrance features, display windows, recesses, and projections along their length.
7. Robust façade materials should be used, including stone, brick, and clear, unobstructed glass.
8. Refer to the HCD Plan for downtown properties within the designated heritage boundary for further guidance on the style, materials, glazing, heights, storefronts, signage, etc.
9. False upper floors are discouraged.

4.3.6 Commercial

4.3.6.1 Site Design

1. On large sites, commercial developments should be integrated into a consistent pattern of streets and blocks.
2. Developments should incorporate a variety of retail unit sizes and building formats.
3. Buildings should front onto public streets or internal streets created on the site.
4. Continuous boulevards should be provided along commercial building frontages that connect to streets, parking areas, courtyards, or other gathering spaces.
5. Pedestrian circulation areas and design should be clearly marked to have priority over vehicular circulation areas.
6. Open spaces between commercial buildings, street edges and parking areas should be well landscaped.
7. Front yard and/or exterior side yard setbacks should respond to adjacent street typology and function.



4.3.6.2 Massing and Architectural Design

1. Where buildings face both a public street and an internal parking area, the preference is that primary entrances should be provided on both frontages. At a minimum both facades are required to be predominantly glazed with visual connections between the interior of the retail unit and the street. Where fronting onto both sides is not possible, allow for one row of parking between the building and the public road, and provide frontage there.
2. Excessive signage and illumination are discouraged.
3. New development should provide appropriate transitions in height and massing to adjacent lower rise-built form where a change in building use occurs.
4. Maximum building length of commercial buildings should not exceed 75 metres where buildings are located within 15 metres of the front or exterior side lot lines, to encourage pedestrian scale buildings and to reduce shadowing impacts.
5. A minimum building height of 2 storeys is encouraged to provide definition to streets and open space.
6. Creation of false upper building floors is discouraged but may be supported where the design/engineering for the building allows the upper floors to be inserted in the future.
7. Building(s) at corners and entrances should be articulated for visual interest such as with increased height, use of architectural projections, variations in the roofing, or changes in materials such as increased glazing to also help activate the public realm.
8. Vertical divisions of the façade should be included to provide visual interest and definition if multiple units are in a single building.
9. Entrances, primary street frontage/façade and other highly visible areas should be a higher quality material and architectural style.
10. Canopies and overhangs should be provided, where possible, to provide optimal pedestrian environment comfort.
11. Building flankage is to be treated similarly to the building frontage.

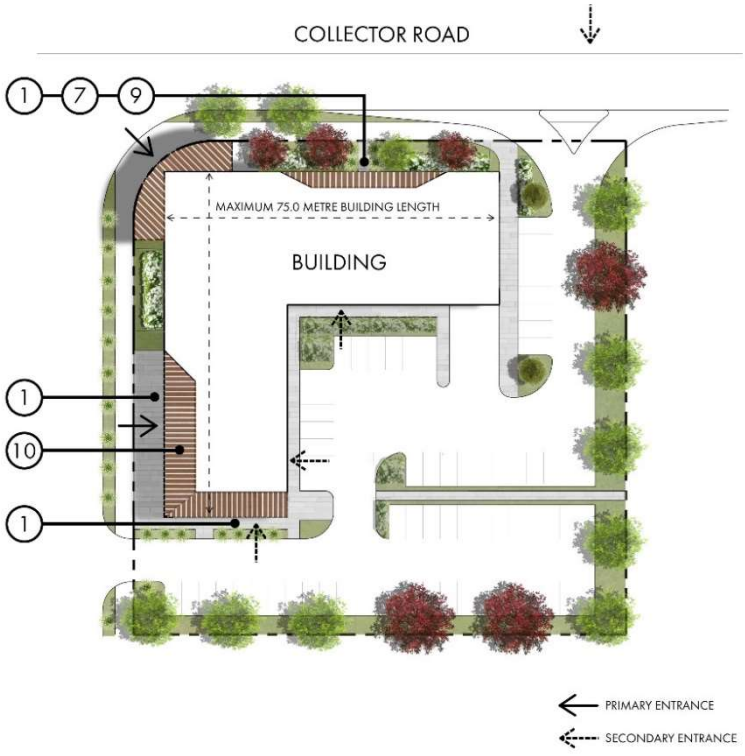
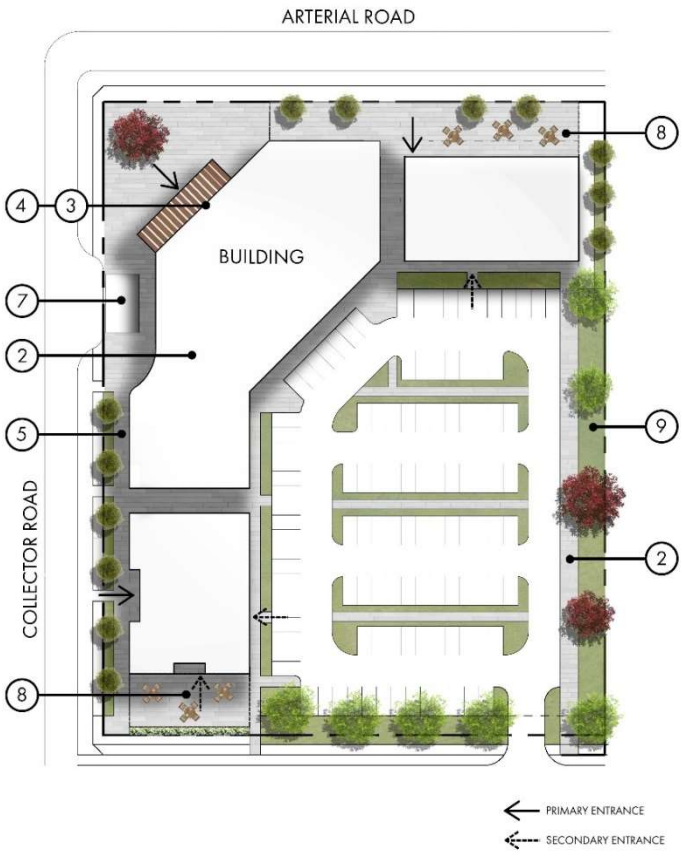


Figure 31 Examples of Massing and Architectural Design of Downtown Commercial

4.3.7 Employment

4.3.7.1 Site Design

1. Site design should be cognizant of neighbouring sites and should aim to achieve a campus style development with continuous pedestrian connections and cohesive landscaping.
2. Overall cohesive site, building and architectural design should be developed to create an identifiable and recognizable employment "community" while enabling every building and site to have different and unique attributes.
3. Primary building frontage should face streets and natural areas, while manufacturing and back of house uses should be located at the rear of the site or along shared lot lines;
4. Buildings and planting should be located to minimize adverse impacts, such as shadows, wind tunnelling, noise attenuation and snow disposition for neighbouring properties and amenity areas.
5. Strategies should be implemented to contribute to pedestrian scale development including modest building setbacks with landscape treatments and canopy trees, entrances related to the street, pedestrian-scale lighting in high pedestrian traffic and parking areas.



6. Use various paving materials and colours to delineate prominent pedestrian entry points.
7. Small convenience and universally accessible parking areas for visitors should be considered at the front of the building.
8. Amenity areas should be considered for employees, away from loading, storage, or other noisy areas.
9. Landscape should be used to provide multiple benefits such as visual buffering, improving air quality, reducing noise by absorbing sound and managing and filtering stormwater on site.
10. Ensure loading and servicing areas are adequately signed and located behind buildings and are adequately screened from the public right-of-way, walkways, and amenity areas.
11. Short-term delivery / drop-off space for couriers should be located in close proximity to main entrances within building parking lots.

4.3.7.2 Massing and Architectural Design

1. Multi-storey buildings should be encouraged to maximize site area and make efficient use of services, as well as to contribute to walkability and provide a sense of enclosure to the street.
2. Appropriate height-to-street width ratios should be provided through step-backs and massing; a minimum height to width ratio of 1:3 is required to achieve a perceived sense of enclosure.
3. Building(s) should be located at minimum setback requirements to bring the building closer to the street to maintain a continuous street wall and enhance the interface between the private and public realms.
4. Building step-backs should be provided for building(s) taller than 3 storeys, protecting the pedestrian scale along the street.
5. Monolithic building(s) should be avoided, and architectural variations and articulation provided along continuous building façades, especially between separate units and between ground and upper floors for visual interest; blank walls should be avoided.
6. Buildings should be designed to provide visual interest, with significant glazing, prominent entrances, façade articulation and high-quality materials;
7. Design higher-quality frontages along the public edges (rights-of-way and the green walkway).
8. Buildings located within significant vistas or views should be designed with heightened quality in order to enhance and optimize the view.
9. Building colours should be warm, natural tones which complement and enhance the surrounding character and context, limiting bold or contrasting colours to accents and focal elements.

10. Design roof lines to locate rooftop mechanical equipment away from the public right-of-way or conceal using incorporated architectural features; if concealing is not feasible, equipment should be painted to better blend into the colour scheme of the rest of the building design.

Figure 32 Example of Employment Architectural Building and Massing

4.3.8 Industrial

4.3.8.1 Site Design

1. Siting and location of industrial buildings should be considered as part of a comprehensive site plan that reflects a more contemporary, campus style layout.
2. Considerations should be given to joining access, shared open space and amenity areas, and continuous connectivity.
3. More attractive indoor uses (i.e., office, research, and development, receiving) are encouraged to occupy as much of the street facing frontage as possible; where more intense forms of development are located along the street, they should be pushed back to accommodate a significant landscaped buffer.
4. Outdoor storage should generally not be visible from the public street or open space; where outdoor storage is required; it should be screened with fencing and/or landscaping.

Figure 33 Example of Industrial Building Design

4.3.8.2 Massing and Architectural Design

1. Ground floor should be differential from upper floors as changes in massing and architectural relief add visual interest and help to diminish the perceived height of buildings.
2. Where the building mass cannot be broken up due to unique use constraints (i.e., manufacturing or warehouse space), building walls should be articulated through the use of texture, colour, material changes, shadow lines and other façade treatments.
3. Highest quality of building design should be applied to the building façades facing public streets, open spaces, and residential neighbourhoods.
4. Height and visual transitions should be provided between industrial areas and adjacent commercial and residential structures.
5. Existing façade rhythm should be reinforced along the street where it exists by using architectural elements such as trim, material changes, bays, clerestory windows, and other design treatments consistent with surrounding buildings.
6. Organize massing to emphasize certain parts of the building such as entries, corners, and the organization of showroom or office spaces.
7. Incorporate and alternate different textures, colours, materials, and distinctive architectural treatments that add visual interest while avoiding dull and repetitive facades.
8. Architectural elements such as entries, porticoes, cornices, and awnings should be compatible in scale with the building massing and should not be exaggerated or made to appear as a caricature of an historic architectural style.
9. Entrances and openings should include overhead architectural features, such as awnings, canopies, trellises, or cornice treatments that provide shade and reduce daytime heat gain, especially on south-facing facades.
10. In light industrial areas, windows should be incorporate on ground floor facing pedestrian paths of travel to improve the pedestrian experience.
11. Incorporate windows and doors with well-designed trims and details as character-defining features to reflect an architectural style or theme consistent with other façade elements.
12. Varied roof lines should be integrated through the use of sloping roofs, modulated buildings heights, step backs or innovative architectural solutions.
13. Outdoor storage, odour or noise should be screened with topographical berms, structural features, and planting.