

View of Green Pedestrian Bridge during construction

5.0 development guidelines



View through Green Pedestrian Bridge at Girardot St. and Huron Church Road

5.1 introduction

The purpose of the Huron Church Road Development Guidelines are to help educate and inform landowners, developers and builders as to the expectations of Windsor City Council regarding the urban design and built form in a specific area.

The Development Guidelines for Huron Church Road Civic Way provide the framework to achieve the Master Plan Design and the Installation Plan as described in Section 4.0 and 5.0. The following section is a guide for directing infrastructure upgrades, public and private realm redevelopment and landscape planning for the area.

These Guidelines will help City Staff and the public in ensuring that a vibrant, original, sustainable and aesthetically unified streetscape is realized in both the Primary and Secondary Study Areas.

The Development Guidelines build on the previous four Sections with a series of specific and implementable recommendations regarding the appearance, design and function of Huron Church Road.

The following Guidelines are divided into two distinct categories of the Private Realm and the Public Realm. Guidelines for privately owned land will be applied as part of the Site Plan Review process.

5.2 what are development guidelines

Even before an application is submitted, a municipality's Development Guidelines set the tone for the expectations of Council. Through their broad availability, including online, they help educate and inform landowners, developers and builders as to the expectations of Council regarding the urban design and built form in a specific area.

Guidelines adopted by Council also identify opportunities for physical improvements both in the public and private realm. It is intended that the identification of these opportunities can inspire both public and private decision-makers to work together in achieving the unified vision for Huron Church Road established in this document.

Once an application is received, the Development Guidelines become a tool for municipal planners to assess the application and engage in a meaningful discussion with the applicant on the basis of a clear set of expectations.

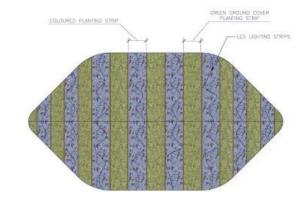
While the Development Guidelines are by themselves neither part of the Official Plan (OP) or zoning, key components can be translated into OP and zoning provisions to guarantee their implementation. They should be understood as a component of the City's planning approvals framework and read in conjunction with all other relevant documents.

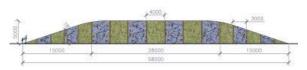
5.3 public realm -streetscape elements

5.3.1 Elevated Landforms

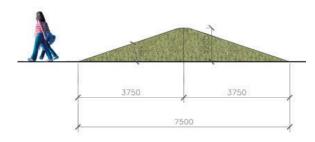
New landform patterns or 'earthworks' provide a new artificial landscape on either side of Huron Church Road that integrate with buildings, street lighting, surface materials and patterns to create a 'total environment' designed to represent all of the principal design themes including Canada, Creation of Environmental Awareness and Innovation. The new visual landscape will provide a one of a kind gateway experience in Windsor and Canada.

- Landforms are to have slope ratios equal to or less than 3:1 to facilitate maintenance
- Landforms are to be proportional to each other maintaining standard relative dimensions.
- Landforms are to be located adjacent to the Huron Church Road and must not impede pedestrian travel or create unsafe or uncomfortable environments.
- Landforms are to be constructed from locally found, previously disturbed soil, preferably fill from nearby construction sites.
- All large landforms are to be constructed as described in the Installation Plan Summary (Section 4.0) with banded plantings and LED light strings.
- The capacity to use mounds as a method of soil remediation (where required) should be further investigated.
- All planting materials should be chosen for their ability to withstand the climate of Windsor, for their visual interest throughout the year,





Large landform berms with 3:1 slope



Small landform berms with 3:1 slope

and for ease of maintenance. A colourful range of non-invasive plant materials is proposed in Section 3.0 - Master Plan Summary of this document.

5.3.2 International 'Gateway"

It is recommended that a new 'special district' designation be created within the signage bylaw that focuses on the Primary Study Area with the potential for boundary adjustments as required to implement the policy. Key Sign By-law themes for the new 'special district' should include:

- That no billboard signage is allowed within the Huron Church Road Special Signage Area.
- That no ground signage on Huron Church Road from College Ave. to Tecumseh Rd. is to be higher than 7m from average grade.
- That all signage should be grouped together where possible and incorporated into an integrated landscape design.
- Only signage that contains a public message or relates to sponsorship of the Green Corridor is recommended within the 10m Landscape Buffer.
- That an LED Display Screen relating to the Green Corridor be allowed
 with the understanding that the responsibility of monitoring and
 scheduling of content must be allocated to an approved representative
 and that content must conform to the requirements as set out in the
 Master Plan Recommendations (Section 3.0).

5.3.3 Public Art

Public Art has the ability to shape and inform the urban environment. Through a series of permanent and temporary art exhibitions area along Huron Church Road, within the International Gateway area, not only can local, regional, national and international talents be highlighted but also the concepts of the International Gateway and the Green Corridor can be reinforced.

The City of Windsor and Huron Church Road are very fortunate to have available to them a wealth of artistic and creative talents to aid in the shaping of Huron Church Road. The recommendations relating to public art are as follow.



Public art can be incorporated into signage elements, such as the artful use of the scrolling LED sign shown above, which is dependant on the grove of trees for its artistic impact.

- Two permanent public art installations that highlight the Design Themes for this Urban Design Master Plan including; an Awareness of Environmental Sustainability; Canadian Identity/History and Culture; Local Industry; Technology and Innovation; Tourism; and Education as recommended. The commissioned art pieces should be prominently display in a location appropriate for their designs.
- Partnerships with Federal, Provincial and Regional levels of Government should be sought to fund the permanent public art pieces.
- All public art pieces should strive for a high quality of construction and design excellence.
- Temporary public art locations are recommended throughout the International Gateway. A revolving display of the work of Canadian and local artists will provide a changing landscape for the International Gateway ensuring that it remains original and engaging. The location or siting of the art pieces should be specific to each piece.
- Public Art on municipal property shall be chosen in conjunction with the Windsor Public Art Advisory Committee and may be coordinated with the Creative Cities Initiative.

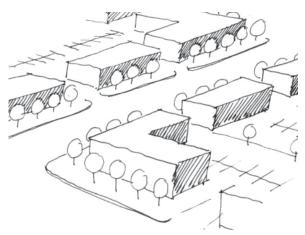
5.3.4 Traffic Mitigation

The vehicular traffic on Huron Church Road can have a negative impact on the surrounding areas. The following traffic mitigation techniques are recommended:

- Contrasting and textured concrete or paving should be used to signal to motorists to slow down and inform pedestrians where to cross.
- All buildings that front onto the street should have articulated façades with pedestrian scale detailing such as to further contribute to an active street edge.
- Street trees are to be located within the boulevard adjacent to Huron Church Roadway to provide a physical barrier for pedestrians from the traffic.



Textured paving should mark intersections



New buildings should have parking behind with the building face at the sidewalk/pathway or the 10m Landscape Buffer

5.3.5 Planting

Plant material should be chosen for its ability to withstand Windsor's climate and the vehicular environment of Huron Church Road, for its visual interest throughout the year, and for ease of maintenance. Simple planting patterns should be employed. The preferred method is to use masses of low-maintenance plants placed at key locations to direct pedestrian traffic, screen parking lots and provide visual interest. Simplicity of plant character with a diversity of colours will create a unified composition properly scaled to the width and proposed character of the street.

- Low maintenance planters and planting areas should be used at the street edge to soften hard surfaces, i.e. parking lots. Plantings should be use to announce entrances, to accent open space areas and define walkways.
- Irrigation of street trees and planting areas should be used where necessary to ensure plant health and attractiveness.
- Generally, plant material used should be chosen for its low maintenance requirements, year round durability, and seasonal colours. Irrigation of median plantings including trees is recommended.
- See Section 4.0 and 2.3.1.2 for additional recommendations for sustainable planting.

5.36 Lighting

The location and style of light standards impacts the visual quality and usability of any streetscape. It is important that a style is chosen that reflects the Master Plan Design concepts and reinforces the goal to achieve a sustainable streetscape design.

- As a minimum, pedestrian-scaled lighting should be provided along Huron Church Road. Lighting should also be provided adjacent to parks, public open space, recreational pathway and institutional or commercial areas.
- All new Light Standards should have the ability to be outfitted with large banners and/or photovoltaic panels to enhance the seasonal atmosphere of the area and the Green Corridor theme.
- Power generated by the photovoltaic panels may be supplied directly into Windsor's power grid (with the necessity protection and metering)



Diverse and easy to maintain planted areas create visual diversity for the pedestrian and vehicular traveller.



Light poles can be used to support banners and photovoltaic panels and pedestrian lighting

and is not be reused on site to minimize the need for unsustainable and potentially polluting batteries.

- Light standards should be chosen for their longevity, quality of materials, resilience to Canadian winters and use of de-icing salt as well as for style, scale, and lighting measures. All street lighting should be down cast to minimize light pollution.
- Full cut-off lighting should be used where possible to minimize both glare and light spillage into the night sky. Full cut-off street lighting can result in a need for additional lighting fixtures. The additional power requirements for these fixtures should be taken into consideration when balancing the positives and negatives of full cut-off lighting.
- LED string lighting is to be installed on all landforms as shown in Section 4.0 Installation Plan Summary.
- Exterior duplex receptacles are recommended at all new trees for seasonal lighting.

5.3.7 Street Furniture

Benches, bicycle racks and waste receptacles should be standardized throughout the entire length of Huron Church Civic Way to visually unify the area, reduce maintenance and simplify replacement.

- A collection of street furniture should be selected for its durability, it compatibility with the Canadian climate, and its availability for additional purchases in the future.
- Canadian-made street furniture should be chosen for ease of distribution and to ensure that it will withstand Canadian winters.
- Colours and materials of site furniture should be coordinated as much as possible.
- Furniture styles should be complementary and consistent.
- Street furniture should be placed out of the way of emergency and maintenance vehicles, especially snow removal vehicles.
- Bicycle racks should be installed at regular intervals and required at destination locations



Night view rendering of berms on Huron Church Road showing LED light strings



Standard galvanized bicycle racks should be installed at all major destination points along Huron Church Road

 Garbage receptacles should be located along the street at any major destination locations; in lieu of a destination location, garbage cans should be located at intersections.

5.3.8 Street Trees

A continuous tree canopy is integral to the design of Huron Church Road's Master Plan, and is fundamental to the image and quality of life in the area. Trees provide positive modification to our climate, help to diminish water and air pollution, and provide a desirable pedestrian environment. Street trees not only create beautiful, light-dappled pedestrian areas, but they also help calm traffic.

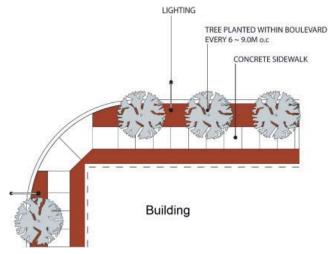
- Any new construction should preserve existing mature trees and woodlots to make them features of the community.
- Street trees should be planted throughout the roadway, especially along both edges of Huron Church Road Civic Way.
- Tree pits (where required) should be constructed using a connected trench method to provide optimal growing conditions, ensuring regulation of moisture levels, and maximum room for root growth.
- Only non invasive and preferably native species that are tolerant of urban conditions, salt, poor soil, and uneven irrigation, should be planted. Good examples are Sycamore Maple, Hackberry and Shumard Oak.
- To ensure that trees do not suffer from soil compaction that restricts water and air around their roots, the bases of trees should be planted with groundcover or shrubs and mulch, or metal tree grates for intensely used areas.
- Adjustable tree grates that allow for growth of the tree should be used. Gravel should be filled under the tree grate to prevent debris from accumulating between it and the finished planted grade.

5.3.10 Recreation Pathway, Sidewalks, Crosswalks, Boulevards and Planters

Pedestrian friendly areas are the most important element in achieving a walkable community. To realize a walkable street, pedestrians need to be



The Sycamore Maple is a good example of a non invasive tree for Huron Church Road



A potential corner plan that incorporates site details to enhance the pedestrian experience.

given a clearly demarcated, continuous zone that is protected from vehicular traffic. The introduction of a planted boulevard between the pathway or sidewalk and vehicular traffic gives the pedestrian an added sense of security. By interspersing planting with hard-scaping in the boulevard, areas can be provided for the future installation of bike racks and street furniture that are assured to not interfere with pedestrian travel.

- A continuous 2.4m (min) recreation pathway should be provided on both sides of Huron Church Road.
- Continuous multi-use recreation pathway should be constructed in asphalt.
- Continuous sidewalks should be constructed in poured in place concrete with a broom finish for traction.
- Where sidewalks occur they are recommended to be a minimum of 1.5m in width. Wider sidewalks (2m minimum) adjacent to shops, institutions and public paths should be considered.
- Pathways and sidewalks should be continuous across driveways.
 Where crossings over driveways and intersections occur, sidewalks should be marked through a material other than the driveway or roadbed paving.
- Sidewalk edges and curbs should be sloped and textured to provide barrier-free access for people physically and visually impaired and bollards, signage and pavement markings are required where the multi-use recreational pathway intersects with driveways.
- Crosswalks should be clearly marked through different materials which provide a strong visual contrast to the road.



Clearly defined pedestrian zones



Accessibility features



Image of Huron Church Road looking north toward College Avenue showing the existing sidewalk connecting into the path to the new Green Pedestrian Bridge.

5.4 private realm – landscaping element

5.4.1 Earthworks

Partnerships with Land Owners, within the Primary Study Area of the Huron Church Road Urban Design Master Plan, should be established to ensure the construction of landforms as described in the Installation Plan Summary.

- All private realm landforms should be constructed to the same design and maintenance standards as the Public Realm Landforms to assure a continuity of appearance.
- Banded planting strip material can vary from proposed but it is recommended that a low maintenance, low water, colourful planting alternative is used for consistency and sustainability
- It is also recommended that the alternate banding (to the colourful planting) be turf to visually tie all of the landforms together.

5.4.2 Landscape Buffer

Adjacent to both sides of Huron Church Road a 10m landscape buffer is defined in the official plan. This landscape buffer enables the creation of a continuous green or open space at the street edge. A uniform design is recommended for the entirety of the landscape buffer. Refer to Section 4.1 for the detailed design recommended for the 10m landscape buffer.

- Restaurants should be allowed to have hardscaped outdoor patios and eating areas within the first 6m closest to the building face within the 10m landscape buffer. Seasonal uses should be permitted in this area. All other standards of the City of Windsor Sidewalk Cafe Handbook should also apply.
- Seasonal awnings are permitted.
- When new buildings are proposed facing onto the landscape buffer an alternate landscape design for the Landscape Buffer can be considered through the submission of a detailed landscape design. It is recommended that the new design employ the same recommended planting materials to assure a uniform look for the streetscape.
- · Walkways connecting to adjacent properties and retail centres should



Existing earthwork berm at 'Green Bridge' on Huron Church



At grade entranceways with overhangs are recommended

be a minimum width of 1.5m with trees planted on a minimum of one side but preferably both. The double row of trees would clearly articulate the pedestrian zone.

- A gentle planted berming is recommended for the Landscape Buffer.
 The earthwork is framed against a low retaining wall at the edge of
 parking areas. The smaller berms establish a uniformity with the larger
 landforms proposed for the international gateway.
- Staggered tree planting, 8m apart, is recommended for the 10m Landscape Buffer, the staggering maximizes visibility into the retail centre while providing a continuous tree boulevard along the multiuse recreation pathway.
- Street furniture located within the landscape buffer should be included as part of an outdoor hardscape area.
- Buildings that abut the Landscape Buffer must provide an entranceway facing the street and a minimum of 50% glazed area.

5.4.3 Planting

All new landscaping is encouraged to utilize the planting palette or suggest equivalent to maintain consistency with the streetscape design.

- See Section 4.0 and 2.3.1.2 for additional recommendations for sustainable planting.
- Planters and low plantings should be used to screen front parking areas from the street.



Patios within the landscape buffer can animate the streetscape



Low level planting beds can buffer sidewalks from traffic zones

5.4.4 Parking and Driveway Curb Cuts

Existing parking lots along Huron Church Road are located adjacent to the street, in front of existing buildings. This expanse of parking and asphalt adds to the width of the roadway and contributes to an uncomfortable and aesthetically unpleasing streetscape.

- In the design of new developments or redevelopment of existing properties, parking lots in front of buildings should be discouraged as they reinforce a streetscape that is dominated by wide expanses of cars and asphalt.
- The screening of existing parking areas with planters or low walls can help mitigate the existing condition.
- Providing additional parking at the rear or sides of commercial buildings enables sidewalks/pathways, street trees and building facades to establish a defined street edge. This is a principal requirement for creating vibrant streetscapes for the entire length of Huron Church Road.
- Appropriate lighting levels and consistency of coverage should be provided in parking areas to assist both pedestrian and vehicular circulation. The height and intensity of light standards should be sensitive to adjacent land uses.
- Refer to Section 2.3.1.7 for additional recommendations for sustainable parking lots.

Minimizing driveway curb cuts for vehicular access where possible is an important step in reclaiming a street for pedestrians. Each interruption in the sidewalk/pathway diminishes a pedestrian's walking experience and feeling of safety.

- The number of driveway curb cuts should be minimized through the
 use of private laneways or shared driveways. New curb cuts should not
 be allowed and wherever possible should be reduced to conform to
 minimum turning radius requirements.
- Where appropriate, driveway access should be paired or consolidated into one, particularly where providing access to rear parking lots for mixed use, institutional or commercial uses.
- Parking areas for abutting commercial uses should be connected.
- Wherever possible consolidated parking areas should be accessed from side streets to minimize curb cuts on main roads.



Greening parking lots with trees and planting minimizes the visibility of asphalt.



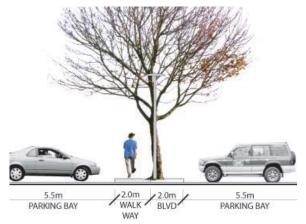
Tall grass pedestrian buffer



Planting Beds should be installed to buffer street fronting parking lots from the sidewalk/pathway and road



Landscaped parking lots



Clearly identifying pedestrian zones aids in the functionality of parking lot layouts

5.5 private realm - built form elements

5.5.1 Massing

Massing refers to the size, scale and shape of a building. By ensuring that the massing of new construction adheres to these guidelines, many reurbanization goals can be achieved. These goals include creating vibrant streetscapes, minimizing new parking lots at the street edge and encouraging design excellence in site and building design.

- All new construction on Huron Church Road should be no less then two storeys high or 7m. In some cases buildings can incorporate clear storey glazing or mezzanine levels in the place of a second storey.
- On continuous building frontages, the building façade should be generally divided into individual storefronts or entrances.
- Large bay windows, with a high proportion of facade glazing, are recommended for ground floor retail.
- False front facades for second storeys should not be allowed
- Large format shops should project the appearance of multiple shop fronts.
- Storefront design should be designed to establish a rhythm of storefront character with recessed entries, awnings and/or large bay windows.
- Residential apartments above street level shops should be considered
 as this use contributes to increased street animation. Any residential
 apartments should be buffered from the street with front terraces and
 balconies that setup back away from the street and aid in mitigating
 traffic noise.
- Blank facades facing the street are not permitted.
- See Section 2.3.1.3 and 2.3.1.4 for additional recommendations for sustainable building construction.



Buildings can frame public spaces at key intersections.



Defined pedestrian spaces against building facades promote walkable site plan designs

5.5.2 New Construction, Additions and Renovations

The appearance of new construction will have a major impact on the long term visual quality of Huron Church Road.

- Additions to an existing building should reference the building to which it is being added both volumetrically and materially.
- A diversity of build typologies and materiality is recommended to minimize the homogeneity of the streetscape and large parcel developments.
- Awnings and/or covered walkways should be incorporated into any new commercial construction.
- The use of high quality building materials like stone, brick and wood are suggested.
- See Section 2.3.1.3 and 2.3.1.4 for additional recommendations for sustainable building construction.

5.5.3 Rooflines

- Roof materials/colours should complement the building materials.
 On sloped roofs, a single roofing colour and material is recommended for visual continuity.
- Rooftop mechanical equipment should be integrated with the building design and rooftop units and vents should be screened using materials complementary to the building. Where appropriate, parapets should be used to screen rooftop mechanical units.
- Where possible green roofs should be considered to minimize the negative environmental impact of new building.
- See Section 2.3.1.4 for additional recommendations for sustainable roof construction.



Articulated building facades add interest to the elevation



An attention to building materials creates visually interesting building facades

5.5.4 Entrance Ways

Building projections including awning and canopies are encouraged as transitional building elements that provide weather protection, dwelling access and active amenity spaces. To ensure fully accessible buildings a grade entry should be maintained or established, if possible a canopy should be included in any new construction.

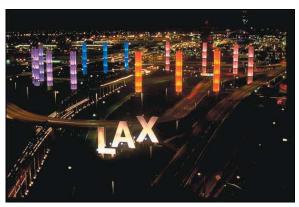
5.5.5 Signage

It is essential that businesses within the Corridor are able to identify themselves through distinct and recognizable signage. At the same time it is also important that the quality, scale and style of signage be reflective of the high design quality appropriate for an international gateway.

- Signage, banners, interpretive signs and plaques should be used to capture the identity of the city and generate excitement among residents and visitors.
- Signs should be made from durable and permanent materials; back-lit fluorescent and plastic signs should be avoided.
- No temporary signage should be allowed
- No billboard signage adjacent to the street should be allowed
- Architectural signs (Median Totems) marking historical dates, names and area settlements should be integrated into the streetscape.
- Signage should be limited in height to 7m above average grade.

5.5.6 Building Materials

- Building materials recommended for new construction include brick, stone and timber. External materials including aluminium, steel and metal panels may be used provided they are used within an appropriate context. Too varied a range of building materials in a single building is discouraged in favour of achieving a unified building image.
- In general, the appearance of building materials should be true to their nature and should not mimic other materials.



The above example shows how lighting and signage can be used together in an artistic fashion that is fitting for an international gateway



High quality building materials and awnings promote visually interesting spaces

- Building materials should be chosen for their functional and aesthetic quality. Exterior finishes should exhibit quality of workmanship, sustainability and ease of maintenance.
- Materials used for the front façade should be carried around the entire building or at a minimum on the side building façades.

5.5.7 Orientation & Site Layout

- Buildings should be oriented towards the street with public entrances, building facades, glazing, signage and walkways making visual and physical connections to the surrounding areas.
- Buildings should be organized to define, frame, and enhance the urban character of abutting streets, internal drive aisles, sidewalks, parking and amenity spaces. Buildings thus require multiple active façades and entrances.
- Building setbacks should be reduced to minimize distances between building entrances and abutting public street sidewalks; to establish a consistent built form edge; and to allow for the development of a significant streetscape contributing to the identity and amenity of the area.
- Corner buildings at all intersections of primary roads should include articulated building elements in the form of towers, bays, projections, recessions, materials or other details that emphasize the focal nature and visibility of these buildings,.
- Prominent focus buildings located at the intersection of primary roads or at gateway locations should be a minimum height of 9m.
- Buildings occupying corners should exhibit fully developed architectural elevations on both frontages and have at least one display window or entrance integrated within the design of the corner or within 5m of the corner on each façade.

5.5.8 Pedestrian Entrances and Access

 Main entrances to buildings should be emphasized with design elements such as an expanded entrance canopies, an articulation in the roofline of the building, additional lighting and/or the introduction of a special architectural element like an arch way.



The location of planting in a site layout can soften hardscaping edges and make developments more friendly to pedestrians.



Defined pedestrian spaces against building facades promote walkable site plan designs

- Each store, commercial unit, or building should provide an entrance facing the primary adjacent street.
- Building entrances should be identifiable and barrier free. High quality streetscape and landscaping treatment is encouraged at all building entrances.
- Window design and location should be coordinated with the location of pedestrian walkways to provide interest and improve security along these routes.

5.5.9 Service Areas

Service areas should not be visible from public or private streets, major pedestrian or residential areas and should therefore be screened from view on all sides. Screening should use building materials and/or landscape treatments compatible to those used for the main buildings.

5.5.10 Landscaping

Wherever possible, the character and scale of materials used in the building should be carried through in those chosen for pathways, courtyards and areas directly surrounding the building to contribute to a cohesive and integrated image of the development.



t planting at pedestrian walkways invites pedestrians into the site



Green spaces in parking areas balance asphalt expanses



Clearly defined pedestrian crossing are recommended in parking areas

